G A. Genetics Society of America Conferences

Program Book



















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Welcome to The Allied Genetics Conference



Customize a schedule just for you, based on a wide range of themes:

Development and Morphogenesis
Disease Models and Aging
Evolution and Quantitative Biology
Genomics and Gene Regulation
Intracellular Dynamics
Neuroscience, Systems to Molecules
New Technology and Resources
Stem Cell, Regeneration and Germline
Professional Development and Education

Here is the meeting you've been asking for, we are..

Bringing Genetics Together















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C. elegans cover image credit to Carolyn Marks and David Hall. Yeast cover image credit to: Masur-Own work, CC BY 2.5, https:commons.wikimedia.org/windex.php?curid=905559



Founded in 1931, the Genetics Society of America (GSA) is a professional scientific society with more than 5,000 members worldwide working to **deepen**

our understanding of the living world by advancing the field of genetics, from the molecular to the population level. GSA represents the collective interests of the genetics and model organism communities in advocating support for research, educating students and the public about the importance of genetics, and providing a respected and authoritative voice on genetic issues increasingly in the public eye.

GSA promotes research and fosters an international community of geneticists by promoting interaction among geneticists (including microbial, plant, animal, human, and population and theoretical geneticists), while cultivating a community of thought leaders in the field.

GSA publishes two peer-edited scholarly journals:

 GENETICS, which has published high quality original research across the breadth of the field since 1916, and



• G3: Genes|Genomes|Genetics, an open access journal launched in 2011 to disseminate high quality foundational research in genetics and genomics.



The Society has a deep commitment to fostering the next generation of scholars in the field through providing career development activities and resources and offering travel grant programs including the GSA Undergraduate Travel Awards and DeLill Nasser Awards for Professional Development in Genetics.

2016 GSA Board of Directors

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Editor-in-Chief, GENETICS
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Representatives: Heath
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WELCOME FROM THE PRESIDENT



Welcome to Orlando and to TAGC. With this conference, the GSA undertakes an unusual experiment: assemble more than 2,500 aliquots of 7 different genetics communities, incubate in a large mixing chamber at warm temperature, and take timepoints over 5 days. Successful outcomes would include novel cross-fertilizations and sustained macromolecular interactions; personal cerebral storage devices filling to capacity with cuttingedge knowledge; and instant chemistry leading to lifelong

attachments. We'll know at the final time-point whether the experiment has worked by observing if its subjects are exuberant, exhilarated and maybe even a bit exhausted, completely consumed by the scientific talks, the discussions with colleagues and the mentoring, education and professional development activities.

We hope you will use your time in Orlando to reflect on, and delight in, the astonishing accomplishments of our field; to make new friends and collaborators; and with these newly made colleagues as well as those of long-standing, to plan out future projects to solve grand challenges in biology through genetics. And please use this opportunity to learn a bit more about what the GSA does for those who love genetics, including in journal publications, in advocacy, in education, in communication, and in the advancement of our trainees. From all of us at GSA, be part of a sensational experiment.

Best wishes.

Stan Fields GSA President



During the meeting, you are encouraged to post thoughts on exciting scientific presentations and on other meeting events using the #TAGC16

WELCOME FROM THE CO-CHAIRS

Dear TAGC Enthusiasts.

We welcome you to this unprecedented gathering of Geneticists!

We have been looking forward to this meeting since we began planning 4 years ago. You may be wondering why GSA has launched TAGC, when the individual model organism conferences have done well over the last three decades? The answer is simple and compelling: We are in a new age of Genetics and Genomics and we are seeing a major explosion of knowledge in every field. In this new age, model organisms will continue to play an important role in biological discovery. But we feel that we can accelerate the pace of discovery by coming together and learning from each other to create something even bigger.

With this idea in mind, we asked: What makes a great meeting? Great people, terrific program, an attractive meeting site that accommodates all activities and is affordable, exciting scientific and special events, social gatherings, and flawless logistics. The result we envision? Great science, lots of interaction, meaningful discussions and scientific exchange, exposure to new technology, seeding new collaborations, and having lots of fun. We hope you find all these things and more at this unique "jamboree" of 7 concurrent meetings. Work hard, play hard, interact, stay up late, get up early, and enjoy every minute!



Phil Hieter, Meeting Co-chair



Jeannie Lee, Meeting Co-chair

Community Representatives

Geoffrey Kapler, Ciliates
Paul Sternberg, C. elegans
Sue Celniker, Drosophila
John Schimenti, Mouse
Michael Lynch, Population, Evolutionary and Quantitative Genetics
Michael Snyder, Yeast
Rebeccas Burdine, Zebrafish
Katie Dumas, Trainee Representative

Cross-Community Workshop Advisor, David Bilder GSA Poster Awards, Peter Stirling Sponsorship, Mike Snyder

Meeting Organizers

C. elegans Development, Cell Biology and Gene Expression Meeting

Monica Gotta, University of Geneva Kevin O'Connell, NIDDK, NIH

2016 Ciliate Molecular Biology Conference

Mark Winey, University of Colorado, Boulder Geoffrey Kapler, Texas A&M University Judith Van Houten, University of Vermont Joshua Smith, Missouri State University

57th Annual Drosophila Research Conference

Susan Celniker, Lawrence Berkeley National Laboratory, Chair David Bilder, University of California, Berkeley Nancy Bonini, University of Pennsylvania Ross Cagan, Mount Sinai School of Medicine

Mouse Genetics 2016

Teresa Gunn, McLaughlin Research Institute, Montana, Co-chair Monica Justice, University of Toronto and Hospital for Sick Children, Canada, Co-chair David Beier, Seattle Children's Research Institute, Washington Martin Hrabé de Angelis, Helmholz Center and Technical University, Munich, Germany Yumiko Saga, National Institute of Genetics, Japan Philippe Soriano, Mount Sinai School of Medicine, New York François Spitz, EMBL Heidelberg, Germany

Population, Evolutionary and Quantitative Genetics Meeting

Michael Lynch, Indiana University, Chair Kirsten Bomblies, Harvard University Lauren McIntyre, University of Florida Bret Payseur, University of Wisconsin Dimitri Petrov, Stanford University

Yeast Genetics Meeting

Brenda Andrews, University of Toronto Michael Snyder, Stanford University Lars Steinmetz, Stanford University Yoshikazu Ohya, University of Tokyo

12th International Conference on Zebrafish Development and Genetics

Rebecca Burdine, Princeton University
Richard Dorsky, University of Utah
Joan Heath, Walter and Eliza Hall Institute of Medical Research
Anming Meng, Tsinghua University
Teresa Nicolson, Oregon Health & Science University
Elizabeth Patton, The University of Edinburgh, UK

The Genetics Society of America gratefully acknowledges the following meeting sponsors

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Disease Models & Mechanisms
Twist Bioscience

Bronze Sponsors

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The Meeting Organizers would like to thank the following organizers and session chairs.

C. elegans Development, Cell Biology and Gene Expression Meeting

Julie Ahringer, Javier Apfeld , Joshua Bembenek, Mike Boxem, Julie Claycomb, Zhuo Du, Christian Eckmann, Jane Hubbard, Antony Jose, Xantha Karp, Michel Labouesse, Tamara Mikeladze-Dvali, Karen Oegema, Hannah Seidel, Geraldine Seydoux, Harold Smith, Anne Spang, Mi Hye Song, Martin Srayko, Jun Takayama, Anne Villeneuve, Ronen Zaidel-Bar, Esther Zanin

2016 Ciliate Molecular Biology Conference

Mireille Betemier, Doug Chalker, Jacek Gaertig, Jean-Francois Gout, Sabrice Guerrier, Jeff Kapler, Laura Landweber, Eric Meyer, Mariusz Nowacki, Chad Pearson, Martin Simon, Josh Smith, Naomi Stover, Anne-Marie Tassin, Sean Taverna, Megan Valentine, Judith Van Houten, Mark Winey, Emily Wiley

57th Annual Drosophila Research Conference

Erika Bach, Kari Barla, Arash Bashirullah, Hugo Bellen, Jacob Berry, Pradeep Bhaskar, David Bilder, Nancy Bonini, Ben Brown, Ana Busturia, Susan Celniker, Hsiao-Tuan Chao, Ron Davis, David Doupé, Daniela Drummond-Barbosa, Rodrigo Fernandez-Gonzalez, Nathalie Franc, Robin Fropf, Liz Gavis, Sharon Greenblum, Benjamin Housden, Aniek Janssen, Gary Karpen, Krystyna Keleman, Amy Kiger, Helmut Kramer, Rebecca Kreipke, Amanda Larracuente, John Laver, Ming-Chia Lee, Kari Lenhart, Howard Lipshitz, Dali Ma, Anthony Long, Erika Matunis, Michele Markstein, Lucy O'Brien, Kate O'Connor-Giles, Terry Orr-Weaver, Parthive Patel, Norbert Perrimon, Margot Quinlan, Pr. Jean-Marc Reichhart, Tor Erik Rusten, Hannele Ruohola-Baker, Nasser Rusan, Todd Schoborg, Matt Sieber, Sarah Siegrist, Conor Sipe, Jason Tennessen, Mark Van Doren, Marta Wayne, Mo Weng, Yang Wu, Ting Xie, Julie Zeitlinger

2016 Mouse Genetics Meeting

David Beier, Teresa Gunn, Viive Howell, Martin Hrabe de Angelis, Monica Justice, Thomas Keane, Darla Miller, Lluis Montoliu, Steve Munger, Fernando Pardo Manuel de Villena, Bill Pavan, Fernando Pardo-Manuel de Villena, Yumiko Saga, Gabriela Sanchez-Andrade, John Schimenti, Clare Smith, Philippe Soriano, Francois Spitz

Population, Evolutionary and Quantitative Genetics Meeting

Kirsten Bomblies, Dan Hartl, Michael Lynch, Lauren McIntyre, Bret Payseur, Dmitri Petrov

Yeast Genetics Meeting

Brenda Andrews, Karen Arndt, Rachel Brem, Orna Cohen-Fix, Kara Dolinski, Aimee Dudley, Maitreya Dunham, Audrey Gasch, Dan Gottschling, Yona Kassir, Oliver Kerscher, Michael Knop, Karl Kuchler, Leonid Kruglyak, Vicki Lundblad, Mike McMurray, Helen Murphy, Yoshi Ohya, Steve Oliver, Lorraine Pillus, Gavin Sherlock, Mike Snyder, Lars Steinmetz, Peter Stirling, Dave Toczyski, Phong Tran, Toshi Tsukiyama, Fred van Leeuwen, Kevin Verstrepen, Eric Weiss

12th International Conference on Zebrafish Development and Genetics

James Amatruda, Herwig Baier, Darius Balciunas, Ashley Bruce, Rebecca Burdine, Rob Cornell, Jill de Jong, Richard Dorsky, Bruce Draper, Iain Drummond, Steve Farber, Michael Granato, Jenya Grinblat, David Grunwald, Joan Heath, Kristen Kwan, James Lister, Lisa Maves, Anming Meng, Mary Mullins, Teresa Nicolson, Liz Patton, Ken Poss, Fabienne Poulain, John Rawls, Alex Schier, Bettina Schmid, Howard Sirotkin, Brant Weinstein, Deborah Yelon, Len Zon

Trainee Organizing Committee

Andrew Adrian, Haifa Alhadyian, Krista Dobi, Alexandra Erwin, Sonia Hall, Alex Hurlburt, Patty Jumbo-Lucioni, David Mets, Karissa Milbury, Stephanie Patchett, Douglas Reilly, Victoria Schulman, Aakanksha Singhvi, Amanda Socha, Maria Sterrett, Zeba Wunderlich

GSA extends its sympathy for the following community members that passed away during the last 12 months: J. Nichol Thomson. Bill Gelbart. Austin Hughes and John Preer.

Badges

Badges are required for admission to all sessions, posters, exhibit hall and mixers. Security will not allow individuals without badges to enter the Exhibit Hall. If you lose your badge, a replacement may be requested at the Conference Registration counters.

Presenters - Speaker Ready Room, Anaheim

All those giving oral talks are required to load and check their presentation the day before the start of their session in the Anaheim room, which will be open during the following hours:

Wednesday, July 13	1:00 pm – 9:30 pm
Thursday, July 14	7:00 am – 5:00 pm
Friday, July 15	7:00 am – 5:00 pm
Saturday, July 16	7:00 am – 5:00 pm

NOTE: You will not be able to upload presentations in the meeting room so checking in at the Speaker Ready Room is vital to the success of your talk.

Poster Sessions and Exhibits – Cypress Ballroom

All posters and exhibits will be in the Cypress Ballroom. The Hall will be open to conference registrants on a 24 hour basis beginning at 5:00 pm, Wednesday, July 13 until 12:00 noon, Saturday, July 16. Security will be posted at the entrance to the Hall and only individuals with the official TAGC registration badge will be admitted.

Exhibit representatives will be at their booths during the following hours:

Wednesday, July 13	9:00 pm – 11:00 pm
Thursday, July 14	8:00 am – 4:00 pm
Friday, July 15	8:00 am – 4:30 pm
Saturday, July 16	8:00 am - 12:00 noon

Authors are expected to present at their boards according to the following schedule:

Thursday, July 14	1:30 pm – 2:30 pm	Even-numbered posters
	2:30 pm – 3:30 pm	Odd-numbered posters
Friday, July 15	1:30 pm – 2:10 pm	"A" posters
	2:10 pm – 2:50 pm	"B" posters
	2:50 pm – 3:30 pm	"C" posters
Saturday, July 16	10:00 am – 11:00 am	Odd-numbered posters
	11:00 am - 12:00 noon	Even-numbered posters

All posters must be removed from poster boards **no later than 1:00 pm on Saturday**, **July 16.** After that time, remaining posters will be removed and recycled. Posters may only be removed by their own authorsr. Posters that are not collected may not be taken by someone who is not an author on that poster.

Mobile App

Download the TAGC mobile app to your smartphone (iOS and Android platforms). The Mobile App gives you the meeting at your fingertips. Once the app has been downloaded, you do not need an Internet connection to view information. Users of Blackberrys or Windows Mobile Devices have full access to the Program through the web version available at genetics2016.org.

WiFi/Internet

Free WiFi will be available at the Orlando World Center Marriott in guest rooms public space and the lobby.

Registration

Registrants can pick up registration materials and Certificates of Attendance at the registration desk in Cypress Ballroom 1 Alcove during the following times:

Wednesday, July 13	2:30 pm – 9:30 pm
Thursday, July 14	7:00 am – 5:00 pm
Friday, July 15	7:30 am – 5:00 pm
Saturday, July 16	7:30 am – 2:00 pm

Social Media Policy

Live tweeting of presentations is allowed unless the speaker explicitly opts out by stating so at the start of their talk. Attendees are encouraged to post their thoughts on exciting scientific advances and other meeting events. Use #TAGC16 to let everyone know what is happening at the meeting.

Camera, Mobile Phone, and Video Recording Policies

Attendees are strictly prohibited from using cameras, including mobile phone and tablet cameras, and all other audio and/or video recording devices in all meeting session rooms. This policy includes the poster section of the exhibit hall.

This means attendees may not take photos or video of speakers presenting or their slides. Attendees not adhering to this policy may be asked to leave the room and will be asked to delete all photos or videos already taken; additional action may be taken with repeated or egregious offenders. When registering, you are required to agree that you will adhere to this policy.

Attendees are asked to be respectful of their colleagues by turning off all mobile devices before entering meeting rooms.

Ticketed/Optional Events

For the following events you need to have purchased a ticket in advance to attend. If you are interested in attending one of these events, and did not register in advance, stop by the conference registration desk in Cypress Ballroom 1 Alcove to see if there are any tickets available.

Mentoring Roundtables #1 and #2 (Thursday and Saturday) Science Café (Thursday) Editor's Panel Discussion and Roundtable (Friday) Closing Reception (Saturday)

Security/Lost and Found

For all emergencies and lost and found items contact the Orlando World Center Marriott Security by dialing 0 from any house phone. The conference registration desk will be able to assist you as well.

FlyBase, MGI, SGD, WormBase, Zfin Demo Room – Palms Ballroom Canary 3-4 All registrants are invited to the demo room to learn how to make the best use of their tools and features for your research and teaching. Throughout the afternoon, other than the scheduled group presentations noted below, personnel are available in the demo room for one-on-one tutorials, troubleshooting and discussions.

Thursday, July 14

9:00 am - 8:00 pm Demo room open for tutorials and discussions

Presentations:

12:45 pm - 1:00 pm	FlyBase: New in FlyBase: Orthology, Human Disease, Gene2Function, miRNA, Author Reagent Form, Protein Domains, Gene Summaries, Video Tutorials, and Community Resources
1:15 pm - 1:30 pm	WormBase: WormBase: a portal to nematode model systems for all research communities
6:15 pm - 6:30 pm	SGD: Saccharomyces Genome Database: New data displays and computational tools
6:45 pm - 7:00 pm	MGI: Searching for human disease, gene expression, genome features on Mouse Genome Informatics
7:15 pm - 7:30 pm	Zfin: Exploring new data at ZFIN: Human disease models and Expression as Phenotype

Friday, July 15

9:00 am - 8:00 pm Demo room open for tutorials and discussions

Presentations:

SGD: Saccharomyces Genome Database: New data	
displays and computational tools	
Zfin: Exploring new data at ZFIN: Human disease models	
and Expression as Phenotype	
MGI: Searching for human disease, gene expression,	
genome features on Mouse Genome Informatics	
WormBase: WormBase: a portal to nematode model	
systems for all research communities	
FlyBase: New in FlyBase: Orthology, Human Disease,	
Gene2Function, miRNA, Author Reagent Form, Protein	
Domains, Gene Summaries, Video Tutorials, and	
Community Resources	

Meals/Meal Plans

Those who purchased a meal plan in advance should redeem their TAGC Meal Plan ticket (provided with their namebadge) by visiting the Meal Plan Ticket Desk at the Cypress Ballroom. The Ticket Desk will provide you with the coupons necessary to use for meals. Meal coupons should be treated like cash and cannot be replaced if lost.

Meal plan coupons can be used at all of the hotel restaurants, cash and carry carts and the food court. Those who did not purchase a meal plan can dine at any of those locations as well at the prevailing menu pricing.

Seating is available in the Crystal Ballroom after picking up your meals at the concessions or food carts.

Parking/Shuttle Bus

Complimentary self-parking is available to meeting attendees. A shuttle service is available between the Orlando World Center Marriott and the Marriott Village overflow properties for those who are registered at those hotels. See the app, hotel front desk and conference registration desk for the shuttle schedule.

Childcare/Family Room

Onsite childcare services may be available through your hotel concierge. Individual or group sitters may be arranged to provide in-room hotel childcare. Please check with your hotel well in advance of your arrival date. The Orlando World Center Marriott also has a wide variety of age appropriate activities for children.

It is the responsibility of the parents, guardian, legal guardian, or individual requesting childcare services to screen caregivers and to make a determination as to the appropriateness of the caregiver. The Genetics Society of America does not screen any of the childcare services and assumes no responsibility with respect to these services and accepts no liabilities.

Children must be accompanied by a parent or guardian during exhibit hours. Parents or guardians may bring children under the age of 18 to educational and social events provided the children do not disrupt the event. Under no circumstances are children under the age of 18 allowed in the Exhibit Hall during set-up and dismantle times.

A Family Room for nursing mothers is located in the Orlando World Center Marriott's North Tower on the lobby level in the Key Largo room. Please note that parents and guardians are responsible for providing infant care supplies. The Family Room is unsupervised and The Genetics Society of America is not responsible for any accidents or injuries that may occur..

Code of Conduct

GSA expects attendees and exhibitors to respect each other, GSA staff, and Marriott staff and behave in a courteous and civilized fashion. Attendees should respect common sense rules for public behavior, personal interaction, common courtesy, and respect for private property.

Abusive, harassing, or threatening behavior towards any other attendee, GSA staff, or Marriott staff will not be tolerated. Please report any incidents in which an attendee of the meeting is abusive, insulting, intimidating, bothersome, or acting in an unsafe or illegal manner to GSA staff or security immediately. Please contact: Anne Marie Mahoney; mahoney@genetics-gsa.org if you need to file a complaint.

PROFESSIONAL DEVELOPMENT AND EDUCATION EVENTS

GSA Education @ TAGC

<u>Wednesday, July 13, 2016</u> – Descriptions of all events are available online. GSA Education Pre-Conference Workshops

Crash Course in Vision & Change: 9:00 am – 4:00 pm

Educator Flex Pass: 9:00 am - 12:00 pm: Morning Session

Collaborative Hackathon: Make Lesson Plans using a Model Organism Card Game

Teaching Foundational Concepts through Primary Literature

Integrating Discovery-based Research into the Undergraduate Curriculum

Educator Flex Pass: 1:00 pm - 4:00 pm: Afternoon Session

All three morning workshops will be repeated.

Saturday, July 16, 2016

You Can Publish That, Too! Publishing education resources: 4:00 pm - 6:00 pm

Professional Development Events

Wednesday, July 13, 2016

Next Stage Mixers: Undergraduates, graduate students, postdocs, and new faculty

members: 5:00 pm - 7:00 pm

Thursday, July 14, 2016

Mentoring Roundtables 1: 12:30 pm - 1:30 pm

Job Fair: 1:30 pm - 3:30 pm

Plenary Session and Workshop for Undergraduate Researchers: 4:00 pm - 6:00 pm

Science Café with Brian Malow: 10:00 pm - 11:30 pm:

Friday, July 15, 2016

Career Workshop - Nailing the Job Talk: 2:30 pm - 3:15 pm:

Women in Genetics Workshop and Networking: 6:00 pm - 8:00 pm Powered by WiG: Thanks to the women whose generous contributions provided funding for this workshop.

Saturday, July 16, 2016
Trainee Bootcamp Workshops
Concurrent Session 1: 8:00 am – 9:00 am
Finding a Job in Academia
Publishing in the Digital Age
Finding Funding

Concurrent Session 2: 9:00 am – 10:00 am Careers Beyond Traditional Academia Scientific Publishing Finding Funding

Career Workshop - Negotiating Job Offers: 10:30 am - 11:15 am

Mentoring Roundtables 2: 12:30 pm - 1:30 pm

PROFESSIONAL DEVELOPMENT AND EDUCATION EVENTS

GeneticsCareers Center

Watch for announcements about how to sign up for career counseling and networking opportunities @GeneticsGSA **#TAGC16**.

Open:

Thursday, July 14, 1:30 pm – 3:30 pm Friday, July 15, 2:00 pm – 4:00 pm Saturday, July 16, 10:00 am – 12:00 pm



These professional development events brought to you by the

TAGC Trainee Organizing Committee

Kathleen Dumas (Buck Institute), Chair Andrew Adrian (University of Iowa) Haifa Alhadyian (University of Kansas) Krista Dobi (Baruch College) Alexandra Erwin (University of Kansas) Sonia Hall (University of Massachusetts Medical School) Alex Hurlburt (Indiana University) Patty Jumbo-Lucioni (Samford University) David Mets (University of California, San Francisco) Karissa Milbury (University of British Columbia) Stephanie Patchett (University of Texas, Austin) Douglas Reilly (Worchester Polytechnic Institute) Victoria Schulman (Weill Cornell Graduate School of Medical Sciences) Aakanksha Singhvi (The Rockefeller University) Amanda Socha (Dartmouth College) Maria Sterrett (Indiana University) Zeba Wunderlich (Harvard Medical School)

Look at the Schedule of Events for each community to find more education workshops! Also be sure to visit the **Education, Outreach, and Broader Impacts posters** in the Exhibit Hall.

Be on the lookout for informal talks and meetups about education and outreach at GSA Central in the Exhibit Hall! They will be announced on social media throughout the conference. #TAGC16 @GeneticsGSA

Wednesda	y, Ju	ly 13	
2:00pm- 9:30pm		Speaker Ready Room Open All presenters must upload their presentation 24 hours in advance of their session	Hall of Cities Anaheim
2:30pm- 9:30pm		Registration Open	Cypress Ballroom 1 Alcove
2:30pm- 9:30pm		Meal Plan Ticket Desk	Cypress Ballroom Registration
5:00pm- 7:00pm		Next Stage Mixers: Undergrad Mixer Ticketed event Graduate Student Mixer Ticketed event Postdoc Mixer Ticketed event Early Career Faculty Mixer Ticketed event	North Tower Key West Sawgrass/Vinoy Harbor Beach Marco Island
7:00pm- 9:00pm		Scientific Sessions:	
	W	Plenary Session 1: Germline Dynamics	Grand Ballroom 8A
	С	Ciliate Genomics: Genome Structure and Organization	Palms Ballroom Canary 2
	D	Opening General Session	Crystal Ballroom M
	М	International Resources	Crystal Ballroom G1
	Р	PEQG Keynote 1	Crystal Ballroom J1
	Y	The Dynamic Genome	Crystal Ballroom G2
	Z	Regeneration and Stem Cells	Grand Ballroom 7A
9:00pm- 11:00pm		Opening Mixer with Exhibits	Cypress Ballroom
Thursday,	July	<u>14</u>	
12:00 am- 12:00 am		Posters Open	Cypress Ballroom
6:30am- 1:00pm		Meal Plan Ticket Desk	Cypress Ballroom Registration
7:00am- 5:00pm		Registration Open	Cypress Ballroom 1 Alcove
7:00am-	İ	Speaker Ready Room Open	Hall of Cities

5:00pm		All presenters must upload their presentation 24 hours in advance of their session	Anaheim
7:45am- 10:00am		Genetics and Determinants of Health Joint Plenary Session	Palms Ballroom Sago/Sabal/Royal
8:00am- 4:00pm		Exhibits Open	Cypress Ballroom
9:00am- 8:00pm		Demo Room: MOD (FlyBase, MGI, SGD, WormBase, Zfin) Demo Room Open for Tutorials and Discussions	Palms Ballroom Canary 3-4
10:30am- 12:30pm		Scientific Sessions:	
	W	Genomics, Gene Regulation and Technology	Grand Ballroom 8A
	С	Programmed DNA Rearrangement I	Palms Ballroom Canary 2
	D	Drosophila Plenary Session I	Palms Ballroom Sago/Sabal/Royal
	М	Comparative Genomics, Computational Methods and Evolution	Crystal Ballroom G1
	Р	Natural Selection and Adaptation	Crystal Ballroom J1
	Y	Post-Transcriptional Gene Regulation	Crystal Ballroom G2
	Z	Early Development and Morphogenesis	Grand Ballroom 7A
	Z	Neural Circuits, Neurophysiology and Behavior	Grand Ballroom 7B
12:30pm- 1:30pm		Mentoring Roundtables #1 Pre-registration Required	North Tower Harbor Beach/Marco Island
12:30pm- 1:30pm		Speaking Up for Genetics and Model Organism Research Food for purchase	Crystal Ballroom H
1:30pm- 3:30pm		Poster Presentations	Cypress Ballroom
1:30pm- 3:30pm		GeneticsCareers Center and Job Fair	Cypress Ballroom 1C

4:00pm- 6:00pm		Scientific Sessions:	
	W	Intracellular Organelles, Trafficking, and the Cytoskeleton	Grand Ballroom 8A
	С	Evolution and Population Biology	Palms Ballroom Canary 2
	D	Cell Division and Growth Control	Palms Ballroom Sago
	D	Neural Development	Palms Ballroom Sabal
	D	Organogenesis & Gametogenesis	Palms Ballroom Royal
	М	Development	Crystal Ballroom G1
	Р	James F. Crow Symposium	Crystal Ballroom J1
	Y	Epigenetics and Transcriptional Regulation	Crystal Ballroom G2
	Z	Cardiac Development	Grand Ballroom 7A
	Z	Gene Regulation and RNA Biology	Grand Ballroom 7B
		Plenary Session and Workshop for Undergraduate Researchers	Sawgrass
7:45pm- 9:45pm		Scientific Sessions:	
	w	Plenary Session 2: Systems Biology	Grand Ballroom 8A
	С	Genome Stability and Dynamics	Palms Ballroom Canary 2
	D	Cell Cycle and Cell Death	Palms Ballroom Sago
	D	Evolution & Quantitative Genetics I	Palms Ballroom Sabal
	D	Pattern Formation	Palms Ballroom Royal
	М	Translational and Systems Genetics	Crystal Ballroom G1
	Р	PEQG Keynote 2	Crystal Ballroom J1
	Υ	Tackling Human Disease Using Yeast	Crystal Ballroom G2
	Z	Neurobiology	Grand Ballroom 7A
10:00pm- 11:30pm		Science Cafe Event Ticketed event	Palms Ballroom Sabal

Friday, Jul	y 15		
12:00 am- 12:00 am		Posters Open	Cypress Ballroom
7:00am- 5:00pm		Speaker Ready Room Open All speakers must upload their presentation 24 hours in advance of their session	Hall of Cities Anaheim
7:30am- 5:00pm		Registration Open	Cypress Ballroom 1 Alcove
8:00am- 9:30am		Scientific Sessions:	
	W	Aging and Cell Death Sponsored by the National Institute on Aging	Grand Ballroom 8A
	С	Programmed DNA Rearrangement II	Palms Ballroom Canary 2
	D	Cell Biology & Cytoskeleton	Palms Ballroom Sago
	D	Evolution & Quantitative Genetics II	Palms Ballroom Sabal
	D	Chromatin & Epigenetics	Palms Ballroom Royal
	М	Technological Innovations	Crystal Ballroom G1
	Р	Cryptic Variation and Robustness	Crystal Ballroom J1
	Y	Division and Development	Crystal Ballroom G2
	Z	Models of Human Disease	Grand Ballroom 7A
	Z	Evolution	Grand Ballroom 7B
8:00am- 4:30pm		Exhibits Open	Cypress Ballroom
9:00am- 8:00pm		Demo Room: MOD (FlyBase, MGI, SGD, WormBase, Zfin) Demonstrations Open for Tutorials and Discussions	Palms B allroom Canary 3-4
10:00am- 12:00pm		Scientific Sessions:	
	W	Cell Cycle, Cell Division, Cytokinesis	Grand Ballroom 8A
	С	Chromatin Structure & Chromatin Modification	Palms Ballroom Canary 2
	D	Physiology, Organismal Growth & Aging	Palms Ballroom Sago
	D	Techniques & Resources	Palms Ballroom Sabal

	D	RNA Biology	Palms Ballroom Royal
	М	Human Disease Models 1	Crystal Ballroom G1
	Р	Mutation & Recombination	Crystal Ballroom J1
	Y	Stress Sensing and Damage Control	Crystal Ballroom G2
	Z	Emerging Technologies - Imaging	Grand Ballroom 1-2
	Z	Signaling	Grand Ballroom 7B
	Z	Organogenesis (Mesoderm, Endoderm, Ectoderm)	Grand Ballroom 7A
11:00am- 12:00pm		Scientific Sessions:	
	W	Cell Polarity and Cell Fate	Grand Ballroom 8A
12:00pm- 1:30pm		Editor's Panel Discussion and Roundtable Ticketed event	North Tower Harbor Beach/Marco Island
1:30pm- 3:30pm		Poster Presentations	Cypress Ballroom
1:30pm- 3:30pm		GeneticsCareers Center	Cypress Ballroom 1C
2:00pm- 2:45pm		GeneticsCareers Workshop – Nailing the Job Talk	Cypress Ballroom 1B
4:00pm- 6:00pm		Scientific Sessions:	
	W	Cell Patterning and Morphogenesis	Grand Ballroom 8A
	С	Ciliate Signaling Systems: Signal Transduction, Protein Secretion, and Trafficking	Palms Ballroom Canary 2
	D	Cell Biology & Signal Transduction	Palms Ballroom Sago
	D	Drosophila Models of Human Disease I	Palms Ballroom Sabal
	D	Regulation of Gene Expression I	Palms Ballroom Royal
	М	Epigenetics	Crystal Ballroom G1
	Р	Molecular Evolution	Crystal Ballroom J1
	Y	Yeast Evolution in and out of the Lab	Crystal Ballroom G2
	Z	Highlighted Talks, Awards Ceremony and Community Meeting	Grand Ballroom 7A

6:00pm- 7:30pm	Women in Genetics Panel and Networking Ticketed event	North Tower Harbor Beach/Marco Island
7:30pm- 9:30pm	Development and Evolution Joint Plenary Session	Palms Ballroom Sago/Sabal/Royal
Saturday, Ju	ıly 16	
12:00 am- 12:00noon	Posters Open	Cypress Ballroom
7:00am- 5:00pm	Speaker Ready Room Open All speakers must upload their presentation 24 hours in advance of their session.	Hall of Cities Anaheim
7:30am- 2:30pm	Registration Open	Cypress Ballroom 1 Alcove
8:00am- 10:00am	Workshops:	
	Automated Tracking for Quantitative Phenotyping	Grand Ballroom 3
	CRISPR-based Genome Engineering	Crystal Ballroom J2
	Using CyVerse Cyberinfrastructure to Enable Data Intensive Research, Collaboration, and Education	Grand Ballroom 1
	Model Organisms to Face Environmental Problems	Palms Ballroom Canary 1
	Integrating Research and Teaching: Professional Development for Current and Future Faculty Members	St. Thomas
	Informatics Resources to Aid the Genetic Dissection of Neural Circuitry	Palms Ballroom Canary 2
	Everything you Wanted to Know about Sex	Palms Ballroom Sabal
	modMetabolome: Model Organism Metabolomics Consortium Workshop	Grand Ballroom 8A
	Feeding Behavior, Nutrition and Metabolism: Emerging Model Organisms	Palms Ballroom Royal
	Functional Genomics for Conserved Gene Function Discovery	Crystal Ballroom J1
	Cell Competition in Flies and Mice	Crystal Ballroom G1

		Developmental Mechanics	Crystal Ballroom G2
		Model Systems in Drug Discovery	Grand Ballroom 2
		CRISPR/Cas9 - Techniques and applications in Fish, Flies, & Mice	Grand Ballroom 7A
		Gene Function Discovery within the IMPC Resource	Crystal Ballroom C
		Utilizing NCBI Databases for Model Organism Research	Grand Ballroom 12-14
		Systems Genetics in Complex Populations	Crystal Ballroom A-B
		An Introduction to Using Galaxy for Genetic Data Analysis	Grand Ballroom 11
		The InterMOD Consortium: A common interface to model organism data	Crystal Ballroom N-Q
8:00am- 9:00am		Trainee Bootcamp Workshops: Session 1: Finding a Job in Academia Finding Funding Publishing in the Digital Age	North Tower Bahamas Grand Cayman Aruba
8:00am- 12:00pm		Exhibits Open	Cypress Ballroom
9:00am- 10:00am		Trainee Bootcamp Workshops: Session 2: Careers Beyond Traditional Academia Finding Funding Scientific Publishing	North Tower Bahamas Grand Cayman Aruba
10:00am- 12:00pm		Poster Presentations All posters must be removed by 1 pm	Cypress Ballroom
10:00am- 12:00pm		GeneticsCareers Center	Cypress Ballroom 1C
10:30am- 11:15am		GeneticsCareers Workshop - Negotiating Job Offers	Cypress Ballroom 1B
12:15pm- 1:45pm		Mentoring Roundtables #2 Ticketed event	North Tower Harbor Beach/Marco Island
1:45pm- 3:45pm		Scientific Sessions:	
	W	Meiosis, Germ Line Development, and Sex Determination	Grand Ballroom 8A
	С	Cell Motility: Cilia, Basal Bodies, and Tubulin	Palms Ballroom Canary 2
	D	Organelles & Trafficking	Palms Ballroom Sago

	D	Drosophila Models of Human Disease II	Palms Ballroom Sabal
	D	Gene Expression & Chromatin	Palms Ballroom Royal
	М	Cancer and Immunology	Crystal Ballroom G1
	Р	Population Genetics	Crystal Ballroom J1
	Y	Revisiting Classical Genetics with New Technology	Crystal Ballroom G2
	Z	Neural Development and Regeneration	Grand Ballroom 7A
	Z	Cancer	Grand Ballroom 7B
4:00pm- 6:00pm		Scientific Sessions:	
	W	RNAi, microRNAs, and Developmental Timing	Grand Ballroom 8A
	С	Cell Biology, Morphogenesis, & Development	Palms Ballroom Canary 2
	М	Rosa Beddington Lecture Stem Cells	Crystal Ballroom G1
	Р	Complex Trait Evolution	Crystal Ballroom J1
	Z	Models of Human Disease	Grand Ballroom 7A
4:00pm- 6:00pm		Workshops:	North Tower
	D	Spotlight on Undergraduate Research using Genetics Research Models	Aruba
	D	The Ecdysone Workshop	Palms Ballroom Canary 4
	D	Genetic and Genomic Models of Polyploidy	Crystal Ballroom A-B
	Y	Beyond cerevisiae: Exploiting yeast diversity in nature to understand genome evolution in diverse environments	Crystal Ballroom C-D
	Υ	Getting Even More Out of SGD	Crystal Ballroom G2
	D	Drosophila Microbiota	Crystal Ballroom M
		You Can Publish That, Too - Publishing Education Resources	Bahamas
6:00pm- 6:30pm	М	IMGS Business Meeting	Crystal Ballroom G1

7:30pm- 9:30pm		Scientific Sessions:	
	W	Plenary Session 3: Development and Disease	Grand Ballroom 8A
	С	Community Resources: Current and Future Needs	Palms Ballroom Canary 2
	D	Immunity and Pathogenesis	Palms Ballroom Sago
	D	Neurophysiology and Behavior Sponsored by the National Institute on Aging	Palms Ballroom Sabal
	D	Stem Cells	Palms Ballroom Royal
	Р	PEQG Keynote 3	Crystal Ballroom J1
	Y	Structural and Cellular Organization	Crystal Ballroom G2
	Z	Haematopoiesis and Vascular Biology	Grand Ballroom 7B
	Z	Cell Biology and Polarity	Grand Ballroom 7A
9:30pm- 11:00pm		Closing Reception	Cypress Ballroom 1
Sunday, J	uly 17	<u></u>	
7:55am- 8:00am	D	Poster Awards Presentation	Palms Ballroom Sago/Sabal/Royal
8:00am- 10:00am		Scientific Sessions:	
	С	Ciliates in the Classroom and Undergraduate Ciliate Research Symposium	Palms Ballroom Canary 2
	D	Drosophila Plenary Session	Palms Ballroom Sago/Sabal/Royal
	М	Human Disease Models II	Crystal Ballroom G1
	Р	Epistasis	Crystal Ballroom J1
	Y	The Fat and Sweet Sides of Life	Crystal Ballroom G2
	Z	Genome Editing	Grand Ballroom 7A
10:30am- 12:30pm		Technology and its Application Joint Plenary Session	Palms Ballroom Sago/Sabal/Royal

NOTES

C. elegans DEVELOPMENT, CELL BIOLOGY AND GENE EXPRESSION MEETING



Plenary and Platform Sessions



C. elegans Development, Cell Biology And Gene Expression Meeting SCHEDULE AT-A-GLANCE

Wednesday, July 13 2:00pm-9:30pm Speaker Ready Room Open Hall of Cities - Anaheim Scientific Session: Plenary Session 1: Germline Dynamics 7:00pm-9:00pm Grand Ballroom 8A Opening Mixer with Exhibits 9:00pm-11:00pm Cypress Ballroom Thursday, July 14 Hall of Cities -Anaheim 7:00am-5:00pm Speaker Ready Room Open 7:45am-10:00am Genetics and Determinants of Health Joint Plenary Session Palms Ballroom 8:00am-4:00pm Exhibits Open Cypress Ballroom 9:00am-8:00pm Demo Room: MOD (FlyBase, MGI, SGD, WormBase, Zfin) Demo Palms Ballroom Canary 3-4 Room Open Grand Ballroom 8A Scientific Session: Genomics, Gene Regulation and Technology 10:30am-12:30pm 12:30pm-1:30pm Mentoring Roundtables #1 North Tower - Harbor Beach 12:30pm-1:30pm Speaking Up for Genetics and Model Organism Research Crystal Ballroom H 1:30pm-3:30pm Poster Presentations Cypress Ballroom 1:30pm-2:30pm: Even-numbered posters 2:30pm-3:30pm: Odd-numbered posters t 1:30pm-3:30pm GeneticsCareers Center and Job Fair Cypress Ballroom 1C 4:00pm-6:00pm Scientific Session: Intracellular Organelles, Trafficking, and the Cytoskeleton Grand Ballroom 8A 4:00pm-6:00pm Plenary Session and Workshop for Undergraduate Researchers North Tower - Sawgrass 7:45pm-9:45pm Scientific Session: Plenary Session 2: Systems Biology Grand Ballroom 8A 10:00pm-11:30pm *Science Cafe Event Palms Ballroom Sabal Friday, July 15 7:00am-5:00pm Speaker Ready Room Open Hall of Cities - Anaheim 8:00am-9:30am Scientific Session: Aging and Cell Death Grand Ballroom 8A 8:00am-4:30pm Exhibits Open Cypress Ballroom 9:00am-8:00pm Demo Room: MOD (FlyBase, MGI, SGD, WormBase, Zfin) Demo Palms Ballroom Canary 3-4 Room Open 10:00am-11:00am Scientific Session: Cell Cycle, Cell Division, Cytokinesis Grand Ballroom 8A 11:00am-12:00pm Scientific Session: Cell Polarity and Cell Fate Grand Ballroom 8A 12:00pm-1:30pm *Editor's Panel Discussion and Roundtable North Tower - Harbor Beach 1:30pm-3:30pm Poster Presentations Cypress Ballroom 1:30pm-2:10pm: "A" poster authors present 2:10pm-2:50pm: "B" poster authors present 2:50pm-3:30pm: "C" poster authors present



GeneticsCareers Center



Cypress Ballroom 1C

Friday, July 15 (co	ntinued)	
2:00pm-2:45pm	GeneticsCareers Workshop - Nailing the Job Talk	Cypress Ballroom 1B
4:00pm-6:00pm	Scientific Session: Cell Patterning and Morphogenesis	Grand Ballroom 8A
6:00pm-7:30pm	*Women in Genetics Panel and Networking	North Tower - Harbor Beach
7:30pm-9:30pm	Development and Evolution Joint Plenary Session	Palms Ballroom
Saturday, July 16		
7:00am-5:00pm	Speaker Ready Room Open	Hall of Cities - Anaheim
8:00am-10:00am	Workshops: See topics and descriptions under the Workshop Section	Multiple locations
8:00am-12:00pm	Exhibits Open	Cypress Ballroom
8:00am-9:00am	Trainee Bootcamp Workshops: Session 1	North Tower
9:00am-10:00am	Trainee Bootcamp Workshops: Session 2	North Tower
10:00am-12:00pm	Poster Presentations 10:00am-11:00am Odd-numbered posters 11:00am-12:00pm Even-numbered posters	Cypress Ballroom (Posters must be removed by 1pm)
10:00am-12:00pm	GeneticsCareers Center	Cypress Ballroom 1C
10:30am-11:15am	GeneticsCareers Workshop	Cypress Ballroom 1B
12:15pm-1:45pm	*Mentoring Roundtables #2	North Tower - Harbor Beach
1:45pm-3:45pm	Scientific Session: Meiosis, Germ Line Development, and Sex Determination	Grand Ballroom 8A
4:00pm-6:00pm	Scientific Session: RNAi, microRNAs, and Developmental Timing	Grand Ballroom 8A
4:00pm-6:00pm	Workshop: You Can Publish That, Too - Publishing Education Resources	North Tower Bahamas
7:30pm-9:30pm	Scientific Session: Plenary Session 3: Development and Disease	Grand Ballroom 8A
Sunday, July 17		
10:30am-12:30pm	Technology and its Application Joint Plenary Session	Palms Ballroom

^{*} Ticketed Event

C. elegans PLENARY AND PLATFORM SESSIONS

Wednesday, July 13 7:00 PM – 9:00 PM Grand Ballroom 8A

Plenary Session 1: Germline Dynamics

Moderators:

Joshua Bembenek, University of TN, Knoxville, and Hannah Seidel, University of WI and Eastern Michigan University

Theme: Stem Cell, Regeneration and Germline

W397 - 7:00 Domestication of *C. elegans* Sperm. **Michael Miller**.

W398 - 7:40 Visualization and quantification of the transcriptional response to GLP-1/Notch signaling in the germline stem cell niche. **Judith Kimble**.

W399 - 8:05 Dynein subunit DLC-1 promotes localization and function of stem cell regulator FBF-2 in *C. elegans*. **Xiaobo Wang**.

W400 - 8:30 After extrusion, the second polar body is internalized via receptormediated phagocytosis in *C. elegans* embryos. **Ann Wehman**.

Thursday, July 14 7:45 AM – 10:00 AM Palms Ballroom Sago/Sabal/Royal

Genetics and Determinants of Health Joint Plenary Session

Moderator: Lynn Cooley, Yale University, New Haven, CT

7:45 Welcome, Stan Fields, University of Washington, Seattle, GSA President.

7:50 Opening Remarks, Phil Hieter, University of British Columbia and Jeannie Lee, Harvard University, TAGC Co-chairs.

8:00 Translating Zebrafish Development to the Clinic. **Leonard Zon**.

8:30 Using Drosophila to unravel the mysteries of sleep: when, why and how. **Amita Sehgal**.

9:00 New insights into the pathogenesis and treatment of Marfan syndrome and other presentations of thoracic aortic aneurysm. Harry Dietz.

9:30 Accelerating Insights from Basic Genetics. **Francis Collins**.

Thursday, July 14 10:30 AM – 12:30 PM Grand Ballroom 8A

NOTES

Genomics, Gene Regulation and Technology

Moderators:

Harold Smith, NIH/NIDDK, Bethesda, MD, and **Julie Ahringer**, University of Cambridge, United Kingdom

Theme: New Technology and Resources

W401 - 10:30 X-specific targeting of the *C. elegans* dosage compensation complex. **Sevinc Ercan**.

W402 - 10:45 Properties and activities of enhancers and promoters. **Chiara Cerrato**.

W403 - 11:00 Quantitative analysis of context-dependent regulation by the Wnt pathway at single cell resolution. **John Murray**.

W404 - 11:15 ShootingStar: Real-Time Tracking and Optical Manipulation of Single Cells in Development. **Pavak Shah**.

W405 - 11:30 Tissue-specific analysis of nuclear organization through development of a novel FLP/Frt-based toolkit for spatiotemporal control of gene expression. **Peter Askjaer**.

W406 - 11:45 Systematic engineering of a temperature-optimized Gal4/UAS system for transcriptional control of gene expression in *Caenorhabditis elegans*. **Jonathan Liu**.

W407 - 12:00 Longevity and its transgenerational inheritance is enabled by H3K9 methylation. **Teresa Lee**.

W408 - 12:15 CRISPR-mediated synthetic genetic analysis reveals genetic interactions among RNA binding proteins affecting fitness and lifespan. Adam Norris.

Thursday, July 14 4:00 PM – 6:00 PM Grand Ballroom 8A

Intracellular Organelles, Trafficking, and the Cytoskeleton

Moderators:

Anne Spang, University of Basel, Switzerland, and **Martin Srayko**, University of Alberta, Canada

Theme: Intracellular Dynamics

W409 - 4:00 Investigating the role of microtubule minus-end proteins in noncentrosomal microtubule organization during epithelial development. **Taylor Skokan**.

W410 - 4:15 Cytoskeletal elements function together to move larval P-cell nuclei through constricted spaces. **Courtney Bone**.

W411 - 4:30 Mitochondria localize to injured axons to support regeneration. **Sungmin Han.**

W412 - 4:45 *C.elegans* as a model to study extracellular vesicle biology, dynamics and function. **Jyothi Akella**.

W413 - 5:00 The TspanC8 tetraspanins TSP-12 and TSP-14 function through the ADAM10 protease SUP-17 to promote BMP signaling in *C. elegans*. **Lin Wang**.

W414 - 5:15 Conserved NEKL/MLT protein network controls molting in *C. elegans*. **Vladimir Lazetic**.

W415 - 5:30 The catalytic activity of twitchin's kinase domain inhibits muscle activity. **Guy Benian**.

W416 - 5:45 Modeling cerebral cavernous malformations in *C. elegans*. **Brent Derry**.

Thursday, July 14 7:45 PM – 9:45 PM Grand Ballroom 8A

Plenary Session 2: Systems Biology

Moderators:

Esther Zanin, The Ludgwig-Maximilians University of Munich, Germany, and Jun Takayama, RIKEN, Kobe, Japan

Theme: Genomics and Gene Regulation

W417 - 7:45 A regulatory map of the C.elegans nervous system. **Oliver Hobert**.

W418 - 8:25 Single-cell *C. elegans* transcriptomics: Deciphering the expression of all genes in all cells throughout development. **Itai Yanai**.

W419 - 8:50 A combined binary interaction and phenotypic map of *C. elegans* cell polarity proteins. **Mike Boxem**.

W420 - 9:15 Caenorhabditis Genetics Center (CGC). **Aric Daul**.

Friday, July 15 8:00 AM – 9:30 AM Grand Ballroom 8A **NOTES**

Aging and Cell Death

Moderators:

Javier Apfeld, Northeastern University, Boston, MA, and Jane Hubbard, New York University School of Medicine

Sponsored by the National Institute on Aging

Theme: Disease Models and Aging

W421 - 8:00 Genetic Background and Experimental Reproducibility Play Critical Roles in Identifying Chemical Compounds with Robust Positive Effects on Longevity. **Mark Lucanic.**

W422 - 8:15 The neuroendocrine peptide DAF-7/TGF- β is a key regulator of dietary restriction in *C. elegans*. Marissa Fletcher.

W423 - 8:30 dbl-1/TGF-β and daf-12/NHR signaling mediate cellnonautonomous effects of daf-16/FOXO on starvation-induced developmental arrest. Rebecca Kaplan.

W424 - 8:45 Fasting protects against proteostasis defects induced by hypoxia. Nicole Iranon.

W425 - 9:00 Omega-3 and -6 fatty acids allocate somatic and germline lipids to ensure fitness during nutrient and oxidative stress in *Caenorhabditis elegans*. **Sean Curran**

W426 - 9:15 RAB-35 coordinates the engulfment and degradation of apoptotic cell corpses. **Ryan Haley**.

C. elegans PLENARY AND PLATFORM SESSIONS

Friday, July 15 10:00 AM – 11:00 AM Grand Ballroom 8A

Cell Cycle, Cell Division, Cytokinesis

Moderators:

Mi Hye Song, Oakland University, MI, and

Karen Oegema, Ludwig Institute for Cancer Research, CA

Theme: Intracellular Dynamics

W427 - 10:00 Hemicentin regulates Anillin to promote cytokinesis in Caenorhabditis elegans germ cells. Yu Chung Tse.

W428 - 10:15 ATX-2, The *C. elegans* Ortholog of Human Ataxin-2, Regulates Centrosome Size and Microtubule Dynamics. **Michael Stubenvoll.**

W429 - 10:30 Developing quantitative resource for computational analysis from images of *C. elegans* embryogenesis in a public database Phenobank. **Yukako Tohsato**

W430 - 10:45 PAR polarity proteins promote enhanced spindle assembly checkpoint activity in germline blastomeres. **Abigail Gerhold**.

Friday, July 15 11:00 AM – 12:00 PM Grand Ballroom 8A

Cell Polarity and Cell Fate

Moderator:

Geraldine Seydoux, Johns Hopkins University, Baltimore, MD

Theme: Intracellular Dynamics

W431 - 11:00 The balance of PAR polarity dictates cellular division patterning. Yen Wei Lim.

W432 - 11:15 Unraveling cell polarity dynamics with single-cell biochemistry. **Daniel Dickinson**.

W433 - 11:30 A Critical Role for Lipid Synthesis and Polyunsaturated Fatty Acids in *C. elegans* Early Embryonic Development. Jason Watts.

W434 - 11:45 The forkhead transcription factor UNC-130 integrates both BMP and Notch signaling to regulate dorsoventral patterning of the *C. elegans* postembryonic mesoderm. **Qinfang Shen**.

Friday, July 15 4:00 PM – 6:00 PM Grand Ballroom 8A NOTES

Cell Patterning and Morphogenesis

Moderators:

Ronen Zaidel-Bar, National University of Singapore, and Michel Labouesse, IBPS, Paris, France

Theme: Development and Morphogenesis

W435 - 4:00 VPR-1 MSP domains coordinate reproductive development with striated muscle metabolism. **Timothy Cole**.

W436 - 4:15 Sensory Activity Maintains Proper Neural Connectivity in *C. elegans*. **Joy Li**.

W437 - 4:30 A transient, pre-cuticular apical extracellular matrix defines tiny tube diameter. **Jennifer Cohen.**

W438 - 4:45 Rotating and elongating embryos: SPIM microscopy reveals how planar polarity could be established during morphogenesis. **Xinyi Yang**.

W439 - 5:00 UNC-33/CRMP inhibits growth cone protrusion in axon repulsion from UNC-6/netrin. **Mahekta Gujar**.

W440 - 5:15 WAVE/SCAR promotes alpha-catenin accumulation and junctional maturation in developing *C. elegans* epithelia. **Martha Soto**.

W441 - 5:30 Mechanical forces drive neuroblast morphogenesis and are required for epidermal enclosure. Alisa Piekny.

W442 - 5:45 Morphogenic movements and cell signalling events during gland cell and pharyngeal organ development in *Caenorhabditis elegans*. **Jay Kormish**.

Friday, July 15 7:30 PM – 9:30 PM Palms Ballroom Sago/Sabal/Royal

NOTES

Development and Evolution Joint Plenary Session

Moderator: Jeannie Lee, Massachusetts General Hospital and Harvard University, Cambridge, MA

7:30 The Fred Kavli Foundation
Distinguished Lecture: Flexibility and
variability in behavior at the geneenvironment interface. **Cori Bargmann**.

8:00 Colinear Hox genes regulation in mammals. **Denis Duboule**.

8:30 Of mice, men and birds: meiotic recombination and its evolution. **Molly Przeworski**.

9:00 Fishing for the secrets of stickleback and human evolution. **David Kingsley**.

CROSS COMMUNITY WORKSHOPS

CROSS COMMUNITY WORKSHOPS

Saturday, July 16	8:0am – 10:00 am	
Descriptions are in the Workshop section and in the app.		
Automated Tracking for Quantitative Phenotyping	Grand Ballroom 3	
CRISPR-based Genome Engineering	Crystal Ballroom J2	
Using CyVerse Cyberinfrastructure to Enable Data Intensive Research, Collaboration, and Education	Grand Ballroom 1	
Model Organisms to Face Environmental Problems	Palms Ballroom Canary 1	
Integrating Research and Teaching: Professional Development for Current and Future Faculty Members	St. Thomas	
Informatics Resources to Aid the Genetic Dissection of Neural Circuitry	Palms Ballroom Canary 2	
Everything you Wanted to Know about Sex	Palms Ballroom Sabal	
modMetabolome: Model Organism Metabolomics Consortium Workshop	Grand Ballroom 8A	
Feeding Behavior, Nutrition and Metabolism: Emerging Model Organisms	Palms Ballroom Royal	
Functional Genomics for Conserved Gene Function Discovery	Crystal Ballroom J1	
Cell Competition in Flies and Mice	Crystal Ballroom G1	
Developmental Mechanics	Crystal Ballroom G2	
Model Systems in Drug Discovery	Grand Ballroom 2	
CRISPR/Cas9 - Techniques and applications in Fish, Flies, & Mice	Grand Ballroom 7A	
Gene Function Discovery within the IMPC Resource	Crystal Ballroom C	
Utilizing NCBI Databases for Model Organism Research	Grand Ballroom 12-14	
Systems Genetics in Complex Populations	Crystal Ballroom A-B	
An Introduction to Using Galaxy for Genetic Data Analysis	Grand Ballroom 11	
The InterMOD Consortium: A common interface to model organism data	Crystal Ballroom N-Q	

Saturday, July 16 1:45 PM – 3:45 PM Grand Ballroom 8A

Meiosis, Germline Development, and Sex Determination

Moderators:

Anne Villeneuve, Stanford University School of Medicine, CA, and Christian Eckmann, Martin Luther University, Saale, Germany

Theme: Stem Cell, Regeneration and Germline

W443 - 1:45 DAF-7/TGF β signaling in the *C. elegans* germline stem cell niche. **Olga Pekar**.

W444 - 2:00 The combined activity of CPB-1^{CPEB} and GLD-3^{Bic-C} opposes FBF^{Pum} to prevent the sperm-to-oocyte switch in *C. elegans* males. **Christian Eckmann**.

W445 - 2:15 *top-2* is required for proper chromosome segregation during male meiosis in *C. elegans*. **Aimee Jaramillo-Lambert**.

W446 - 2:30 The t-SNARE *syx-7* promotes cytokinesis during sperm meiosis. **Kristin Fenker**.

W447 - 2:45 Signaling sperm to stop or go: the seminal fluid protease inhibitor SWM-1 regulates *C. elegans* sperm motility. **Daniela Chavez**.

W448 - 3:00 The sperm TRP family channel TRP-3 induces a calcium wave in the fertilized oocyte of *C. elegans.* **Jun Takayama**.

W449 - 3:15 Maternal MEMI specifies the female meiosis II program in *C. elegans*. **Martin Srayko**.

W450 - 3:30 ELLI-1, a novel germline protein, modulates RNAi activity and P-granule accumulation in *C. elegans*. **Dustin Updike**.

Saturday, July 16 4:00 PM – 6:00 PM Grand Ballroom 8A

RNAi, microRNAs, and Developmental Timing

Moderators:

Julie Claycomb, University of Toronto, Canada, and Antony Jose, University of Maryland, College Park

Theme: Genomics and Gene Regulation

W451 - 4:00 Cell-cycle quiescence maintains *C. elegans* germline stem cells independent of GLP-1/Notch. **Hannah Seidel**

W452 - 4:15 Beyond Cell Death: Systematic Analyses of Non-apoptotic CED-3 Caspase Functions in *C. elegans*. **Benjamin Weaver**.

W453 - 4:30 Two new genes regulate LIN-28 in the juvenile-to-adult transition. Karin Kiontke

W454 - 4:45 The Argonaute VSRA-1 Regulates Gene Expression through Multiple Small RNA Pathways. **Julie Claycomb**.

W455 - 5:00 ALG-5 interacts with a subset of miRNAs to affect male gene expression and fecundity in *C. elegans*. **Taiowa Montgomery**.

W456 - 5:15 Toward an understanding of cooperative miRNA-mediated silencing.

Mathieu Flamand.

W457 - 5:30 A continuum of mRNP complexes in embryonic miRNA-mediated silencing. **Thomas Duchaine**.

W458 - 5:45 Germline- and soma-specific mechanisms of heritable epigenetic silencing at an endogenous locus. Olga Minkina.

Saturday, July 16 7:30 PM – 9:30 PM Grand Ballroom 8A

Plenary Session 3: Development and Disease

Moderators: Tamara Mikeladze-Dvali,

The Ludwig-Maximilians University of Munich, Germany, and Xantha Karp, Central Michigan University, Mount Pleasant

Theme: Development and Morphogenesis

W459 - 7:30 The not so simple regulation of a simple cell death. **Barbara Conradt**.

W460 - 8:10 PP1 β controls ZYG-1 levels to ensure precise centrosome doubling. **Jyoti lyer**.

W461 - 8:35 Sumoylation and desumoylation in epidermal morphogenesis. **Limor Broday**.

W462 - 9:00 Conserved TRPA1-Nrf2 signaling mediates reactive alphadicarbonyl detoxification relevant for diabetic pathologies. **J. Chaudhuri**.

Sunday, July 17 10:30 AM – 12:30 PM Palms Ballroom Sago/Sabal/Royal

Technology and its Application Joint Plenary Session

Moderator: Phil Hieter, University of British Columbia, Vancouver, Canada

10:30 The gut microbiota and childhood undernutrition: looking at human development from a microbial perspective. **Jeffrey Gordon**.

11:00 Synthesis of the yeast genome and beyond. **Jef Boeke**.

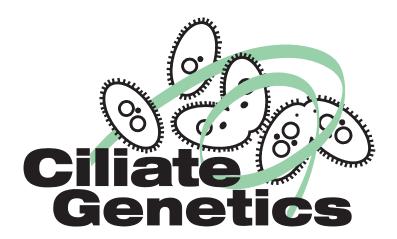
11:30 Tomorrow's Table: Organic Farming, Genetics and the Future of Food. **Pamela Ronald**.

12:00 CRISPR-Cas Genome Engineering: Biology, Technology and Ethics. **Jennifer Doudna**. (Pre-recorded talk)

C. elegans PLENARY AND PLATFORM SESSIONS

NOTES

2016 CILIATE MOLECULAR BIOLOGY MEETING



Plenary and Platform Sessions



2016 Ciliate Molecular Biology Conference SCHEDULE AT-A-GLANCE

Wednesday, July 1	3	
2:00pm-9:30pm	Speaker Ready Room Open	Hall of Cities - Anaheim
7:00pm-9:00pm	Scientific Session: Genomics: Genome Structure and Organization	Palms Ballroom Canary 2
9:00pm-11:00pm	Opening Mixer with Exhibits	Cypress Ballroom
Thursday, July 14		
7:00am-5:00pm	Speaker Ready Room Open	Hall of Cities -Anaheim
7:45am-10:00am	Genetics and Determinants of Health Joint Plenary Session	Palms Ballroom
8:00am-4:00pm	Exhibits Open	Cypress Ballroom
9:00am-8:00pm	Demo Room: MOD (FlyBase, MGI, SGD, WormBase, Zfin) Demo Room Open	Palms Ballroom Canary 3-4
10:30am-12:30pm	Scientific Session: Programmed DNA Rearrangement I	Palms Ballroom Canary 2
12:30pm-1:30pm	Mentoring Roundtables #1	North Tower - Harbor Beach
12:30pm-1:30pm	Speaking Up for Genetics and Model Organism Research	Crystal Ballroom H
1:30pm-3:30pm	Poster Presentations 1:30pm-2:30pm: Even-numbered poster 2:30pm-3:30pm: Odd-numbered posters	Cypress Ballroom (Posters must be removed by 1pm)
1:30pm-3:30pm	GeneticsCareers Center and Job Fair	Cypress Ballroom 1C
4:00pm-6:00pm	Scientific Session: Evolution and Population Biology	Palms Ballroom Canary 2
4:00pm-6:00pm	Plenary Session and Workshop for Undergraduate Researchers	North Tower - Sawgrass
7:45pm-9:45pm	Scientific Session: Stability and Dynamics	Palms Ballroom Canary 2
10:00pm-11:30pm	*Science Cafe Event	Palms Ballroom Sabal
Friday, July 15		
7:00am-5:00pm	Speaker Ready Room Open	Hall of Cities - Anaheim
8:00am-9:30am	Scientific Session: Programmed DNA Rearrangement II	Palms Ballroom Canary 2
8:00am-4:30pm	Exhibits Open	Cypress Ballroom
9:00am-8:00pm	Demo Room: MOD (FlyBase, MGI, SGD, WormBase, Zfin) Demo Room Open	Palms Ballroom Canary 3-4
10:00am-12:00pm	Scientific Session: Chromatin Structure & Chromatin Modification	Palms Ballroom Canary 2
12:00pm-1:30pm	*Editor's Panel Discussion and Roundtable	North Tower - Harbor Beach
	4	

^{*} Ticketed Event



.20 2.20	Poster Presentations	Cypress Ballroom
1:30pm-3:30pm	1:30pm-2:10pm: "A" poster authors present	Cypress Bailroom
	2:10pm-2:50pm: "B" poster authors present	
	2:50pm-3:30pm: "C" poster authors present	
1:30pm-3:30pm	GeneticsCareers Center	Cypress Ballroom 1C
2:00pm-2:45pm	GeneticsCareers Workshop - Nailing the Job Talk	Cypress Ballroom 1B
4:00pm-6:00pm	Scientific Session: Signaling Systems: Signal Transduction, Protein Secretion, and Trafficking	Palms Ballroom Canary 2
6:00pm-7:30pm	*Women in Genetics Panel and Networking	North Tower - Harbor Beach
7:30pm-9:30pm	Development and Evolution Joint Plenary Session	Palms Ballroom
Saturday, July 16		
7:00am-5:00pm	Speaker Ready Room Open	Hall of Cities - Anaheim
8:00am-10:00am	Workshops: See topics and descriptions under the Workshop Section	Multiple locations
8:00am-12:00pm	Exhibits Open	Cypress Ballroom
8:00am-9:00am	Trainee Bootcamp Workshops: Session 1	North Tower
9:00am-10:00am	Trainee Bootcamp Workshops: Session 2	North Tower
10:00am-12:00pm	Poster Presentations	Cypress Ballroom
	10:00am-11:00am: Odd-numbered posters	
	11:00am-12:00pm: Even-numbered posters	
10:00am-12:00pm	GeneticsCareers Center	Cypress Ballroom 1C
10:30am-11:15am	GeneticsCareers Workshop	Cypress Ballroom 1B
12:15pm-1:45pm	*Mentoring Roundtables #2	North Tower - Harbor Beach
1:45pm-3:45pm	Scientific Session: Cell Motility: Cilia, Basal Bodies, and Tubulin	Palms Ballroom Canary 2
4:00pm-6:00pm	Scientific Session: Cell Biology, Morphogenesis, & Development	Palms Ballroom Canary 2
7:30pm-9:30pm	Scientific Session: Community Resources: Current and Future Needs	Palms Ballroom Canary 2
Sunday, July 17		
8:00am-10:00am	Scientific Session: Ciliates in the Classroom and Undergraduate Ciliate Research Symposium	Palms Ballroom Canary 2
10:30am-12:30pm	Technology and its Application Joint Plenary Session	Palms Ballroom

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Wednesday, July 13 7:00 PM – 9:00 PM Palms Ballroom Canary 2

Ciliate Genomics: Genome Structure and Organization

Moderator:

Laura Landweber, Princeton University, NJ and Columbia University, NY

Theme: Genomics and Gene Regulation

C13 - 7:00 Maintenance and loss of duplicated genes by dosage subfunctionalization in *Paramecium*. **Jean-Francois Pierre Gout**.

C14 - 7:30 De Novo sequencing of the Paramecium tetraurelia macronucleolar (MAC) genome using Pacific Biosciences single molecule long reads for improvement of genome assembly and annotation. Rafal Woycicki.

C15 - 7:45 Comparative genomics in the ciliate genus *Paramecium*. **Georgi**Marinov

C16 - 8:00 Programmed retention of germline-limited genes in Oxytricha trifallax. Richard Miller.

C17 - 8:15 Cell Cycle Transcriptome Analysis in the Binucleated Ciliate, *Tetrahymena thermophila*. **Linying Zhang**.

C18 - 8:30 RNA-seq analysis of stress response to silver nanoparticles in *Tetrahymena thermophila*. Angela Piersanti.

C19 - 8:45 Preliminary analysis on genome and transcriptome data of two species of karyorelictids, *Loxodes* sp. and Trachelocercidae sp. (Ciliophora, Karyorelictea). Ying Yan.

Thursday, July 14 7:45 AM – 10:00 AM Palms Ballroom Sago/Sabal/Royal

Genetics and Determinants of Health Joint Plenary Session

Moderator: Lynn Cooley, Yale University, New Haven, CT

7:45 Welcome, Stan Fields, University of Washington, Seattle, GSA President.

7:50 Opening Remarks, Phil Hieter, University of British Columbia and Jeannie Lee, Harvard University, TAGC Organizers.

8:00 Translating Zebrafish Development to the Clinic. **Leonard Zon**.

8:30 Using Drosophila to unravel the mysteries of sleep: when, why and how. **Amita Sehgal**.

9:00 New insights into the pathogenesis and treatment of Marfan syndrome and other presentations of thoracic aortic aneurysm. Harry Dietz.

9:30 Accelerating Insights from Basic Genetics **Francis Collins**

Thursday, July 14 10:30 AM – 12:30 PM Palms Ballroom Canary 2

NOTES

Programmed DNA Rearrangement I

Moderators:

Eric Meyer, IBENS, Paris, France, and **Mireille Betemier**, I2BC, Gif-sur-Yvette, France

Theme: Stem Cell, Regeneration and Germline

C20 - 10:30 Genome Rearrangement and Organization in *Oxytricha*: A Complex Epigenome. **Laura Landweber**.

C21 - 11:00 Novel genetic manipulation approaches to investigate development-specific genes in *Oxytricha trifallax*. **Derek Clay**.

C22 - 11:15 The prevalence of paralogous macronuclear DNA fragments aid in the formation of scrambled genes in *Oxytricha trifallax*. **Jonathan Burns**.

C23 - 11:30 Domesticated *piggyBac* transposases and DNA repair factors work hand in hand during programmed rearrangements in *Paramecium*. Mireille Betermier.

C24 - 12:00 SDCP, a novel *Paramecium* protein involved in macronuclear development during autogamy. **Aditi Singh**.

C25 - 12:15 A mutagenesis screen based on mating-type switch reveals a small subset of IESs enriched in a 5-bp motif.

Simran Bhullar

Thursday, July 14 4:00 PM – 6:00 PM Palms Ballroom Canary 2

Evolution and Population Biology

Moderator:

Jean-Francois Gout, Indiana University, Bloomington

Theme: Evolution and Quantitative Biology

C26 - 4:00 Transposable elements as vehicles of gene movement and duplication within and between eukaryotes. Ellen Pritham

C27 - 4:30 Evolution of internal eliminated sequences in *Paramecium*. **Diamantis Sellis**.

C28 - 4:45 Population genomics of *Paramecium* species. **Parul Johri**.

C29 - 5:00 Transcriptome analysis in the Antarctic ciliate Euplotes focardii: molecular basis of cold adaptation and insights regarding the potential impact of climate change. Cristina Miceli.

C30 - 5:30 Comparison of adaptive mechanism between sexual and asexual reproduction in *Tetrahymena thermophila* based on the experimental evolutionary genomics. **Wei Miao**.

C31 - 5:45 Diversities of endosymbiotic Rickettsia in the fish parasite Ichthyophthirius multifiliis. Kassandra Zaila Thursday, July 14 7:45 PM – 9:45 PM Palms Ballroom Canary 2

Genome Stability and Dynamics

Moderators:

Jeff Kapler, Texas A&M University, College Station, and Josh Smith, Missouri State University, Springfield

Theme: Genomics and Gene Regulation

C32 - 7:45 Genetic and epigenetic control of DNA replication in *Tetrahymena thermophila*. **Geoffrey Kapler**.

C33 - 8:15 Beyond condensation: novel roles for condensin in the polyploid somatic nucleus of *Tetrahymena thermophila*.

Rachel Howard-Till.

C34 - 8:45 Repair of a fragile site in the mating type genes using an episomal template in *Tetrahymena*. Marcella Cervantes.

C35 - 9:00 Identification and Characterization of *Tetrahymena* thermophila Snf2/Swi2 ATPase Homologs Involved in DNA Repair. **Andrew Morin**.

C36 - 9:30 Interplay between the Homologs Rad51 and Dmc1 in Cell Division, Sexual Reproduction, and Homologous Recombination Repair. Amaal Abulibdeh.

Friday, July 15 8:00 AM – 9:30 AM Palms Ballroom Canary 2

NOTES

Programmed DNA Rearrangement II

Moderator:

Mariusz Nowacki, University of Bern, Switzerland

Theme: Stem Cell, Regeneration and Germline

C37 - 8:00 Both maternal and paternal scnRNAs can target excision of transposon-derived sequences during *Paramecium* development. **Eric Meyer**.

C38 - 8:30 Analysis of developmentspecific Piwi proteins in *Paramecium*. Dominique Furrer.

C39 - 8:45 Regulation of DNA elimination boundaries requires novel DNA-binding proteins that define heterochromatin domains. Douglas Chalker.

C40 - 9:15 Transiently maintained somatic chromosomes of *Tetrahymena* contain development-specific genes. **Yifan Liu**.

Friday, July 15 10:00 AM – 12:00 PM Palms Ballroom Canary 2

Chromatin Structure and Chromatin Modification

Moderators:

Martin Simon, Saarland University, Germany, and Sean Taverna, John's Hopkins University, MD

Theme: Genomics and Gene Regulation

10:00 Session Introduction.

C41 - 10:15 Cell cycle control of histone methyltransferase TXR1 levels is required NOTESfor proper DNA replication in *Tetrahymena*. **Shan Gao**.

C42 - 10:30 Functional analysis of the lbd1 protein in *Terahymena thermophila*. **Aleiandro Saettone**.

C43 - 10:45 GCN5, ESA1, and CHD1: More Than Just Transcription Regulators? Joshua Smith.

C44 - 11:00 MAC-specific Chromatin Remodelers bind a Zinc Finger Protein and Diverse RNAs throughout the *Tetrahymena* Life Cycle. **Eva DeRango-Adem**.

C45 - 11:15 Homology dependent heterochromatin formation by *trans* acting RNAi in *Paramecium tetraurelia*. Martin Simon

C46 - 11:30 The enhancer of zeste like protein Ezl1 is required for scnRNA selection and transcriptional repression of transposon-derived sequences in *Paramecium tetraurelia*. Andrea Frapporti.

C47 - 11:45 Proteomic Characterization of *Tetrahymena thermophila* Chromatin Assembly Proteins. **Jyoti Garg**.

Friday, July 15 4:00 PM – 6:00 PM Palms Ballroom Canary 2

Ciliate Signaling Systems: Signal Transduction, Protein Secretion, and Trafficking

Moderators:

Megan Valentine, University of Vermont, Burlington, and Sabrice Guerrier, Millsaps College, Jackson. MS

Theme: Intracellular Dynamics

C48 - 4:00 Signaling and Cell Cycle Studies in *Tetrahymena thermophila*. **Ronald Pearlman**.

C49 - 4:30 A potential role for TtSNX4 in macronuclear degradation in *Tetrahymena thermophila* conjugation. **Sabrice Guerrier**.

C50 - 4:45 Characterization of the ubiquitin-like modifier *Urm1* in the Ciliate *Tetrahymena thermophila*. **Jennifer Copeland**.

C51 - 5:00 Early stages of diversification in the Rab GTPase gene family revealed by genomic and functional studies in *Paramecium* species. **Lydia Bright**.

C52 - 5:15 The detection of intracellular cAMP fluctuations – a sensitive in vivo assay to investigate signal transduction pathways in *Tetrahymena thermophila*.

Daniel Romero.

C53 - 5:30 Polycystin-2 (Pkd2) and its unexpected role in Mg²⁺ permeability in *Paramecium*. **Megan Valentine**.

C54 - 5:45 Whole genome sequencing of a *Tetrahymena* mutant reveals that VPS8, a subunit of the CORVET complex, is essential for biogenesis of mucocysts. **Daniela Sparvo**

Friday, July 15 7:30 PM – 9:30 PM Palms Ballroom Sago/Sabal/Royal

NOTES

Development and Evolution Joint Plenary Session

Moderator: Jeannie Lee, Massachusetts General Hospital and Harvard University, Cambridge, MA

- 7:30 The Fred Kavli Foundation
 Distinguished Lecture: Flexibility and variability in behavior at the geneenvironment interface. Cori Bargmann.
- 8:00 Colinear Hox genes regulation in mammals. **Denis Duboule**.
- 8:30 Of mice, men and birds: meiotic recombination and its evolution. **Molly Przeworski**.
- 9:00 Fishing for the secrets of stickleback and human evolution. **David Kingsley**.

CROSS COMMUNITY WORKSHOPS

CROSS COMMUNITY WORKSHOPS

Saturday, July 16	8:0am – 10:00 am	
Descriptions are in the Workshop section and in the app.		
Automated Tracking for Quantitative Phenotyping	Grand Ballroom 3	
CRISPR-based Genome Engineering	Crystal Ballroom J2	
Using CyVerse Cyberinfrastructure to Enable Data Intensive Research, Collaboration, and Education	Grand Ballroom 1	
Model Organisms to Face Environmental Problems	Palms Ballroom Canary 1	
Integrating Research and Teaching: Professional Development for Current and Future Faculty Members	St. Thomas	
Informatics Resources to Aid the Genetic Dissection of Neural Circuitry	Palms Ballroom Canary 2	
Everything you Wanted to Know about Sex	Palms Ballroom Sabal	
modMetabolome: Model Organism Metabolomics Consortium Workshop	Grand Ballroom 8A	
Feeding Behavior, Nutrition and Metabolism: Emerging Model Organisms	Palms Ballroom Royal	
Functional Genomics for Conserved Gene Function Discovery	Crystal Ballroom J1	
Cell Competition in Flies and Mice	Crystal Ballroom G1	
Developmental Mechanics	Crystal Ballroom G2	
Model Systems in Drug Discovery	Grand Ballroom 2	
CRISPR/Cas9 - Techniques and applications in Fish, Flies, & Mice	Grand Ballroom 7A	
Gene Function Discovery within the IMPC Resource	Crystal Ballroom C	
Utilizing NCBI Databases for Model Organism Research	Grand Ballroom 12-14	
Systems Genetics in Complex Populations	Crystal Ballroom A-B	
An Introduction to Using Galaxy for Genetic Data Analysis	Grand Ballroom 11	
The InterMOD Consortium: A common interface to model organism data	Crystal Ballroom N-Q	

Saturday, July 16 1:45 PM – 3:45 PM Palms Ballroom Canary 2

NOTES

Cell Motility: Cilia, Basal Bodies, and Tubulin

Moderators: **Jacek Gaertig**, University of Georgia, Athens, and **Anne-Marie Tassin**, CNRS, Gif-sur-Yvette, France

Theme: Intracellular Dynamics

C55 - 1:45 Using *Chlamydomonas* to understand cilia assembly. **Susan Dutcher**.

C56 - 2:15 Role of molecular motors and microtubule-binding proteins in cell polarity and regeneration of Stentor. **Tatyana Makushok**.

C57 - 2:30 Kinome analysis in the giant ciliate *Stentor coeruleus*. **Sarah Reiff**.

C58 - 2:45 Forward Genetics in *Tetrahymena thermophila* by a Modified Pooled Linkage: Identification of Causative Mutations Related to Cell Division and Ciliogenesis. **Yuyang Jiang**.

C59 - 3:00 Paramecium as a model to study human ciliopathies: study of a transition zone protein, MKS2. **Anne-Marie Tassin**.

C60 - 3:15 Sfr proteins that transiently localize to the basal bodies during assembly. **Mark Winey**.

C61 - 3:30 Stabilizing basal bodies to resist asymmetric ciliary forces. **Chad Pearson**.

Saturday, July 16 4:00 PM – 6:00 PM Palms Ballroom Canary 2

Cell Biology, Morphogenesis, and Development

Moderators:

Judith Van Houten, University of Vermont, Burlington, and **Chad Pearson**, University of Colorado Aurora

Theme: Development and Morphogenesis

C62 - 4:00 Organ sculpting in the *Drosophila* ovary. **David Bilder**.

C63 - 4:30 Answer to the Puzzle: Why Paramecium Pawn Mutants Cannot Swim Backward. Judith Van Houten.

C64 - 4:45 Mitochondrial contributions to behavioral and developmental phenotypes in *Paramecium tetraurelia*. **Wade Bell**.

C65 - 5:00 Role of Aurora Kinases in Single-Cell Regeneration of *Stentor*. **Athena Lin**.

C66 - 5:15 Transcriptional dynamics of single-cell regeneration in the ciliate Stentor coeruleus Pranidhi Sood

C67 - 5:30 Quantifying HAP2-mediated cellular fusion in a sexual ciliate. **Jennifer Pinello**

C68 - 5:45 The Role of Extracellular Microvesicles During Conjugation in *Tetrahymena thermophila*. **Eric Cole**.

Saturday, July 16 7:30 PM – 9:30 PM Palms Ballroom Canary 2

Community Resources: Current and Future Needs

Moderators:

Naomi Stover, Bradley University, Peoria, IL, and Doug Chalker, Washington University in St. Louis. MO

Theme: New Technology and Resources

C69 - 7:30 TetraMine and Web Apollo at Tetrahymena Genome Database. **Naomi Stover**.

C70 - 7:45 TetraExpress™: A Breakthrough Protein Expression Technology. **Janna Bednenko**.

C71 - 8:00 Construction of a Gateway fluorescent tagging plasmid system for integration into the *btu1-1* locus. **Jeremy Tee**.

8:15 Future of Ciliate Research: opportunities, needs and challenges. Panel discussion with Wei Meio, Naomi Stover, and other representatives from Ciliate Genome Databases, The Tetrahymena Stock Center, and the Tetrahymena Research advisory Board.

Sunday, July 17 8:00 AM – 10:00 AM Palms Ballroom Canary 2

Ciliates in the Classroom and Undergraduate Ciliate Research Symposium

Moderators:

Emily Wiley, Claremont McKenna College, CA and Joshua Smith, Missouri State University

Theme: New Technology and Resources

Ciliate biologists have a long history of using the model system to engage undergraduates in their science courses. This workshop will serve as a forum for sharing innovative uses of ciliates to foster original inquiry or enhance conceptual learning in undergraduate classrooms.

- 8:00 Discussion Integration of Research Priorities in to the Classroom.
- 8:30 Discussion Teaching Research.
- **C72** 9:00 Research and Cloning of *Tetrahymena thermophila UBE2S* in an Introductory Science Lab. **Emily Schmoll**.
- **C73** 9:15 Characterization of the SIRT2 and SIRT3 homologs in *Tetrahymena thermophila*. **Kyle Cook**.
- **C74** 9:30 Gene expression changes during infection of *Paramecium caudatum* by *Holospora undulata* bacteria. **Catherine Kagemann**.
- **C75** 9:45 Towards the Identification of Genomic Targets of MED 31 in *Tetrahymena thermophila*. **Cristina ThuppuMudalige**.

Sunday, July 17 10:30 AM – 12:30 PM Palms Ballroom Sago/Sabal/Royal

Technology and its Application Joint Plenary Session

Moderator: Phil Hieter, University of British Columbia, Vancouver, Canada

- 10:30 The gut microbiota and childhood undernutrition: looking at human development from a microbial perspective. **Jeffrey Gordon**.
- 11:00 Synthesis of the yeast genome and beyond. **Jef Boeke**.
- 11:30 Tomorrow's Table: Organic Farming, Genetics and the Future of Food. **Pamela Ronald**.
- 12:00 CRISPR-Cas Genome Engineering: Biology, Technology and Ethics. **Jennifer Doudna**. (Pre-recorded talk)

NOTES

Drosophila

57TH ANNUAL DROSOPHILA RESEARCH CONFERENCE



Plenary and Platform Sessions



57th Annual Drosophila Research Conference

SCHEDULE AT-A-GLANCE

	<u> </u>	
Wednesday, July 13		
2:00pm-9:30pm	Speaker Ready Room Open	Hall of Cities - Anaheim
7:00pm-9:00pm	Scientific Session: Opening General Session	Crystal Ballroom M
9:00pm-11:00pm	Opening Mixer with Exhibits	Cypress Ballroom
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7:00am-5:00pm	Speaker Ready Room Open	Hall of Cities -Anaheim
7:45am-10:00am	Genetics and Determinants of Health Joint Plenary Session	Palms Ballroom
8:00am-4:00pm	Exhibits Open	Cypress Ballroom
9:00am-8:00pm	Demo Room: MOD (FlyBase, MGI, SGD, WormBase, Zfin) Demo Room Open	Palms Ballroom Canary 3-4
10:30am-12:30pm	Scientific Session: Plenary Session I	Palms Ballroom Sago/Sabal/Royal
12:30pm-1:30pm	Mentoring Roundtables #1	North Tower - Harbor Beach
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7:00am-5:00pm	Speaker Ready Room Open	Hall of Cities - Anaheim
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9:00am-8:00pm	Demo Room: MOD (FlyBase, MGI, SGD, WormBase, Zfin) Demo Room Open	Palms Ballroom Canary 3-4

^{*} Ticketed Event



Friday, July 15 (con	tinued)	
10:00am-12:00pm	Concurrent Scientific Session: Physiology, Organismal Growth & Aging Techniques & Resources RNA Biology	Palms Ballroom Sago Palms Ballroom Sabal Palms Ballroom Royal
12:00pm-1:30pm	*Editor's Panel Discussion and Roundtable	North Tower - Harbor Beach
1:30pm-3:30pm	Poster Presentations 1:30pm-2:10pm: "A" poster authors present 2:10pm-2:50pm: "B" poster authors present 2:50pm-3:30pm: "C" poster authors present	Cypress Ballroom
1:30pm-3:30pm	GeneticsCareers Center	Cypress Ballroom 1C
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1:45pm-3:45pm	Concurrent Scientific Sessions: Organelles & Trafficking Models of Human Disease II Gene Expression & Chromatin	Palms Ballroom Sago Palms Ballroom Sabal Palms Ballroom Royal
4:00pm-6:00pm	Workshops: See topics and descriptions in the Workshop Section	Multiple Locations
7:30pm-9:30pm	Concurrent Scientific Session: Immunity and Pathogenesis Neurophysiology and Behavior Stem Cells	Palms Ballroom Sago Palms Ballroom Sabal Palms Ballroom Royal
Sunday, July 17		
7:55am -8:00am	Poster Awards Presentation	Palms Ballroom
8:00am-10:00am	Scientific Sessions: Plenary Session	Palms Ballroom
10:30am-12:30pm	Technology and its Application Joint Plenary Session	Palms Ballroom

Wednesday, July 13 7:00 PM – 9:00 PM Crystal Ballroom M

Opening General Session

Moderator:

Susan Celniker, Lawrence Berkely National Laboratory, CA

Theme: Intracellular Dynamics

7:00 Welcome and Opening Remarks. **Susan Celniker**.

D76 - 7:15 Image Award Presentation. **Michelle Arbeitman**

D77 - 7:20 Presentation of Larry Sandler Award and Lecture. **Daniella Drummond-Barbosa**.

D78 - 7:25 Larry Sandler Award Winner.

D79 - 7:55 Discovery of the Homeobox Panel featuring Matthew Scott, Michael Levine and William McGinnis.

Thursday, July 14 7:45 AM – 10:00 AM Palms Ballroom Sago/Sabal/Royal

Genetics and Determinants of Health Joint Plenary Session

Moderator: Lynn Cooley, Yale University, New Haven, CT

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8:30 Using Drosophila to unravel the mysteries of sleep: when, why and how. **Amita Sehgal**.

9:00 New insights into the pathogenesis and treatment of Marfan syndrome and other presentations of thoracic aortic aneurysm. **Harry Dietz**.

9:30 Accelerating Insights from Basic Genetics. **Francis Collins**.

Thursday, July 14 10:30 AM – 12:30 PM Palms Ballroom Sago/Sabal/Royal

NOTES

Drosophila Plenary Session I

Moderator:

David Bilder, University of California, Berkeley

D80 - 10:30 Organizing the contraction that changes tissue shape. **Adam Martin**.

D81 - 11:00 Hox Transcription Factors and their Cell type-specific Role in Development. **Ingrid Lohmann**.

D82 - 11:30 Modelling Intellectual Disability Disorders in *Drosophila* - from Genes to Functional Modules and Clinical Applications. **Annette Schenck**.

D83 - 12:00 Hippo Signaling in Growth Control and Beyond. **Duojia Pan**.

Thursday, July 14 4:00 PM – 6:00 PM Palms Ballroom Sago

Cell Division and Growth Control

Moderators:

Erika Bach, New York University,

Terry Orr-Weaver, Whitehead Inst, MIT, and

Kari Barla, Univety of Chicago

Theme: Intracellular Dynamics

D84 - 4:00 Centrosomes and the Spindle Assembly Checkpoint cooperatively ensure proper growth and organization of the developing fly brain by promoting genome stability and viability of neural stem cells. **John Poulton**.

D85 - 4:15 The GATOR2 Complex Uses TORC1 Dependent and Independent Pathways to Regulate Cellular Metabolism. **Weili Cai**.

D86 - 4:30 Vamana couples Fat signaling to the Hippo pathway. **Jyoti Misra**.

D87 - 4:45 Genetic regulation of cell-fate plasticity in *Drosophila* imaginal discs. **Melanie Worley**.

D88 - 5:00 Oxidative Stress in Oocytes during Mid-Prophase Induces Premature Loss of Cohesion and Chromosome Segregation Errors. **Adrienne Perkins**.

D89 - 5:15 Yorkie, a transcriptional coactivator that regulates growth, also functions at the cell cortex to promote cytoskeletal tension. **Jiajie Xu**.

D90 - 5:30 Notch signaling promotes cell proliferation and controls cell identity in developing imaginal ring cells. **Sheng-An Yang**

D91 - 5:45 Regulating the regulator of cell cycle, Xpd. **Rishita Nag**.

Thursday, July 14 4:00 PM – 6:00 PM Palms Ballroom Sabal

Neural Development

Moderators:

Ron Davis, The Scripps Research Inst., FL and Krystyna Keleman, HHMI Janelia Research Campus and Yang Wu, HHMI Janelia Research Campus, VA

Theme: Neuroscience, Systems to Molecules

D92 - 4:00 Formin3 regulates dendritic architecture via microtubule stabilization and is required for somatosensory nociceptive behavior. **Ravi Das**.

D93 - 4:15 Heparan sulfate proteoglycans promote dendritic growth of *Drosophila* sensory neurons through receptor protein tyrosine phosphatase Ptp69D. **Amy Poe**.

D94 - 4:30 *nejire*-mediated transcriptional regulation of dendritic growth and arborization complexity. **Sarah Clark**.

D95 - 4:45 A Functionally Conserved Gene Regulatory Network Module Governing Olfactory Neuron Diversity. **Scott Barish**

D96 - 5:00 Developmental programs and olfactory receptor signaling in structural and functional development of *fruitless* positive olfactory neurons. **Pelin Volkan**.

D97 - 5:15 Inhibition of mitochondrial calcium entry in mushroom body neurons during pupariation causes memory impairment and neuronal structural defects in adult flies. **Ilaria Drago**.

D98 - 5:30 Syncrip regulates *prospero* stability during neuroblasts division and differentiation. **Lu Yang**.

D99 - 5:45 Spontaneous grooming and other activity phenotypes resulting from Neurofibromin loss of function in Drosophila. **Lanikea King**.

Thursday, July 14 4:00 PM – 6:00 PM Palms Ballroom Royal

Organogenesis and Gametogenesis

Moderators:

Mark Van Doren, Johns Hopkins University, and Erika Matunis, Johns Hopkins Medicine, and Pradeep Bhaskar, Johns Hopkins University

Theme: Stem Cell, Regeneration and Germline

D100 - 4:00 Mediator subunit *skuld* is required sex specifically for ovary development. **Hina Sultana**.

D101 - 4:15 Neuropeptide-dependent control of female germline stem cell proliferation after mating in *Drosophila melanogaster*. Tomotsune Ameku.

D102 - 4:30 Electron Transport Chain Remodeling by GSK3 during Oogenesis Connects Nutrient State to Reproduction. Matt Sieber

D103 - 4:45 The mitochondrial outer membrane protein MDI promotes local protein synthesis and mtDNA replication. Yi Zhang.

D104 - 5:00 Signaling through the Gprotein-coupled receptor Rickets is important for polarity, detachment, and migration of the border cells in *Drosophila*. Lauren Anllo

D105 - 5:15 A mutation in *fat2* uncouples tissue elongation from global tissue rotation in *Drosophila*. **Franziska Aurich**.

D106 - 5:30 Steroid signaling in mature follicles is essential for *Drosophila* ovulation. **Elizabeth Knapp**.

D107 - 5:45 Identification and characterization of an "insect epididymis". Timothy Karr.

Thursday, July 14 7:45 PM – 9:45 PM Palms Ballroom Sago

Cell Cycle and Cell Death

Moderators:

Arash Bashirullah, Univ. of Wisconsin- Madison, and **Sarah Siegrist**, University of Virginia, and

Conor Sipe, University of Virginia

Theme: Intracellular Dynamics

D108 - 7:45 An autonomous requirement of the lysosomal nuclease DNasell in a caspase-independent primordial germ cell death in the *Drosophila* embryo. Lama Tarayrah.

D109 - 8:00 Move or Die: Linking caspases and cell migration and invasion in *Drosophila*. **Eli Arama**.

D110 - 8:15 Lysosome activity controls nurse cell death non-autonomously. **Albert Mondragon**.

D111 - 8:30 Programmed necrosis control germ cell homeostasis during *Drosophila* spermatogenesis. **Bertrand Mollereau**.

D112 - 8:45 Regulation of cell size by variant cell cycles. **Terry Orr-Weaver**.

D113 - 9:00 An inhibitory monoubiquitylation of the *Drosophila* initiator caspase Dronc functions in both apoptotic and non-apoptotic pathways. **Hatem Elif Kamber Kaya**.

D114 - 9:15 The *Drosophila* TNF Eiger activates Dronc-dependent necrosis when apoptosis is blocked. **Mingli Li**.

D115 - 9:30 Enhancer of Polycomb represses transcription of Cyclin B during male germ cell differentiation. **Lijuan Feng**.

Thursday, July 14 7:45 PM – 9:45 PM Palms Ballroom Sabal

Evolution and Quantitative Genetics I

Moderators:

University

Marta Wayne, University of Florida, and Anthony Long, Univ. of California, Irvine, and Sharon Greenblum. Stanford

Theme: Evolution and Quantitative Biology

D116 - 7:45 Towards a Genetic Understanding of Behavior Evolution: An Ion-Channel Gene Causes Natural Courtship Song Variation in *Drosophila*. Yun Ding.

D117 - 8:00 A delicate balance of mating preference in *Drosophila melanogaster*. **Akihiko Yamamoto**

D118 - 8:15 Mechanism of hybrid incompatibility between two subspecies of *Drosophila pseudoobscura*. **Christopher Large**.

D119 - 8:30 Recurrent changes to *pdm3* drive convergent evolution of female-limited polymorphism in the *Drosophila montium* subgroup. **Emily Delaney**.

D120 - 8:45 Evolution of the Sex Peptide Network: Lineage-specific adaptive evolution and gene duplication. **Meaghan McGeary**.

D121 - 9:00 Investigating the female's role in sperm competition in *Drosophila melanogaster*. **Simone White**.

D122 - 9:15 Missing variation revealed by deep sequencing of individuals in a population of *D. simulans*. **Sarah Signor**.

D123 - 9:30 Mutational patterns in *Drosophila melanogaster.* **Zoe June Assaf**.

Thursday, July 14 7:45 PM – 9:45 PM Palms Ballroom Royal

NOTES

Pattern Formation

Moderators:

Ana Busturia, Centro de Biología Molecular Severo Ochoa, and Liz Gavis, Princeton University, and Mo Weng, Princeton University

Theme: Development and Morphogenesis

D124 - 7:45 Cell fate transformations in sine oculis eye-specific LOF mutants obscures direct regulatory interactions within the retinal determination network. **Bonnie Weasner**.

D125 - 8:00 Genome-wide analyses of Hox target genes in *Drosophila melanogaster*. **Narendra Singh**.

D126 - 8:15 Manipulating fate with light – an optogenetics tool to understand Bcd function. **Anqi Huang**.

D127 - 8:30 Regulation of Dpp signaling by O-linked glycosylation. **Matthew Moulton**

D128 - 8:45 A Transcription Factor code controlling serial specification of muscle identities in *Drosophila*. Alain Vincent.

D129 - 9:00 Tracking morphogens down: Uncovering the Dpp morphogen gradient. Pablo Sánchez Bosch.

D130 - 9:15 Flies have 11 abdominal segments (as suggested by the bithorax complex). **Welcome Bender**.

D131 - 9:30 Spatial patterning of the *Drosophila* ventral epithelium is important for proper tissue shape. **Natalie Heer**.

Friday, July 15 8:00 AM – 9:30 AM Palms Ballroom Sago

Cell Biology and Cytoskeleton

Moderators:

Nasser Rusan, National Institutes of Health, and Rodrigo Fernandez-Gonzalez, Univ. of Toronto, and Todd Schoborg, National Heart, Lung, and Blood Institute, NIH

Theme: Intracellular Dynamics

D132 - 8:00 An actomyosin-Arf-GEF negative feedback loop for tissue plasticity. Junior West.

D133 - 8:15 E-Cadherin decrease transmits proliferative-dependent forces via actin-myosin flows. Diana Pinheiro.

D134 - 8:30 A gradient of Rac activity determines protrusion form and position in a 3-dimensional epithelial sheet. **Marios Georgiou**.

D135 - 8:45 A STRIPAK-like complex regulates axonal transport of autophagosomes and dense core vesicles by modulating PP2A activity. Amanda Neisch.

D136 - 9:00 Centrosomal proteins are required for autophagy to maintain neural homeostasis. **Yiming Zheng**.

D137 - 9:15 Centrosome-pole cohesion requires Abnormal Spindle and Calmodulin to ensure proper centrosome inheritance in neural stem cells but is dispensable for brain size. **Todd Schoborg**.

Friday, July 15 8:00 AM – 9:30 AM Palms Ballroom Sabal

Evolution and Quantitative Genetics II

Moderators:

Marta Wayne, University of Florida, and **Anthony Long**, Univ. of California, Irvine, and

Sharon Greenblum, Stanford University

Theme: Evolution and Quantitative Biology

D138 - 8:00 Local Adaptation and the Establishment of Inversions in Natural Populations of *Drosophila pseudoobscura* Through the Indirect Effects of Suppressed Recombination. Zach Fuller.

D139 - 8:15 *Cis*-regulatory basis of expression divergence between recent gene duplicates. **Kohtaro Tanaka**.

D140 - 8:30 Beyond the tip of the iceberg: New *Drosophila* reference genomes reveal novel structural variants. **Mahul Chakraborty**.

D141 - 8:45 Functional and evolutionary consequences of epigenetically silenced transposable elements in euchromatin.

Grace Lee.

D142 - 9:00 Co-evolution within the nuclear branch of the *Drosophila* piRNA pathway. **Swapnil Parhad**.

D143 - 9:15 Lineage-specific rapid gains of satellite DNA in *Drosophila*. **Kevin Wei**.

Friday, July 15 8:00 AM – 9:30 AM Palms Ballroom Royal

NOTES

Chromatin and Epigenetics

Moderators:

Gary Karpen, Lawrence Berkeley Natl. Laboratory, and Amanda Larracuente, Univ. of Rochester, and Aniek Janssen, Lawrence Berkeley National Laboratory

Theme: Genomics and Gene Regulation

D144 - 8:00 Repetitious elements drive silencing in the *Drosophila melanogaster* genome through heterochromatin formation. **Sarah Elgin**.

D145 - 8:15 Establishment and maintenance of heritable patterns of chromatin structure during early embryogenesis. **Shelby Blythe**.

D146 - 8:30 Deciphering double strand break repair in heterochromatin and euchromatin using an in vivo *Drosophila* model. **Aniek Janssen**.

D147 - 8:45 The *Drosophila* Y chromosome acts as a heterochromatin sink and contributes to sex-specific aging. **Emily Brown**.

D148 - 9:00 Progenitor expansion and competence are controlled by Lsd1, PRC2 and non-coding RNAs. **Ming-Chia Lee**.

D149 - 9:15 A somatic piRNA pathway in the *Drosophila* fat body ensures metabolic homeostasis and normal lifespan. **Stephen Helfand**.

Friday, July 15 10:00 AM – 12:00 PM Palms Ballroom Sago

Physiology, Organismal Growth and Aging

Moderators:

Ting Xie, Stowers Institute for Medical Research, MO and Jason Tennessen, Indiana University Bloomington, and Matt Sieber, Carnegie Institute for Science Sponsored by the National Institute on Aging

Theme: Development and Morphogenesis

D150 - 10:00 The sexual identity of adult intestinal stem cells controls organ size and plasticity. **Bruno Hudry**.

D151 - 10:15 Mechanisms underlying sexually dimorphic growth. **Annick Sawala**.

D152 - 10:30 Body weight dependent autophagy induction mediates metamorphic timing control under nutrient restriction in Drosophila. Xueyang Pan.

D153 - 10:45 A SANT-like domain-containing protein regulates lipid droplet size. **Xun Huang**.

D154 - 11:00 Identification and Characterization of a Novel Gene that Regulates Mitochondrial DNA Replication. Jessica Tang.

D155 - 11:15 Circadian mutants lacking either *period* or *timeless* have an extended longevity phenotype due to altered mitochondrial function. **Michele Shirasu-Hiza**.

D156 - 11:30 Histidine metabolism perturbations inhibit neural tumours dependent on Myc-mediated dedifferentiation. Francesca Froldi.

D157 - 11:45 Ecology of the gut microbiome determines fly health. William Ludington.

Friday, July 15 10:00 AM – 12:00 PM Palms Ballroom Sabal

Techniques and Resources

Moderators:

Norbert Perrimon, Harvard Medical School, and Kate O'Connor-Giles, Univ. of Wisconsin- Madison, and Benjamin Housden, Harvard Medical School

Theme: New Technology and Resources

D158 - 10:00 Genome-wide spatial-temporal gene expression pattern prediction in Drosophila melanogaster embryonic development. **Jian Zhou**.

D159 - 10:15 Measuring exercise in *Drosophila:* Characterization of the Rotating Exercise Quantification System (R.E.Q.S.). **Louis Watanabe**.

D160 - 10:30 Features and Applications of FlyCircuit Database – From Fluorescent Images to the Drosophila Connectome.

Chi-Tin Shih

D161 - 10:45 High-speed imaging of neural spiking and dendritic dynamics in awake flies with a fluorescent voltage sensor. Cheng Huang.

D162 - 11:00 Effective knockdown of *Drosophila* long noncoding RNAs by CRISPR interference. **Ji-Long Liu**.

D163 - 11:15 Optimized synthetic lethal screening approaches for drug target discovery in *Drosophila*. Benjamin Housden.

D164 - 11:30 CRISPR/Cas9-based tools for *in vivo* transcriptional activation and repression in *Drosophila*. **Ben Ewen-Campen**.

D165 - 11:45 A novel 96 well system for housing, manipulating and feeding flies. **Maria Jaime**.

Friday, July 15 10:00 AM – 12:00 PM Palms Ballroom Royal **NOTES**

RNA Biology

Moderators:

Howard Lipshitz, Univ. of Toronto, and **Ben Brown**, Lawrence Berkeley Natl.

Ben Brown, Lawrence Berkeley Natl. Laboratory, and **John Laver**, University of Toronto

Theme: Genomics and Gene Regulation

D166 - 10:00 Neuronal 3'UTR extension: ELAV links Pol II pausing to alternative polyadenylation. **Valerie Hilgers**.

D167 - 10:15 Mutant rescue by inhibition of nonsense mediated decay. Mark
Metzstein

D168 - 10:30 The *Drosophila* hnRNP F/H homolog, Glorund, Uses Two Distinct RNA Binding Modes to Differentially Regulate Its Targets. **Elizabeth Gavis**.

D169 - 10:45 The TREX complex suppresses piRNA precursor splicing and promotes assembly of piRNA cluster heterochromatin. **Gen Zhang**.

D170 - 11:00 From egg to adult: piRNA-mediated silencing throughout germline development in *Drosophila melanogaster*. **Pauline Marie**.

D171 - 11:15 Nano-exons in *Drosophila*. **Stephen Mount**.

D172 - 11:30 Identifying genetic modifiers of FUS toxicity in a drosophila model of ALS. **Udai Pandey**.

D173 - 11:45 A high-throughput pipeline for the production of synthetic antibodies for analysis of ribonucleoprotein complexes. **John Laver**.

Friday, July 15 4:00 PM – 6:00 PM Palms Ballroom Sago

Cell Biology and Signal Transduction

Moderators:

Margot Quinlan, Univ. of California, Los Angeles,

Lucy O'Brien, Stanford University, and

Parthive Patel, German Cancer Research Center (DKFZ) - University of Heidelberg (ZMBH) Alliance

Theme: Intracellular Dynamics

D174 - 4:00 Intercellular Ca²⁺ transients integrate spatiotemporal morphogenetic patterning in the *Drosophila* wing imaginal disc. **Qinfeng Wu**.

D175 - 4:15 Rewiring regulatory feedback in BMP morphogen signaling. **Jennifer**Gawlik

D176 - 4:30 Minibrain and Wings apart control organ growth and tissue patterning through downregulation of Capicua. Liu Yang.

D177 - 4:45 Muscle derived TGF-β growth factor Myoglianin regulates size of imaginal wing discs. **Ambuj Upadhyay**.

D178 - 5:00 The *Drosophila* tumor suppressor Tid/Alg3 controls TNFR/JNK signaling through glycosylation. **Geert de Vreede**.

D179 - 5:15 A kinome-wide RNAi screen in *Drosophila* glia and human GBM models reveals Stk17A drives neoplastic glial proliferation. **Joanna Wardwell-Ozgo**.

D180 - 5:30 Wnt proteins serve as directional cues for the Par-complex polarity and the *Drosophila* nervous tissue growth. **Shigeki Yoshiura**.

D181 - 5:45 Motile stem cells exhibit tissue-level spatial order during homeostasis but not growth of the adult *Drosophila* midgut. XinXin Du.

Friday, July 15 4:00 PM – 6:00 PM Palms Ballroom Sabal

Drosophila Models of Human Disease I

Moderators:

Hugo Bellen, Baylor College of Medicine, and Hannele Ruohola-Baker, University of Washington, and Rebecca Kreipke, University of Washington

Theme: Disease Models and Aging

D182 - 4:00 Identification of Alzheimer's disease as a neurodegenerative laminopathy. **Bess Frost**.

D183 - 4:15 Defects in synaptic vesicle endocytosis are caused by TDP-43 dependent translation inhibition in a Drosophila model of ALS. Alyssa Coyne.

D184 - 4:30 Glial expression of spen confers a Notch-dependent resistance to paraquat. **Nathalie Davoust**.

D185 - 4:45 The ecdysone and JAK/STAT pathways regulate proper morphogenetic movement of squamous cells by suppressing Notch-induced Broad. Dongyu Jia.

D186 - 5:00 Selective removal of deletion-bearing mitochondrial DNA in heteroplasmic muscle. **Nikolay Kandul**.

D187 - 5:15 A *Drosophila* Model for XX Gonadal Dysgenesis. **Offer Gerlitz**.

D188 - 5:30 Mechanism of Ethanol Tolerance: ChIP-seq to identify the signature of ethanol tolerance genes. **Nigel Atkinson**.

D189 - 5:45 A *Drosophila* Model of Essential Tremor. **Lorraine Clark**.

Friday, July 15 4:00 PM – 6:00 PM Palms Ballroom Royal

NOTES

Regulation of Gene Expression I

Moderators:

Julie Zeitlinger, Stowers Institute for Medical Research, and Michele Markstein, University of Massachusetts, and Robin Fropf, Stowers Institute for Medical Research

Theme: Genomics and Gene Regulation

D190 - 4:00 Modulation of bursting kinetics generates specific gene expression rates in the early embryo. **Shawn Little**.

D191 - 4:15 A fully synthetic transcriptional enhancer platform for study of regulatory protein function in a multicellular eukaryote. **Justin Crocker**.

D192 - 4:30 Developmental Regulomes – Resolving Enhancer-Protein Interactions with Temporal and Tissue-Specificity. Robert Zinzen.

D193 - 4:45 Application of ChIP-nexus to map transcription factors during development. **Robin Fropf**.

D194 - 5:00 Natural variation in binding site affinity controls stochastic gene expression in the fly eye. Caitlin Anderson.

D195 - 5:15 Towards a 4D understanding of chromatin architecture and transcriptional regulation. **Hongtao Chen**.

D196 - 5:30 Zelda pioneers early enhancers during genome activation. **Christine Rushlow**.

D197 - 5:45 Highly accurate prediction of early anterior-posterior enhancer sequences from ChIP-seq data. **Hamutal Arbel**.

Friday, July 15 7:30 PM – 9:30 PM Palms Ballroom Sago/Sabal/Royal

NOTES

Development and Evolution Joint Plenary Session

Moderator: Jeannie Lee, Massachusetts General Hospital and Harvard University, Cambridge, MA

7:30 The Fred Kavli Foundation
Distinguished Lecture: Flexibility and variability in behavior at the geneenvironment interface. Cori Bargmann.

8:00 Colinear Hox genes regulation in mammals. **Denis Duboule**.

8:30 Of mice, men and birds: meiotic recombination and its evolution. **Molly Przeworski**.

9:00 Fishing for the secrets of stickleback and human evolution. **David Kingsley**.

CROSS COMMUNITY WORKSHOPS

CROSS COMMUNITY WORKSHOPS

Saturday, July 16	8:00am – 10:00 am	
Descriptions are in the Workshop section and in the app.		
Automated Tracking for Quantitative Phenotyping	Grand Ballroom 3	
CRISPR-based Genome Engineering	Crystal Ballroom J2	
Using CyVerse Cyberinfrastructure to Enable Data Intensive Research, Collaboration, and Education	Grand Ballroom 1	
Model Organisms to Face Environmental Problems	Palms Ballroom Canary 1	
Integrating Research and Teaching: Professional Development for Current and Future Faculty Members	St. Thomas	
Informatics Resources to Aid the Genetic Dissection of Neural Circuitry	Palms Ballroom Canary 2	
Everything you Wanted to Know about Sex	Palms Ballroom Sabal	
modMetabolome: Model Organism Metabolomics Consortium Workshop	Grand Ballroom 8A	
Feeding Behavior, Nutrition and Metabolism: Emerging Model Organisms	Palms Ballroom Royal	
Functional Genomics for Conserved Gene Function Discovery	Crystal Ballroom J1	
Cell Competition in Flies and Mice	Crystal Ballroom G1	
Developmental Mechanics	Crystal Ballroom G2	
Model Systems in Drug Discovery	Grand Ballroom 2	
CRISPR/Cas9 - Techniques and applications in Fish, Flies, & Mice	Grand Ballroom 7A	
Gene Function Discovery within the IMPC Resource	Crystal Ballroom C	
Utilizing NCBI Databases for Model Organism Research	Grand Ballroom 12-14	
Systems Genetics in Complex Populations	Crystal Ballroom A-B	
An Introduction to Using Galaxy for Genetic Data Analysis	Grand Ballroom 11	
The InterMOD Consortium: A common interface to model organism data	Crystal Ballroom N-Q	

Saturday, July 16 1:45 PM – 3:45 PM Palms Ballroom Sago

Organelles and Trafficking

Moderators:

Helmut Kramer, UT Southwestern Medical Center, and

Amy Kiger, Univ. of California San

Diego, and

Kari Lenhart, University of Pennsylvania School of Medicine

Theme: Development and Morphogenesis

D198 - 1:45 ESCRTs and intraluminal vesicles play novel roles in controlling exosome heterogeneity, late endosomal acidification and regulated secretion. **Benjamin Kroeger**.

D199 - 2:00 Mitophagy is dispensable for axonal maintenance during normal aging in *Drosophila*. **Yanshan Fang**.

D200 - 2:15 Endosomal Microautophagy: a genetic model in *Drosophila*. **Anindita Mukherjee**.

D201 - 2:30 Mechanisms of rapid, membrane-dependent furrow formation in the early *Drosophila* embryo. **James Blankenship**.

D202 - 2:45 The Voltage Gated Chloride Channels CLC-b and CLC-c play critical roles in lifespan and cell viability respectively. **Richard Burke**.

D203 - 3:00 A screen for systemic growth regulators reveals *hobbit*, a novel and conserved regulator of insulin secretion. **Sarah Neuman**.

D204 - 3:15 Spastic paraplegia proteins help model the axonal endoplasmic reticulum network in *Drosophila*. **Cahir O'Kane**.

D205 - 3:30 Asymmetric Endoplasmic Reticulum partitioning is dependent on Jagunal in the early *Drosophila* embryo. **Blake Riggs**.

Saturday, July 16 1:45 PM – 3:45 PM Palms Ballroom Sabal

Drosophila Models of Human Disease II

Moderators:

Hugo Bellen, Baylor College of Medicine, and Hannele Ruohola-Baker, University of Washington, and Hsiao-Tuan Chao, Texas Childrens Hospital, Clinical Care Center

Theme: Disease Models and Aging

D206 - 1:45 Inhibiting lipid transfer between neurons and glia by modulating lactate levels delays neurodegeneration. **Lucy Liu**.

D207 - 2:00 Mitochondrial-nuclear incompatibility during oogenesis causes embryonic lethality. **Chunyang Zhang**.

D208 - 2:15 *dSod1* knock-in mutations cause ALS-like phenotypes in *Drosophila*. **Aaron Held**.

D209 - 2:30 JmjC demethylases regulate resistance and tolerance to alcohol in *Drosophila*. **Jorge Pinzon**.

D210 - 2:45 Loss of Nardilysin, a chaperone for α-Ketoglutarate Dehydrogenase, causes neurodegeneration in flies and humans and promotes mTORC1 activation. Wan Yoon.

D211 - 3:00 A multi-omics strategy for fly models of human disease in exposure biology. **James Brown**.

D212 - 3:15 Using the DGRP to identify gene networks associated with autism-like behaviors. **Lawrence Reiter**.

D213 - 3:30 Defects in phagocytosis by glia and immune cells in a *Drosophila* model of Fragile X syndrome. **Michele Shirasu-Hiza**

Saturday, July 16 1:45 PM – 3:45 PM Palms Ballroom Royal

NOTES

Gene Expression and Chromatin

Moderators:

Julie Zeitlinger, Stowers Institute for Medical Research, and Michele Markstein, University of Massachusetts, and David Doupé, Harvard Medical School

Theme: Genomics and Gene Regulation

D214 - 1:45 Epigenetic control of ribosome biogenesis homeostasis. **Jérôme Deraze**

D215 - 2:00 Specialized Ribosomes: eRpL22 paralogue-specific ribosomes translate specific mRNAs in the *Drosophila* testis. **Catherine Mageeney**.

D216 - 2:15 Translational compensation of segmental aneuploidy in *Drosophila melanogaster*. **Zhenguo Zhang**.

D217 - 2:30 When One Plus One Does Not Equal Two: Some Tandem Gene Duplicates are Overactive. **David Loehlin**.

D218 - 2:45 A double assurance mechanism controls enhancer-promoter specificity at the *hunchback* locus. **Jia Ling**.

D219 - 3:00 Tailless repression sets pairrule stripes and gap domains. **Luiz Andrioli**.

D220 - 3:15 Enzymatic modules of the SAGA chromatin-modifying complex play distinct roles in *Drosophila* gene expression and development. **Xuanying Li**.

D221 - 3:30 An ancient yet flexible *cis*-regulatory architecture allows localized Hedgehog tuning by *patched/Ptch1*. **Scott Barolo**.

DROSOPHILA WORKSHOPS

Drosophila Workshops		
Saturday, July 16	4:00pm – 6:00pm	
Descriptions are in the Workshop section and in the app.		
Spotlight on Undergraduate Research using Genetics Research Models	North Tower Aruba	
The Ecdysone Workshop	Palms Ballroom Canary 4	
Genetic and Genomic Models of Polyploidy	Crystal Ballroom A-B	
Drosophila Microbiota	Crystal Ballroom M	

NOTES

Saturday, July 16 7:30 PM – 9:30 PM Palms Ballroom Sago

Immunity and Pathogenesis

Moderators:

Nathalie Franc, The Scripps Research Institute, and Pr. Jean-Marc Reichhart, IUF-UdS, and

Dali Ma, Institute de Génomique Fonctionnelle de Lyon

Theme: Disease Models and Aging

D222 - 7:30 Hemocytes as key regulators of respiratory system immunity in adult *Drosophila melanogaster*. **Katja Brückner**.

D223 - 7:45 Modulation of occluding junctions alters the hematopoietic stem cell microenvironment to trigger immune activation in *Drosophila*. **Rohan Khadilkar**.

D224 - 8:00 The TEAD family transcription factor Scalloped regulates blood progenitor maintenance and proliferation in *Drosophila* through PDGF/VEGFR receptor (Pvr) signaling. Julian Martinez-Agosto.

D225 - 8:15 Microbial modulation of host lipid metabolism: lessons from *Drosophila*. **Chun Nin (Adam) Wong**.

D226 - 8:30 A GWAS Analysis of Genetic Variation in *Drosophila melanogaster* Pathogen Susceptibility. **Jonathan Wang**.

D227 - 8:45 Invasion dynamics in the fly gut microbiome. **Benjamin Obadia**.

D228 - 9:00 Molecular analyses of immune-suppressive virus-like particles from a *Drosophila* parasitic wasp suggest cell-specific activities and a hybrid biotic particle nature. **Mary Ellen Heavner**.

D229 - 9:15 Host-produced Eiger/TNF and the bacterial type 4 secretion system enable susceptibility of *Drosophila melanogaster* to *Coxiella burnetii* infection. **Alan Goodman**.

Saturday, July 16 7:30 PM – 9:30 PM Palms Ballroom Sabal

Neurophysiology and Behavior

Moderators:

Ron Davis, Scripps Research Institute, and Krystyna Keleman, Janelia Research Campus, HHMI, and Jacob Berry, Scripps Research Institute

Theme: Neuroscience, Systems to Molecules

D230 - 7:30 Postprandial sleep mechanics in *Drosophila*. **Keith Murphy**.

D231 - 7:45 A novel behavioural paradigm of interval timing in *Drosophila*. **Woo Jae Kim**.

D232 - 8:00 Scribble Scaffolds a signalosome for active forgetting. Isaac Cervantes Sandoval.

D233 - 8:15 The detection of bitter and sweet compounds by the evolutionarily conserved sweet clade in *Drosophila*. **Arun Kumar**.

D234 - 8:30 A peptidergic pathway critical to satiety responses in Drosophila. **Soohong Min**.

D235 - 8:45 A genetically tractable platform for identifying regulators of acute and chronic pain. **Seol Hee Im**.

D236 - 9:00 The molecular and cellular basis of pharyngeal taste in *Drosophila*. **Yu-Chieh Chen**.

D237 - 9:15 Ionotropic Receptors mediate thermo- and hygro-sensation in *Drosophila*. Paul Garrity.

Saturday, July 16 7:30 PM – 9:30 PM Palms Ballroom Royal

NOTES

Stem Cells

Moderators:

Tor Erik Rusten, Oslo University Hospital, and **Daniela Drummond-Barbosa**, Johns Hopkins Bloomberg School of Public

Health, and **Ming-Chia Lee**, Carnegie Institution for Science

Theme: Stem Cell, Regeneration and Germline

D238 - 7:30 A Potential Role for DNA Replication in Establishing Distinct Epigenomes. **Matthew Wooten**.

D239 - 7:45 Sensing Respiratory Gases for the Control of the Hematopoietic System. **Bumsik Cho**.

D240 - 8:00 Opposite temporal gradients of Imp and Syp govern senescence of neural stem cells via distinct effectors. **Ching-Po Yang**.

D241 - 8:15 A Transcriptional Network Specifies The Intestinal Stem Cell Fate In *Drosophila* Adult Midgut. **Qing Lan**.

D242 - 8:30 Niche Appropriation by *Drosophila* Intestinal Stem Cell Tumors. **Parthive Patel**

D243 - 8:45 The niche ligand-receptor directly orients the spindle in *Drosophila* male germline stem cells. **Cuie Chen**.

D244 - 9:00 Somatic cell encystment promotes abscission in germline stem cells after a regulated block in cytokinesis. Kari Lenhart.

D245 - 9:15 An intercellular E-cadherin-EGFR relay maintains organ size during renewal by coupling cell division and death. **Jackson Liang**.

Sunday, July 17 7:55 AM – 10:00 AM Palms Ballroom Sago/Sabal/Royal

Drosophila Plenary Session

Moderator:

Nancy Bonini, University of Pennsylvania, Philadelphia

D246 - 7:55 Poster Awards Presentation. **Ross Cagan**.

D247 - 8:00 Coordination of neuroepithelial specification and neurogenesis modes in the *Drosophila* visual system. **Iris Salecker**.

D248 - 8:30 Growth coordination mechanisms during *Drosophila* development. **Pierre Leopold**.

D249 - 9:00 Networking at the nuclear periphery: Contributions of *Drosophila* LEM domain proteins. **Pamela Geyer**.

D250 - 9:30 Molecular genetics of sexspecific evolutionary innovations. **Artyom Kopp**. Sunday, July 17 10:30 AM – 12:30 PM Palms Ballroom Sago/Sabal/Royal

Technology and its Application Joint Plenary Session

Moderator: Phil Hieter, University of British Columbia, Vancouver, Canada

10:30 The gut microbiota and childhood undernutrition: looking at human development from a microbial perspective. **Jeffrey Gordon**.

11:00 Synthesis of the yeast genome and beyond. **Jef Boeke**.

11:30 Tomorrow's Table: Organic Farming, Genetics and the Future of Food. **Pamela Ronald**.

12:00 CRISPR-Cas Genome Engineering: Biology, Technology and Ethics. **Jennifer Doudna**. (Pre-recorded talk)

Meeting Organizers

Susan Celniker, Chair David Bilder Nancy Bonini Ross Cagan

Fly Board

David Bilder	President
Laura Johnston	President-elect
Ken Irvine	Past-President (2014)
Amy Bejsovec	Past-President (2013)
Michael O'Connor	Past-President (2012)
Deborah Andrew	Treasurer

Regional Representatives

regional representatives		
Name	Region	
Esther Verheyen	Canada	
Scott Barolo	Great Lakes	
Sarah Certel	Mountain	
Andrea Page-McCaw	Southeast	
Angelika Stathopoulos	California	
Michael Galko	Heartland	
Giovanni Bosco	New England	
Jessica Triesman	Mid-Atlantic	
Bing Zhang	Midwest	

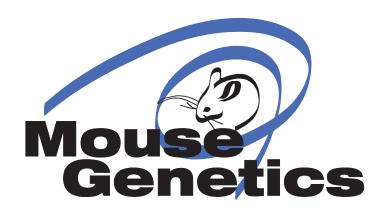
Primarily Undergraduate Institution Representative

Name	
Alexis Nagengast	

International Representatives

Name	Region
Gary Hime	Australia/Oceania
Shigeo Hiyashi	Asia
Daniel St. Johnston	Europe
Mariana Melani	Latin America

MOUSE GENETICS 2016



Plenary and Platform Sessions



Mouse Genetics 2016 SCHEDULE AT-A-GLANCE

Wednesday, July 13		
2:00pm-9:30pm	Speaker Ready Room Open	Hall of Cities - Anaheim
7:00pm-9:00pm	Scientific Session: International Resources	Crystal Ballroom G1
9:00pm-11:00pm	Opening Mixer with Exhibits	Cypress Ballroom
Thursday, July 14		
7:00am-5:00pm	Speaker Ready Room Open	Hall of Cities -Anaheim
7:45am-10:00am	Genetics and Determinants of Health Joint Plenary Session	Palms Ballroom
8:00am-4:00pm	Exhibits Open	Cypress Ballroom
9:00am-8:00pm	Demo Room: MOD (FlyBase, MGI, SGD, WormBase, Zfin) Demo Room Open	Palms Ballroom Canary 3-4
10:30am-12:30pm	Scientific Session: Comparative Genomics, Computational Methods and Evolution	Crystal Ballroom G1
12:30pm-1:30pm	Mentoring Roundtables #1	North Tower - Harbor Beach
12:30pm-1:30pm	Speaking Up for Genetics and Model Organism Research	Crystal Ballroom H
	Poster Presentations 1:30pm-2:30pm: Even-numbered poster 2:30pm-3:30pm: Odd-numbered posters	Cypress Ballroom
1:30pm-3:30pm	GeneticsCareers Center and Job Fair	Cypress Ballroom 1C
4:00pm-6:00pm	Scientific Session: Development	Crystal Ballroom G1
4:00pm-6:00pm	Plenary Session and Workshop for Undergraduate Researchers	North Tower - Sawgrass
7:45pm-9:45pm	Scientific Session: Translational and Systems Genetics	Crystal Ballroom G1
10:00pm-11:30pm	*Science Cafe Event	Palms Ballroom Sabal
Friday, July 15		
7:00am-5:00pm	Speaker Ready Room Open	Hall of Cities - Anaheim
8:00am-9:30am	Scientific Session: Technological Innovations	Crystal Ballroom G1
8:00am-4:30pm	Exhibits Open	Cypress Ballroom
9:00am-8:00pm	Demo Room: MOD (FlyBase, MGI, SGD, WormBase, Zfin) Demo Room Open	Palms Ballroom Canary 3-4
10:00am-12:00pm	Scientific Session: Human Disease Models 1	Crystal Ballroom G1
12:00pm-1:30pm	*Editor's Panel Discussion and Roundtable	North Tower - Harbor Beach
	Poster Presentations 1:30pm-2:10pm: "A" poster authors present 2:10pm-2:50pm: "B" poster authors present 2:50pm-3:30pm: "C" poster authors present	Cypress Ballroom
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Friday, July 15 (cont	tinued)	
2:00pm-2:45pm	GeneticsCareers Workshop - Nailing the Job Talk	Cypress Ballroom 1B
4:00pm-6:00pm	Scientific Session: Epigenetics	Crystal Ballroom G1
6:00pm-7:30pm	*Women in Genetics Panel and Networking	North Tower - Harbor Beach
7:30pm-9:30pm	Development and Evolution Joint Plenary Session	Palms Ballroom
Saturday, July 16		
7:00am-5:00pm	Speaker Ready Room Open	Hall of Cities - Anaheim
8:00am-10:00am	Workshops: See topics and descriptions in the Workshop Section	Multiple locations
8:00am-12:00pm	Exhibits Open	Cypress Ballroom
8:00am-9:00am	Trainee Bootcamp Workshops: Session 1	North Tower
9:00am-10:00am	Trainee Bootcamp Workshops: Session 2	North Tower
10:00am-12:00pm	Poster Presentations 10:00am-11:00am Odd-numbered posters 11:00am-12:00pm Even-numbered posters	Cypress Ballroom (Posters must be removed by 1pm)
10:00am-12:00pm	GeneticsCareers Center	Cypress Ballroom 1C
10:30am-11:15am	GeneticsCareers Workshop	Cypress Ballroom 1B
12:15pm-1:45pm	*Mentoring Roundtables #2	North Tower - Harbor Beach
1:45pm-3:45pm	Scientific Session: Cancer and Immunology	Crystal Ballroom G1
4:00pm-6:00pm	Scientific Session: Rosa Beddington Lecture Stem Cells	Crystal Ballroom G1
6:00pm-6:30pm	IMGS Business Meeting	Crystal Ballroom G1
Sunday, July 17		
8:00am-10:00am	Scientific Session: Human Disease Models II	Crystal Ballroom G1
10:30am-12:30pm	Technology and its Application Joint Plenary Session	Palms Ballroom

^{*} Ticketed Event

Wednesday, July 13 7:00 PM – 9:00 PM Crystal Ballroom G1

International Resources

Moderator:

Thomas Keane, Sanger Institute, Cambridge, UK

Theme: New Technology and Resources

M251 - 7:00 Building the first comprehensive functional catalogue of a mammalian genome. Martin Hrabé de Angelis.

M252 - 7:15 Large-scale discovery of embryonic lethal phenotypes in mice. Stephen Murray.

M253 - 7:30 3D image analysis of embryonic lethal mutations: An IMPC/KOMP2 resource. **Mary Dickinson**.

M254 - 7:45 The DMDD programme: an online database of embryonic lethal mouse gene mutations. **Tim Mohun**.

M255 - 8:00 GENCODE: using new technologies to improve reference mouse genome annotation. **Mark Thomas**.

M256 - 8:15 Trainee Talk.

M257 - 8:30 Trainee Talk.

M258 - 8:45 Beyond the spreadsheet. **Kenneth Manly**.

Thursday, July 14 7:45 AM – 10:00 AM Palms Ballroom Sago/Sabal/Royal

Genetics and Determinants of Health Joint Plenary Session

Moderator: Lynn Cooley, Yale University, New Haven, CT

7:45 Welcome, Stan Fields, University of Washington, Seattle, GSA President.

7:50 Opening Remarks, Phil Hieter, University of British Columbia and Jeannie Lee, Harvard University, TAGC Organizers.

8:00 Translating Zebrafish Development to the Clinic. **Leonard Zon**.

8:30 Using *Drosophila* to unravel the mysteries of sleep: when, why and how. **Amita Sehgal**.

9:00 New insights into the pathogenesis and treatment of Marfan syndrome and other presentations of thoracic aortic aneurysm. Harry Dietz.

9:30 Accelerating Insights from Basic Genetics. **Francis Collins**.

Thursday, July 14 10:30 AM – 12:30 PM Crystal Ballroom G1

NOTES

Comparative Genomics, Computational Methods and Evolution

Moderator:

Steve Munger, Jackson Laboratory, Bar Harbor, ME

Theme: Evolution and Quantitative Biology

M259 - 10:30 Good dad, bad dad: the genetic basis of parental care **Hopi Hoekstra**.

M260 - 11:00 Accumulation and detection of germline spontaneous mutations in C57BL/6JJcl inbred mouse strain. **Yoichi Gondo**.

M261 - 11:15 Discovery, assembly, and annotation of subspecies specific haplotypes in classical and wild-derived mouse strains. **Jingtao Li**.

M262 - 11:30 Post-translational mechanisms buffer protein abundance against transcriptional variation. Gary Churchill.

M263 - 11:45 Trainee Talk.

M264 - 12:00 Trainee Talk.

M265 - 12:15 Multiple mouse reference genomes defines subspecies specific haplotypes and novel coding sequences. **Thomas Keane**.

Thursday, July 14 4:00 PM – 6:00 PM Crystal Ballroom G1

Development

Moderator: Bill Pavan, NIH, Bethesda,

Theme: Development and Morphogenesis

M266 - 4:00 Symmetry breaking and selforganization in mouse development. Takashi Hiiragi.

M267 - 4:30 A SUMO-Ubiquitin Relay Recruits Proteasomes to Chromosome Axes to Regulate Meiotic Recombination.

Neil Hunter.

M268 - 4:45 SMC5/6 complex is required for the formation of bivalent chromosomes capable of segregation during meiosis I in oocytes. **Grace Hwang**.

M269 - 5:00 Imaging how Transcription Factors Bind DNA to Control Cell Fate in Living Mouse Embryos. **Nicolas Plachta**.

M270 - 5:15 Maternally provided KDM1A enables the maternal-to-zygotic transition and prevents defects that manifest postnatally. **Jadiel Wasson**.

M271 - 5:30 A Forward Genetics Approach to Discover Modifiers of Developmental Phenotypes. **Krista Geister**

M272 - 5:45 ER stress-induced remodeling of placental mRNA and small RNA expression networks. Clement Chow.

Thursday, July 14 7:45 PM – 9:45 PM Crystal Ballroom G1

Translational and Systems Genetics

Moderator:

Fernando Pardo Manuel de Villena, UNC, Chapel Hill, NC

Theme: Neuroscience, Systems to Molecules

M273 - 7:45 Verne Chapman Lecture: Mendel 2.0, revisiting the determinants of inheritance and the origins of phenotypic variation. Joseph Nadeau.

M274 - 8:45 A suppressor screen in *Mecp2* mice reveals pathways for Rett syndrome pathogenesis. **Monica Justice**.

M275 - 9:00 Systems Genetics Approach toward Understanding Regulation of MECP2 Expression in the Brain. Lucy Williams

M276 - 9:15 Conserved and tissuespecific effects of natural genetic variation on transcript and protein abundance. **Steven Munger**.

M277 - 9:30 Discovering novel susceptibility genes for aggressive prostate cancer using an integrated, systems-based cross-species strategy. **Jean Winter**.

Friday, July 15 8:00 AM – 9:30 AM Crystal Ballroom G1

NOTES

Technological Innovations

Moderator:

Francois Spitz, Institute Pasteur, Paris, France

Theme: New Technology and Resources

M278 - 8:00 Confirming Functional Genomics with Optoacoustic and Raman Imaging. **Vasillis Ntziachristos**.

M279 - 8:30 A Cross-Species Novel Genetic Cell Ablation Technology Involving CD59 and Intermedilysin. Elizabeth Bryda.

M280 - 8:45 RNAi and CRISPR/Cas9 based In Vivo Models for Drug Discovery. **Prem Premsrirut**.

M281 - 9:00 CRISPR/Cas9 Genome Editing Pipeline for Mice and Rats. **Thom Saunders**.

M282 - 9:15 *Easy-(Isi)*-CRISPR; a method to efficiently knock-in long DNA inserts. **Channabasavaiah Gurumurthy**.

Friday, July 15 10:00 AM – 12:00 PM Crystal Ballroom G1

Human Disease Models 1

Moderator:

Monica Justice, Sickkids, Toronto, Ontario, Canada

Theme: Disease Models and Aging

M283 - 10:00 Modeling the Gene: Maternal environment interaction in neurodevelopmental disorders. Freda Miller

M284 - 10:30 An inducible dominant negative allele of *Sox10* models neurocristopathy deficits characteristic of PCWH patients. **Michelle Southard-Smith**

M285 - 10:45 Alpha-synuclein, the cause of Parkinson's disease, has a vital function in aged mice. **Deborah Cabin**.

M286 - 11:00 Aberrant DNA binding by mutant (E339D) KLF1 induces upregulation of embryonic β-globin in adult mice.

Danitza Nebor.

M287 - 11:15 Mutations in beta spectrin protect mice from malaria by increasing parasite susceptibility to clearance. **Gaetan Burgio**.

M288 - 11:30 Interaction of BRCA2 and PALB2 is essential for genome stability. Suzanne Hartford.

M289 - 11:45 Pathophysiological responses to dietary patterns differ with genetic backgrounds. William Barrington.

Friday, July 15 4:00 PM – 6:00 PM Crystal Ballroom G1

Epigenetics

Moderator:

Philippe Soriano, Mt. Sinai Hospital, New York

Theme: Genomics and Gene Regulation

M290 - 4:00 Xist RNA, its interactome, and consequences of their disruption in vivo Jeannie Lee

M291 - 4:30 Allelic imbalance is a prevalent and tissue-specific feature of autosomal and X-linked genes in F1 hybrid mice. Stefan Pinter.

M292 - 4:45 *Vive la difference*: zooming in on sex-specific differences in mouse embryonic stem cells. **Nora Engel**.

M293 - 5:00 Genetic control of the epigenetic landscape. **Christopher Baker**.

M294 - 5:15 Genetic Variation Mediates the Epigenetic Response to Corticosteroids in Mice. **Gregory Carter**.

M295 - 5:30 EZH2 Isoforms Differentially Regulate the Function of Polycomb Repressive Complex 2. Weipeng Mu.

M296 - 5:45 The function of the histone demethylase KDM1A (LSD1) in Tau mediated neurodegeneration. **David Katz**.

Friday, July 15 7:30 PM – 9:30 PM Palms Ballroom Sago/Sabal/Royal

NOTES

Development and Evolution Joint Plenary Session

Moderator: Jeannie Lee, Massachusetts General Hospital and Harvard University, Cambridge, MA

- 7:30 The Fred Kavli Foundation
 Distinguished Lecture: Flexibility and
 variability in behavior at the geneenvironment interface. **Cori Bargmann**.
- 8:00 Colinear Hox genes regulation in mammals. **Denis Duboule**.
- 8:30 Of mice, men and birds: meiotic recombination and its evolution. **Molly Przeworski**.
- 9:00 Fishing for the secrets of stickleback and human evolution. **David Kingsley**.

CROSS COMMUNITY WORKSHOPS

CROSS COMMUNITY WORKSHOPS

Saturday, July 16	8:0am – 10:00 am	
Descriptions are in the Workshop section and in the app.		
Automated Tracking for Quantitative Phenotyping	Grand Ballroom 3	
CRISPR-based Genome Engineering	Crystal Ballroom J2	
Using CyVerse Cyberinfrastructure to Enable Data Intensive Research, Collaboration, and Education	Grand Ballroom 1	
Model Organisms to Face Environmental Problems	Palms Ballroom Canary 1	
Integrating Research and Teaching: Professional Development for Current and Future Faculty Members	St. Thomas	
Informatics Resources to Aid the Genetic Dissection of Neural Circuitry	Palms Ballroom Canary 2	
Everything you Wanted to Know about Sex	Palms Ballroom Sabal	
modMetabolome: Model Organism Metabolomics Consortium Workshop	Grand Ballroom 8A	
Feeding Behavior, Nutrition and Metabolism: Emerging Model Organisms	Palms Ballroom Royal	
Functional Genomics for Conserved Gene Function Discovery	Crystal Ballroom J1	
Cell Competition in Flies and Mice	Crystal Ballroom G1	
Developmental Mechanics	Crystal Ballroom G2	
Model Systems in Drug Discovery	Grand Ballroom 2	
CRISPR/Cas9 - Techniques and applications in Fish, Flies, & Mice	Grand Ballroom 7A	
Gene Function Discovery within the IMPC Resource	Crystal Ballroom C	
Utilizing NCBI Databases for Model Organism Research	Grand Ballroom 12-14	
Systems Genetics in Complex Populations	Crystal Ballroom A-B	
An Introduction to Using Galaxy for Genetic Data Analysis	Grand Ballroom 11	
The InterMOD Consortium: A common interface to model organism data	Crystal Ballroom N-Q	

Saturday, July 16 1:45 PM – 3:45 PM Crystal Ballroom G1

NOTES

Cancer and Immunology

Moderator:

Viive Howell, The University of Sydney, Australia

Theme: Disease Models and Aging

M297 - 1:45 Engineering the Cancer Genome. **Tyler Jacks**.

M298 - 2:15 Genetic inhibition of MTOR during thymic Pre-T LBL development delays tumorigenesis and points to the IRF4-CDK6 pathway as a potential target in the treatment of T-ALL/LBL. **Beverly Mock**.

M299 - 2:30 Adenoma Susceptibility
Modulated by Variable Complex Gut
Microbiota in a Rat Model of Familial Colon
Cancer Susheel Bhanu Busi

M300 - 2:45 The aggressive prostate cancer susceptibility gene *HIST1H1A* is a modulator of androgen receptor signaling and epithelial to mesenchymal transition. **Kendra Williams**.

M301 - 3:00 Polymorphisms in the *Arntl2* promoter affect metastatic susceptibility in estrogen-receptor negative breast cancer. **Kent Hunter**.

M302 - 3:15 Glioma modeling with MADM, a mouse genetic mosaic system, revealed cell competition as the mechanism that enables inevitable malignant progression. Hui Zong.

M303 - 3:30 Host-pathogen genetic interactions drive outcome to tuberculosis in the Collaborative Cross. Clare Smith.

Saturday, July 16 4:00 PM – 6:00 PM Crystal Ballroom G1

Rosa Beddington Lecture Stem Cells

Moderator:

Yumiko Saga, National Institute of Genetics, Japan

Theme: Stem Cell, Regeneration and Germline

M304 - 4:00 Rosa Beddington Lecture: Single cells get together: cell lineage specification & tissue morphogenesis in the early mouse embryo. Anna-Katerina Hadjantonakis.

M305 - 5:00 Snai1 is required for stem cell maintenance in the mouse intestinal epithelium. Helen Abud.

M306 - 5:15 Muscle fiber signaling scales the myogenic stem cell pool. **Christoph Lepper**.

M307 - 5:30 Plasticity, self-renewal and transcriptional dynamics – How embryonic stem cells stall for time in the decision making process? **Joshua Brickman**.

Sunday, July 17 8:00 AM – 10:00 AM Crystal Ballroom G1

Human Disease Models II

Moderator:

Teresa Gunn, McLaughlin Research Institute, Great Falls, MT

Theme: Disease Models and Aging

M308 - 8:00 Comparative Mendelian genomics and disease modeling in mice. Laura Reinholdt.

M309 - 8:15 A New Mouse Model for Costello Syndrome. **Tania Sorg**.

M310 - 8:30 A genetic epistasis analysis of an ENU-induced *Reln* mutant reveals that the C-terminal domain of RELN is required for binding to the receptor VLDLR but not to LRP8 (APOER2). **David Beier**.

M311 - 8:45 Inhibition of activin A stops the regrowth of surgically resected heterotopic bone in a mouse model of Fibrodysplasia Ossificans Progressiva and indicates a new potential path to therapy.

Aris Economides.

M312 - 9:00 Driving discovery and characterisation of novel genes important for bone biology by combining high-throughput mouse phenotyping and a tissue-based deep phenotyping platform.

Chris Lelliott.

M313 - 9:15 From mouse to human and back to mouse: sodium channel mutations and epilepsy. **Miriam Meisler**.

M314 - 9:30 Cas9 RNA-guided nuclease gene editing – rapid disease modeling in mice. Lauryl Nutter.

9:45 Trainee Awards.

Sunday, July 17 10:30 AM – 12:30 PM Palms Ballroom Sago/Sabal/Royal

NOTES

Technology and its Application Joint Plenary Session

Moderator: Phil Hieter, University of British Columbia, Vancouver, Canada

10:30 The gut microbiota and childhood undernutrition: looking at human development from a microbial perspective. **Jeffrey Gordon**.

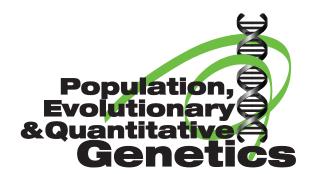
11:00 Synthesis of the yeast genome and beyond. **Jef Boeke**.

11:30 Tomorrow's Table: Organic Farming, Genetics and the Future of Food. **Pamela Ronald**.

12:00 CRISPR-Cas Genome Engineering: Biology, Technology and Ethics. **Jennifer Doudna**. (Pre-recorded talk)

NOTES

POPULATION, EVOLUTIONARY, AND QUANTITATIVE GENETICS MEETING



Plenary and Platform Sessions



Population, Evolutionary, And Quantitative Genetics Meeting

SCHEDULE AT-A-GLANCE

Wednesday, July 1	3	
2:00pm-9:30pm	Speaker Ready Room Open	Hall of Cities - Anaheim
7:00pm-9:00pm	Scientific Session: PEQG Keynote 1	Crystal Ballroom
9:00pm-11:00pm	Opening Mixer with Exhibits	Cypress Ballroom
Thursday, July 14		
7:00am-5:00pm	Speaker Ready Room Open	Hall of Cities -Anaheim
7:45am-10:00am	Genetics and Determinants of Health Joint Plenary Session	Palms Ballroom
8:00am-4:00pm	Exhibits Open	Cypress Ballroom
9:00am-8:00pm	Demo Room: MOD (FlyBase, MGI, SGD, WormBase, Zfin) Demo Room Open	Palms Ballroom Canary 3-4
10:30am-12:30pm	Scientific Session: Natural Selection and Adaptation	Crystal Ballroom
12:30pm-1:30pm	Mentoring Roundtables #1	North Tower - Harbor Beach
12:30pm-1:30pm	Speaking Up for Genetics and Model Organism Research	Crystal Ballroom H
1:30pm-3:30pm	Poster Presentations 1:30pm-2:30pm: Even-numbered poster 2:30pm-3:30pm: Odd-numbered posters	Cypress Ballroom
1:30pm-3:30pm	GeneticsCareers Center and Job Fair	Cypress Ballroom 1C
4:00pm-6:00pm	Scientific Session: James F. Crow Symposium	Crystal Ballroom
4:00pm-6:00pm	Plenary Session and Workshop for Undergraduate Researchers	North Tower - Sawgrass
7:45pm-9:45pm	Scientific Session: PEQG Keynote 2	Crystal Ballroom
10:00pm-11:30pm	*Science Cafe Event	Palms Ballroom Sabal
Friday, July 15		
7:00am-5:00pm	Speaker Ready Room Open	Hall of Cities - Anaheim
8:00am-9:30am	Scientific Session: Cryptic Variation and Robustness	Crystal Ballroom
8:00am-4:30pm	Exhibits Open	Cypress Ballroom
9:00am-8:00pm	Demo Room: MOD (FlyBase, MGI, SGD, WormBase, Zfin) Demo Room Open	Palms Ballroom Canary 3-4
10:00am-12:00pm	Scientific Session: Mutation & Recombination	Crystal Ballroom
12:00pm-1:30pm	*Editor's Panel Discussion and Roundtable	North Tower - Harbor Beach
1:30pm-3:30pm	Poster Presentations 1:30pm-2:10pm: "A" poster authors present 2:10pm-2:50pm: "B" poster authors present 2:50pm-3:30pm: "C" poster authors present	Cypress Ballroom
1:30pm-3:30pm	GeneticsCareers Center	Cypress Ballroom 1C
2:00pm-2:45pm	GeneticsCareers Workshop - Nailing the Job Talk	Cypress Ballroom 1B
4:00pm-6:00pm	Scientific Session: Molecular Evolution	Crystal Ballroom
6:00pm-7:30pm	*Women in Genetics Panel and Networking	North Tower - Harbor Beach
7:30pm-9:30pm	Development and Evolution Joint Plenary Session	Palms Ballroom





Saturday, July 16		
7:00am-5:00pm	Speaker Ready Room Open	Hall of Cities - Anaheim
8:00am-10:00am	Workshops: See topics and descriptions in the Workshop Section	Multiple locations
8:00am-12:00pm	Exhibits Open	Cypress Ballroom
8:00am-900am	Trainee Bootcamp Workshops: Session 1	North Tower
9:00am-10:00am	Trainee Bootcamp Workshops: Session 2	North Tower
10:00am-12:00pm	Poster Presentations 10:00am-11:00am Odd-numbered posters 11:00am-12:00pm Even-numbered posters	Cypress Ballroom (Posters must be removed by 1pm)
10:00am-12:00pm	GeneticsCareers Center	Cypress Ballroom 1C
10:30am-11:15am	GeneticsCareers Workshop	Cypress Ballroom 1B
12:15pm-1:45pm	*Mentoring Roundtables #2	North Tower - Harbor Beach
1:45pm-3:45pm	Scientific Session: Population Genetics	Crystal Ballroom
4:00pm-6:00pm	Scientific Session: Complex Trait Evolution	Crystal Ballroom
7:30pm-9:30pm	Scientific Session: PEQG Keynote 3	Crystal Ballroom
Sunday, July 17		
8:00am-10:00am	Scientific Session: Epistasis	Crystal Ballroom
10:30am-12:30pm	Technology and its Application Joint Plenary Session	Palms Ballroom

^{*} Ticketed Event

Wednesday, July 13 7:00 PM – 9:00 PM Crystal Ballroom J1

PEQG Keynote 1

Moderator:

Michael Lynch, Indiana University, Bloomington

Theme: Evolution and Quantitative Biology

- **P315** 7:00 Evolution of gene expression: from mutation to polymorphism to divergence. **Patricia Wittkopp**.
- **P316** 7:30 The hidden complexity of Mendelian inheritance in natural populations. **Joseph Schacherer**.
- P317 7:45 Parallel Gene Expression
 Differences between Low and High Latitude
 Populations of two *Drosophila* species. Li
 Zhao.
- **P318** 8:00 *Trans* regulatory architecture of genetic transcriptome variation from 1,000 yeast individuals. **Frank Albert**.
- P319 8:15 The genomic basis of environmental adaptation in house mice.

 Megan Phifer-Rixey.
- **P320** 8:30 Parallel selective sweeps of selfish Segregation Distorter complexes in African and European Drosophila melanogaster populations. **Amanda** Larracuente.
- **P321** 8:45 Diverse genetic architectures lead to the same cryptic phenotype in a yeast cross. **Ian Ehrenreich**.

Thursday, July 14 7:45 AM – 10:00 AM Palms Ballroom Sago/Sabal/Royal

Genetics and Determinants of Health Joint Plenary Session

Moderator: Lynn Cooley, Yale University, New Haven, CT

- 7:45 Welcome, Stan Fields, University of Washington, Seattle, GSA President.
- 7:50 Opening Remarks, Phil Hieter, University of British Columbia and Jeannie Lee, Harvard University, TAGC Organizers.
- 8:00 Translating Zebrafish Development to the Clinic. **Leonard Zon**.
- 8:30 Using Drosophila to unravel the mysteries of sleep: when, why and how. **Amita Sehgal**.
- 9:00 New insights into the pathogenesis and treatment of Marfan syndrome and other presentations of thoracic aortic aneurysm. Harry Dietz.
- 9:30 Accelerating Insights from Basic Genetics **Francis Collins**

Thursday, July 14 10:30 AM – 12:30 PM Crystal Ballroom J1

NOTES

Natural Selection and Adaptation

Moderator:

Dmitri Petrov, Stanford University, CA

Theme: Evolution and Quantitative Biology

P322 - 10:30 Genome-wide selection component analysis in a wild pedigreed population of the Florida Scrub-Jay.

Andrew Clark.

P323 - 10:45 Drosophila melanogasterspecific genes rapidly evolved strong fitness effects. Nicholas VanKuren.

P324 - 11:00 Examining the effects of natural selection on linked neutral divergence. **Tanya Phung**.

P325 - 11:15 Genome-wide signals of adaptation in mammals and the arms race with viruses. **David Enard**.

P326 - 11:30 Evolution of gene expression in giant island mice. Mark Nolte.

P327 - 11:45 Does the Y-chromosome facilitate sexual dimorphic evolution or constrain autosomal evolution? Ian Kutch.

P328 - 12:00 The antibiotic-independent evolution of antibiotic resistance. **Ruth Hershberg**.

P329 - 12:15 Dynamics and feasibility of CRISPR/Cas9-mediated gene drives in natural populations. **Philipp Messer**.

Thursday, July 14 4:00 PM – 6:00 PM Crystal Ballroom J1

James F. Crow Symposium

Moderator:

Kirsten Bomblies, John Innes Centre. Norwich UK

Theme: Evolution and Quantitative Biology

4:00 Introduction. Kirsten Bomblies.

P330 - 4:15 Legacy of James Crow. Daniel Hartl.

P331 - 4:30 Estimating Jacquard's general model of relatedness from population genomic data. Matthew S. Ackerman.

P332 - 4:45 Dynamics of seasonal adaptation in *Drosophila melanogaster*. **Emily Behrman**.

P333 - 5:00 The fragile Y hypothesis: The role of Y aneuploidy in the evolution of sex chromosomes and genome architecture. Heath Blackmon.

P334 - 5:15 Using network theory to infer and analyze population structure from genetic data. **Gili Greenbaum**.

P335 - 5:30 Molecular variation across populations of a widespread North American firefly reveals selection on luciferase but not opsins. Sarah Sander.

P336 - 5:45 Fitness pleiotropy and the phenotypic basis of adaptation in experimentally evolving yeast. Sandeep Venkataram.

Thursday, July 14 7:45 PM – 9:45 PM Crystal Ballroom J1

PEQG Keynote 2

Moderator:

Lauren McIntyre, University of Florida, Gainesville

Theme: Evolution and Quantitative Biology

P337 - 7:45 Systems genetics for industry: combining QTL mapping, GWAS and RNA sequencing to improve bone strength in laying hens. Dirk Jan de Koning.

P338 - 8:15 Effect of Genetic Architecture and Sample Size on the Accuracy of Genomic Prediction of Complex Traits. **Fabio Morgante**.

P339 - 8:30 A Powerful Yeast Mapping Panel for Complex Trait Genetics. **Daniel Skelly**.

P340 - 8:45 Using haplotype-based models for genomic predictions in crossbred animals and multiple breeds. Jared Decker.

P341 - 9:00 Dissection of complex traits in sorghum for the sustainable production of fuels and chemicals. **Wilfred Vermerris**.

P342 - 9:15 Rediscovering the Diallel: How inbred and F1 data can be used to define, model and estimate heritability of both ordinary and treatment-response traits. **William Valdar**.

P343 - 9:30 A New Trait Mapping Method for *Drosophila* Reveals Oligogenic Adaptation from Standing Genetic Variation. **John Pool**.

Friday, July 15 8:00 AM – 9:30 AM Crystal Ballroom J1

NOTES

Cryptic Variation and Robustness

Moderator: **Bret Payseur**, University of Wisconsin, Madison

Theme: Evolution and Quantitative Biology

P344 - 8:00 The genomic architecture of interactions between natural polymorphisms and environments in yeast growth. **Xinzhu Wei**.

P345 - 8:15 How to make drug resistance evolution "difficult": a lesson on epistasis and robustness in malaria parasites. **Thanat Chookajorn**.

P346 - 8:30 Investigating cryptic genetic variation through position effect variegation in a panel of *Drosophila melanogaster* inbred lines. **Joyce Kao**.

P347 - 8:45 The cost of noise in biochemical reactions and the evolutionary limits of cellular robustness. J. David Van Dyken.

P348 - 9:00 Selection transforms the genetic landscape of Hsp90-interacting variation. **Kerry Geiler-Samerotte**.

P349 - 9:15 Genetic and cellular architecture of parentally biased seed size determinants. **Jonathan Fitz Gerald**.

Friday, July 15 10:00 AM – 12:00 PM Crystal Ballroom J1

Mutation and Recombination

Moderator:

Michael Lynch, Indiana University, Bloomington

Theme: Evolution and Quantitative Biology

P350 - 10:00 An X×Y genetic interaction mediates global crossover frequency in house mice. **Beth Dumont**.

P351 - 10:15 CRISPR-directed mitotic recombination enables genetic mapping without crosses. Meru Sadhu.

P352 - 10:30 Genetic analysis of an intermediate phenotype for recombination rate variation. **Richard Wang**.

P353 - 10:45 Replication timing generates conserved base-substitution mutation rates in concurrently replicated regions of mismatch repair deficient bacterial genomes. Vaughn Cooper.

P354 - 11:00 Decomposing intra-genomic heterogeneity in mutation bias in coding sequences. **Cedric Landerer**.

P355 - 11:15 Transposon-induced genome rearrangements in maize: mechanisms and genetic impacts. Thomas Peterson.

P356 - 11:30 Evidence for the interspecies transfer of a driving X chromosome. **Christopher Leonard**.

P357 - 11:45 The mutational structure of metabolism in *Caenorhabditis elegans*. Charles Baer.

Friday, July 15 4:00 PM – 6:00 PM Crystal Ballroom J1

Molecular Evolution

Moderator:

Dmitri Petrov, Stanford University, CA

Theme: Evolution and Quantitative Biology

P358 - 4:00 Ongoing duplicate gene resolution shapes diversified metabolic networks: a functional comparative study of two yeast *GAL*alactose utilization networks. **Meihua Kuang**.

P359 - 4:15 Young proteins are less ordered, showing preadaptation for *de novo* gene birth. **Benjamin Wilson**.

P360 - 4:30 Lineage dynamics in adapting yeast populations. **Julia Piper**.

P361 - 4:45 Exploration of bioactive peptides from random sequences: an experimental approach to *de novo* gene evolution. **Rafik Neme**.

P362 - 5:00 Molecular evolution and population dynamics of herbicide resistance in *Amaranthus palmeri*: rapid proliferation of a highly conserved gene modulated by population structure. **Amy Lawton-Rauh**.

P363 - 5:15 Secreted Proteins evade the Expression – Rate Anticorrelation. Felix Feyertag.

P364 - 5:30 The fitness landscape of a tRNA gene. **Chuan Li**.

P365 - 5:45 The Critical Functions Encoded by Synonymous Sites. **Heather Machado**.

Friday, July 15 7:30 PM – 9:30 PM Palms Ballroom Sago/Sabal/Royal

NOTE

Development and Evolution Joint Plenary Session

Moderator: Jeannie Lee, Massachusetts General Hospital and Harvard University, Cambridge, MA

- 7:30 The Fred Kavli Foundation
 Distinguished Lecture: Flexibility and
 variability in behavior at the geneenvironment interface. **Cori Bargmann**.
- 8:00 Colinear Hox genes regulation in mammals. **Denis Duboule**.
- 8:30 Of mice, men and birds: meiotic recombination and its evolution. **Molly Przeworski**.
- 9::00 Fishing for the secrets of stickleback and human evolution. **David Kingsley**.

CROSS COMMUNITY WORKSHOPS

CROSS COMMUNITY WORKSHOPS

Saturday, July 16	8:0am – 10:00 am	
Descriptions are in the Workshop section and in the app.		
Automated Tracking for Quantitative Phenotyping	Grand Ballroom 3	
CRISPR-based Genome Engineering	Crystal Ballroom J2	
Using CyVerse Cyberinfrastructure to Enable Data Intensive Research, Collaboration, and Education	Grand Ballroom 1	
Model Organisms to Face Environmental Problems	Palms Ballroom Canary 1	
Integrating Research and Teaching: Professional Development for Current and Future Faculty Members	St. Thomas	
Informatics Resources to Aid the Genetic Dissection of Neural Circuitry	Palms Ballroom Canary 2	
Everything you Wanted to Know about Sex	Palms Ballroom Sabal	
modMetabolome: Model Organism Metabolomics Consortium Workshop	Grand Ballroom 8A	
Feeding Behavior, Nutrition and Metabolism: Emerging Model Organisms	Palms Ballroom Royal	
Functional Genomics for Conserved Gene Function Discovery	Crystal Ballroom J1	
Cell Competition in Flies and Mice	Crystal Ballroom G1	
Developmental Mechanics	Crystal Ballroom G2	
Model Systems in Drug Discovery	Grand Ballroom 2	
CRISPR/Cas9 - Techniques and applications in Fish, Flies, & Mice	Grand Ballroom 7A	
Gene Function Discovery within the IMPC Resource	Crystal Ballroom C	
Utilizing NCBI Databases for Model Organism Research	Grand Ballroom 12-14	
Systems Genetics in Complex Populations	Crystal Ballroom A-B	
An Introduction to Using Galaxy for Genetic Data Analysis	Grand Ballroom 11	
The InterMOD Consortium: A common interface to model organism data	Crystal Ballroom N-Q	

Saturday, July 16 1:45 PM – 3:45 PM Crystal Ballroom J1 **NOTES**

Population Genetics

Moderator:

Lauren McIntyre, University of Florida, Gainesville

Theme: Evolution and Quantitative Biology

P366 - 1:45 Estimation of Population Phylogeny in an IM framework, with Applications to African Human Hunter Gatherer Populations. **Jody Hey**.

P367 - 2:00 The genetic diversity of a population experiencing selection. **Ivana Cvijovic**.

P368 - 2:15 Estimation of effective number of stem cells in Dugesia worms using temporal variance of allele frequencies. Hosseinali Asgharian.

P369 - 2:30 Estimating ages of singletons and other rare alleles. **Alexander Platt**.

P370 - 2:45 Genetic Interrelationships between Zika Virus, Dengue Virus, Chikungunya Virus and Yellow Fever Virus Strains Olaitan Awe

P371 - 3:00 Beneficial mutations improve fitness in a *Caenorhabditis elegans* line evolved under conditions of extreme genetic drift. **Stephen Christy**.

P372 - 3:15 Homoploid hybrid speciation in the wild: yeasts do it too. **Guillaume** Charron.

P373 - 3:30 The correlation across populations of mutation effects on fitness. Ryan Gutenkunst.

Saturday, July 16 4:00 PM – 6:00 PM Crystal Ballroom J1

Complex Trait Evolution

Moderator:

Kirsten Bomblies, John Innes Centre, Norwich, UK

Theme: Evolution and Quantitative Biology

P374 - 4:00 An Ion-channel Gene Causes Natural Courtship Song Variation in *Drosophila*. **Yun Ding**.

P375 - 4:15 Allelic variation of an EXOCYST subunit switches between distinct root system architectures. Wolfgang Busch.

P376 - 4:30 Large scale splicing QTL analysis of cancer genomes. **Kjong-Van** Lehmann

P377 - 4:45 QTL mapping for hitchhiking behavior in *C. elegans* reveals evolutionary trade-off between dispersal and reproduction. **Daehan Lee**.

P378 - 5:00 Genetic Analysis of Maize Lines Tolerance to Drought and Soil-Nitrogen Stresses. **Bashir Bello**.

P379 - 5:15 Systems genetics in Maize: A multilevel analysis of Maize response to Ozone. **Lauren McIntyre**.

P380 - 5:30 Deep sequencing of whole transcriptomes across the Drosophila Genetic Reference Panel. **Logan Everett**.

P381 - 5:45 Steps toward reproducible research. **Karl Broman**.

Saturday, July 16 7:30 PM – 9:30 PM Crystal Ballroom J1

PEQG Keynote 3

Moderator: **Bret Payseur**, University of Wisconsin, Madison

Theme: Evolution and Quantitative Biology

P382 - 7:30 Genomics of parallel local adaptation to serpentine and toxic copper mine soils in the wildflower Mimulus. John Willis

P383 - 8:00 Domestic pigeon's checkered past: a link between color patterning, introgression, and hereditary blindness.

Anna Vickrey.

P384 - 8:15 Whole genome sequencing studies of speciation and selection in the Lake Malawi cichlid radiation. Richard Durbin.

P385 - 8:30 How much do chromosomal inversions prevent gene conversion and interspecies gene flow? **Katharine Korunes**.

P386 - 8:45 Convergent evolution of regulatory regions in flightless birds. Timothy Sackton.

P387 - 9:00 Genomic imprinting and speciation in mammals. **Jeffrey Good**.

P388 - 9:15 Cryptic genetic variation and the evolution of complex traits. **Annalise Paaby**.

Sunday, July 17 8:00 AM – 10:00 AM Crystal Ballroom J1

Sunday, July 17 10:30 AM – 12:30 PM Palms Ballroom Sago/Sabal/Royal

Epistasis

Moderator:

Michael Lynch, Indiana University, Bloomington

Theme: Evolution and Quantitative Biology

P389 - 8:00 Dissecting the large X-effect in Drosophila speciation: high resolution mapping and the identification of hybrid male sterility genes. **Colin Meiklejohn**.

P390 - 8:15 The naturally variable ELF3 polyglutamine is the hub of an epistatic network in *Arabidopsis thaliana*. **Maximilian Press**.

P391 - 8:30 Functional compensation and dependency between duplicated genes in protein interaction networks. Christian Landry.

P392 - 8:45 High-throughput measurements of the evolutionary consequences of epistasis. **José Rojas Echenique**.

P393 - 9:00 Beyond candidate genes: Mapping monogenic trait modifiers using informative recombinant progeny in yeast. **Amy Sirr**.

P394 - 9:15 Characterizing patterns of epistasis in yeast experimental evolution. Gregory Lang.

P395 - 9:30 Genetic Interactions Suppress Extreme Bone and Weight Phenotypes in a Mouse Intercross. **Gregory Carter**.

P396 - 9:45 Can epistasis or GxE be predictable? Lessons from mitonuclear interactions in Drosophila. **David Rand**.

Technology and its Application Joint Plenary Session

Moderator: Phil Hieter, University of British Columbia, Vancouver, Canada

10:30 The gut microbiota and childhood undernutrition: looking at human development from a microbial perspective. **Jeffrey Gordon**.

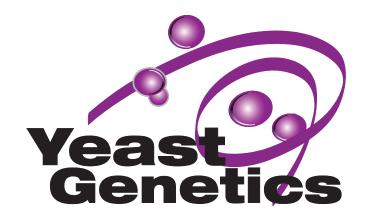
11:00 Synthesis of the yeast genome and beyond. **Jef Boeke**.

11:30 Tomorrow's Table: Organic Farming, Genetics and the Future of Food. Pamela Ronald.

12:00 CRISPR-Cas Genome Engineering: Biology, Technology and Ethics. **Jennifer Doudna**. (Pre-recorded talk)

NOTES

YEAST GENETICS MEETING



Plenary and Platform Sessions



Wednesday, July 13	3		
2:00pm-9:30pm	Speaker Ready Room Open	Hall of Cities - Anaheim	
7:00pm-9:00pm	Scientific Session: The Dynamic Genome Crystal Ballroom G2 Winge-Lindegren Address presented by Rodney Rothstein		
9:00pm-11:00pm	Opening Mixer with Exhibits	Cypress Ballroom	
Thursday, July 14			
7:00am-5:00pm	Speaker Ready Room Open	Hall of Cities -Anaheim	
7:45am-10:00am	Genetics and Determinants of Health Joint Plenary Session	Palms Ballroom	
8:00am-4:00pm	Exhibits Open	Cypress Ballroom	
9:00am-8:00pm	Demo Room: MOD (FlyBase, MGI, SGD, WormBase, Zfin) Demo Room Open	Palms Ballroom Canary 3-4	
10:30am-12:30pm	Scientific Session: Post-Transcriptional Gene Regulation	Crystal Ballroom G2	
12:30pm-1:30pm	Mentoring Roundtables #1	North Tower - Harbor Beach	
12:30pm-1:30pm	Speaking Up for Genetics and Model Organism Research	Crystal Ballroom H	
1:30pm-3:30pm	Poster Presentations 1:30pm-2:30pm: Even-numbered poster 2:30pm-3:30pm: Odd-numbered posters	Cypress Ballroom	
1:30pm-3:30pm	GeneticsCareers Center and Job Fair	Cypress Ballroom 1C	
4:00pm-6:00pm	Scientific Session: Epigenetics and Transcriptional Regulation	Crystal Ballroom G2	
4:00pm-6:00pm	Plenary Session and Workshop for Undergraduate Researchers	North Tower - Sawgrass	
7:45pm-9:45pm	Scientific Session: Tackling Human Disease Using Yeast Ira Herskowitz Award presented to Lars Steinmetz	Crystal Ballroom G2	
10:00pm-11:30pm	*Science Cafe Event	Palms Ballroom Sabal	
Friday, July 15			
7:00am-5:00pm	Speaker Ready Room Open	Hall of Cities - Anaheim	
8:00am-9:30am	Scientific Session: Division and Development	Crystal Ballroom G2	
8:00am-4:30pm	Exhibits Open	Cypress Ballroom	
9:00am-8:00pm	Demo Room: MOD (FlyBase, MGI, SGD, WormBase, Zfin) Demo Room Open Palms Ballroom		
10:00am-12:00pm	Scientific Session: Stress Sensing and Damage Control Yeast Genetics Meeting Lifetime Achievement Award presented to James Broach Crystal Ballroom G2		
12:00pm-1:30pm	*Editor's Panel Discussion and Roundtable	North Tower - Harbor Beach	
1:30pm-3:30pm	Poster Presentations 1:30pm-2:10pm: "A" poster authors present 2:10pm-2:50pm: "B" poster authors present 2:50pm-3:30pm: "C" poster authors present	Cypress Ballroom	



Friday, July 15 (co		0 0 10		
1:30pm-3:30pm	GeneticsCareers Center Cypress Ballroom			
2:00pm-2:45pm	GeneticsCareers Workshop - Nailing the Job Talk Cypress Ballro			
4:00pm-6:00pm	Scientific Session: Evolution in and out of the Lab	Crystal Ballroom G2		
6:00pm-7:30pm	*Women in Genetics Panel and Networking	North Tower - Harbor Beach		
6:30pm-7:30pm	YGM Program Committee Meeting	TBD		
7:30pm-9:30pm	Development and Evolution Joint Plenary Session	Palms Ballroom		
Saturday, July 16				
7:00am-5:00pm	Speaker Ready Room Open	Hall of Cities - Anaheim		
8:00am-10:00am	Workshops: See topics and descriptions under the Workshop Section	Multiple locations		
8:00am-12:00pm	Exhibits Open	Cypress Ballroom		
8:00am-9:00am	Trainee Bootcamp Workshops: Session 1	North Tower		
9:00am-10:00am	Trainee Bootcamp Workshops: Session 2	North Tower		
10:00am-12:00pm	Poster Presentations	Cypress Ballroom		
	10:00am-11:00am Odd-numbered posters	(Posters must be removed		
	11:00am-12:00pm Even-numbered posters	by 1pm)		
10:00am-12:00pm	GeneticsCareers Center	Cypress Ballroom 1C		
10:30am-11:15am	GeneticsCareers Workshop	Cypress Ballroom 1B		
12:15pm-1:45pm	*Mentoring Roundtables #2	North Tower - Harbor Beach		
1:45pm-3:45pm	Scientific Session: Revisiting Classical Genetics with New Crystal Ballroon Technology			
4:00pm-6:00pm	Concurrent Workshops:	Crystal Ballroom C-D		
	Beyond cerevisiae: Exploiting yeast diversity in nature to			
	understand genome evolution in diverse environments			
	Getting Even More Out of SGD	Crystal Ballroom G2		
7:30pm-9:30pm	Scientific Session: Structural and Cellular Organization	Crystal Ballroom G2		
	Lee Hartwell Lecture presented by Susan Gasser			
Sunday, July 17				
8:00am-10:00am	Scientific Session: The Fat and Sweet Sides of Life Crystal Ballroom G2			
10:30am-12:30pm	Technology and its Application Joint Plenary Session	Palms Ballroom		

^{*} Ticketed Event

Wednesday, July 13 7:00 PM – 9:00 PM Crystal Ballroom G2

The Dynamic Genome

Moderator:

Gavin Sherlock, Stanford University, CA

Theme: Genomics and Gene Regulation

Y463 - 7:00 Winge-Lindegren Address. **Rodney Rothstein**.

Y464 - 7:30 Using Experimental Evolution To Engineer A Low Flocculation Yeast Strain. Elyse Hope.

Y465 - 7:45 Ploidy tug-of-war: evolutionary and genetic environments influence the rate of ploidy drive in a human fungal pathogen. **Meleah Hickman**.

Y466 - 8:00 Mechanism of non-genetic heterogeneity in yeast growth rate and stress resistance. Shuang Li.

Y467 - 8:15 The concerted function of the Shu complex and the Rad51 paralogs in Rad51 presynaptic assembly. Kara Bernstein.

Y468 - 8:30 Genome-wide detection of genomic fluctuations in *Saccharomyces cerevisiae*. Kim Palacios Flores.

Thursday, July 14 7:45 AM – 10:00 AM Palms Ballroom Sago/Sabal/Royal

Genetics and Determinants of Health Joint Plenary Session

Moderator: Lynn Cooley, Yale University, New Haven, CT

- 7:45 Welcome, Stan Fields, University of Washington, Seattle, GSA President.
- 7:50 Opening Remarks, Phil Hieter, University of British Columbia and Jeannie Lee, Harvard University, TAGC Organizers.
- 8:00 Translating Zebrafish Development to the Clinic. **Leonard Zon**.
- 8:30 Using *Drosophila* to unravel the mysteries of sleep: when, why and how. **Amita Sehgal**.
- 9:00 New insights into the pathogenesis and treatment of Marfan syndrome and other presentations of thoracic aortic aneurysm. Harry Dietz.
- 9:30 Accelerating Insights from Basic Genetics. **Francis Collins**.

Thursday, July 14 10:30 AM – 12:30 PM Crystal Ballroom G2

NOTES

Post-Transcriptional Gene Regulation

Moderator: **Audrey Gasch**, University of WI, Madison

Theme: Genomics and Gene Regulation

Y469 - 10:30 A cradle-to-grave analysis of *cis*-regulatory variation in yeast. **Jennifer Andrie**.

Y470 - 10:45 Msn2 regulates cellular response and growth to stress through modulation of its localization and DNA binding. Vasudha Bharatula.

Y471 - 11:00 Stress-dependent transcriptome changes serve to reallocate translational capacity during stress acclimation. Yi-Hsuan Ho.

Y472 - 11:15 Genetic factors controlling accelerated mRNA degradation during a nitrogen upshift. **Darach Miller**.

Y473 - 11:30 P bodies regulate the rewiring of a transcription network by controlling the expression of the *YOX1* repressor during DNA replication stress. Raphael Loll-Krippleber.

Y474 - 11:45 Gene control by prion-like conformations of intrinsically disordered proteins. **Daniel Jarosz**.

Y475 - 12:00 Parallel pathways for export of tRNAs from the nucleus to the cytoplasm. **Anita Hopper**.

Y476 - 12:15 Yeast telomerase and RNase P/MRP: when two different worlds come together. Nancy Laterreur.

YEAST PLENARY AND PLATFORM SESSIONS

Thursday, July 14 4:00 PM – 6:00 PM Crystal Ballroom G2

Epigenetics and Transcriptional Regulation

Moderator:

Lorraine Pillus, University of California, San Diego

Theme: Genomics and Gene Regulation

Y477 - 4:00 Coordinated regulation of heterochromatin inheritance by Daf1/Dpb4 complex. **Fei Li**.

Y478 - 4:15 The Replication Kinase Cdc7 Marks Histones to Regulate Biosynthesis Genes. Patrick Grant.

Y479 - 4:30 An oncometabolite disrupts epigenetic processes and increases gene silencing in *Saccharomyces cerevisiae*. Ryan Janke.

Y480 - 4:45 Mechanistic insight into the role of the Paf1 complex in histone modification S. Branden Van Oss

Y481 - 5:00 Protein abundance control by non-coding antisense transcription. Florian Huber.

Y482 - 5:15 Promoter scanning during transcription initiation in *Saccharomyces cerevisiae*: Pol II in the "shooting gallery". Craig Kaplan.

Thursday, July 14 7:45 PM – 9:45 PM Crystal Ballroom G2

Tackling Human Disease Using Yeast

Moderator:

Kara Dolinski, Princeton University, NJ

Theme: Neuroscience, Systems to Molecules

Y483 - 7:45 Ira Herskowitz Award. Lars Steinmetz.

Y484 - 8:15 Pathway transplantation into yeast as a model for human disease. **Neta Agmon**.

Y485 - 8:30 Genetic and environmental backgrounds constrain the course of evolutionary rescue by compensatory mutations. Véronique Hamel.

Y486 - 8:45 The genomic repercussions of *RAD5* overexpression. **Robert Reid**.

Y487 - 9:00 Functional characterization of human gene alleles using inter-species genetic approaches. Quan Zhong.

Y488 - 9:15 Genome-Wide Analysis in Yeast to Identify Molecular Targets Promoting Readthrough. Mert Icyuz.

Y489 - 9:30 Systematic functional analysis of resistance-conferring mutations. Lai Wong.

Friday, July 15 8:00 AM – 9:30 AM Crystal Ballroom G2 **NOTES**

Division and Development

Moderator:

Yona Kassir, Technion Institute, Haifa, Israel

Theme: Neuroscience, Systems to Molecules

Y490 - 8:00 A trade-off between invasion and sexual reproduction is mediated by the DNA-binding mechanism of a conserved transcription factor. Michael Dorrity.

Y491 - 8:15 Meiotic Crossing Over Requires Attenuation of an Intrinsic Degron in the MutS Homolog Msh4. Neil Hunter.

Y492 - 8:30 The ascus persists after post-germination budding and influences bud-vs-mate decisions in *S. cerevisiae*. Michael McMurray.

Y493 - 8:45 Kar4p regulates meiosis at both the transcriptional and translational levels Mark Rose

Y494 - 9:00 A cytokinesis checkpoint. **Eric Weiss**.

Y495 - 9:15 The CWI Pathway Regulates Cell Wall Degradation during Mating. Allison Hall.

YEAST PLENARY AND PLATFORM SESSIONS

Friday, July 15 10:00 AM – 12:00 PM Crystal Ballroom G2

Stress Sensing and Damage Control

Moderator:

Oliver Kerscher, The College of William and Mary, Williamsburg, VA

Theme: Neuroscience, Systems to Molecules

Y496 - 10:00 "Flipping the Switch": ROSinduced degradation of Med13 by SCF^{Grr1} mediates mitochondrial fragmentation and cell death. **David Stieg**.

Y497 - 10:15 Protein sequestration after genotoxic stress regulates splicing. Peter Stirling.

Y498 - 10:30 The DNA damage checkpoint targets the exoribonuclease, Xrn1, in response to damage. Jessica Lao.

Y499 - 10:45 The lysine acetyltransferase NuA4 regulates glucose-deprived stress granule formation through cellular acetyl-CoA levels. Sylvain Huard.

Y500 - 11:00 The Quick and the Dead: Single-Cell Demography at the Yeast Thermal Limit. Paul Magwene.

Y501 - 11:15 The RSC complex functions to maintain ploidy in *Saccharomyces cerevisiae*. **Tina Sing**.

Y502 - 11:30 Yeast Genetics Meeting Lifetime Achievement Award. James Broach Friday, July 15 4:00 PM – 6:00 PM Crystal Ballroom G2

Yeast Evolution in and out of the Lab

Moderator:

Helen Murphy, The College of William and Mary, Williamsburg, VA

Theme: Neuroscience, Systems to Molecules

Y503 - 4:00 A comprehensive genotypefitness map of adaptation-driving mutations in yeast. **Barbara Dunn**.

Y504 - 4:15 Extrachromosomal Circular DNA – A Key Player in Creation of Copy Number Variation? Henrik Møller.

Y505 - 4:30 Deciphering common principles governing gene replaceability in yeast. Aashig Kachroo.

Y506 - 4:45 The 1002 yeast genomes project. **Joseph Schacherer**.

Y507 - 5:00 Integrative Analysis of the Variation in the Regulatory Network Among Strains of Yeast. Rohith Srivas.

Y508 - 5:15 Comparative translatomics reveal a conserved class of noncanonical uORFs in yeast. **Joel McManus**.

Y509 - 5:30 Mating-type switching in the methylotrophic yeast *Hansenula* polymorpha is regulated by yeast mating and differentiation pathways. **Sara Hanson**.

Y510 - 5:45 The 3D organization of the diploid *Saccharomyces* genome. **Seungsoo Kim**.

YEAST PLENARY AND PLATFORM SESSIONS

Friday, July 15 7:30 PM – 9:30 PM Palms Ballroom Sago/Sabal/Royal

NOTES

Development and Evolution Joint Plenary Session

Moderator: Jeannie Lee, Massachusetts General Hospital and Harvard University, Cambridge, MA

- 7:30 The Fred Kavli Foundation
 Distinguished Lecture: Flexibility and
 variability in behavior at the geneenvironment interface. **Cori Bargmann**.
- 8:00 Colinear Hox genes regulation in mammals. **Denis Duboule**.
- 8:30 Of mice, men and birds: meiotic recombination and its evolution. **Molly Przeworski**.
- 9:00 Fishing for the secrets of stickleback and human evolution. **David Kingsley**

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CRISPR-based Genome Engineering	Crystal Ballroom J2		
Using CyVerse Cyberinfrastructure to Enable Data Intensive Research, Collaboration, and Education	Grand Ballroom 1		
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Integrating Research and Teaching: Professional Development for Current and Future Faculty Members	St. Thomas		
Informatics Resources to Aid the Genetic Dissection of Neural Circuitry	Palms Ballroom Canary 2		
Everything you Wanted to Know about Sex	Palms Ballroom Sabal		
modMetabolome: Model Organism Metabolomics Consortium Workshop	Grand Ballroom 8A		
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Systems Genetics in Complex Populations	Crystal Ballroom A-B		
An Introduction to Using Galaxy for Genetic Data Analysis	Grand Ballroom 11		
The InterMOD Consortium: A common interface to model organism data	Crystal Ballroom N-Q		

Saturday, July 16 1:45 PM – 3:45 PM Crystal Ballroom G2 **NOTES**

Revisiting Classical Genetics with New Technology

Moderator:

Aimee Dudley, Pacific Northwest Research Institute, Seattle, WA

Theme: Neuroscience, Systems to Molecules

Y511 - 1:45 A global yeast genetic network maps cellular function. **Michael Costanzo**.

Y512 - 2:00 A programmable sensor for protein solubility in yeast uncovers ecological prion-switching factors. **Gregory Newby**.

Y513 - 2:15 Identifying synthetic cytotoxic genetic interactions with DNA damaging therapeutic agents. Xuesong Li.

Y514 - 2:30 High throughput proteinprotein interaction sequencing using iSeq. Zhimin Liu.

Y515 - 2:45 Scalable tools for the quantitative analysis of chemical-genetic interactions from sequencing-based chemical-genetic interaction screens. Scott Simpkins.

Y516 - 3:00 One library to make them all: streamlining the creation of yeast libraries via a SWAp-Tag strategy. Uri Weill.

Y517 - 3:15 NGS for "No-pain Genetic Screens": Using transposons and Next-Gen Sequencing to unveil all important yeast loci in one go. Agnes Michel.

Y518 - 3:30 Exploring Functional Genetic Suppression Interactions on a Global Scale. Jolanda van Leeuwen.

YEAST PLENARY AND PLATFORM SESSIONS

Saturday, July 16 4:00 PM – 6:00 PM Crystal Ballroom C-D

Beyond cerevisiae: Exploiting yeast diversity in nature to understand genome evolution in diverse environments

Organizers:

Christian Landry, Universite Laval, Quebec, Canada, and Judith Berman, Tel Aviv University, Israel

Yeast research has extended far beyond the study of Saccharomyces cerevisiae and outside of the laboratory in the recent years. Our understanding of fundamental cellular and evolutionary processes have benefitted from the synergy created by the use of the resources developed for S. cerevisiae and the diversity of life-style, morphological and metabolic diversity found in closely related yeasts and fungi. This workshop will bring together people who are contributing to this progress by looking at how diverse yeast species adapt to various environmental settings, including natural forests, industrial brewing and human infections.

TALKS (12 min + 3 min for questions) Bin He, Evolution of gene regulation in nutrient starvation response between freeliving and commensal yeast.

Ching-Hua Shih, Cis-acting variation in gene expression dynamics within and between *Saccharomyces* species.

Kangzhen Dong, Hsp90 perturbations affect genome integrity in *Candida* albicans

Catherine L. Ludlow, Independent origins of yeast associated with coffee and cacao fermentation.

Cullen Roth, Virulence QTLs and Genomewide Recombination Rates in *Cryptococcus*. EXPRESS TALKS (5 minutes, no questions)

Chris Eberlein, A reverse ecology approach to understand the proximate and ultimate causes of phenotypic divergence during species formation

Arturo Hernandez Cervantes, Rme1 controls chlamydospore formation in the human pathogenic yeast *Candida albicans*.

Dee Robinson, High-copy number gene expression in different *Saccharomyces cerevisiae* strains reveals the impact of natural variation in wild yeast.

Lauren C. Ames, Identifying novel factors underlying stress resistance in the pathogenic yeast *Candida glabrata*.

David Peris Navarro, Mining Saccharomyces diversity and experimental evolution for cellulosic biofuel production Saturday, July 16 4:00 PM – 6:00 PM Crystal Ballroom G2

Getting Even More Out of SGD

Organizers:

Stacia R. Engel, Stanford University, CA, and Michael Cherry, Stanford University, CA

The Saccharomyces Genome Database interactive workshop will discuss ways to explore and discover information at SGD. We will present and discuss our data repository, tools such as Genome Browser and YeastMine, and ways to delve into the treasure trove of available yeast data. We'll present recent additions to SGD, including the Variant Viewer, which presents sequence comparisons for genes in twelve widely-used *S. cerevisiae* genomes. New users will learn how to use SGD to support their research. Seasoned users will learn how to get even more out the SGD that they already know and love.

J. Michael Cherry, Stanford University - Welcome & Introduction

Pedro Assis, Stanford University - New search capabilities in SGD

Kalpana Karra, Stanford University -YeastMine: SGD's powerful data warehouse

Sage Hellerstedt, Stanford University - Post-translational modifications at SGD

Olivia Lang, Stanford University - Variant Viewer, JBrowse & other sequence tools at SGD

Stacia Engel, Stanford University -Homology curation at SGD

Kevin MacPherson, Stanford University - SGD outreach: YouTube, video tutorials, & webinars

Saturday, July 16 7:30 PM – 9:30 PM Crystal Ballroom G2

Structural and Cellular Organization

Moderator:

Dan Gottschling, Calico Labs, South San Francisco, CA

Theme: Neuroscience, Systems to Molecules

Y519 - 7:30 Lee Hartwell Lecture. From Yeast to Worms and Beyond: Folding Dynamic Chromatin. Susan Gasser.

Y520 - 8:00 The yeast polo kinase, Cdc5, inhibits cell growth and affects nuclear morphology during a mitotic arrest. Alison Walters

Y521 - 8:15 Reconstitution of the microtubule nucleation system of *Candida albicans*. Elmar Schiebel.

Y522 - 8:30 Capture-shrinkage of astral microtubules by budding yeast dynein in cells lacking cortical endoplasmic reticulum tethering proteins Scs2 and Scs22. Wei-Lih Lee.

Y523 - 8:45 Role of the microtubule cytoskeleton in the regulation of Cdc42 dynamics. Marbelys Rodriguez Pino.

Y524 - 9:00 Spindle pole body assembly into the nuclear envelope in budding and fission yeast. Sue Jaspersen.

Y525 - 9:15 Investigating the role of septin phosphorylation in controlling of septin organization at cytokinesis. **Molly McQuilken**.

YEAST PLENARY AND PLATFORM SESSIONS

Sunday, July 17 8:00 AM – 10:00 AM Crystal Ballroom G2

The Fat and Sweet Sides of Life

Moderator:

Karl Kuchler, Medical University Vienna. Austria

Theme: Neuroscience, Systems to Molecules

Y526 - 8:00 The respiration/fermentation switch in yeast requires protein aggregation. **Kobi Simpson-Lavy**.

Y527 - 8:15 SNX-BAR proteins contribute to autophagy via trafficking of lipids required for autophagosome-vacuole fusion Richard Chi

Y528 - 8:30 Rewiring of lipid metabolism in a yeast mutant devoid of the major membrane lipid phosphatidylcholine. Anton de Kroon.

Y529 - 8:45 The lysine acetyltransferase complex NuA4 regulates cellular phosphatidylinositol-4-phosphate and phospholipid metabolism. Louis Dacquay.

Y530 - 9:00 An unexpected role for casein kinases in glucose sensing and signaling. Chris Snowdon.

9:15 Poster Awards

Sunday, July 17 10:30 AM – 12:30 PM Palms Ballroom Sago/Sabal/Royal

Technology and its Application Joint Plenary Session

Moderator: Phil Hieter, University of British Columbia, Vancouver, Canada

10:30 The gut microbiota and childhood undernutrition: looking at human development from a microbial perspective. **Jeffrey Gordon**.

11:00 Synthesis of the yeast genome and beyond. **Jef Boeke**.

11:30 Tomorrow's Table: Organic Farming, Genetics and the Future of Food. **Pamela Ronald**.

12:00 CRISPR-Cas Genome Engineering: Biology, Technology and Ethics. **Jennifer Doudna**. (Pre-recorded talk)

12TH INTERNATIONAL CONFERENCE ON ZEBRAFISH DEVELOPMENT AND GENETICS



Plenary and Platform Sessions



12Th International Conference On Zebrafish Development And Genetics

SCHEDULE AT-A-GLANCE

Wednesday, July	13			
2:00pm-9:30pm	Speaker Ready Room Open	Hall of Cities - Anaheim		
7:00pm-9:00pm	Scientific Session: Regeneration and Stem Cells Grand Ballroom 7A			
9:00pm-11:00pm	Opening Mixer with Exhibits	Cypress Ballroom		
Thursday, July 14				
7:00am-5:00pm	Speaker Ready Room Open	Hall of Cities -Anaheim		
7:45am-10:00am	Genetics and Determinants of Health Joint Plenary Session	Palms Ballroom		
8:00am-4:00pm	Exhibits Open	Cypress Ballroom		
9:00am-8:00pm	Demo Room: MOD (FlyBase, MGI, SGD, WormBase, Zfin) Demo Room Open	Palms Ballroom Canary 3-4		
10:30am-12:30pm	Scientific Session: Early Development and Morphogenesis Neural Circuits, Neurophysiology and Behavior	Grand Ballroom 7A Grand Ballroom 7B		
12:30pm-1:30pm	Mentoring Roundtables #1	North Tower - Harbor Beach		
12:30pm-1:30pm	Speaking Up for Genetics and Model Organism Research	Crystal Ballroom H		
1:30pm-3:30pm	Poster Presentations 1:30pm-2:30pm: Even-numbered posters 2:30pm-3:30pm: Odd-numbered posters	Cypress Ballroom		
1:30pm-3:30pm	GeneticsCareers Center and Job Fair	Cypress Ballroom 1C		
4:00pm-6:00pm	Concurrent Scientific Sessions: Cardiac Development Gene Regulation and RNA Biology	Grand Ballroom 7A Grand Ballroom 7B		
4:00pm-6:00pm	Plenary Session and Workshop for Undergraduate Researchers	North Tower - Sawgrass		
7:45pm-9:45pm	Scientific Session: Neurobiology	Grand Ballroom 7A		
10:00pm-11:30pm	*Science Cafe Event	Palms Ballroom Sabal		
Friday, July 15				
7:00am-5:00pm	Speaker Ready Room Open	Hall of Cities - Anaheim		
8:00am-9:30am	Concurrent Scientific Sessions: t Models of Human Disease Evolution	Grand Ballroom 7A Grand Ballroom 7B		
8:00am-4:30pm	Exhibits Open	Cypress Ballroom		
9:00am-8:00pm	Demo Room: MOD (FlyBase, MGI, SGD, WormBase, Zfin) Demo Room Open Palms Ballroom Canal			
10:00am-12:00pm	Concurrent Scientific Session: Emerging Technologies Imaging Signaling Organogenesis (Mesoderm, Endoderm, Ectoderm)	Grand Ballroom 1-2 Grand Ballroom 7B Grand Ballroom 7A		
12:00pm-1:30pm	*Editor's Panel Discussion and Roundtable	North Tower - Harbor Beach		





Friday, July 15 (c		
1:30pm-3:30pm	Poster Presentations 1:30pm-2:10pm: "A" poster authors present 2:10pm-2:50pm: "B" poster authors present 2:50pm-3:30pm: "C" poster authors present	Cypress Ballroom
1:30pm-3:30pm	GeneticsCareers Center	Cypress Ballroom 1C
2:00pm-2:45pm	GeneticsCareers Workshop - Nailing the Job Talk	Cypress Ballroom 1B
4:00pm-6:00pm	Scientific Session: Highlighted Talks, Awards Ceremony and Community Meeting	Grand Ballroom 7A
6:00pm-7:30pm	*Women in Genetics Panel and Networking	North Tower - Harbor Beach
7:30pm-9:30pm	Development and Evolution Joint Plenary Session	Palms Ballroom
Saturday, July 16		
7:00am-5:00pm	Speaker Ready Room Open	Hall of Cities - Anaheim
8:00am-10:00am	Workshops: See topics and descriptions under the Workshop Section	Multiple locations
8:00am-12:00pm	Exhibits Open	Cypress Ballroom
8:00am-9:00am	Trainee Bootcamp Workshops: Session 1	North Tower
9:00am-10:00am	Trainee Bootcamp Workshops: Session 2	North Tower
10:00am-12:00pm	Poster Presentations 10:00am-11:00am Odd-numbered posters 11:00am-12:00pm Even-numbered posters	Cypress Ballroom (Posters must be removed by 1pm
10:00am-12:00pm	GeneticsCareers Center	Cypress Ballroom 1C
10:30am-11:15am	GeneticsCareers Workshop	Cypress Ballroom 1B
12:15pm-1:45pm	*Mentoring Roundtables #2	North Tower - Harbor Beach
1:45pm-3:45pm	Concurrent Scientific Sessions: Neural Development and Regeneration Cancer Grand Ballroom 7F Grand Ballroom 7F	
4:00pm-6:00pm	Scientific Session: Models of Human Disease	Grand Ballroom 7A
7:30pm-9:30pm	Concurrent Scientific Session: Haematopoiesis and Vascular Biology Cell Biology and Polarity	Grand Ballroom 7A Grand Ballroom 7B
Sunday, July 17		
8:00am-10:00am	Scientific Sessions: Genome Editing	Grand Ballroom 7A
10:30am-12:30pm	Technology and its Application Joint Plenary Session	Palms Ballroom

^{*} Ticketed Event

Wednesday, July 13 7:00 PM – 9:00 PM Grand Ballroom 7A

Regeneration and Stem Cells

Moderator:

Richard Dorsky, University of Utah

Theme: Stem Cell, Regeneration and Germline

- **Z531** 7:00 Modulation of tissue repair by regeneration enhancer elements. **Junsu Kang**.
- Z532 7:15 A screen for epigenetic regulators reveals a requirement for Ing4 in HSC specification and function. Katie Kathrein
- **Z533** 7:30 Zebrafish T cells mediate organ-specific regenerative programs . **Kazu Kikuchi**.
- **Z534** 7:45 Production of medaka individuals derived from cryopreserved spermatogonia by allogenic transplantation. **Shinsuke Seki**.
- **Z535** 8:00 Zebrafish heart regeneration requires alleviation of cardiomyocyte genomic stress by BMP signaling. **Gilbert Weidinger**.
- **Z536** 8:15 Autophagy Activation via FGF Signaling Regulates Cytoplasmic Remodeling of Regenerating Adult Zebrafish Myocytes. **Alon Kahana**.
- **Z537** 8:30 Macrophages mediate the repair of brain vascular rupture through direct physical adhesion and mechanical traction. **Lingfei Luo**.
- **Z538** 8:45 Four and a Half LIM Domains 1b (Fhl1b) Is Essential for Regulating the Liver versus Pancreas Fate Decision and for beta-Cell Regeneration. **Chong Shin**.

Thursday, July 14 7:45 AM – 10:00 AM Palms Ballroom Sago/Sabal/Royal

Genetics and Determinants of Health Joint Plenary Session

Moderator: Lynn Cooley, Yale University, New Haven, CT

- 7:45 Welcome, Stan Fields, University of Washington, Seattle, GSA President.
- 7:50 Opening Remarks, Phil Hieter, University of British Columbia and Jeannie Lee, Harvard University, TAGC Organizers.
- 8:00 Translating Zebrafish Development to the Clinic. **Leonard Zon**.
- 8:30 Using *Drosophila* to unravel the mysteries of sleep: when, why and how. **Amita Sehgal**.
- 9:00 New insights into the pathogenesis and treatment of Marfan syndrome and other presentations of thoracic aortic aneurysm. **Harry Dietz**.
- 9:30 Accelerating Insights from Basic Genetics. **Francis Collins**.

Thursday, July 14 10:30 AM – 12:30 PM Grand Ballroom 7A

NOTES

Early Development and Morphogenesis

Moderator:

Mary Mullins, University of Pennsylvania School of Medicine

Theme: Development and Morphogenesis

Z539 - 10:30 A Meiotic-Vegetal Center Couples Oocyte Polarization with Meiosis. **Yaniv Elkouby**.

Z540 - 10:45 Investigating the function of the yolk cell microtubules during zebrafish epiboly. **Ashley Bruce**.

Z541 - 11:00 *Myo1D*, an unconventional myosin regulates Kupffer's vesicle lumenogenesis in zebrafish. **Manush Saydmohammed**.

Z542 - 11:15 Combinatorial signaling interactions pattern the dorsal-ventral mesodermal axis by controlling bHLH transcription factor activity. **Benjamin Martin**

Z543 - 11:30 Functional conservation of the zebrafish germ plasm organizer Bucky ball and *Drosophila* Oskar. **Pritesh Krishnakumar**.

Z544 - 11:45 Fibroblast growth factor 24 is required for early somatic gonad development in zebrafish. **Dena Leerberg**.

Z545 - 12:00 Wnt signaling regulates progenitor cell identity and collective cell migration in the lateral line. **Hillary McGraw**.

Z546 - 12:15 Migratory neural crest is required for patterning and morphogenesis of the embryonic optic cup. **Chase Bryan**.

Thursday, July 14 10:30 AM – 12:30 PM Grand Ballroom 7B

Neural Circuits, Neurophysiology and Behavior

Moderator:

Alex Schier, Harvard University, MA

Theme: Neuroscience, Systems to Molecules

Z547 - 10:30 Neuronal connectivity analysis of wild-type and mutant zebrafish with transsynaptic virus and 3D brain mapping. **Manxiu Ma**.

Z548 - 10:45 Assembling the MET complex in sensory hair cells: Tomt regulates the trafficking of Tmc proteins to the site of mechanotransduction. **Timothy Erickson**.

Z549 - 11:00 Asymmetric activation of the dorsal habenulae correlates with larval recovery from electric shock. **Erik Duboué**.

Z550 - 11:15 Linking function to cell type in the optic flow responsive circuit in zebrafish larva. **Anna Kramer**.

Z551 - 11:30 A forward genetic screen identifies the G-protein coupled calcium receptor CaSR as a regulator of simple decision-making. **Roshan Jain**.

Z552 - 11:45 Feeding state modulates behavioral choice and processing of prey stimuli in the zebrafish tectum. **Alessandro Filosa**

Z553 - 12:00 Impact of circadian protein Period2 on glucocorticoid signaling and depression regulation. **Mingyong Wang**.

Z554 - 12:15 Visualizing Inhibitory Structural Synaptic Plasticity during Day and Night. **Idan Elbaz**. Thursday, July 14 4:00 PM – 6:00 PM Grand Ballroom 7A

Cardiac Development

Moderator:

Deborah Yelon, University of California, San Diego

Theme: Development and Morphogenesis

Z555 - 4:00 Identifying novel regulators of early cardiac development in zebrafish using single-cell mRNA-seq and ATAC-seq. **Xuefei Yuan**.

Z556 - 4:15 PDGF signaling directs cardiomyocyte movement toward the midline during heart tube assembly. **Deborah Yelon**

Z557 - 4:30 Convergence of FGF and Nodal signals on the actin cytoskeleton controls cardiac cell migration in zebrafish. **Meagan Grant**.

Z558 - 4:45 Cardiomyocyte fusion in zabrafish. **Suphansa Sawamiphak**.

Z559 - 5:00 HDAC1 repression of retinoic acid-responsive genes promotes second heart field development. **Yuntao Charlie Song.**

Z560 - 5:15 Epigenetic control of zebrafish cardiogenesis by TET2/3. **Yahui Lan**.

Z561 - 5:30 Multicolor mapping of the cardiomyocyte proliferation dynamics that construct the atrium. **Matthew Foglia**.

Z562 - 5:45 Spatiotemporal regulation of cell size and nuclear content during regeneration of the epicardium. **Jingli Cao**.

Thursday, July 14 4:00 PM – 6:00 PM Grand Ballroom 7B

NOTES

Gene Regulation and RNA Biology

Moderator:

Joan Heath, Walter and Eliza Hall Institute of Medical Research, Australia

Theme: Genomics and Gene Regulation

Z563 - 4:00 The zebrafish embryo mRNA interactome reveals distinct roles for hnRNP A1 during the maternal to zygotic transition. **Karla Neugebauer**.

Z564 - 4:15 Clearance of maternal mRNAs via 3'-end uridylation in vertebrate embryos. **Hyeshik Chang**.

Z565 - 4:30 Testing the in vivo consequences of splicing and transcriptional crosstalk. **Adriana De La Garza**

Z566 - 4:45 Longterm Regulation of Zebrafish Behavior by Maternal Rest/NRSF is Mediated by *snap25a/b*. **Howard Sirotkin**.

Z567 - 5:00 TFAP2A drives melanocyte gene expression in parallel with MITF. **Hannah Seberg**.

Z568 - 5:15 Tet-mediated DNA hydroxymethylation is required for retinal neurogenesis. **Pawat Seritrakul**.

Z569 - 5:30 Genomic dissection of conserved transcriptional regulation in intestinal epithelial cells. **Colin Lickwar**.

Z570 - 5:45 Constructing gene regulatory networks underlying fate specification of multipotent progenitors in the zebrafish neural crest. **Kleio Petratou**.

Thursday, July 14 7:45 PM – 9:45 PM Grand Ballroom 7A

Neurobiology

Moderator:

Teresa Nicolson, Oregon Health & Science University

Theme: Neuroscience, Systems to Molecules

Z571 - 7:45 Emergence of Patterned Activity in the Developing Zebrafish Spinal Cord. **Yinan Wan**.

Z572 - 8:00 Automated 3D cellular-resolution phenotyping of whole zebrafish with in situ RNA probe libraries. **Yuelong Wu**.

Z573 - 8:15 A conserved role for Lef1-mediated Wnt signaling in hypothalamic neurogenesis and anxiety. **Yuanyuan Xie**.

Z574 - 8:30 Injury-induced *ctgfa* directs glial bridging and spinal cord regeneration in zebrafish. **Mayssa Mokalled**.

Z575 - 8:45 Light-dependent regulation of sleep/wake states by prokineticin 2 in zebrafish. **David Prober**.

Z576 - 9:00 A forward genetic screen identifies Huntingtin-interacting protein 14 as an *in vivo* regulator of zebrafish habituation learning. **Jessica Nelson**.

Z577 - 9:15 Larval zebrafish show individual left/right bias in movement direction during local light-search behavior. **Eric Horstick**

Z578 - 9:30 Neuro-taxonomy: Towards a complete parts list of the zebrafish central nervous system. **Herwig Baier**.

Friday, July 15 8:00 AM – 9:30 AM Grand Ballroom 7A

Models of Human Disease

Moderator:

James Amatruda, University of Texas Southwestern Medical Center

Theme: Disease Models and Aging

Z579 - 8:00 Identifying roles for Pbx factors in heart development and congenital heart defects using zebrafish genome engineering. **Lisa Maves**.

Z580 - 8:15 An essential splice site mutation in flt1 protects against early-stage atherosclerosis in zebrafish larvae. **Marcel** den Hoed

Z581 - 8:30 Mutations in COL22A1 cause a loss of vascular integrity that result in intracranial aneurysms. **Quvnh Ton**.

Z582 - 8:45 Cure modeling human genetic skeletal muscle disorders. **Noriko Umemoto**

Z583 - 9:00 Fmrp interacts with Adar and regulates RNA editing, synaptic density and locomotor activity in zebrafish. **Adi Shamay-Ramot**.

Z584 - 9:15 Pyruvate carboxylase functions in astrocytes to regulate habituation learning. **Marc Wolman**.

Friday, July 15 8:00 AM – 9:30 AM Grand Ballroom 7B **NOTES**

Fvolution

Moderator: **James Lister**, Virginia Commonwealth University

Theme: Evolution and Quantitative

Biology

Z585 - 8:00 Introgression in Zebrafish and related species was mediated by genome structure. **Braedan McCluskey**.

Z586 - 8:15 Regulation of actinodin1 in embryonic fins via tissue-specific cis-acting regulatory elements: a potential mechanism for the loss of these genes during the fin-to-limb transition. **Robert Lalonde**.

Z587 - 8:30 The MITF family member *tfec* functions in zebrafish neural crest pigment cell fate diversification. **James Lister**.

Z588 - 8:45 Evolutionary Conservation of Tcf12 and Twist1 Function in Coronal Suture Development. **Camilla Teng**.

Z589 - 9:00 Fish synovial joints as new models for joint development and disease. **Joanna Smeeton**.

Z590 - 9:15 Cavefish evolution as a natural model for metabolic diseases. **Nicolas Rohner**.

Friday, July 15 10:00 AM – 12:00 PM Grand Ballroom 1-2

Emerging Technologies – Imaging

Moderator:

Kristen Kwan, University of Utah

Theme: New Technology and Resources

Z591 - 10:00 In toto imaging of osteoblast cell cycle dynamics in regenerating zebrafish scales. **Ben Cox**.

Z592 - 10:15 Plasticity & Robustness in Gastrulation: Siamese Zebrafish. **Antonio Ortiz**.

Z593 - 10:30 Spatiotemporal regulation of metalloprotease activity in DV patterning. **Francesca Tuazon**.

Z594 - 10:45 Automated approaches to sample handling and high-throughput behavioral screening of zebrafish. **Rayindra Peravali**.

Z595 - 11:00 Quantitative in vivo optical tomography of cancer progression and vasculature development in adult zebrafish. **Nicola Lockwood**.

Z596 - 11:15 Pancellular, whole-organism tissue microCT as a basis for organismal phenomics. **Keith Cheng**.

Z597 - 11:30 Automated Segmentation and Morphological Characterization of Neuronal Cell Nuclei in Synchrotron MicroCT Images of Whole Zebrafish. **Yifu Ding**.

Z598 - 11:45 Diverse structures and functions of pharyngeal teeth in teleost (zebrafish, medaka, carp, snowflake moray) live-imaged by synchrotron X-ray cinematography. **Kohei Hatta**.

Friday, July 15 10:00 AM – 12:00 PM Grand Ballroom 7B

Signaling

Moderator:

Anming Meng, Tsinghua University, China

Theme: Disease Models and Aging

Z599 - 10:00 Calcium signalling mediated by *tmem33* is essential for endothelial tip cell function during angiogenesis in zebrafish. **Aaron Savage**.

Z600 - 10:15 Lgr6 Is a Wnt Target That Promotes Support Cell Proliferation in the Regenerating Lateral Line Neuromast. **Jonathan Kniss**.

Z601 - 10:30 In vivo ranking of RASopathy MEK1 variants using functional assays in zebrafish and *Drosophila*. **Granton Jinda**l.

Z602 - 10:45 Hedgehog Signaling in Choroid Fissure Formation and Coloboma. **Hannah Gordon**.

Z603 - 11:00 The role of the Nkd EF-hand in modulating Wnt signaling outputs. **Autumn Marsden**.

Z604 - 11:15 Glycolysis meets Fgf signaling: The glycolytic enzyme PGK1 is required non-autonomously for Fgf-dependent specification of otic neurons in zebrafish. **Bruce Riley**.

Z605 - 11:30 Shh promotes direct interactions between epidermal cells and osteoblast progenitors to shape regenerated zebrafish bone. **Kryn Stankunas**.

Z606 - 11:45 A genetic mechanism to sense and respond to enhanced cellular sphingosine levels during development. **Todd Evans**.

Friday, July 15 10:00 AM – 12:00 PM Grand Ballroom 7A **NOTES**

Organogenesis (Mesoderm, Endoderm, Ectoderm)

Moderator:

lain Drummond, MGH/Harvard Medical School, MA

Theme: Development and Morphogenesis

Z607 - 10:00 Developmental origin of muscle-associated fibroblasts. **Peng Huang**.

Z608 - 10:15 Hepatic nuclear receptor 4 alpha mediates microbial control of host gene expression in the zebrafish digestive tract. **James Davison**.

Z609 - 10:30 Deciphering the role of Isl1 in enteroendocrine cell differentiation. **Marianne Voz**

Z610 - 10:45 Liver-enriched gene 1, a glycosylated secretory protein, binds to FGFR and mediates an anti-stress pathway to protect liver development in zebrafish. **Jinrong Peng**.

Z611 - 11:00 The Fatty Acid Chain Elongase, Elovl1, Is Required for Kidney and Swim Bladder Development during Zebrafish Embryogenesis. **Sushil Bhandari**.

Z612 - 11:15 Wnt signaling is required for adult zebrafish kidney regeneration. **Caramai Kamei**.

Z613 - 11:30 Gain-of-function mutations of *mau*/DrAqp3a influence zebrafish pigment pattern formation through the tissue environment. **Anastasia Eskova**

Z614 - 11:45 Evidence for ECM-Sema3d interactions controlling skeletal regeneration in the fin. **M. Kathryn Iovine**.

Friday, July 15 4:00 PM – 6:00 PM Grand Ballroom 7A

Highlighted Talks, Awards Ceremony and Community Meeting

Moderator: **Rebecca Burdine**, Princeton University, NJ

Z615 - 4:00 Positional cloning of *cloche*, a gene that drives endothelial and hematopoietic lineage specification. **Didier Stainier**.

Z616 - 4:30 Chi-Bin Chien Award Presentation: Molecular asymmetry at electrical synapses – at the gap and beyond. Adam Miller.

Community Meeting

- 5:00 Conference Announcements.
- 5:15 Resource Center Presentations.
- 5:30 Open Community Discussion.

Friday, July 15 7:30 PM – 9:30 PM Palms Ballroom Sago/Sabal/Royal

Development and Evolution Joint Plenary Session

Moderator: Jeannie Lee, Massachusetts General Hospital and Harvard University, Cambridge, MA

- 7:30 The Fred Kavli Foundation
 Distinguished Lecture: Flexibility and variability in behavior at the geneenvironment interface. Cori Bargmann.
- 8:00 Colinear Hox genes regulation in mammals. **Denis Duboule**.
- 8:30 Of mice, men and birds: meiotic recombination and its evolution. **Molly Przeworski**.
- 9:00 Fishing for the secrets of stickleback and human evolution. **David Kingsley**.

CROSS COMMUNITY WORKSHOPS

Saturday, July 16	8:0am – 10:00 am		
Descriptions are in the Workshop section and in the app.			
Automated Tracking for Quantitative Phenotyping	Grand Ballroom 3		
CRISPR-based Genome Engineering	Crystal Ballroom J2		
Using CyVerse Cyberinfrastructure to Enable Data Intensive Research, Collaboration, and Education	Grand Ballroom 1		
Model Organisms to Face Environmental Problems	Palms Ballroom Canary 1		
Integrating Research and Teaching: Professional Development for Current and Future Faculty Members	St. Thomas		
Informatics Resources to Aid the Genetic Dissection of Neural Circuitry	Palms Ballroom Canary 2		
Everything you Wanted to Know about Sex	Palms Ballroom Sabal		
modMetabolome: Model Organism Metabolomics Consortium Workshop	Grand Ballroom 8A		
Feeding Behavior, Nutrition and Metabolism: Emerging Model Organisms	Palms Ballroom Royal		
Functional Genomics for Conserved Gene Function Discovery	Crystal Ballroom J1		
Cell Competition in Flies and Mice	Crystal Ballroom G1		
Developmental Mechanics	Crystal Ballroom G2		
Model Systems in Drug Discovery	Grand Ballroom 2		
CRISPR/Cas9 - Techniques and applications in Fish, Flies, & Mice	Grand Ballroom 7A		
Gene Function Discovery within the IMPC Resource	Crystal Ballroom C		
Utilizing NCBI Databases for Model Organism Research	Grand Ballroom 12-14		
Systems Genetics in Complex Populations	Crystal Ballroom A-B		
An Introduction to Using Galaxy for Genetic Data Analysis	Grand Ballroom 11		
The InterMOD Consortium: A common interface to model organism data	Crystal Ballroom N-Q		

Saturday, July 16 1:45 PM – 3:45 PM Grand Ballroom 7A

Neural Development and Regeneration

Moderator:

Yevgenya Grinblat, University of Wisconsin- Madison

Theme: Neuroscience, Systems to Molecules

Z617 - 1:45 Cell proliferation and differentiation are controlled by different Fgf downstream targets during sensory hair cell regeneration. **Mark Lush**.

Z618 - 2:00 Cilia genes play differing roles in hair cells. **Tamara Stawicki**.

Z619 - 2:15 The Agrin receptor Lrp4 promotes peripheral nerve regeneration through a novel, MuSK-independent pathway. **Katherine Gribble**.

Z620 - 2:30 pregnancy-associated plasma protein-aa (pappaa) mediates the development and function of distinct retinal circuits. **Andrew Miller**

Z621 - 2:45 CachD1 is a novel type I transmembrane protein that regulates the development of habenular asymmetry in zebrafish. **Ana Faro**.

Z622 - 3:00 New pathways required for zebrafish brain Left-Right asymmetry and bilateral symmetry. **Michael Rebagliati**.

Z623 - 3:15 Roundabout2 and exotosinlike 3 promote target specific peripheral nerve regeneration *in vivo*. **Patricia Murphy**.

Z624 - 3:30 MECP2-IGF1 signaling determines how neural circuits interpret sensory information. **Nicholas Santistevan**.

Saturday, July 16 1:45 PM – 3:45 PM Grand Ballroom 7B

Cancer

Moderator:

Len Zon, Harvard Medical School, MA

Theme: Intracellular Dynamics

Z625 - 1:45 Selenoprotein H is an essential regulator of redox homeostasis that cooperates with p53 in development and tumorigenesis. **Andrew Cox**.

Z626 - 2:00 Single-cell imaging of normal and malignant cell engraftment into optically clear immune deficient zebrafish. **Qin Tang**.

Z627 - 2:15 Dynamics of innate immunity guided tumor cell motility *in vivo*. **Minna Roh-Johnson**

Z629 - 2:45 Investigating novel nononcogene targets for cancer therapies. **Joan Heath**.

Z630 - 3:00 Chemical genetic approach identifies role of proton sensing GPR68 in modulation of migration in melanoma. **Charles Williams**

Z631 - 3:15 Zebrafish Pediatric Brain Tumor Modeling for Pre-clinical Drug Screening. **Rodney Stewart**.

Z632 - 3:30 Dissecting the mechanism of oncogenic glutamate receptor signaling in melanocytes and melanoma. **Ana Neto**.

Saturday, July 16 4:00 PM – 6:00 PM Grand Ballroom 7A NOTES

Models of Human Disease

Moderator:

Liz Patton, Inst for Genetics and Molecular Medicine, UK

Theme: Disease Models and Aging

Z633 - 4:00 GDF6-induced BMP signaling promotes melanoma progression by reawakening a pro-survival neural crest identity. **Craig Ceol**.

Z634 - 4:15 Humanising the zebrafish liver shifts metabolic profiles, improves pharmacokinetics of CYP3A4 substrates and couples with development of fluorescent screening biomarkers. **Tom Carney**.

Z635 - 4:30 Missing heritability for orofacial clefing identified through dissection of the gene regulatory network governing zebrafish periderm differentiation. **Robert Cornell**.

Z636 - 4:45 Linking cilia motility and cerebrospinal fluid flow to the etiopathogenesis of adolescent idiopathic scoliosis. **Daniel Grimes**.

Z637 - 5:00 Macrophage epithelial reprogramming underlies mycobacterial granuloma formation and promotes infection. **Mark Cronan**.

Z638 - 5:15 Metabolic stress induces Ripk3- and macrophage-dependent β-cell death in a zebrafish model of insulin resistance. **Wenbiao Chen**.

Z639 - 5:30 Genetically encoded apolipoprotein reporters illuminate lipoprotein dynamics in the larval zebrafish. **Steven Farber**.

Z640 - 5:45 Estrogens Suppress a Behavioral Phenotype in Zebrafish Mutants of the Autism Risk Gene, CNTNAP2. **Ellen Hoffman**.

Saturday, July 16 7:30 PM – 9:30 PM Grand Ballroom 7B

Haematopoiesis and Vascular Biology

Moderator:

Jill de Jong, The University of Chicago, IL

Theme: Development and Morphogenesis

Z641 - 7:30 Macrophage-mediated thrombus dissolution is rate limiting during vascular repair. **Hilary Clay**.

Z642 - 7:45 A story in translation: Phosphoinositide signaling and angiogenesis. **Brant Weinstein**.

Z643 - 8:00 LSD1-dependent shutdown of *etv2* promotes hematopoietic differentiation in hemangioblasts. **Makoto Kobayashi**.

Z644 - 8:15 Growth Differentiation Factor 6 (GDF6) promotes vascular quiescence by maintaining stable endothelial cell adherens junctions. **Shlomo Krispin**.

Z645 - 8:30 Embryonic hematopoiesis in vertebrate somites gives rise to definitive hematopoietic stem cells. **Anming Meng**.

Z646 - 8:45 RUNX1-independent development of HSC and definitive hematopoiesis in zebrafish. **Pu Liu**.

Z647 - 9:00 TopBP1 Governs Hematopoietic Stem/Progenitor Cells Survival in Zebrafish Definitive Hematopoiesis. **Weijun Pan**.

Z648 - 9:15 Structural basis of endothelial Adgra2/Reck complex activity during Wnt7-dependent brain angiogenesis and bloodbrain barrier formation in zebrafish. **Naguissa Bostaille**.

Saturday, July 16 7:30 PM – 9:30 PM Grand Ballroom 7A

Cell Biology and Polarity

Moderator:

Ashley Bruce, University of Toronto, Canada

Theme: Intracellular Dynamics

Z649 - 7:30 Microtubule-actin crosslinking factor (Macf1) Function in Oocyte Polarity and Nuclear Positioning. **Matias Escobar-Aguirre**.

Z650 - 7:45 Actr10, a component of the dynactin complex, regulates retrograde mitochondrial transport in axons. **Catherine Drerup**.

Z651 - 8:00 Apoptotic cartilage remodelng requires Kinesin I. **Adrian Santos**

Z652 - 8:15 Protocadherin18a organizes notochord formation by regulating E-cadherin-mediated cell migration. **Bernadett Bösze**.

Z653 - 8:30 RGMa/Neogenin signaling promotes neural convergence by enhancing cell polarity and organizing microtubules. **Sharlene Brown**.

Z654 - 8:45 Hippo signaling regulates ventricle morphogenesis via Tazdependent activation of Wnt and Notch signaling. **Lyndsay Selland**.

Z655 - 9:00 The Joubert syndrome protein INPP5E controls ciliogenesis by regulating phosphoinositides at the apical memebrane. **Ying Cao**.

Z656 - 9:15 An unexpected influence of the extracellular matrix on cilia function in zebrafish. **Ellen LeMosy**.

Sunday, July 17 8:00 AM – 10:00 AM Grand Ballroom 7A

Genome Editing

Moderators:

Bettina Schmid, DZNE, Munich, Germany, and **Darius Balciunas**, Temple University, PA

Theme: New Technology and Resources

Z657 - 8:00 A high-throughput workflow for CRISPR/Cas9 mediated targeted mutagenesis to model human disease genes in zebrafish . **Gaurav Varshney**.

Z658 - 8:15 Resource Construction at the China Zebrafish Resource Center. **Yong-Hua Sun**.

Z659 - 8:30 Phenome-scale screen defines post-embryonic gene function during the zebrafish larval-to-adult transition. **Ricardo Fuentes**.

Z660 - 8:45 Precise editing of the zebrafish genome by homologous recombination made simple and efficient. **Kazuyuki Hoshijima**.

9:00 Workshop and Roundtable.

Sunday, July 17 10:30 AM – 12:30 PM Palms Ballroom Sago/Sabal/Royal

Technology and its Application Joint Plenary Session

Moderator: Phil Hieter, University of British Columbia, Vancouver, Canada

10:30 The gut microbiota and childhood undernutrition: looking at human development from a microbial perspective. **Jeffrey Gordon**.

11:00 Synthesis of the yeast genome and beyond. **Jef Boeke**.

11:30 Tomorrow's Table: Organic Farming, Genetics and the Future of Food. **Pamela Ronald**.

12:00 CRISPR-Cas Genome Engineering: Biology, Technology and Ethics. **Jennifer Doudna**. (Pre-recorded talk)

All posters and exhibits will be in the Cypress Ballroom. The Hall will be open to conference registrants on a 24 hour basis beginning at 5:00 pm, Wednesday, July 13 until 12:00 noon, Saturday, July 16. Security will be posted at the entrance to the Hall and only individuals with the official TAGC registration badge will be admitted.

Authors are expected to present at their boards according to the following schedule:

Thursday, July 14	1:30 pm – 2:30 pm	Even-numbered
		posters
	2:30 pm – 3:30 pm	Odd-numbered
		posters
Friday, July 15	1:30 pm – 2:10 pm	"A" posters
	2:10 pm – 2:50 pm	"B" posters
	2:50 pm – 3:30 pm	"C" posters
Saturday, July 16	10:00 am – 11:00 am	Odd-numbered
		posters
	11:00 am - 12:00 pm	Even-numbered
		posters

Poster presentations have four digit numbers preceded by their community letter and followed by an "A", "B" or "C".

Example:

Y3197A - is for the Yeast Genetics Meeting, poster #3197 and in addition to presenting on Thursday and Saturday will present, 1:30 - 2:10 on Friday.

Legend:

W = C. elegans P = PEQG C = Ciliates Y = Yeast D = Drosophila Z = Zebrafish

M = Mouse

Exhibit representatives will be at their booths during the following hours:

Wednesday, July 13	9:00 pm – 11:00 pm
Thursday, July 14	8:00 am - 4:00 pm
Friday, July 15	8:00 am - 4:30 pm
Saturday, July 16	8:00 am - 12:00 noon

C. elegans DEVELOPMENT, CELL BIOLOGY AND GENE EXPRESSION MEETING



Posters

Meiosis, Germ Line Development and	
Sex Determination	W4001A-W4035B
Cell Cycle, Cell Division, Cytokinesis	W4036C-W4043A
Cell Polarity and Cell Fate	W4044B-W4061A
Aging and Cell Death	W4062B-W4087C
Cell Patterning and Morphogenesis	W4088A-W4109A
Genomics, Gene Regulation and	
Technology	W4110B- W4154A
RNAi, microRNAs, and	
Developmental Timing	W4155B-W4164B
Intracellular Organelles, Trafficking	
and the Cytoskeleton	W4165C-W4189C

C. elegans POSTER SESSION

Meiosis, Germ Line Development, and Sex Determination

W4001A Unearthing Aneuploidy: A Study of the Influence of Double Strand Breaks on Oocytes in Caenorhabditis elegans. **Fabiola Balmir**.

W4002B New complexities in ATM/ATR regulation in meiosis. **Wei Li**.

W4003C NuRD Chromatin Remodelers Block Checkpoint Activation in the *C. elegans* Germ Line. **Solomon Sloat**.

W4004A NuRD paralogs CHD-3/LET-418 promote meiotic double-stranded break repair In *C. elegans* . **Carolyn Turcotte**.

W4005B SMRC-1, a putative annealing helicase, links chromatin regulation and DNA repair in the *C. elegans* germ line. **Bing Yang**.

W4006C Sex pheromones of *C. elegans* males potentiate the female reproductive system. **Erin Aprison**.

W4007A Identifying a role for ETR-1 in *C. elegans* reproduction and germ line apoptosis. **Ruby Boateng**.

W4008B Developmental consequences of the inappropriate transgenerational inheritance of histone methylation in *spr-5;met-2* mutant worms. **Brandon Carpenter**.

W4009C SAMP-1 Regulates Chromosome Segregation in *C. elegans* Spermatogenesis. **Alison Deshong**.

W4010A Sex specific differences in *C. elegans* meiosis. **Sara Fielder**.

W4011B Identification of Genes that Regulate the Activation of *C. elegans* Sperm. **Abigail Greer**.

W4012C Maternal diet influences intergenerational phenotypic plasticity affecting progeny size and starvation resistance. Jon Hibshman.

W4013A TGFβ and prostaglandin synthesis in *C. elegans*: linking environmental cues to sperm motility function. **Muhan Hu**.

W4014B Characterization and identification of new genes required for sperm activation in *C. elegans*. **Amber Krauchunas**.

W4015C A calcineurin-interacting protein regulates ovulation and male mating in C.elegans. **Sun-Kyung Lee**.

W4016A Identification and Characterization of Genes Essential for *C. Elegans* Sperm Guidance. **Shara Legg**.

W4017B PP1α phosphatase GSP-2 regulates meiotic chromosome segregation during spermatogenesis in *C. elegans*. **Yi-Hsiu Lin**.

W4018C PAM-1, the *C. elegans* ortholog of the puromycin sensitive aminopeptidase, and autophagy pathways genetically collaborate to regulate gametogenesis. **Ashley Munie**.

W4019A Screening of compounds that can dissect the *C. elegans* spermiogenesis pathway. **Hitoshi Nishimura**.

W4020B A role for sperm-gonad signaling in competition for reproductive success. **Gillian Stanfield**.

W4021C Are all hermaphroditic nematodes like *C. elegans*? Lessons from *Rhabditis* hermaphroditic nematodes that produce sperm and oocytes simultaneously. **Xiaoxue Lin.**

W4022A Characterization of the germline stem cell niche in *C. elegans* males. **Sarah Crittenden**.

W4023B Molecular and genetic analysis of the ego-3 gene reveals a critical role for HSP90 in GLP-1/Notch signaling in the *C. elegans* germline. **James Lissemore**.

W4024C Investigating the remodeling of *C. elegans* primordial germ cells into germline stem cells. **Chelsea Maniscalco**.

W4025A Regulation of germline stem cell maintenance by S6-Kinase in *C. elegans*. **Debasmita Roy**.

W4026B GLD-1, FOG-2, and the Emergence of Self-fertility in *C. elegans*. **Eric Haag**.

W4027C Novel regulation of *C. briggsae* spermatogenesis. **Katharine Pelletier**.

W4028A TGFß and insulin-like signaling mediate the feeding state-dependent expression of the food chemoreceptor ODR-10 in *C. elegans* males. **Emily Wexler**.

W4029B PUP-1/CDE-1 and PUP-2 poly(U) polymerases function redundantly in germline development in *C. elegans*. **Yini Li**.

W4030C Analysis of germ cell proliferation and germline histone dynamics in *C.elegans*. **Simona Rosu**.

W4031A Epigenetic Contributions to Homolog Recognition in Meiosis. **Christine Doronio**.

The letter preceding the number is the community. A, B, C after the number is presentation time. W – C. elegans, C – Ciliates, D – Drosophila, M – Mouse, P – PEQG, Y – Yeast, Z – Zebrafish

C. eleaans POSTER SESSION

W4032B Cortical microtubule dynamics in *C. elegans* oocytes. **Chien-Hui Chuang**.

W4033C Investigating Oocyte Meiotic Spindle Assembly and Bipolarity in *C. elegans*. **Aleesa Schlientz**.

W4034A Analysis of DLC-1 mediated regulation of the tumor suppressor protein GLD-1. Ekaterina Voronina.

W4035B Ubiquitin Conjugating Enzymes required for Ubiquitination of Paternal Organelles during post fertilization events. **Paola Molina**.

Cell Cycle, Cell Division, Cytokinesis

W4036C Elucidating the Role of Securin in Regulating Separase during Cortical Granule Exocytosis. **Christopher Turpin**.

W4037A The Protease Activity of Separase Is Required for Both Chromosome Segregation and Membrane Trafficking During Anaphase. Xiaofei Bai

W4038B A Potential Role for Midbodies in Developing Tissues of *C. elegans*. **Joshua Bembenek**.

W4039C TPXL-1 mediates aster-based clearing of contractile ring proteins from the cell poles during cytokinesis. **Esther Zanin**.

W4040A *t3421*, a novel mutation required for bipolar spindle assembly in the one-cell stage *C. elegans* embryo. **Tamara Mikeladze-Dvali**.

W4041B Polo-like kinase 1 is required for nuclear envelope breakdown and parental chromosome mixing during Caenorhabditis elegans early embryonic divisions. Mohammad Rahman.

W4042C Microtubule glutamylation is dispensable for *C. elegans* viability. **Katherine Badecker**.

W4043A The Power of One: A single wild type chromosome pair promotes chromosome partition in the first spermatocyte division of meiotic mutants. Katherine Rivera Gomez.

Cell Polarity, and Cell Fate

W4044B Asymmetric positioning of organelles during epithelial cell polarization. **James Brandt**.

W4045C SLO BK K⁺ channels couple gap junctions to inhibition of Ca²⁺ signaling in olfactory neuron diversification. **Amel Algadah**.

W4046A Identifying factors that interact with PAX-3, a Paired-box protein involved in hypodermal cell fate specification in *C. elegans*. **Margarita Correa-Mendez**

W4047B Forward genetic screens for TLD mutants with defective localization of the TIR-1 Ca²⁺ signaling scaffold protein in left-right neuronal asymmetry. **Yi-Wen Hsieh**.

W4048C Investigation into the Regulatory Dynamics of LIN-1 and LIN-31, Transcription Factors Involved in *C. elegans* Cell Fate Specification. **Robert Kousnetsov**.

W4049A The histone chaperone RBA-1 is critical for *C. elegans* postembryonic mesoderm development. **Jun Liu**.

W4050B SWI/SNF chromatin remodeling complexes interact with *hnd-1* and *let-381* to regulate the SGP/hmc cell fate decision. **Laura Mathies**.

W4051C Genetic Control of the Maintenance of the AIA Cell Fate. **Joshua Saul**.

W4052A Dissecting the roles of the zinc finger transcription factor SEM-4/SALL in distinct cell fate specification programs in the *C. elegans* postembryonic mesoderm. **Qinfang Shen**.

W4053B Identification of a novel Ral signal transduction cascade in *C. elegans* 2° vulval fate patterning. **Hanna Shin**.

W4054C BAR-1 and CCAR-1 cooperate to properly position a subset of motor neurons along the AP axis. **Jeffrey Hung**.

W4055A Centrosome-cortical contact duration affects anterior-posterior polarity in the one-cell *C. elegans* embryo. **Dominique Saturno**.

W4056B Suppressor screening to identify new regulators of anterior-posterior axis establishment in *Caenorhabditis elegans*. **Emily Schleicher**.

W4057C Development of Quantitative Imaging Toolkit to Monitor the Process of Symmetry Breaking. **Peng Zhao**.

W4058A Developmental and cancer cell invasion share regulatory pathway components. **Evelyn Lattmann**.

W4059B A promoter element in the *C. elegans nhr-67 tailless* gene mediates *hlh-2/daughterless* regulation of anchor cell differentiation and uterine organogenesis. **Caroline Berman**.

C. elegans POSTER SESSION

W4060C The *fax-1* nuclear receptor of *C. elegans* functions in gonad development. **Sydney Saltzman**

W4061A The role of sumoylation in cell invasion. **Aleksandra Fergin**.

Aging and Cell Death

W4062B Study of antipsychotics-induced side effects in *C. elegans*. **Maria Carretero**.

W4063C Arecoline improves age-dependent motor functional decline and extends lifespan by activating GAR-2 receptor in motor neuron in *C. elegans.* **Yen-Chieh Chen.**

W4064A S-adenosylmethionine synthetase-5, SAMS-5, in the regulation of longevity in *C. elegans*. **Tsui-Ting Ching**.

W4065B Investigating the role of intestinal cell-to-cell communication in longevity in *C. elegans*. **Calista Diehl**.

W4066C Bacillus subtilis and Caenorhabditis elegans are good friends. **Veronica Donato**.

W4067A Elucidating drivers of proteostasis decline by targeting age-related accumulation of insoluble protein. **Kathleen Dumas**.

W4068B Investigation of medicinal and therapeutic effects of boronic acid compounds in an Alzheimer's Disease model of *Caenorhabditis elegans*. Denise Flaherty.

W4069C Neuronal HSF-1 cell nonautonomously regulates intestinal DAF-16 functions and longevity in *C. elegans*. **JiYuen Kim**.

W4070A The Spinal Muscular Atrophy Network (SMA) Regulates Insulin Signaling in Response to High-Glucose Diet in *C. elegans*. **Maegan Neilson**.

W4071B PROtein FEeding in CElegans (PROFECE) a new method to study gutmicrobiota interaction during neuro/muscular development. Frederic Pio.

W4072C The role of Ca²⁺ permeability and Na⁺ conductance in cellular toxicity caused by hyperactive DEG/ENaC channels. **Cristina Matthewman**.

W4073A Knock-out of *C. elegans* sirtuin *sir-2.3* protects neurons from death. **Rachele Sangaletti**.

W4074B The effect of sesame lignans on amyloid-beta toxicity in *Caenorhabditis elegans* model of Alzheimer's disease. **Roongpetch Keowkase**.

W4075C Nematode disease model of Niemann-Pick C yields pharmacological bypass suppressors. **Ethan PerIstein**.

W4076A Characterizing the role of *swip-10* in the glutamatergic regulation of *C. elegans* dopamine neuron morphology. **Chelsea Snarrenberg**.

W4077B Functional analysis of VPS41-mediated protection from β-Amyloid cytotoxicity. **Edward Griffin.**

W4078C Sexually antagonistic male signals manipulate germline and soma of *C. elegans* hermaphrodites. **Ilya Ruvinsky**.

W4079A Characterization of a CRISPR/Cas9 Mediated *C. elegans* HSF-1 Model Reveals a Complex Oxidative Response and Novel Oocyte Expression. **Andrew Deonarine**.

W4080B Identifying Intrinsic Modulators of Neuronal Resilience in the *C. elegans* Dopaminergic System. **Anthony Gaeta**.

W4081C Investigating DNA damage response pathways after exposure to various heavy metals in *C. elegans*. **Julie Hall**.

W4082A Functional regulation of the DAF-16 by CBP-1-dependent acetylation in response to multiple stressors. **Ao-Lin Hsu**.

W4083B Environmental stresses induce transgenerationally inheritable survival advantages via germline-to-soma communications. **Saya Kishimoto**.

W4084C The *C. elegans* mitochondrial unfolded response induces dopaminergic neurodegeneration under prolonged cell-autonomous over-activation. **Bryan Martinez**.

W4085A Chromatin remodeling proteins influence the Heat Shock Response in *Caenorhabditis elegans*. **Mark Noble**.

W4086B Determining the Role of DBL-1 TGF-β Signaling in the Response to Potential Therapeutic Compounds in the *C. elegans* Model System. **Geethanjali Ravindranathan**.

W4087C Interaction of telomerase deficiency with stress response pathways. Maya Spichal.

Cell Patterning and Morphogenesis

W4088A In vivo mechanisms of epithelial junction formation. **Jose Montoyo-Rosario**.

W4089B Non-autonomous roles of posterior *Hox* genes and SPON-1/F-Spondin in Q descendant migration. **Matthew Josephson**.

W4090C Analyzing phosphorylation of LIN-31, a transcription factor involved in *C. elegans* cell fate specification. **Hannah Kortbawi**.

W4091A C. elegans immunoglobulin superfamily members, syg-2 and syg-1, genetically interact with mig-5/dishevelled to control anteroposterior neurite growth of GABAergic motor neurons. Dana Tucker.

W4092B A RhoGAP responds to axonal guidance signals to regulate actin nucleation during *C. elegans* morphogenesis. **Andre Wallace**.

W4093C Using *C. elegans* PVD Neurons to Functionally Validate Neuropsychiatric Risk Genes. **Cristina Aguirre-Chen**.

W4094A Impact of endocrine signaling on dendrite morphology during development. Claire Richardson.

W4095B Genetic suppression of basement membrane defects by altered function of the Myotactin/LET-805 receptor. Jennifer Gotenstein.

W4096C A regulatory genetic network in *C. elegans* embryos contributes to epidermal structural integrity during development. **Melissa Kelley**.

W4097A Axon guidance of the posterior lateral microtubule in *C. elegans* through VAB-1 activation by EFN-1. **Evelyn Popiel**.

W4098B Neurons and glia cooperate in assembly of the embryonic *C. elegans* nerve ring. **Georgia Rapti**.

W4099C Novel reinforcement of Ras signaling by Rap1 in *C. elegans* vulval patterning. **Neal Rasmussen**.

W4100A Mechanosensing during *C. elegans* embryogenesis: Hunting for a putative mechanosensor. **Shashi Kumar Suman**.

W4101B A Genetic Screen for Temperature-Sensitive, Morphogenesis Defective Mutants in *C. elegans*. **Molly Jud**. **W4102C** Male Specific Neurogenesis Depends on the Sexual State of the Seam in *C. elegans*. **Noah Reger**.

W4103A Scaffolding Cells and Associated Molecular Factors in *C. elegans* Nerve Ring Development. **Kris Barnes**.

W4104B Dissecting *paired-box* and *odd-skipped* transcriptional networks. **Amy Groth**.

W4105C The Transcription Factors LIN-31 and LIN-1 Play a Role in C. elegans Vulval Morphorgenesis. **Leilani Miller**.

W4106A Protein phosphatase 2A is crucial for muscle organization in *C. elegans*. **Hiroshi Qadota**.

W4107B CRISPR/CAS-9 mediated engineering of the *lin-3* egf locus enables the analysis of tissue-specific functions. Silvan Spiri.
W4108C Unearthing the cues to tissue identity within the gonadal sheath. Laura Vallier.

W4109A RNAi-based screens identify tube morephogenesis genes in the *C. elegans* spermatheca. **Md. Asaduzzaman Khan**.

Genomics, Gene Regulation and Technology

W4110B Developing an assay for high throughput detection of dauer larvae in *C. elegans*. **Maxwell Colonna**.

W4111C A developmental map of accessible chromatin in *C. elegans*. **YAN DONG**.

W4112A CEC-4 reads histone H3K9 methylation to promote heterochromatin organization. **Jennifer Harr**.

W4113B In search of *C. elegans* histone H3 lysine 27 methylation (H3K27me) 'readers'. **Arneet Saltzman**.

W4114C TGF-β signaling promotes competence for sleep in *C. elegans*. **Desiree Goetting**.

W4115A Optogenetics of gene regulation in *C. elegans*. **Arielle Lam**.

W4116B Modeling Craniofacial Diseases in *C. elegans*. **Aditi Chandra**.

W4117C Genome engineering with the CRISPR/Cas9 system in *C. elegans*. **Daniel Dickinson**.

W4118A Recombineering in C. elegans: genome editing using in vivo assembly of linear DNAs. **Alexandre Paix**.

C. elegans POSTER SESSION

W4119B Digital resources for high-throughput analysis of 3D spatial and temporal cell division dynamics in early embryos. **Koji Kyoda**.

W4120C SSBD: an open database of quantitative data and microscopy images of biological dynamics. **Yukako Tohsato**.

W4121A Unused program number

W4122B Calcium imaging of a dopamineregulated chemosensory circuit in *Caenorhabditis elegans*. **Cory Kunkel**.

W4123C Differential Gene Expression within a Single Sex-Specific Class of *Caenorhabditis elegans* Neurons. **Douglas Reilly**.

W4124A High throughput chemical genomics in *C. elegans* to screen for novel bioactives and their targets. **Hala Zahreddine Fahs**.

W4125B Ribosomal DNA copy number as an unexplored potential source of heritable phenotypic variation. **Elizabeth Morton**.

W4126C Textpresso: mining full text for efficiently obtaining information from the biological literature. **Paul Sternberg**.

W4127A Metablomics meets genomics in Pristionchus pacificus: A highly specific esterase is involved in the synthesis of dauer inducing small molecules. Jan Meyer.

W4128B Caenorhabditis sp. 34 is a sister species to *C. elegans* with marked differences in morphology and ecology. **Asako Sugimoto**.

W4129C Large-scale genetic interaction maps for *C. elegans* embryonic development. **Patricia Cipriani**.

W4130A Truncation of the RUNX transcription factor RNT-1 disrupts dopaminergic signaling in *Caenorhabditis elegans*. **Sarah Robinson**.

W4131B Genome-wide mapping in *C. elegans* using a bulk segregant approach. **Eyal Ben-David.**

W4132C Rational design of protein coding sequences that evade piRNA-mediated germline silencing. **Daniel Dickinson**.

W4133A High-resolution microfluidic imaging platform for high-throughput drug discovery using *C. elegans* disease model. **Sudip Mondal**.

W4134B Pilot study to map the *Caenorhabditis elegans* metabolome to its genome. **Tyler Carter**.

W4135C Development of systems biology in *Caenorhabditis elegans*. **Arthur Edison**.

W4136A Metabolomics of developmental stages of *Caenorhabditis elegans* using mixed populations. **Francesca Ponce**.

W4137B The EAT-2 and GAR-3 acetylcholine receptors have distinct effects on pharyngeal muscle peristalsis. **Alena Kozlova**.

W4138C Identification of genetic variation in *Caenorhabditis elegans* bleomycin sensitivity. **Shannon Brady**.

W4139A Genetic and molecular tools for *Caenorhabditis sp.* 34, a sister species of *C. elegans* with a larger body size. **Kenji Tsuyama**.

W4140B Neurologic and Genetic Analysis of *Ginkgo biloba* Extract Effects in *Caenorhabditis elegans*. **Heather Cathcart**.

W4141C Evaluation of single-cell RNA sequencing measurements for use in developmental lineage reconstruction. **Hannah Dueck**.

W4142A Chromsosomal context influences X chromosome targeting by the *C. elegans* Dosage Compensation Complex. **Sarah Albritton**.

W4143B Identification of *lin-35* (Rb) suppressors. **Cynthia Becker**.

W4144C Mutagenesis of GATA motifs controlling the endoderm regulator *elt-2* reveals distinct dominant and secondary *cis*-regulatory elements. Lawrence Du.

W4145A Direct and positive regulation of *bed-3* by BLMP-1 in *C. elegans*. **Hei Tung Fong**.

W4146B Cellular proteomes drive tissuespecific regulation of the heat shock response. **Eric Guisbert**.

W4147C A sexually dimorphic transcriptional switch integrates information about microbial environment and nutritional state to regulate exploratory behavior of *C. elegans*. **Zoe Hilbert**.

W4148A Dynamic trans-splicing in *C. elegans*. **Marija Jovanovic**.

W4149B Hox proteins generate neuronal diversity by regulating the transcriptional output of a single terminal selector gene. Paschalis Kratsios.

W4150C X-box promoter motif searches: from *C. elegans* to humans to novel candidate ciliopathies. **Gilbert Lauter**.

W4151A Caenorhabditis elegans BMP Transcriptional Program Implicates Collagen Remodeling in Body Size Regulation. Uday Madaan.

W4152B Activation and Repression of Target Gene Expression in Neurons by the *C. elegans* RFX Transcription Factor, DAF-19. **Katherine Mueller**.

W4153C Regulation of anterior lineage genes in *C. elegans* embryogenesis. **Jonathan Rumley**.

W4154A Transcriptomic Analysis of *C. elegans* transgenic animals overexpressing human alphasynuclein (A53T): Comparison to genes regulated in human Parkinson's Disease brain tissues. Chenyin Wang.

RNAi, microRNAs, and Developmental Timing

W4155B Overlapping microRNA networks during nematode development. **Aurora Kerscher**.

W4156C Identification of microRNAs that regulate ovulation in *C. elegans*. **Katherine Maniates**.

W4157A Investigating the role of KIN-20 in microRNA biogenesis, LIN-42 regulation and developmental timing. **Christiane Olivero**.

W4158B A conserved yet uncharacterized RNA binding protein modulates microRNA activity during *C. elegans* development. **Anna Zinovyeva**.

W4159C Using C. elegans cuticle collagen genes to dissect temporal regulation of gene expression during development. Patricia Abete Luzi.

W4160A Role of nuclear Argonaute proteins in the inheritance of acquired stress resistance in *C. elegans*. **Emiko Okabe**.

W4161B The effects of different food types on the reproductive physiology of *C. elegans*. **Shashwat Mishra**.

W4162C Fluorescent beads are a versatile tool for staging *C. elegans* in different life histories. **Liberta Nika**.

W4163A Sex-specific maturation of the *C. elegans* nervous system. **Hannah Steinert**.

W4164B FAX-1 and UNC-42 transcription factors regulate developmental arrest in *C. elegans.* **Bruce Wightman**.

Intracellular Organelles, Trafficking, and the Cytoskeleton

W4165C Dystrophin interactors in worms and flies. **Kevin Edwards**.

W4166A Comparative genomics reveals novel genes associated with sensory cilia. Brian Piasecki.

W4167B Coordinating microtubule organization with cell cycle state. **Maria Sallee**.

W4168C Mechanisms of SYS-1/β-catenin centrosomal localization in early embryonic blastomeres. **Josh Thompson**.

W4169A The effects of luteolin on the V-ATPase and the acidification of the FB-MOs in *C.elegans* sperm. **Melissa Henderson**.

W4170B The calponin family member CHDP-1 promotes membrane expansion and interacts with Rac/CED-10 to regulate protrusion formation. **Ying Guan**.

W4171C Caenorhabditis elegans extracellular matrix proteins regulate polycystin localization/activity and cilia integrity. Deanna De Vore

W4172A Intermediate filaments EXC-2/IFC-2 and IFA-4 Maintain Tube Structure of the Excretory Canal of the nematode *C. elegans*. **Hikmat Al Hashimi**.

W4173B Genetic Analysis in NimA-Related Kinase Pathways in *C. elegans*. **David Fay**.

W4174C O-GlcNAc cycling and mitochondrial oxygen consumption. **Matthew Mahaffey**.

W4175A Male Chemosensory Pathways that Modulate Sperm Navigation Performance. **Hieu Hoang**.

W4176B Three conserved tetraspanin proteins positively modulate BMP signaling in *C. elegans*. **Zhiyu Liu**.

W4177C AMPK-related kinase UNC-82 has genetic and probable physical interactions with paramyosin. **NaTasha Schiller**.

W4178A A Tale of Two SNPs: Genetic Analysis of the Dopamine Transporter Structure and Function in DAT-1 Coding Variants Derived from the C. elegans Million Mutation Project. Phyllis Freeman.

W4179B The *Caenorhabditis elegans* excretedsecreted protein fraction is enriched in innate immunity related proteins. **Patricia Berninsone**.

C. elegans POSTER SESSION

W4180C Investigating the function of intestinal cell-cell communication in peptide secretion. **Lisa Learman**.

W4181A Understanding the secretion mechanism of VAPB/ALS8 MSP. Hala Zein-Sahatto

W4182B Identification of Conserved MEL-28/ELYS Domains with Essential Roles in Nuclear Assembly and Chromosome Segregation. Peter Askjaer.

W4183C LIN-10 promotes LET-23 EGFR signalling independently of LIN-2 and LIN-7. Kimberley Gauthier.

W4184A Miro and dynein localize mitochondria in the intestine. **Takao Inoue**.

W4185B The liprin protein SYD-2 regulates synaptic vesicle localization in *C. elegans.* **Xia Li**.

W4186C In vivo function of the Kinesin-3 motor, KLP-4. **Jay Pieczynski**.

W4187A A Search for Novel Presynaptic Determinants of Dopamine Signaling in *C. elegans*. **Osama Refai**.

W4188B A *C. elegans* model for Human Antigen R. **Zhe Yang**.

W4189C A vesicle-intrinsically regulated pathway for apical polarity. **Nan Zhang**.

2016 CILIATE MOLECULAR BIOLOGY MEETING



Posters

C7001A-C7002B
C7003C-C7006C
C7008B-C7009C
C7010A-C7013A
C7014B-C7017B
C7109A-C7021C
ction, Protein
C7022A-C7203B

CILIATES POSTER SESSION

Ciliate Genomics: Genome Structure and Organization

C7001A Evolution of gene families in ciliates. **Olivia Pilling**.

C7002B Mapping and characterization of DNA replication origins in *Tetrahymena thermophila*. **Linying Zhang**.

Programmed DNA Rearrangement

C7003C Investigations into the Paramecium iesRNA pathway. **Sarah Allen**.

C7004A Multiple Layers of Nested Genes in the Complex Genome of *O. trifallax*. **Jasper Braun**.

C7005B Environmental temperature and its impact on the process of programmed DNA elimination in *Paramecium*. **Francesco Catania**.

C7006C Complex Rearrangements in the Highly Scrambled Genome of O. trifallax. Lukas Nabergall.

Chromatin Structure and Chromatin Modification

C7007A Identification and Characterization of the SIRT4/5 Homologs in *Tetrahymena* thermophila. Emily Nischwitz.

RNA Metabolism and Non-Coding RNAs

C7008B A nuclear RNAi-dependent *Polycomb* repression pathway is required for transcriptional silencing of transposable elements. **Lifang Feng**.

C7009C Regulation of *Tetrahymena* germline transcription in meiotic prophase by three novel proteins. **Miao Tian**.

Genome Stability and Dynamics

C7010A Cas9 localization in the binucleated ciliate *Tetrahymena thermophila*. **Kelsey Fryer**.

C7011B Epigenetic control of DNA replication revealed in *Tetrahymena thermophila* TXR1 knockout mutants. **Miguel Gonzales**.

C7012C Gene expression in Paramecium as a

response to DNA damage. Rainey Stewart.

C7013A Identification and Investigation of the Function of Rad23 in DNA Repair and Proteosomal Degradation in *Tetrahymena thermophila*. Evan Wilson.

Evolution and Population Biology

C7014B The investigation of Caedibacter taeniospiralis Reb-related genetic elements in paramecia using fluorescent and phylogentic methodologies. David Johnson.

C7015C On the evolution of a family of cisacting elements for programmed somatic chromosome fragmentation. **Eduardo Orias**.

C7016A Hemp seed extract enhances excystation and survival across genetically diverse ciliates. **Sujal Phadke**.

C7017B Phylogenetic framework of the systematically confused *Anteholosticha-Holosticha* complex (Ciliophora, Hypotricha) based on multigene analysis. **Xiaolu Zhao**.

Cell Biology, Morphogenesis, and Development

C7018C Genetic analysis of the molecular properties underlying centriole stability. **Nicole DeVaul**.

Cell Motility: Cilia, Basal Bodies, and Tubulin

C7019A Characterization of the Striated Rootlet Proteins of the *Paramecium* Basal Body. **Ashikun Nabi**.

C7020B A NIMA-related kinase CNK4 regulates ciliary stability and length. **Junmin Pan**.

C7021C Plasma Membrane Calcium ATPase Regulates Ciliary Calcium in *Paramecium tetraurelia*. **Junji Yano**.

Ciliate Signaling Systems: Signal Transduction, Protein Secretion, and Trafficking

C7022A Depletion of SUMO-conjugating enzyme Ubc9p causes nuclear defects during the vegetative and sexual life cycles of *Tetrahymena thermophila*. **James Forney**.

C7023B Proteinases and phagocytosis in *Tetrahymena thermophila*. **J. Straus**.

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D1497B The chromatin remodeling protein Kismet regulates synaptic pruning by controlling steroid hormone receptor expression. **Nina Latcheva**.

D1498C The recognition of target gene transcriptional state by epigenetic regulators and establishment of Polycomb-group-mediated repression. **Piao Ye**.

D1499A Stuxnet Facilitates the Degradation of Polycomb Protein during Development. **Alan Zhu**

D1500B Mechanisms of epigenetic gene regulation by the *Drosophila* COMPASS-like complex. **Claudia Zraly**.

D1501C The RNA paradox: can small RNA increase gene expression? **Nikita Deshpande**.

D1502A Exploring the chromatin regulation of an inner nuclear membrane Speg (CG9723). **Chikin Kuok**.

D1503B Regulation of metazoan DNA replication fork progression, stability and composition. **Jared Nordman**.

D1504C Evaluation of genes required for telomere maintenance on *HipHop* dependent suppression of cell lethality after telomere loss. **Christopher Hendrix**.

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D1507C RNA helicase Belle/DDX3 regulates transgene expression in *Drosophila*. **Yi-Chun Huang**.

D1508A The activation of new *lawc* transcripts after the homologous long double-stranded RNA treatment in *Drosophila*. **Olga Simonova**.

D1509B Clueless is a ribonucleoprotein that binds the ribosome at the mitochondrial outer membrane. **Rachel Cox**.

D1510C Investigating a link between methyl-6 adenosine RNA and the dNab2 RNA binding protein in *Drosophila melanogaster*. **Binta Jalloh**.

D1511A Investigating a link between methyl-6 adenosine RNA and the dNab2 RNA binding protein in *Drosophila melanogaster*. Binta Jalloh.

D1512B The level of nuclear 80S ribosomes increases during cell stress. **Akilu Abdullahi**.

D1513C Tet and epitranscriptomics in Drosophila. **Fei Wang**.

D1514A The m⁶A RNA modification controls neurogenesis and sex determination in *Drosophila* via its nuclear reader protein YT521-B. **Tina Lence**.

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D1515B Regulated epithelial microenvironment chip for whole organ studies in *Drosophila*. **Cody Narciso**.

D1516C Persistence of RNAi-mediated knockdown in *Drosophila* complicates mosaic analysis yet enables highly sensitive lineage tracing. **Justin Bosch**.

D1517A A *Drosophila* RNAi library modulates Hippo pathway-dependent tissue growth. **Joseph Vissers**.

D1518B Hemophilia, direct diagnosis in Cuba suporting genetic counseling. **Niurka González**.

D1519C Efficient targeted editing of genes with a modified Crispr/Cas9 strategy. **David Li-Kroeger**.

D1520A Curation of transcript models with all available public sequencing reads. **Zhen-Xia Chen**.

D1521B Highly contiguous de novo genome assembly of a non-model metazoan using PacBio long reads. **Patrick Reilly**.

D1522C Library preparation effects on estimating satellite DNA abundance from short-read sequencing. **Sarah Sander**.

D1523A Highly sensitive measurement of poly(A) tail by TAIL-seq2 reveals dynamic gene regulation via cytoplasmic polyadenylation during ogenesis. Ahyeon Son.
D1524B Improving Genome Annotation across the Drosophila Clade. Terence Murphy.

D1525C Ilastik- and Matlab-based computational tools to analyze biological tubes in 3-D. **Ran Yang**.

D1526A *REDfly*: The Regulatory Element Database for *Drosophila*. **Marc Halfon**.

D1527B DRSC Informatics Tools for Functional Genomics Studies, 2016 Update. **Claire Hu**.

D1528C Model organism analysis using InterMine. **Rachel Lyne**.

D1529A Enhanced orthology data in FlyBase. Steven Marygold.

D1530B *flyDIVaS*: A database for genus- and genome- wide divergence and selection in Drosophila. **Craig Stanley**.

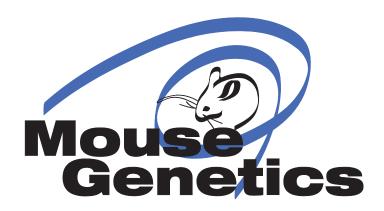
D1531C A Comprehensive and Precise Genome Duplication Kit in *Drosophila melanogaster*. **Graeme Mardon**.

D1532A Do not let your money fly away: Costeffective strategies for new investigators operating a fly lab. **Anne-Christine Auge**.

D1533B A New Protocol to Visualize Dopamine in Whole Mount *Drosophila* Brains. **Yi Ting Liu**.

D1534C What's new at the Bloomington Drosophila Stock Center. **Annette Parks**.

Mouse Genetics 2016 Conference



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M5001A Oncogenic Role of BRE (BRCC45) by USP7-mediated CDC25A Deubiquitylation. Kajal Biswas.

M5002B Genes, Orthologs, and Human Diseases: How Model Organism Databases and the Gene Ontology Empower Knowledge Discovery. Judith Blake.

M5003C Neonatal Exposure to UV-Radiation and NER Pathway Deficiencies Enhance Melanomagenesis In A Novel Transgenic K5-Edn3 Mouse Model. Diana Cardero.

M5004A In vivo Modeling of Heritable Dopamine Transporter Dysfunction Associated with Neuropsychiatric Disorders. **Gwynne Davis**.

M5005B KDM1A inhibition may contribute to MAPT (tau)-mediated neurodegeneration in Alzheimer's disease. **Amanda Engstrom**.

M5006C Degenerative transformations in the Liver and Gonads of male Wister albino rats by Irvingia gabonensis (Aubery-Lecomte ex O'Rouke) Seed extract. Hannah Etta.

M5007A Embryo and neonate phenotyping identifies new genes essential for mammalian development. **Ann Flenniken**.

M5008B Gene expression and regulation in food restricted mice. **Douglas Guarnieri**.

M5009C The role of *Arid1a* as a suppressor of spontaneous mammary tumors in mice. **Nithya Kartha**.

M5010A Mitochondrial Fetal Drive in Response to Nutritional Stress during Gestation. **Robert Kesterson**.

M5011B A spontaneous mutation of neurexin III in the 129S1/SvImJ strain of mice enhances empathic fear behavior. **Sehoon Keum**.

M5012C Animal Models in Diabetes Research.
Karunakaran Kumar

M5013A Integrated analysis of the Jackson Laboratory Knockout Mouse Project 2 (KOMP2) data. Vivek Kumar.

M5014B Identifying Causal Variants for an Allergen-Induced Inflammation QTL. **Lucas Laudermilk**.

M5015C Identification of Genetic Modifier Loci that Affect Early Sudden Death in a Mouse Model of Accelerated Heart Aging. **Sarah Lewis**.

M5016A Resistance mitigating effect of Artemisia annua on Plasmodium berghei ANKA and Plasmodium yoelii. **Kangethe Lucy**.

M5017B Long-term exercise positively benefits body composition and metabolism during aging in a sex-dependent manner. **Rachel McMullan**.

M5018C Mutations in PI(3,5)P₂ biosynthesis and neurological disease in human and mouse. **Miriam Meisler**.

M5019A Systematization of the regulation of mammalian chromosome biology with evolutionary genetics & OMICs: A synopsis - 2016. Ferez Nallaseth.

M5020B A Novel Mouse Model of Leptomeningeal Melanocytic Disease Based on the Overexpression of GRM1 (mGluR1). Joseph Palmer

M5021C One RING to Rule Them All: RNF212 Regulates The Size of The Ovarian Follicle Pool. **Huanyu Qiao**.

M5022A Effect of ketogenic diet on endurance running performance in males and females of two genetically distinct mouse strains. Andreea Radulescu.

M5023B IMPC metabolic phenotyping: Systemic search for new gene functions associated with disturbances in energy balance regulation and glucose homeostasis. Jan Rozman.

M5024C Extracellular matrix perturbations in the urinary tract of mouse model of vesicoureteral reflux. Fatima Tokhmafshan.

M5025A Translating between human and mouse genetics and phenotypes using the Human-Mouse: Disease Connection. Monika Tomezuk

M5026B Identifying enhancers that regulate genes critical in mouse spermatogenesis. **Tina Tran**.

M5027C Investigating the phenotype of *Lyplal1* knockout mice. **Rachel Watson**.

M5028A Analysis of odor identification in B6;129-*Psen1*^{lm1Mpm} Tg(APPSwe, tauP301L)1Lfa/Mmjax mice. **Lisa Webb**.

M5029B SIK1 is a key regulator of adipose mass, glucose and lipid metabolism in mice. **David West**.

M5030C High-throughput multi-system phenotyping identifies pleiotropy and novel gene function. David West.

M5031A Newly formed heterotopic bone in

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Fibrodysplasia Ossificans Progressive still requires Activin A for maintenance and expansion. **LiQin Xie**.

M5032B A trypsin-like protease from *Alternaria* alternata altergens promotes airway inflammation through activation of protease-activated receptor-2/β-arrestin signaling. Michael Yee.

M5033C An OVA-sensitized and MChchallenged mouse phenotyping screen for new genes involved in lung function and respiratory disease. Yingchun Zhu.

Stem Cells

M5034A Investigating Operative DNA Damage Response Pathways in Mouse Primordial Germ Cells. Jordana Bloom.

M5035B Top3b-null Mice Show Defective Neurogenesis, Synaptic Plasticity and Increased Anxiety. **Yuyoung Joo**.

M5036C Investigating how cytoskeletal protein mutations cause Amyotrophic Lateral Sclerosis disease using neuronal cells differentiated from mouse embryonic stem cells. **Kim Nguyen**.

M5037A Androgen receptor plays distinct roles in prostate basal and luminal cells and is required for rare stem cell activities in both compartments. Zhu Wang.

M5038B Mammalian Retinal Regeneration in Response to an α7 nAChR Agonist. Mark
Webster

Epigenetics

M5039C A Transgenic Mouse Model for Understanding *cis* and *trans* Mechanisms of IncRNA *Jpx in vivo*. **Sarah Carmona**.

M5040A The cytosine methylase DIM-2 and the H3K9 methylase DIM-5 mediate clustered mutation of repetitive DNA sequences in *Neurospora crassa*. **Eugene Gladyshev**.

M5041B Histone H3R17me2a Mark Recruits TET3 to Initiate Active DNA Demethylation in mouse Zygotes. **Yuki Hatanaka**.

M5042C Downregulation of MBD2, a Mi-2/NuRD Chromatin Remodeling Complex Component, Potentiates Erythroid Terminal Differentiation and Hemoglobin Synthesis by Allowing the DNA Binding of TFCP2 (CP2c) TF Complexes. Chul Geun Kim.

M5043A A Targeting Small Molecule Inhibitor of MBD2-GATAD2A Interaction Induces Myeloid

Leukemia Cell-specific Cell Death. **Chul Geun Kim**

M5044B Genome wide analysis of transcriptional profiles of *Usp22* mutant placentas reveal impaired cancer signaling cascades. **Evangelia Koutelou**.

M5045C Imprinted DNA methylation status can be reconstituted by combining activity of distinct *H19* ICR elements in mice. **Hitomi Matsuzaki**.

M5046A On the role of the epigenetic factor PRDM9 in meiosis of the wild mouse. Zdenek Trachtulec.

Comparative Genomics, Computational Methods & Evolution

M5047B Full length transcript sequencing of wild derived mouse strains identifies strain specific novel gene structures. **Monica Abrudan**.

M5048C Integration of heterogeneous crossspecies functional genomics data in GeneWeaver.org **Jason Bubier**.

M5049A High throughput screening of International Knock-out Mouse Consortium leads to novel gene-phenotype annotations. James Clark.

M5050B New exome sequencing of wild derived inbred strains of mice significantly improves power to link phenotype and genotype. Matt Dean.

M5051C Deep genome sequencing and variation analysis of 13 inbred mouse strains defines candidate phenotypic alleles, private variation, and homozygous truncating mutations. **Anthony Doran**.

M5052A Functional annotation of proteoforms in the Mouse Genome Database using the Protein Ontology. **Harold Drabkin**.

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M5054C Rapid evolution of co-amplified X and Y chromosome genes and genomic structures in mice. **Alyssa Kruger**.

M5055A The future of reference assembly updates. **Valerie Schneider**.

M5056B Identifying genetic factors associated with extinction of strains in the Collaborative Cross. John Shorter.

M5057C The genomes of *Mus caroli* and *Mus pahari* uncover the evolutionary dynamics of the

mouse lineage. David Thybert.

Technological Innovations

M5058A Genetic pest management technologies to control invasive rodents. **Dona Kanavy**.

M5059B Unexpected translation reinitiation by on-target CRISPR-Cas9 genome editing. Shigeru Makino.

M5060C Optimisation and high-throughput production of CRISPR/Cas9-mediated knockout mouse strains. **Ed Ryder**.

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M5061A Elevated canonical Wnt signalling disrupts development of the embryonic midline and may underlie cases of *ZIC3*-associated Heterotaxy. **Ruth Arkell**.

M5062B HOX proteins are essential for motor neuron subtype differentiation and connectivity by regulating the expression of *Ret/Gfra* genes. **Catarina Catela**.

M5063C Genetic studies of large mammalian sex chromosome palindromes harboring testicular germline genes. **Quinn Ellison**.

M5064A Embryonic Spacing in the C3H Mouse: A Model for Abnormal Pregnancies in Mammals? Samantha Fletcher.

M5065B Role of a 3'UTR-dependent DAZL suppression in mouse postnatal ovary. **Kurumi Fukuda**.

M5066C SOX9 in developing heart valves and adult valve disease. **Pamela Hoodless**.

M5067A Linear-(de)ubiquitination – a (uro)chordate specific mechanism - regulates Wnt signaling in the mouse. **Sofiia Ivantsiv**.

M5068B Sperm proteome maturation in the mouse epididymis. **Timothy Karr**.

M5069C The role of *Robo* genes during development of the intervertebral discs. **Lisa Lawson**.

M5070A Study of dendritic cell development *in vitro* and *in vivo* using immortalized hematopoietic stem and progenitor cells. **Chien-Kuo Lee**.

M5071B A novel hypomorphic smoothened allele results in impaired sonic hedgehog

signaling and skeletal defects. Alyssa Long.

M5072C Mice mutant for *Cecr2*, which codes for a chromatin remodelling protein, show severe male subfertility that significantly improves with age. **Heather McDermid**.

M5073A Regulation of murine coat color by transgenic expression of endothelin 3. **Javier Pino**.

M5074B Simulation of transient oscillatory Neurog3 expression during pancreatic duct development. Gerhard Przemeck. M5075C Oscillatory Expression of cyclin A2 Requires the E2F Consensus Binding Site. Jessica Rakijas.

M5076A The cilia protein ARL13B regulates axon guidance in the mouse hindbrain. **Sarah**

M5077B Population Variability and The Teratogenic Effects of Exposure to 2, 3, 7, 8-Tetrachlorodibenzo-p-dioxin During Pregnancy. **Melanie Warren**.

M5078C The meiotic functions of aurora kinases during spermatogenesis in mice. Stephen Wellard.

M5079A Epithelial development of pharyngeal arches and intestine requires a member of S100 protein. **Shuying Xie**.

M5080B Establishing bipotentiality for gonadal differentiation. **Yisheng Yang**.

M5081C Embryonic lethality in mice expressing conditionally-stabilized *Ctnnb1* under control of Tg(Vil-cre)997Gum. **Ephraim Amiel Yusi**.

M5082A Post-transcriptional regulation of mouse neurogenesis by pumilio proteins. **Meng Zhang**.

M5083B Wnt/beta-catenin signaling modulates cytoskeleton dynamics to direct mammalian neural tube closure. Chengji Zhou.

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M5084C An inbred *Tp53* rat model exhibits a tumor spectrum similar to human Li-Fraumeni syndrome. **James Amos-Landgraf**.

M5085A *Arl13b* is a Novel Target for the Treatment of Medulloblastoma. **Sarah Bav**.

M5086B Determining the significance of space radiation exposures: high resolution genomic mapping to determine overlap in susceptibility loci for HZE-ion induced, y-ray induced, and

spontaneous phenotypes in outbred mice. Elijah Edmondson.

M5087C Complex genetic regulation of immune cell composition and activity in a genetically variable population. **Martin Ferris**.

M5088A Evaluation of premetastatic niche formation in a mouse model of spontaneous melanoma lung metastasis. Juliano Freitas. M5089B GNL3 modulates prostate cancer metastasis susceptibility. Minnkyong Lee.

M5090C Molecular analysis of epidermal growth factor receptor (EGFR)-independent colorectal cancers. **Carolina Mantilla Rojas**.

M5091A Host genetic and gut microbiota variability within the C57BL/6-Apc^{Min} mouse affects the intestinal tumor phenotype. **Jacob Moskowitz**

M5092B Nuclear to cytoplasmic relocalization of cyclin C directs stress-induced mitochondrial fission and promotes apoptosis in yeast and mouse cell lines. Randy Strich.

M5093C Combinatorial regulation of BATF and BATF2 in LPS-stimulated and Mycobacterium-infected inflammatory responses. Harukazu Suzuki.

Translational & Systems Genetics

M5094A Susceptibility to diethylstilbestrol exposure in mice. **David Aylor**.

M5095B Systemic metabolic effects exerted by a point mutation in the RED subdomain of PAX6. **Nirav Chhabra**.

M5096C Congenic localization of the *Moo1* obesity QTL to 319 kb. **Susanne Clee**.

M5097A DII1- and DII4-mediated Notch signaling in adult pancreatic β-cells is essential for the structural integrity of the islets of Langerhans and maintenance of glucose homeostasis. Marina Fuetterer.

M5098B Quantitative Genetic Analysis of MUC5AC and MUC5B in a Mouse Model of Asthma. **Samir Kelada**.

M5099C GeneLab: A systems biology platform for spaceflight omics data. **Sigrid Reinsch**.

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M5100A Rat Resource and Research Center. **Elizabeth Bryda**.

M5101B Using the web-based genome browser *gEVAL*, to evaluate and improve the draft assemblies of 18 strains for the Mouse Genomes Project. **William Chow**.

M5102C Phylogenetically based Gene Ontology (GO) Annotations using the Phylogenetic Annotation and INference Tool (PAINT). **Karen Christie**.

M5103A Catalogue of identified mutations in RIKEN ENU Mutant Mouse Library: a new approach for the studies on polygenic traits. Ryutaro Fukumura.

M5104B Utilizing NCBI's Mouse Genome Resources. **Tripti Gupta**.

M5105C Analysis of the Collaborative Cross founder strains at the German Mouse Clinic identify new and known phenotypes. **Heike Kollmus**.

M5106A Mouse SNPs and polymorphisms data on Mouse Genome Informatics. **MeiYee Law**.

M5107B Mouse Genome Nomenclature at MGI, Improved by Collaboration. **Monica McAndrews**.

M5108C Informing the Genetic Basis of Disease: Informatics for The International Mouse Phenotyping Consortium. Terry Meehan.

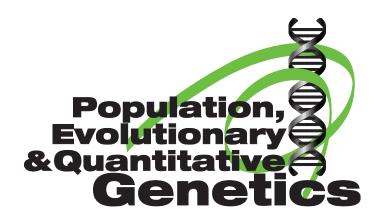
M5109A The Systems Genetics Core Facility at UNC. Darla Miller

M5110B What's New in Mouse Genome Informatics (MGI)? **Joel Richardson**.

M5111C Mouse Genome Informatics tools for batch data searches and retrieval. **David Shaw**.

M5112A The Gene Expression Database (GXD): mouse developmental expression information at your fingertips. **Constance Smith**.

Population, Evolutionary & Quantitative Genetics Meeting



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Population Genomics

P2001A Identifying population differentiation in the clam shrimp Eulimnadia texana through genome assembly and pooled sequencing.

James Baldwin-Brown.

P2002B Genetic characterization of populations of the African Jewelfish (*Hemichromis letourneuxi*) introduced to the waterways of Florida. **Natalia Belfiore**.

P2003C Speckled feathers and bladder eyes: pleiotropic effects of the Almond mutation in pigeon. **Rebecca Bruders**.

P2004A *CYP2D6*: Detecting New Structures for Clinical Practice. **Beatriz Carvalho Henriques**.

P2005B Evolutionary implications of recombination rate variation among populations of *Drosophila melanogaster*. Johnny Cruz Corchado

P2006C The Effects of Demographic History on the Detection of Recombination Hotspots. **Amy Dapper**.

P2007A Exogenous RNA in the serum of healthy persons. **Supriyo De**.

P2008B Genetic variation, population structure, and genome assembly of the threatened Neosho madtom catfish (*Noturus placidus*). **Jared Decker**.

P2009C Unused program number

P2010A Population Genetic Analysis of Autophagy and Phagocytosis genes in *Drosophila melanogaster*. **Joo Hyun Im**.

P2011B Insertion polymorphisms of mobile elements in sexual and asexual populations of *Daphnia pulex*. **xiaoqian jiang**.

P2012C The Relationship between Host Genetic Architecture and Pathogen Susceptibility in Caenorhabditis elegans. **Lindsay Johnson**.

P2013A Characterization of Genic Microsatellite Markers (EST-SSRs) in the Endangered Tree Quercus georgiana. Priyanka Kadav.

P2014B Population genomics of *Fusarium graminearum* head blight pathogens in North America. **Amy Kelly**.

P2015C The effects of linked selection on Capsella grandiflora. **Tyler Kent**.

P2016A Exact calculation of the joint site frequency spectrum for generalized isolation with migration models. **Andrew Kern**.

P2017B The evolution of herbicide resistance in an agricultural weed, *Capsella bursa-pastoris*. **Julia Kreiner**.

P2018C Saccharomyces eubayanus population dynamics in nature and industry. **Quinn** Langdon.

P2019A A Haplotype Method Detects Diverse Scenarios of Local Adaptation from Genomic Sequence Variation. **Jeremy Lange**.

P2020B How a Framework for Evolutionary Systems Biology Can Accelerate Reproducible Modeling of Mechanistic Fitness Landscapes. Laurence Loewe.

P2021C Parallel seasonal selection across *Drosophila melanogaster* populations. **Heather Machado**.

P2022A Genotype calling from populationgenomic sequencing data. **Takahiro Maruki**.

P2023B Whole animal genetics-by-sequencing approaches to investigate starvation resistance. **Brad Moore**.

P2024C Two locus allele frequency statistics with demography and selection using a diffusion approach. **Aaron Ragsdale**.

P2025A Unused program number

P2026B Frequency, variance and power: how genetic model and demography impact association studies. **Jaleal Sanjak**.

P2027C Robust identification of hard and soft sweeps in humans via machine learning. **Daniel Schrider**.

P2028A Comprehensive genome-wide disease characterization (URSA(HD)) and tissue-specific networks (GIANT) guide discovery and functional elucidation of novel predicted disease-associated genes. Chandra Theesfeld.

P2029B Polygenic adaptation to an optimum shift. **Kevin Thornton**.

P2030C Genome-wide association in presence of high density marker panels and genotyped causal variants. **Sajjad Toghiani**.

P2031A Detecting patterns of microgeographical adaptation to a patchy saline environment of a single popupation of *Medicago truncatula*. **Wendy Vu**.

POPULATION, EVOLUTIONARY AND QUANTITATIVE GENETICS POSTER SESSION

P2032B Genome-wide divergence among microhabitats in *Fundulus heteroclitus*. **Dominique Wagner**.

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P2033C Essential proteins evolve slower than non-essential ones during evolution experiments. **David Alvarez-Ponce**.

P2034A Subpopulation structure in long-term cultures of *Escherichia coli* K-12. **Megan Grace Behringer**.

P2035B Phenotypic variation in individuals isolated from *Escherichia coli* long-term evolution populations. **Brian Choi**.

P2036C Quantifying host genome response to gene drive using experimental evolution. **Kaitlin Fisher**

P2037A Leveraging haplotype-aware inference for evolve-and-resequence studies. **Sharon Greenblum**.

P2038B Genome-wide Analysis of Starvationselected *Drosophila melanogaster-* a Genetic Model of Obesity. **Chris Hardy**.

P2039C Investigation of the prevalence of antagonistic pleiotropy. **Lucas Herissant**.

P2040A Analyses of Breast Cancer Type 1(BRCA 1) Gene of Different Mammalian Species. **Ekei Ikpeme**.

P2041B Experimental evolution of drift robustness in digital organisms. **Thomas LaBar**.

P2042C A gene's view of a long-term evolution experiment with *Escherichia coli*. Rohan Maddamsetti.

P2043A The fitness spectrum in adaptation of diploid yeast. **David Yuan**.

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P2044B Genomic Basis of Craniofacial Diversity in Lake Malawi Cichlids. **Kawther Abdilleh**.

P2045C Repeated horizontal transfer of a fused gene encoding adjacent metabolic enzymes. **Noelle Anderson**.

P2046A Mapping the Origins of Inter-Population Skin Color Variation with Admixed Indigenous Populations . **Khai Ang**.

P2047B Genomic deletion and silencing on the Y chromosomes of Rumex hastatulus. **Felix Beaudry**.

P2048C Horizontal transfer can drive a greater transposable element load in large populations. **Justin Blumenstiel**.

P2049A Defining microRNA molecular origins to facilitate target prediction. **Glen Borchert**.

P2050B *Cis*-regulatory enhancers of social insects share ultraconserved core elements flanked by taxa specific modifications. **Thomas Brody**.

P2051C Single molecule real time sequencing reveals the detailed structure of a Y-autosome fusion in *Drosophila pseudoobscura*. **Ching-Ho Chang**.

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P2053B Transposase genes are actively expressed in vespertilionid bat somatic tissues. **Rachel Cosby**.

P2054C Cytogenetics in the post-genomic era: Standing chromosomal variation associated with rapid divergence in a young species pair. **Anne-Marie Dion-Côté**.

P2055A Catching de novo genes as they arise in natural populations. **Eleonore Durand**.

P2056B Few Nuclear-Encoded Mitochondrial Gene Duplicates Contribute to Male Germline-Specific Functions in Humans Compared to *Drosophila*. **Mohammadmehdi Eslamieh**.

P2057C Reconstruction of gene regulatory networks in the developing gonad of the common snapping turtle using ARACNe opens new perspectives for the study of temperature-dependent sex determination. **Lei Guo**.

P2058A Investigating the evolutionary pathways towards extremely AT rich genomes. **Weilong Hao**.

P2059B Evolution of gene regulation in nutrient starvation response between free-living and commensal yeast. **Bin He**.

P2060C Dynamics of mitochondrial genome evolution during speciation by hybridization. **Mathieu Henault**.

P2061A Detailed structure and variation of complex satellite DNA loci in *Drosophila melanogaster*. **Daniel Khost**.

P2062B The Rate and Spectrum of Spontaneous Mutations in Social Amoeba Dictyostelium discoideum. Sibel Kucukyildirim.

P2063C Mitochiondrial genome comparisons across major sea urchin families, with special focus on the emerging model *Tripneustes gratilla*. Aki Laruson.

P2064A Comparative Methylome Analyses Identify Epigenetic Loci of Transcriptional Regulation in the Human Brain. Isabel Mendizabal.

P2065B Exploring the last chromosome: Y-linked sequence variation in the house mouse. **Andrew Morgan**.

P2066C The evolution of sexual dimorphism of recombination rate in house mice. April

Peterson

P2067A Genomic disintegration in woolly mammoths on Wrangel island. **Rebekah Rogers**.

P2068B *Cis*-acting variation in gene expression dynamics within and between *Saccharomyces* species. **Ching-Hua Shih**.

P2069C Degeneration and positive selection of a non-recombining chromosomal inversion underlying behavioral polymorphism in the white-throated sparrow. **Dan Sun**.

P2070A Enhancer activity of vertebrate ultraconserved elements in fruit flies. Toshiyuki Takano-Shimizu.

P2071B Divergent patterns of marsupialeutherian genomic imprinting revealed from RNAseq analysis in the opossum, *Monodelphis domestica*. **Xu Wang**.

P2072C Comparative genomics of the *Daphnia pulex* species complex. **Zhiqiang Ye**.

P2073A Origin and spead of *de novo* genes in *Drosophila*. **Li Zhao**.

P2074B Evolution trajectories of snake genes and genomes revealed by comparative analyses of five-pacer viper. **Qi Zhou**.

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P2075C The Genomics of Drug Consumption in *Drosophila melanogaster*. **Brandon Baker**.

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P2079A Moving beyond the joint-scaling test for line cross analysis: An information-theoretic approach to estimating the composite genetic effects contributing to variation among generation means. Jeffery Demuth.

P2080B Genetic variation in male attractiveness: it's time to see the forest for the trees. **Szymon Drobniak**.

P2081C A comparison of PCR-based and GBS-based methodologies to fine-map anthracnose resistance loci in sorghum. **Terry Felderhoff**.

P2082A An additive genetic model is often not sufficient for predicting individual phenotypes. **Simon Forsberg**.

P2083B Estimation of genetic parameters for growth, yield and carcass quality traits in a fast-growing strain of Atlantic salmon. **Jose Gallardo**.

P2084C Tracing the signature of gene expression across time in *D. melanogaster* artificially selected for long and short sleep duration. **Susan Harbison**.

P2085A Functional validation of loci contributing to nicotine resistance in *Drosophila*. **Chad Highfill**.

P2086B Analyzing the Effects of Naturally Occurring Genetic Variants in the Sphingosine-1-Phosphate Receptor Family. **Jacob Hornick**.

P2087C Integrated Genetic Analysis Platform (IGAP) for Web-based Interactive Association Analysis and Visualization of Large Scale Genotype/Phenotype Data. **Goo Jun**.

P2088A Automated tracking and analysis of sleep-like behavior in *Drosophila* larvae. **Cecelia Kim**.

P2089B The genetic basis of the Drosophila IIS pathway response to changing nutrition. **Elizabeth King**.

P2090C A decrease in soybean seed protein is associated with an increase in domestication traits. **Edward Large**.

P2091A The genetic basis of temperature sensitivity in a mutationally induced trait. **Jonathan Lee**.

P2092B Genome-wide association mapping identifies SNPs influencing the plastic response of lifespan and age-specific fecundity to diet in *Drosophila melanogaster*. **Jeff Leips**.

P2093C A Bayesian approach for the imputation of genotypes on observed markers in complex pedigrees. **Damien Leroux**.

P2094A Genetic basis of thermal tolerance in *Saccharomyces* species. **Xueying Li**.

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P2147C The lower limit of transcription error rate in the bacterium *Escherichia coli*. **Weiyi Li**.

P2148A A maximum pseudo-likelihood approach for estimating species trees. **Liang liu**.

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P2152B Improved accuracy of phylogenetic analyses by partitioning schemes that incorporate structural information. **Akanksha Pandey**.

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Yeast Genetics Meeting



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Y3001A Elimi-NAD-ing fat in old mother yeast cells. Anthony Beas.

Y3002B Fin1-PP1 clears the spindle assembly checkpoint protein Bub1 from the kinetochore in anaphase. Michael Bokros.

Y3003C How TORC controls growth through metabolism. **Jun Chen**.

Y3004A Cell-Cycle Control of a Pulse-Generating Network Restricts Frequency of Periodic Transcription. Chun-Yi Cho.

Y3005B The Yeast Genome Project: Exploring APD1. Catherine Douds.

Y3006C Mmf1p protects Hem1p from damage caused by the ubiquitous metabolic stressor, 2-aminoacrylate. **Dustin Ernst**.

Y3007A Global Analysis of Molecular Fluctuations Associated with Cell Cycle Progression in Saccharomyces cerevisiae. Ben Grys.

Y3008B Interplay between Rfa2 N-terminal phosphorylation and Rad53 dephosphorylation in regulating exit from a checkpoint in the presence of persistent DNA damage. Stuart Haring.

Y3009C The function of Sgo1-centromere recruitment pathway and spindle assembly checkpoint silencing. **Fengzhi Jin**.

Y3010A Regulation of lifespan by vitamin B₆ metabolism-related genes in yeast. **Yuka Kamei**.

Y3011B The role of protein acetylation in stress defense. Jeffrey Lewis.

Y3012C A genome-wide screening identifies novel filament-forming metabolic enzymes in Saccharomyces cerevisiae. Ji-Long Liu.

Y3013A TOR pathway mediates cytoophidium assembly in *Schizsaccharomyces pombe*. **Ji-Long Liu**.

Y3014B Candida albicans Pho84 is required for anabolic TOR signaling, stress responses and virulence determinants. Ning-Ning Liu.

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Y3016A Regulation of lifespan by phosphate starvation response factors in budding yeast. Yukio Mukai.

Y3017B Natural variation in the cell adhesin, FLO11, and its effects on biofilm formation. **Helen Murphy**.

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Y3021C Dissecting the role of the transcription factor Hap1 in *Saccharomyces cerevisiae* respiration and fitness. Kevin Serdynski.

Y3022A Nutrient starvation induces upregulation of α-mannosidase Ams1 in Saccharomyces cerevisiae. Midori Umekawa.

Y3023B Differential Acetylation of Protein N-Termini in Response to Nutrient Starvation. Sylvia Varland.

Y3024C Identification of Unforeseen Functions of Ataxin-2, a Conserved Protein Linked to Neurodegenerative Disease. Yu-San Yang.

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Y3026B Production of volatile aroma compounds by yeast during fermentation of Chinese Baijiu. Cui-ying Zhang.

Y3027C Newly made prion particles must overcome actin-based spatial quality control mechanisms. Anita Manogaran.

Y3028A Duplication of the budding yeast spindle pole body. **Diana Rüthnick**.

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Y3030C The roles of the LINC complex in chromosome movement and nuclear dynamics in budding yeast. **Jinbo Fan**.

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Y3050B Membrane trafficking underlies aging and rejuvenation. **Kiersten Henderson**.

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Y3063C The Transmission Interface in Yeast Pleiotropic Drug Resistance (PDR) Pumps Controls Substrate Specificity by Linking ATP Hydrolysis to Drug Extrusion. Karl Kuchler.

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Y3102C Epigenetic conversions at the telomeres of *S.cerevisiae* – links to DNA replication. **Krassimir Yankulov**.

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Y3104B Yeast RNA 3'-end processing factors promote RNA Polymerase II ubiquitination and degradation following UV-type DNA damage. Jason Kuehner.

Y3105C mRNAs accumulate near transcription sites, nuclear pore complexes, or within the nucleolus when RNA processing is disrupted. Biplab Paul.

Y3106A A Genetic Screen of the Yeast Kinome Reveals Gin4p Regulation of mRNPs. Eric Cosky.

Y3107B Molecular genetic tools for manipulation of the oleaginous red yeast *Rhodotorula toruloides*. **Stephen Aves**.

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Y3109A Role of chromatin modulators during polymerase switch for ribosomal RNA synthesis in *Saccharomyces cerevisiae*. Kushal Bhatt.

Y3110B Investigating a novel function of snRNP assembly factor Prp24 in regulating H2B monoubiquitylation. Katie Bolling.

Y3111C Regulation of *S. cerevisiae* in response to 4NQO by the polymorphic transcription factor, Yrr1. **Jen Gallagher**.

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Y3120C Transcriptional regulation of quiescence state promoting factor Saf1p by MADS box motif protein Rlm1p in *S.cerevisiae*. **Meenu Sharma**.

Y3121A Impairment of cell signalling in Saccharomyces cerevisiae as a result of suboptimal PRPP synthetase activity. Eziuche Ugbogu.

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Y3137B Comparisons of the genomes of Holleya sinecauda and Ashbya gossypii – closing in on the minimal gene set for a free-living fungus. Fred Dietrich.

Y3138C Chromosome-specific and global effects of aneuploidy revealed by Synthetic Genetic Array analysis. Stacie Dodgson.

Y3139A Toxicogenomic approaches for profiling resistance to P450-activated food carcinogens and phenotyping human P450 polymorphisms in budding yeast. Michael Fasullo.

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Y3143B Investigating the effects of gene overexpression on genome stability in Saccharomyces cerevisiae. Krystal Laframboise.

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Z6239B Integration of multiple signaling pathways in habenular development. **Sara Roberson**.

Z6240C Bsx in Neuroendocrine and Pineal Complex Development. **Theresa Schredelseker**.

Z6241A Pard3c, an unconventional zebrafish Par-3 ortholog for organogenesis: important for cell survival and proliferation but not for apicobasal polarity. **Zheni Shi**.

Z6242B The role of microglia in neurogenesis and repair following telencephalic lesion in adult zebrafish. **Kaia Skaggs**.

Z6243C Characterization of two protein repair enzymes in Zebrafish and their influence on the motor system. **Remon Soliman**.

Z6244A Wnt signaling and mediator 12 control development of the hypothalamus and pituitary. **Emma Spikol**.

Z6245B The Retinoic Acid signaling pathway temporally influences enteric neural crest cell migration and differentiation during early phases of enteric nervous system formation in vivo. **Rosa Uribe**.

Z6246C Role of local neurogenesis in functional recovery post spinal cord injury . **Deeptha Vasudevan**.

Z6247A Planar cell polarity components control anterior-posterior guidance of spinal commissural axons. **Gregory Walsh**.

Z6248B A genomic approach to investigate the interactions between somatosensory neurons and skin. **Fang Wang**.

Z6249C Lineage Tracing of Neuronal Progenitor Cells Expressing *dlx* Genes in the Zebrafish Brain. **Hellen Weinschutz Mendes**.

Z6250A Zebrafish Models for Parkinson's Disease. **Jinelle Wint**.

Z6251B Functional Genomics of Somatosensory Neuron Signaling and Morphology. **Victoria Wright**.

Z6252C Eyes shut homolog is localized near connecting cilia/transition zone and is required for cone photoreceptor survival in zebrafish. Miao YII

Z6253A Regulation of neural stem cell division modes in the developing zebrafish brain. Xiang Zhao

Regeneration and Stem Cells

Z6254B Committed stem cells derived from the somites supply the osteoblasts during adult bone homeostasis and regeneration. **Kazunori Ando**.

Z6255C Melanocyte stem cell dynamics in wound healing. **Christina Carnevale**.

Z6256A Regeneration after zebrafish traumatic brain injury is dependent upon microglia. **Jessica Chen**

Z6257B A novel role for miR-9 and Argonaute proteins in balancing quiescent and activated neural stem cell states. **Marion Coolen**.

Z6258C Development and Regeneration in the Zebrafish Lateral Line System. **Ivan Cruz**.

Z6259A Leukocyte Itga4 Signaling Regulates Heart Regeneration in Zebrafish. **Jupeng Diao**.

Z6260B Defining the Progenitor Population in Adult Zebrafish Jaw Bone Regeneration. **Dion Giovannone**.

Z6261C Zebrafish fin fold regeneration requires proper control of inflammation via macrophage. **Tomoya Hasegawa**.

Z6262A Manipulating hair cell regeneration in zebrafish lateral line neuromast. **Dong Liu**.

Z6263B Role of Neuropilins in Zebrafish Heart Regeneration. **Vanessa Lowe**.

Z6264C Unravelling the molecular mechanisms of myocardial de-differentiation during zebrafish heart regeneration. **Chris Onderisin**.

Z6265A Hair cell regeneration in the zebrafish lateral line is impared by crude root extracts of Valeriana officinalis. Roberto Rodriguez Morales.

Z6266B Thyroid hormone coordinates zebrafish pigment cell lineages during post-embryonic development and homeostasis. **Lauren Saunders**.

Z6267C The induction of radial glial cell proliferation after stab injury in the optic tectum of adult zebrafish. **Yuki Shimizu**.

Z6268A Systemic and local signaling interfaces of zebrafish bone regeneration. **Scott Stewart**.

Z6269B The contribution of biliary epithelial cells to hepatocytes in the developing liver with *tomm22* knockdown. **Jianchen Wu**.

RNA Biology in Development

Z6270C miRNAs function to limit vascular development flexibility. **Stefania Nicoli**.

Signaling

Z6271A Syndecan4 facilitates FGF signaling in trailing cells and cell migration in the zebrafish lateral line primordium. **Caitlin Fox**.

Z6272B The Sec14-like Phosphatidylinositol Transfer Proteins Act as GTPase Proteins to Mediate Wnt/Ca²⁺ Signaling. **Shunji Jia**.

Z6273C Atrazine Affects Cartilage and Heart Development in Zebrafish (*Danio rerio*). **Christopher Lassiter**.

Z6274A Wdr68 modulates TGFβ interference with BMP signaling for lower jaw patterning. **Andrew Martinez**.

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EDUCATION POSTER SESSION

Education

E8001A *Tetrahymena* in the classroom: An example of the use of model organisms in K-12 education. **Donna Cassidy-Hanley**.

E8002B 'Moving' AP Biology forward: Using *Drosophila*-optimized wrMTrck to examine muscle mutants. **Nicole Green**.

E8003C DNA barcoding: engaging students in molecular biology and bioinformatics through authentic biodiversity research. **Eric Nash**.

E8004A SMART research collaborations to foster K-12 STEM development. **Michael Pickart**.

E8005B Disruption of Sortilin-related receptor (sorl1) gene causes severe malformations, apoptosis and stunted structure in newly TALEN Knockout zebrafish *Danio rerio* model: Construction and molecular characterization. **Tamer Saleh.**

E8006C *Drosophila* cancer model used to introduce research to freshman biology majors. **Joseph Ahlander**.

E8007A Approaches and assessment of incorporating authentic research experiences into an undergraduate genetics course. **David Aiello**.

E8008B Promoting leadership development within undergraduate STEM curricula. David Aiello.

E8009C An undergraduate laboratory class using CRISPR/Cas9 technology to mutate Drosophila genes. **Richard Cripps**.

E8010A Drosophila and zebrafish in undergraduate teaching laboratories and student-driven independent research projects. Melissa Daggett.

E8011B Experiments in Inclusive Education. **Elizabeth De Stasio**.

E8012C Teaching Experimental Design through Worm Picking. **Nicole Evans**.

E8013A Integrating professional development opportunities during graduate education. Joyce Fernandes.

E8014B Microscopic image analysis of zebrafish pigmentation in an undergraduate cell biology laboratory. **Andrea Henle**.

E8015C STEAM (Science Technology Engineering Arts and Math) approaches in the undergraduate classroom. **Margarita Kaplow**.

E8016A Yeast orphan gene project: Finding a place for ORFans to GO. **Jill Keeney**.

E8017B The Genomics Education Partnership: Assessment of Key Elements of a Course-based Undergraduate Research Experience (CURE). **Judith Leatherman**.

E8018C Open Genetics Lectures (OGL): An Open Source Introductory Genetics Textbook. **John Locke**.

E8019A Zebrafish lateral line as an inquiry-based lab model for cell biology. **Jason Meyers**.

E8020B Using the Yeast Mating Response to Study Genetics and Cell Biology: From the Biology Lab to the Computer Lab and Back. **Michelle Mondoux**.

E8021C A Simple HPC Workflow for RNA-Seq in the Classroom. **Eric Nash**.

E8022A No lectures here: How an active and problem-based learning classroom in genomics transformed the confidence, creativity and communication skills of all students. **Ahna Skop**.

E8023B A Multi-course Inquiry-Based Science Laboratory Module Approach Integrates Research and Teaching through functional annotation of the *Tetrahymena thermophila* geneome. **Joshua Smith**.

E8024C Research/education partnerships to develop course-based undergraduate research experiences. **Rachelle Spell**.

E8025A Research-based learning in bioinformatics using yeast experimental evolution. Laurie Stevison.

E8026B F.I.R.E. lab: A full immersion research experience in an undergradate laboratory course. Cheryl Van Buskirk.

E8027C DNA Subway – An Educational Bioinformatics Platform for Genomics and Course-based Research. **Jason Williams**.

E8028A CourseSource: a journal of evidence-based teaching resources for undergraduate biology education. **Robin Wright**.

E8029B Course-Based Undergraduate Research in Molecular Biology. **Deborah Zies**.

E8030C Learning how to teach: Using the PALM fellowship to design a student-centered instructional unit for a large-enrollment genetics classroom. **Christopher Baker**.

E8031A An Undergraduate RNAi-Based Genetic Screen Reveals a Novel Component of the Polyamine Transport System. **Michael Haney**.

E8032B Plumbing STEM education: Designing a "Pipeline" CURE for a small teaching-focused college. **Karen Schmeichel**.

E8033C Fostering critical thinking skills via

analysis of primary literature. Elvira Tour.

E8034A Compatibility between learning and examination styles – analysis of the performance of students in advanced genetic courses.

Krassimir Yankulov.

E8035B Student peer review: an educational and assessment tool for upper year genetic courses. **Krassimir Yankulov**.

E8036C Fungal infections Aspergillossis and Cryptococcal meningitis in C H U Oran . **Zakaria Benmansour**.

E8037A Fellowships in Research and Science Teaching (FIRST): An integrative postdoctoral experience that generates effective researchers and educators. **Joanna Wardwell-Ozgo**.

E8038B Developing Future Biologists: a devbio lab course for outreach, diversity recruitment, and professional development. **Scott Barolo**.

E8039C The DNA Day Network: Integrating career training and outreach into trainee development. **Sonia Hall**.

E8040A The Effects of Myrrh and Rosemary Extract on Cancer Cell Lines. **Areej Alanazi**.

E8041B The Effects of *Lepidium sativum* on Four Tumor Cell Lines. **Afnan Felimban**.

E8042C Alterations induced in ovarian follicular kinetics of adult zebrafish on long term exposure to environmental estrogenic contaminants. **Basavaraj Goundadkar**.

E8043A Genetic modifiers compensating for loss of epidermal growth factor receptor. **Selene Howe**.

E8044B Nutritional Regulation of Oogonial Proliferation and Differentiation into Primary Oocytes in the Adult Ovary of Zebrafish (*Danio rerio*). **Pancharatna Katti**.

E8045C Effect of heat stress on condesin II levels and localization. **Vibhuti Rana**.

E8046A Effect of genetic variations on various post translational modifications (PTMs) and its role in protein regulation. **Muhammad Saleem**.

E8047B Acute heat shock leads to loss of polarity in *C. elegans* embryos. **Deepika Singh**

Notes



Advanced Analytical Technologies, Inc......627

URL: http://www.aati-us.com Communities: W, D, M, P, Y, Z

The Fragment Analyzer accurately qualifies and quantifies nucleic acid raw materials such as RNA and gDNA and is an indispensable tool for QC during NGS library sample preparation. Fragment Analyzer accelerates laboratory workflow by combining reliability, ease-of-use, and automated flexibility. Over 500 labs are using more than 600 Fragment Analyzers in 46 countries.

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AQUA SCHWARZ GmbH......717

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Aquaneering806

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URL: http://www.aquaneering.com
Communities: 7

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Life Science.....618

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BioTek Instruments, Inc......506

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Bitplane, Inc.707

Email: s.cummings@andor.com URL: http://www.bitplane.com Communities: W, D, Z

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Carl Zeiss Microscopy, LLC....501

Email: info.microscopy.us@zeiss.com URL: http://www.zeiss.com/us/microscopy Communities: W, D, M, Y, Z

As the world's only manufacturer of light, X-ray and electron/ion microscopes, ZEISS offers tailor-made microscope systems for 3D imaging in biomedical research, life sciences and healthcare. A well-trained sales force, an extensive support infrastructure and a responsive service team enable customers to use their ZEISS microscopes to their full potential.

CyVerse527

Email: info@cyverse.org URL: http://www.cyverse.org/ Communities: W, C, D, M, P, Y, Z

CyVerse (formerly iPlant Collaborative) is funded by the National Science Foundation working to develop a comprehensive national research and education cyberinfrastructure for the life sciences community. It collaborates with researchers and educators at universities and higher education institutions across the United States, and interacts with similar international and transnational efforts.

Darwin Chambers Company.. 511

Email: sales@darwinchambers.com URL: http://www.darwinchambers.com Communities: D. M

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Dino-Lite Scopes (BigC)...... 503

Email: sales@dinolite.us URL: http://www.dinolite.us Communities: D, M, Z

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Drosophila Genomics Resource Center (DGRC).......609

Email: kerdel@indiana.edu URL: https://dgrc.bio.indiana.edu/

Communities: D

The Drosophila Genomics Resource Center (https://dgrc.bio.indiana.edu/) serves the Drosophila community by collecting and distributing clones and cell lines of general interest and by assisting the community in using these materials. Visit our booth for information about upcoming services or to speak to DGRC personnel about our materials.

Drummond Scientific723

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Genesee Scientific.....411

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Communities: W, D

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Genetics Society of America ..531

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Communities: D

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Communities: M, Z

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INTAVIS Bioanalytical

Instruments 514

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InterMine 403

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IWAKI Aquatic......702 Email: gofish@iwakiaquatic.com URL: http://www.iwakiaquatic.com

Communities: Z

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Knudra Transgenics.....830

Email: info@knudra.com URL: http://www.knudra.com Communities: W, Z

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Lawrence Berkeley National Laboratory.....611

Email: kygee@lbl.gov URL: http://www.lbl.gov Communities: W, C, D, M, P, Z

Berkeley Lab is a member of the national laboratory system supported by the U.S. Department of Energy through its Office of Science. It is charged with conducting unclassified research across a wide range of scientific disciplines.

LGC Biosearch Technologies.500

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Loligo Systems701

Email: mail@loligosystems.com URL: http://www.loligosystems.com Communities: W, C, D, M, P, Y, Z

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MACHEREY-NAGEL Inc......710

Email: sales-us@mn-net.com URL: http://www.mn-net.com Communities: W, D, M, Y, Z

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MilliporeSigma (Formally known as EMD Millipore).....508

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Email: info@mooragar.com URL: http://www.mooragar.com Communities: D, Z

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Mouse Genome Informatics....433

Email: judith.blake@jax.org URL: http://www.informatics.jax.org Communities: M

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mouse models in a comparative context using multiple biomedical ontologies. All data is freely available.

Mutant Mouse Research & Resource Center (MMRRC) 727

Email: service@mmrrc.org URL: http://www.mmrrc.org

Communities: M

MMRRC, a NIH funded consortium, is the resource for mouse models used in Biomedical research. One of the largest nonprofit mouse model repositories in the world, the MMRRC distributes and archives models to advance research efforts and enhance pre-clinical research with a catalog of mouse models of human disease.

National Science Foundation. 431

Communities: W, C, D, M, P, Y, Z

US Federal Agency Funding Original Research.

NemaMetrix Inc. 714

Email: nema.metrix@nemametrix.com URL: http://nemametrix.com/ Communities: W, C, D, M, P, Y, Z

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Communities: Y

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NuGEN Technologies, Inc...... 507

URL: http://www.nugeninc.com Communities: W, C, D, M, P, Y, Z

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Pentair Aquatic

Eco-Systems.....800

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Percival Scientific, Inc.....602

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URL: http://www.percival-scientific.com

Communities: W, D, M, Y

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Flies, Inc.619

Email: info@rainbowgene.com URL: http://www.rainbowgene.com

Communities: D

Located in beautiful California, RTF has been serving Drosophila fly community since 2004. Top quality of transgenic fly services and customer satisfaction are our ultimate goal. We offer competitive price, fast turn-around time and guaranteed rate of transformation, which make RTF an affordable and reliable resource for your research needs.

RAPID Genomics, LLC519

Email: mresende@rapid-genomics.com URL: http://www.rapid-genomics.com Communities: W, C, D, M, P, Y, Z

RAPID Genomics is a DNA genotyping and genetic data analysis company that provides genomic services for companies and researchers to rapidly and cost competitively characterize genetic variation

in plants, livestock and humans. In addition, the company offers high throughput RNA-Seq, Next-Generation Sequencing and Bioinformatic services.

Roboz Surgical Instrument Co606

Email: dmitrii@roboz.com Communities: W, D, M, Y, Z

Roboz Surgical Instrument Company is the leading name for high quality microdissecting instruments, general surgical instruments and other surgical devices for biomedical research. Our catalog includes microdissecting scissors and forceps, microvascular clips, bone cutting instruments, suture material, instrument care and handling products, and much more

Sable Systems International...401

Email: marketing@sablesys.com URL: http://www.sablesys.com Communities: W, D, M, Y

Sable Systems International is the widely cited, international standard in high resolution metabolism and behavior systems. Our systems measure gas exchange in real time for C.elegans, yeast, Drosophila, and rodents. We look forward to learning about your research needs and sharing the latest technical advances in metabolic and behavioral phenotyping.

skretting north america......703

Email: jim.macneill@skretting.com URL: http://zebrafish.skrettingusa.com/ Communities: Z

Skretting is a global leader in providing innovative aquatic nutritional solutions and a supplier of Gemma Micro providing complete nutrition for all life stages of Zebrafish (Danio rerio). Gemma Micro is as a highly stable feed exhibiting excellent physical characteristic, documented to improve fecundity, eliminate Artemia and reduce feeding frequency to one event per day

SoftGenetics......615

Email: info@softgenetics.com URL: http://www.softgenetics.com Communities: W, C, D, M, P, Y, Z

Featuring NextGENe software for analysis of all NGS data; Geneticist Assistant NGS Workbench, a knowledge base for the calling and archiving of variant predictions; ChimerMarker, Automated Chimerism Analysis and monitoring software; GeneMarker for MLPA, MS-MLPA, CF, Trisomy, LOH, MSI, FragileX analysis ,and Mutation Surveyor software for analysis of Sanger Sequences.

SPEX SamplePrep, LLC..... 616

Email: learnmore@spex.com URL: http://www.spexsampleprep.com Communities: 7

SPEX SamplePrep has provided innovative sample preparation products since 1954. Our Geno/Grinder is a high-throughput, tissue homogenizer ideal for DNA/RNA extractions. It grinds samples in a variety of formats from deep-well titer plates to 50mL centrifuge tubes. Our MiniG is ideal for labs requiring a compact yet powerful tissue homogenizer.

Sunrise Science Products...... 832

Email: info@sunrisescience.com URL: http://www.sunrisescience.com Communities: W, Y

Sunrise Science Products manufactures hundreds of selective and non-selective yeast media formulations, and custom recipes for any organism are quickly produced. We are also proud to distribute yeast antibodies, products for protein expression in E. coli, and unique magnetic devices for efficient isolation of DNA, RNA and proteins.

Communities: W, C, D, M, P, Y, Z

Taylor & Francis boasts a growing and high calibre portfolio of journals and books in genetics and bioscience. Our journals are edited by some of the most prominent academics and practitioners in their fields. Visit www.tandfonline.com to browse our list of journals.

Techshot, Inc.617

Email: rboling@techshot.com URL: http://www.techshot.space Communities: W, D, M, P, Y, Z

Techshot is a one-stop solution for investigators who want to conduct life science research in space. The company provides the appropriate spaceflight equipment and coordinates everything from launching your samples, to training and supervising the astronauts conducting your experiments, to recovering your samples after the mission.

Tecniplast USA......822

Email: info@tecniplstusa.com URL: http://www.tecniplast.it/us/index.html Communities: M, Z

Tecniplast has more than 60 years of experience in the design, manufacture and distribution of specialized housing products and related equipment for the laboratory animal industry: zebrafish and rodents.

The Company of Biologists 814

Email: jitske.devries@biologists.com URL: http://www.biologists.com Communities: W, C, D, M, P, Y, Z

The Company of Biologists is a not for profit publishing organisation dedicated to supporting and inspiring the biological community through scientific journals, meetings and grants. The Company publishes five specialist peer-reviewed journals: Development, Journal of Cell Science, Journal of Experimental Biology, Disease Models & Mechanisms and Biology Open.

Transnetyx, Inc.....706

Email: egarrett@transnetyx.com URL: http://www.transnetyx.com Communities: M. P. Z

Transnetyx is the world leader in automated genotyping built on providing researchers and labs worldwide Fast, Easy, and Accurate genotyping for animal models. Transnetyx reporting gives labs results in 72 hours guaranteed. Using Transnetyx, researchers now have the time to focus on what matters the most - advancing their research that leads to discoveries.

Union Biometrica.....614

Email: sales@unionbio.com URL: http://www.unionbio.com Communities: W. D. Z

Union Biometrica provides high throughput / high content tools for genetics research. VAST BioImager™ automates the loading & orientation of 2-7 dpf zebrafish larvae for large imaging screens at organ and cellular-level. COPAS™ & BioSorter® are large particle flow cytometers for gentle analysis & sorting of *C.elegans*, Drosophila and zebrafish.

Vienna Drosophila

Resource Center.....417

Email: office@vdrc.at URL: http://www.vdrc.at Communities: D

The Vienna Drosophila Resource Center (VDRC) is a non-profit research organization which aims to promote scientific discoveries in Drosophila, primarily by maintaining over 35,000 transgenic Drosophila melanogaster stocks and DNA resources and distributing them to researchers worldwide. We also provide a private stock keeping service.

Viewpoint Life Sciences Inc....415

Email: info@viewpoint.fr URL: http://www.vplsi.com Communities: W, C, D, M, Z

The Viewpoint Zebralab System, is a state of the art automated observation and video tracking solution for Zebrafish, Drosophila. C-Elegans and Ciliates. It is the first ever complete system for high throughput tracking and behavioural analysis of fish or insects. As pioneer in Zebrafish behaviour analysis, our Zebralab system has an innovative software used to track and calculate LIVE activity for zebrafish embryos, larvae and adults in multi-wells plates or tanks. Please visit our website www.vplsi.com to see our various applications such as 3D. Heartbeat and Bloodflow, Virtual Prey, Optokenetic, C-Shape, S-Shape, Optogenetic ...

Vision Engineering502

Email: info@visioneng.com URL: http://www.visioneng.us

Communities: D, M

Vision Engineerings ergonomic, patented eyepiece-less microscopy liberates users from fixed working positions and eliminates neck strain often associated with binocular microscope use. Ideal for very long working distances across a wide range of magnifications, including applications involving dissection tools and extended hours of viewing.

WellGenetics Inc......419

Email: info@wellgenetics.com URL: https://wellgenetics.com/

Communities: D

WellGenetics is dedicated to providing researchers professional services in microinjection and gene knockout/knockin in fly and mosquito models. We are experts in molecular biology and in microinjection for generating variety of genetic tools, such as gene deletion, point mutation, gene reporters, tag knockin and RMCE knockin to level-up your research quality.

Wiki Education Foundation518

Email: jami@wikiedu.org URL: http://wikiedu.org

Communities: W, C, D, M, P, Y, Z

The Wiki Education Foundation is a non-profit organization providing tools and services to support university instructors as they assign their students to write for Wikipedia. At the booth, staff will provide instructional materials, advise on assignment best practices, and promote the Wikipedia Year of Science.

World Precision Instruments, Inc. 816

Email: info@wpiinc.com URL: http://www.wpiinc.com Communities: W, D, M, Z

World Precision Instruments (WPI) has been providing bioscience instruments to research scientists for over 50 years. Our display booth features microinjection & electroporation transfection products and related items: microscopes, micromanipulators, micro dissection instruments, pipette pullers, capillary glass. Stop at booth #816 and test drive our injection system. www.wpiinc.com.

WorldWide Life Sciences 607

Email: cconway@wwmponline.com URL: http://www.wwmponline.com

Communities: D

WorldWide Life Sciences is quality-driven provider of essential laboratory wares to the scientific community. We are excited to launch our self-manufactured line of SoFly™ Drosophila consumables and instrumentation at TAGC 2016.Visit www.soflysupplies.com to learn more about our SoFly™ Drosophila product line.

WPI Instruments, Inc. 623

Email: sales@wpiinc.com URL: http://www.wpiinc.com Communities: W, D, M, Z

WPI Instruments (WPI). We offer a full line of Microdissection and Surgical Instrumentation of fine quality from German and Swiss manufacturers. Surgical Stainless Steel and Titanium offerings can be found in our forceps, tweezers and spring scissors. A wide variety of related instrumentation and accessories are also

available. www.wpiinc.com.

Yeast-Worm-Fly532

Email: gail.binkley@stanford.edu URL: http://www.yeastgenome.org, www.wormbase.org, flybase.org

Communities: W, D, Y

Come visit three of the original model organism databases: SGD (Saccharomyces Genome Database, WormBase (Nematode Information Resource) and FlyBase (Database of Drosophila Genes & Genomes). Learn about our latest website features, new data types, and how to use these databases to answer your biological questions for any organism.

ZFIN (Zebrafish Model Organism Database)......409

Email: jknight@zfin.org URL: http://www.zfin.org

Communities: Z

The Zebrafish Model Organism Database. ZFIN goals include a) be the community database for laboratory use of zebrafish, b) curate zebrafish genetic, genomic and developmental information, c) maintain zebrafish research reference data sets, d) link to corresponding data in other databases, e) facilitate use of zebrafish as a model for human biology.

ZIRC (Zebrafish International Resource Center)407

Email: erin@zebrafish.org URL: http://www.zebrafish.org

Communities: Z

The Zebrafish International Resource Center is a central repository for wild-type, transgenic and mutant strains of zebrafish. The mission of ZIRC is to distribute these strains and other materials to the research community. ZIRC also develops methods to improve zebrafish health and provides health services. ZIRC is supported by a grant from the NIH-ORIP (DPCPSI).

Zymo Research Corporation ..622

Email: info@zymoresearch.com URL: http://www.zymoresearch.com Communities: W, C, D, M, P, Y, Z

Since 1994, Zymo Research has been offering innovative, quality, and easy-to-use tools for Epigenetics research and DNA/RNA purification. As The Epigenetics Company Zymo Research is an industry leader in epigenetic product and service development. Our products are well known for their quality, affordability, efficiency, and unparalleled technical and customer support.

Saturday, July 16 8:00 AM – 10:00 AM Grand Ballroom 3
Automated Tracking for

Quantitative Phenotyping

Organizers:Andre Brown Gordon Berman Megan Carey

Advances in sequencing and genome editing have increasingly made phenotyping a bottleneck in genetics. At the same time, imaging technology and computer vision are becoming more accessible, bringing high-throughput quantitative phenotyping to a growing number of labs. At this workshop we will: 1) Share recent advances in animal tracking in a range of model organisms 2) Get feedback from researchers across the communities on what new technologies would be most useful in their work 3) Coordinate efforts and consider working towards a more universal open source animal tracker that can serve as a shared basis for future developments.

Saturday, July 16 8:00 AM – 10:00 AM Crystal Ballroom J2 CRISPR-Based Genome Engineering

Organizer:Mike Boxem

In just a few years' time, CRISPR-based genome engineering has become an essential tool for many C. elegans groups. This exciting technology is still rapidly evolving, with new insights being gained regularly. This workshop offers an opportunity to learn about the latest developments in CRISPR/Cas9 genome engineering, share ideas, and gain practical tips, protocols, and insights to enable the successful application of this technology. In a series of short talks, researchers actively developing novel methods or improvements will present their work, with a focus on practical, technical advice.

Saturday, July 16 8:00 AM – 10:00 AM Grand Ballroom 1

Using CyVerse Cyberinfrastructure to Enable Data Intensive Research, Collaboration, and Education

Organizers:Joslynn Lee Jason Williams

CyVerse (formerly iPlant Collaborative) is a freely available cyberinfrastructure funded by the National Science Foundation. CyVerse cyberinfrastructure (software, data storage/management, High Performance Computing, and support) enables dataintensive biology by allowing users to analyze and share data efficiently. This workshop will quide attendees through demonstrations of the CyVerse platform and orient them to additional training materials. Demos will introduce data sharing, (meta)data management, resources for genome assembly. annotation, RNA-Seq, variation, and image analysis. CyVerse's mission is to empower discovery at multiple levels, from making bioinformatics applications accessible to the "average bench-biologist" to enabling big-data science that would not otherwise be possible.

Saturday, July 16 8:00 AM – 10:00 AM Palms Ballroom Canary 1

Model Organisms to Face

Environmental Problems

Organizers:Cristina Miceli Michael Lynch Wei Miao

In spite of general progress in environmental research, the impact of environmental changes on living organisms and human health remains deeply worrying. Monitoring of water contamination, air pollution, exposure to metals and global climate change can be faced with the contribution of modern omics techniques. This workshop has the objective to gain insight into practical environmental problems by using key model systems in which omics are largely applied. Genomics and transcriptomics are

used to identify marker-genes involved in environmental responses, to analyze differential gene expression under environmental stress, to study the relationship between genotype and phenotype, including possible epigenetic control

Saturday, July 16 8:00 AM – 10:00 AM St. Thomas, North Tower Integrating Research and Teaching: Professional Development for Current and Future Faculty Members

Organizers:Rebeccah Kurzhals Joyce

Fernandes
Pamela Hanson
Paula Checchi
Gretchen Edwalds-Gilbert
Eric Stoffregen
Christina Swanson

This workshop provides current and future faculty (post-docs and graduate students) from different organismal communities with a platform for presenting and discussing strategies to integrate research and pedagogy at the undergraduate level. Goals include: (1) sharing concepts and techniques that encourage integration of model organisms as teaching tools in the classroom and laboratory and (2) networking to promote discussion, collaboration, and support on professional issues associated with balancing the demands of research and teaching.

Saturday, July 16 8:00 AM – 10:00 AM Palms Ballroom Canary 2 Informatics Resources to Aid the Genetic Dissection of Neural Circuitry

Organizers:David Osumi-Sutherland, Owen Randlett Paul Sternberg

With advances in imaging technology and the power of model organism genetics we can now map and functionally dissect entire neural circuits, modulating the activity specific neurons and observing the effects on behavior and circuit function. Researchers need efficient ways to query and visualise data from massive and diverse datasets to identify, understand and target circuit elements. This workshop brings together users and developers of neuroinformatics tools, techniques and resources for Zebrafish, C.elegans and Drosophila. As these communities are working independently to solve similar problems, this workshop provides the opportunity to discuss these problems, share solutions and promote collaboration. Melissa Haendel (Monarch initiative): Oregon Health & Science University, Portland OR

Saturday, July 16 8:00 AM – 10:00 AM Palms Ballroom Sabal Everything you Wanted to Know about Sex

Organizers:Artyom Kopp Michelle Arbeitman Mark Siegal Mark Van Doren

The workshop will cover the molecular genetics, development, neurobiology, genomics, and evolution of sexual dimorphism, with an emphasis on crossdisciplinary interactions. Presentations by 6 invited speakers working in Drosophila, mouse, nematode, zebrafish, and ciliate models will be followed by moderated discussions. The speakers are encouraged to summarize the key ideas behind their research for people working in other models, outline the main unsolved questions, offer their opinions about future directions, and suggest connections that could be built with other models and disciplines.

Saturday, July 16 8:00 AM – 10:00 AM Grand Ballroom 8A

modMetabolome: Model Organism Metabolomics Consortium Workshop

Organizers:Laura Reed Arthur Edison

Metabolomics is emerging as a powerful tool for linking genetic and environmental factors with downstream phenotypes. Model organisms including mouse, zebrafish, yeast, Drosophila, and C. elegans have served as the standard bearers for eukaryotic genomic resource development and comparative genomics. Correspondingly, these organisms are also the logical choices in the field of metabolomics. With coordinated metabolomic analyses across model organism we can elucidate evolutionary conservation and innovation in eukaryotic metabolic networks and improve our understanding of human biology. The "modMetabolome" workshop seeks to promote a broad effort to characterize and curate the metabolomes of model organisms.

Saturday, July 16 8:00 AM – 10:00 AM Palms Ballroom Royal Feeding Behavior, Nutrition and Metabolism: Emerging Model Organisms

Organizers:Tania Reis William Ja Supriya Srinivasan Amnon Schlegel

Caenorhabditis elegans, Drosophila melanogaster and Danio rerio have become powerful models for studying how diet and nutrition influence a wide range of metabolic processes. This workshop will assemble a diverse group of presentations that highlight recent advances in the field of nutrition and metabolism across these genetic model systems. The goal of this workshop is to foster discussions and encourage collaborations among

individuals interested in topics ranging from food intake as a fundamental parameter of metabolism to the effects of diet on energy storage and utilization in worms, flies and zebrafish.

Saturday, July 16 8:00 AM – 10:00 AM Crystal Ballroom J1 Functional Genomics for Conserved Gene Function Discovery

Organizers:Stephanie Mohr Brenda Andrews Susan Dutcher Norbert Perrimon Yi Zhou

Functional genomics permits gene function discovery at large scale. The power of the approach increases when related genes in multiple species are shown to have similar functions. We bring together experts in functional genomics in single-cell, invertebrate and vertebrate models to present their effective platforms, with an emphasis on cross-species studies (e.g. parallel screens in multiple species or screens in one system followed up in another). Attendees will learn about functional genomics and analysis workflows, and discuss with experts how our communities can collaborate to harness the power of model species for functional genomics screens in new and diseaserelevant ways.

Saturday, July 16 8:00 AM – 10:00 AM Crystal Ballroom G1
Cell Competition in Flies and Mice

Organizers:Erika Bach Nicholas Baker Laura Johnston

In cell competition, a comparison selects fitter cells during tissue growth and development. Cell competition is relevant to tissue growth, stem cell biology, regeneration and cancer. Studies in Drosophila formalized the concept of context-dependent elimination of ordinarily

viable cells and laid the groundwork for mechanistic studies in flies and mice. This workshop will bring together scientists studying cell competition in different tissues and genetic models, including (but not limited to) Drosophila and mouse, to foster communication and promote collaboration. Topics will include signaling mechanisms in diverse contexts, methodologies and the contribution of cell competition to development, aging and disease.

Saturday, July 16 8:00 AM – 10:00 AM Crystal Ballroom G2 **Developmental Mechanics**

Organizers:Rodrigo Fernandez-Gonzalez Guy Tanentzapf Ronen Zaidel-Bar

D'Arcy Thompson in his seminal book On growth and form proposed that physical forces play a central role in animal development. Over the last twenty years, the establishment of tools to measure and manipulate mechanical forces in living organisms has demonstrated that mechanical forces influence molecular dynamics and cell behaviors during tissue morphogenesis. We will review the latest advances to visualize and quantify force generation during C. elegans, Drosophila. zebrafish and mouse development, directly targeting four communities that participate in The Allied Genetics Conference. We will discuss recent results demonstrating the interplay between physical forces, molecular dynamics and tissue morphogenesis.

Saturday, July 16 8:00 AM – 10:00 AM Grand Ballroom 2 **Model Systems in Drug Discovery**

Organizer:Daniela Zarnescu

Recent successes using simple models for drug screening have brought attention to model organisms ranging from yeast to nematodes, to flies and fish as emerging systems that hold great promise for the

rapid discovery of high quality therapeutic leads. Talks from expert speakers will focus on the challenges and opportunities of screening for therapeutics in simple model systems. Topics will include screening approaches using various paradigms relevant to human disease. A summary discussion will focus on identifying opportunities and challenges associated with using simple models for drug discovery, and strategies for increasing visibility with funding agencies and pharmaceutical companies.

Saturday, July 16 8:00 AM – 10:00 AM Grand Ballroom 7A CRISPR/Cas9 - Techniques and applications in Fish, Flies, and Mice

Organizers:Lauryl MJ Nutter John Seavitt Edward Ryder

This workshop will show participants how CRISPR/Cas9 is being used to enhance discovery using disease model organisms. Speakers will discuss both the technical aspects of producing genetically engineered models with CRISPR/Cas9 as well as the application of those models to particular areas of interest, including undiagnosed diseases and functional genomics. Following the presentations, speakers will be available for a round table discussion with workshop participants and attendees to discuss both technical and applied aspects of the use of CRISPR/Cas9 genome editing in fish, flies and mice

Saturday, July 16 8:00 AM – 10:00 AM Crystal Ballroom C
Gene Function Discovery within the IMPC Resource

Organizers:Ann-Marie Mallon Terry Meehan James Brown Jeremy Mason

The International Mouse Phenotyping Consortium (IMPC) is building the first truly comprehensive functional catalog of a mammalian genome by producing and characterizing a knockout mouse strain for every protein-coding gene. Data from a standardized, broad-based phenotyping pipeline annotated through a sophisticated statistical analysis pipeline to identify phenodeviants. With phenotype data now available for over 3200 genes, this workshop will focus on how to access and search this rich data source.

Saturday, July 16 8:00 AM – 10:00 AM Grand Ballroom 12-14 Utilizing NCBI Databases for Model Organism Research

Organizer: Terence Murphy

We are experiencing an exponential increase in genomic sequencing data, with profound impacts on research for all model organisms. NCBI provides a variety of resources and services to help access and take advantage of these new datasets. This workshop will cover topics related to data submission to GenBank; genome assembly efforts in mouse and zebrafish by the GRC; and annotation resources in the RefSeq and Gene databases. Annotation examples will focus on zebrafish and mouse genes, but the databases and tools that will be described are applicable to all eukaryotes represented in our databases.

Saturday, July 16 8:00 AM – 10:00 AM Crystal Ballroom A-B Systems Genetics in Complex Populations

Organizers:Martin Ferris
Fernando Pardo-Manuel
de Villena
Logan Everett

Genetic reference populations are genetically complex, reproducible sets of animals which are derived from >2 parental inbred strains. These populations allow for the integration of population-wide phenotypic, molecular and genetic information across treatments and timescales. Furthermore, these populations are ideal for genetic mapping of complex traits, assessment of genetic perturbation on molecular pathways, and development of new disease models. In this workshop we will familiarize users with mouse (and drosophila) resources useful for these populations; as well as go through experimental design and analysis considerations and approaches for using these systems.

Saturday, July 16 8:00 AM – 10:00 AM Grand Ballroom 11
An Introduction to Using Galaxy for Genetic Data Analysis
Organizer:Dave Clements

An essential component of genetics research is extracting information from large and diverse datasets using bioinformatics tools that often require researchers to become proficient in tasks such as Linux package management and system administration. Galaxy is a free open-source data integration and analysis platform that enables researchers to focus on their questions, rather than on the underlying compute infrastructure. After introducing Galaxy the workshop will demonstrate a phenotype and orthology analysis using data from ZFIN. Wormbase. SGD and other databases to discover relationships in multiple datasets from multiple sources.

Saturday, July 16 8:00 AM – 10:00 AM Crystal Ballroom N-Q The InterMOD Consortium: A common interface to model organism data

Organizers:Rachel Lyne Julie Sullivan

The budding yeast, rat, zebrafish, nematode, mouse and fruitfly model organism databases (MODs) are developing a new common interface to facilitate gene discovery and analysis, for identification of interactions, disease associations, and pathways, and to build stronger bridges to and from human data. This consortium, working with the open source InterMine project, aims to improve the ease, flexibility and uniformity with which researchers can work integratively with the MOD data, and to do this by means of the nascent NIH "Cloud" Commons Framework. This interactive hands-on workshop will introduce participants to the progress made by this consortium.

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This is an index of genes mentioned in the abstracts. The current FlyBase-approved gene symbol is given in each case; non-current symbol synonyms or full names used in the abstracts are not indexed.

The index was prepared computationally based solely on the FBgn & gene symbol information provided by authors during abstract submission. FlyBase has performed a cross-check between the FBgn and gene symbol provided to ensure the intended gene is indexed. FlyBase is not responsible for any omissions from the index where authors did not provide information, nor for any incorrect indexing where genes stated to feature in an abstract do not actually appear. Indexed terms are in bold. Numbers following each term refer to abstract program numbers: 250 and below are oral presentations and 1000 and above are poster presentations...

A2hn1 D171	bab1 D95	CASK
A2bp1 D171 Abd-B D130	bab2D95	cav
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AcnD1247A	D177	Cdk5 D1364A
	ballD1146B D1333B	
Acsl		Cdk5α
Act57B	bamD1430A	Ced-12
D1342C	ban D1366C	CG11221 D1277A
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Actβ D1156C	D1414C D1468C	CG11377 D1055A
D1335B	BEAF-32 D1491B	CG15930 D1190A
Ada2b	D1493A	CG2025 D210
Adh D217	bel D1507C	CG2982 D209
AGBE D1134B	BicC D1383B	CG5210 D1205A
AGO1 D1061A	bif D1051C	CG6422
AGO2 D1485B	Blm D1070A	CG7033
D1501C	D1138C D1325A	CG7130
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D1335B	bmm D1124A	CG7818 D1514A
AkhR D1135C	D1153C	CG8331D204
D1335B	βNACtes6 D1452B	CG8878 D1481A
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D1124A D1157A	br D185 D1469A	D1193A
Alk D152 D1454A	brp D1316A	CG9338D139
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Axn D171	caix D1169A	Clk D188 D1460A
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B-H2 D95	casD1217A D1465C	cortoD214

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Crz	dve D1416B D1443B	Gcn2 D1242B
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cysu D1141C	Egfr D179 D1056B	grnd D178
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dar1D94	elav D1452B	hb D190 D1498C
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Dp D1151A D1455B	flnD186	D1469A
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dpp D127 D129	Fmr1 D213 D1485B	Hpr1 D169
D174 D1147C	fogD1003C	Hsc70-5 D1067A
D1224B D1352A	fon D1027C	Hsp22D1140B
D1464B D1475A	form3D92	D1460A
Dpse\Ovd D118	foxoD102 D1153C	hts D1005B D1008B
Dr D192	D1154A	httD1369C
Drak D179	fried D1165C	ldgf1D1205A
Drice D1094A	frma D1192C	ldgf2D1205A
Dronc	fruD1191B D1281B	ldgf3D1205A
Drp1 D1367A		ldgf4D1205A
drpr D110 D213	D1286A	ldgf5
Drs D1242B	ftD1053B	ifc
Dsim\bam D1430A	Fur1 D1207C	IIp2 D1132C D1158B
John Diroun	Fur2 D1207C	Ilp3D1132C
	fweD1050B D1103A	Ilp5D1132C
	Gadd45D167	Ilp6D1132C
	Gaud45	וועווע 11320

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Imp D240	midD1469A	Obp56d D1304A
ImpL2D1156C	mip120D1455B	Obp56h
ImpL3D1125B	mirrD1469A	Opa1 D1367A
D1140B D1460A	Mmp1 D1159C	orb
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ind	Mmp2	ovo
InRD102 D235	mnb D1264C	p38a
D1103A D1153C	Mob4D135	p53 D111 D1068B
D1437B	Mocs1D1293B	para D1379A
Itp-r83A D174	Moe D1012C	park D186 D1348C
D1349A	Mondo D1152B	D1374B
jagn D205	msnD228	Pc D1494B D1496A
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jubD1074B	Msp300D182	Pdf D231
jumu . D1196A D1197B	msps D1249C	PdfrD1135C
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kelD1008B	mus301D1325A	peb
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knD128 D228	-	Phf7 D1212B
	myo	
koi	Myo31DFD1017B	phm D1452B
Kr-h1 D1153C	D1022A D1413B	Phm D106
D1154A	N D90 D112 D185	pho D1498C
kto D100	D1041B D1043A	phu D1193A
kug D105	D1183C D1217A	Pi3K92E D1157A
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Liprin- αD1051C	Nep4 D1158B	Pngl D1331A D1385A
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Lsp1γ D1027C	Nhe3 .D1303C D1332B	Pp1-87B
LstD1132C	nito D1254B D1336C	ppk29 D1271A
	NIg2D212	• •
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mD1182B	nocD128	pros D1416B
M(UAS-dsh)8-3D1198C	nompC D1312C	Prosap
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D1110B D1224B	Npc1a D1385A	Psn D1043A
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mahjD1089B	nrv1 D1303C	Ptp10D
MarfD186 D1367A	nrv2 D1303C	D1105C D1109A
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Mbs D1014B D1386B	Nrx-IVD212	Ptp69D D93
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Rab8D201	sens D1416B	SPR D101 D120
Rac1 D134 D1386B	Sep-02 D1436A	D1192C
Rala D201	Sep-05 D1436A	sqh D89 D131 D133
Rap1 D1103A	Ser D90	D1003C D1014B
RapGAP1D1452B	SERCA D174	Src42A D1041B
Ras85DD1056B	Sesn	D1205A
D1057C D1330C	sffD1051C	Src64B D1041B
rawD1256A D1257B	sfl D212	SREBP
RbfD1226A D1455B	Sfp79B	srl D1183C
rcD1128B	sgg D94 D102	srp D222 D1243C
RecQ4 D1069C	Shark D1205A	ssD194 D1416B
Reep1 D204 D1375C	shd D106	D1476B
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D1366C	SIFaD1270C	D1056B D1063C
repoD1452B	SIFaR D1270C	D1318C D1469A
rhi D142 D169	sim	step
Rho1 D1386B	sina	stg
RhoGEF2D131	sisAD1189C	Strip D135
rib D1200B D1202A	skdD100	stwl D1488B
rictorD1124A	slD1045C	
		Su(H)D192 D1475A
rin D1051C	sli	su(Hw)
rkD104	Slik	D1462C
Rm62D1485B	SInD206	Su(var)2-10 D1134B
rnD95	slo D188	Su(var)205 D144
robo1 D1108C	slou D128	D182 D1484A
robo2D1108C	slp1 D1268A	Su(var)3-3
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RpL22D215 D1201C	sns	sxc D127
RpL22-like D215	so D124 D128	SxI D151 D1189C
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RpL8 D171	Sod3 D1113B	Synj D1264C
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RpS12 D1107B	solo D1082A	Syx7 D1131B
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salm D1416B	SP D101 D120 D1192C	Tdc2D1292A
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scrib D1330C	D1336C D1463A	Tet
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Thor	D1242B
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Timp	
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tkv D174	
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TI D1124A	D1157A
Tlk	
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Toll-6	
Τορ3β	
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trbl D1090C Tre1	D1123C D1110B D1286A D1464B D1312C D1448A D163 D1445A D1133A D1027C 31 D220 D207 D1316A D1469A D167 D1268A D1459C D1440B D1292A
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This is an index of genes mentioned in the abstracts. The current WormBase-approved gene symbol is given in each case; non-current symbol synonyms or full names used in the abstracts are not indexed.

The index was prepared computationally based solely on the WBgn & gene symbol information provided by authors during abstract submission. GSA is not responsible for any omissions from the index where authors did not provide information, nor for any incorrect indexing where genes stated to feature in an abstract do not actually appear.

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mrg-1 W4031A	pkd-2 W4171C	W4073A
mrp-4 W4044B	PMK-1 W4053B	sir-2.4W4082A
MSP W4021C	pop-1W403	
	W4153C	
	pptr-1 W4106A	
	F.F.	

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skn-1 W425	tax-6 W4015C	unc-61 W4023B
W462 W4012C	tba-1W409	unc-82 W4177C
. W4065B W4083B	tbg-1 W409	unc-83W410
slo-1W4045C	W4139A W4167B	W4044B
slo-2W4045C	tir-1W4047B	unc-84 W410
sIr-2 W4143B	tlp-1W403	unc-89 W4106A
sma-9 W434	top-2W445	W4177C
W4176B	tpxI-1 W4039C	unc-96 W4177C
smn-1 W4070A	tra-1 W4102C	unc-98 W4177C
smrc-1 W4005B	trpa-1 W462	VAB-1 W4092B
snf-10 W4011B	trt-1 W4087C	vab-1 W4097A
snt-1 W4154A	try-5 W447	vab-10 W4095B
spd-1 W4038B	W4011B	vab-19 W4095B
spe-41 W448	tsp-12W413	vab-3 W4060C
spe-43 W4014B	W4176B	vha-20 W4096C
spe-8 W4011B	tsp-14W413	vit-2 W4065B
spe-9 W4020B	W4176B	vit-3 W4146B
SPON-1 W4089B	tsp-21W4176B	vpr-1 W435
spon-1 W4095B	ttll-11 W4042C	W4181A
spr-5 W4008B	ttII-15 W4042C	vps-32 W4018C
srb-12 W4175A	ttII-4 W4042C	vps-34 W400
srb-13 W4175A	ttII-5 W4042C	vps-41 W4077B
srb-16 W4175A	ttII-9 W4042C	VSRA-1 W454
srb-5 W4175A	TWIST1W4116B	WBGene00003166
srj-54 W4163A	TWIST2W4116B	W4072C
sup-17 W413	ubc-13 W4035B	WBGene00003168.
sur-5 W4139A	ubc-16 W4035B	W4072C
sur-6 W4106A	ubc-18 W4035B	WBGene00003170
swip-10 W4076A	ubc-2 W4035B	W4072C
swm-1 W447	ulp-2 W461	WBGene00003272.
W4011B	unc-104W4185B	W4156C
swsn-1W4050B	W4186C	WBGene00006748
swsn-4W4050B	unc-122W4139A	W4072C
syd-2W4185B	unc-129W434	wdr-23W425
syg-1W4091A	unc-130W434	wdr-5W407
syg-2W4091A	unc-15 W4177C	wdr-5.1 W4083B
sygl-1W398	unc-2 W4045C	wee-1.3 W4007A
	unc-22W415 unc-3W4149B	wht-2 W4044B wht-7 W4044B
sym-3W4096C	unc-31 W4069C	wnt-7W4044B
sym-4W4096C	unc-40W413	zim-2W4010A
syp-1 W4010A sys-1 W403	UNC-40W4092B	zwl-1 W4101B
W4153C	unc-42W4164B	zyg-1
svx-7	unc-52W4095B	zyg-11W449
T04F8.6 W409	unc-54W4106A	2yg -11vv449
1041 0.0 VV403	U110-34VV4100A	

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Indexed terms are in bold. Numbers following each term refer to abstract program numbers: 530 and below are oral presentations and 3000 and above are poster presentations.

1004 V400	BUB4 VOCCO	OD114 V0400A
ACC1Y499	BUB1 Y3009C	CRM1 Y3103A
acc1Y3012C	Bud4 Y525	CSE4Y3096C
ACE2Y464	CAC1 Y3102C	CSM2 Y467
ACS1Y499	CCR4 Y474	Y3073A Y3174C
ACT1Y3027C	Cdc10 Y525	CSM4Y3030C
Act1 Y3101B	Cdc11 Y525	CTF4 Y3173B
ADE4 Y484	Cdc12 Y525	cts1Y3013A
AMA1 Y3031A	CDC13 Y3078C	CUP1-1Y504
Y3033C	Cdc13 Y3082A	CUP1-2Y504
ams1 Y3022A	cdc14 Y3002B	Cur1 Y526
any1 Y518	Y3065B	DAM1 Y3009C
APD1 Y3005B	CDC14 Y3004A	DBF4 Y478 Y491
Apj1 Y497	Cdc20 Y477	dcp2Y3106A
APN1 Y3073A	CDC20 Y3033C	DFR1 Y489
APN2 Y3073A	CDC28 Y3004A	DIP5 Y472
ARG82 Y3193A	Cdc3 Y525	dis2 Y523
Arp4 Y3101B	CDC39 Y474	DIS3
asn1Y3012C	cdc42 Y495	DLX5 Y3098B
asn2Y3012C	Y523 Y3034A	DNL4 Y513
Atg8Y527	CDC5 Y520	DNM1 Y496
atp1Y518	Cdc50 Y3054C	dpb4Y477
atp2Y518	CDC7 Y478 Y491	Drs2Y3054C
atp3Y518	CDH1 Y3004A	DYN1 Y522
ATX1	CDK8 Y496	EAF1 Y529
AZF1 Y3192C	Y3085A	Ecm33Y3054C
BAS1 Y3190A	CDS1 Y529	ECO1Y3093C
BAS2(PHO2)	cha1 Y3006C	Epl1 Y3101B
Y3190A	CHL1Y3093C	Erg2 Y3059B
BCP1Y529	CKI1 Y3011B	Erg24 Y3059B
Bem1 Y3060C	Cla4 Y525	Erg6 Y3059B
bit61 Y3013A	CLN1Y3004A	Esa1 Y3101B
bmh1 Y3002B	CLN2 Y3004A	Est1Y3082A
BOI1 Y3064A	Y3094A	EST1 Y476
BOI2 Y3064A	CNC1Y496 Y3085A	EST2 Y476
BRE1Y480	coa2 Y3038B	Y3103A
Y3110B	cox1 Y3038B	fin1 Y3002B
Btn2Y497 Y526	crf1Y3013A	FIS1Y3049A
bub1 Y3002B	Crm1 Y475	FLO1 Y464

Flo11Y3017B	Hsh155 Y497	MED13Y496
FLO11Y3132C	Hsp104 Y497	MED2 Y3119B
FLO8Y464	Y526	Mex67Y475
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Fpr3Y3088A	Y3160A	mid2Y495
Fpr4Y3088A	Hsp42 Y497	mmf1 Y3006C
fus1Y495	hsp82 Y3183C	MPH1 Y3153C
Y3034A	HSP82 Y3134B	mps3 Y3053B
fus2.Y495 Y3034A	Hsp82 Y3195C	MPS3 Y3030C
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GAL11 Y3119B	HTA1 Y3009C	Mrh1 Y3054C
GAP1Y472	Y3088A	MRK1
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gcd1Y3012C	Y3088A	MSH5Y491
GCN5Y3096C	HTB2Y480	Msn2 Y466 Y470
gdb1Y3012C	HTL1Y501	Msn4Y466
	HTZ1Y3090C	MTG3 Y3039C
gdh2Y3012C	HXT1 Y3069C	MTH1Y530
gef1		
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gin4	HXT7 Y504	mtl1Y495
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GLN3Y3058A	IME2Y493	Naa10 Y3023B
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GSY1 Y3018C	ira1Y518	Naa30 Y3023B
GSY2 Y3018C	ira2Y518	Naa40 Y3023B
Hac1Y3059B	Ire1 Y3059B	Naa50 Y3023B
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hem1Y3006C	kar5Y495	NDT80 Y3035B
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HHO1Y3090C	kel1 Y3034A	NPL6 Y501
HHT1Y480	kel2Y3034A	Npr2Y3003C
Y3088A	KOG1 Y3068B	NRG1 Y3109A
HHT2Y480	KSP1 Y3068B	NUM1Y522
HIF1Y3182B	KSS1 Y3193A	NUT1Y3119B
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HLTFY486	LAS17Y485	OPI1
hmf1Y3006C	LDB7Y501	orb6
HMO1Y3109A	LIF1Y513	Y3071B Y3175A
HOY3092B	Los1Y475	OSH4Y529
но Y3092B Y3094A	LSM1Y473	PAF1Y480 Y3115A
	MAG1 Y3073A	
HOF1; CYK2		PAT1Y473
Y3177C	mat1 switching	PBP1
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HSC82Y3134B	MCD1 Y3047B	
hsc82Y3183C	MEC1 Y3080B	pde1
	MED1 Y3119B	pde2

PDS5Y3093C	REV7 Y3174C	SGS1 Y3153C
pfk1/pfk2 Y3012C	RFA2 Y3008B	Shs1 Y525
PGD1 Y3119B	RGT1Y3069C	SHU1 Y467
pgk1 Y3106A	rgt2 Y3057C	Y3073A Y3174C
PGM2 Y3018C	RGT2 Y530	SHU2Y467
PHD1Y509	Y3069C	Y3073A Y3174C
PHO13 Y3159C	Rif1 Y3082A	shy1
PHO3 Y3189C	Rif2 Y3082A	sin1
PHO4 Y3016A	rim15 Y518	Sip5
PHO5 Y3189C	RIM4 Y493	SIR1
PHO80 Y3016A	RLF2 Y3089B	Sir2Y3100A
PHO85 Y3016A	Y3095B	SIR2Y3027C
PKC1 Y3070A	rlf2 Y3091A	Y3087C Y3092B
Pma1 Y3050B	RLM1Y474 Y3120C	Sir4Y3082A
Y3054C	RME1 Y3184A	SIS1Y3160A
POL1 Y3080B	Rnr2Y3195C	skn7 Y3172A
Y3173B	RNR3 Y3143B	SKO1Y3109A
POL30 Y3093C	Rnr4Y3195C	SLT2
Y3095B Y3102C	ROX3 Y464	Y3120C
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Y486	RPL40A Y3070A	SLX8 Y3052A
POM152 Y3030C	RPO21 Y482	SMK1Y3033C
POP1Y476	rpo21 Y3117C	SMP1Y474
POP2Y474	RRM3 Y3095B	SMT3Y3052A
pop3 Y3013A	Y3102C	Snf1 Y526
POP6Y476	rrm3 Y3091A	SNF1 Y496
POP7 Y476	RSC1 Y501	Y3193A
PPN1 Y3016A	RSC2 Y501	snf1 Y3106A
PRE4 Y3148A	RSC30 Y501	SNF3 Y3069C
PRP24 Y3110B	rsp5Y3051C	Snq2 Y3111C
Prs1 Y3121A	RTF1 Y480	Snx4Y527
Prs2 Y3121A	RTS1 Y3009C	Snx41 Y527
Prs3 Y3121A	Y3096C	Snx42
Prs4 Y3121A	Rts1 Y525	SNZ1 Y3010A
Prs5	RTT102 Y501	SOH1 Y3119B
PSY3 Y467	RTT105 Y3036C	SOK2
Y3073A Y3174C	rvs161 Y495	SOL4 Y3159C
ptp1 Y3057C		SPC110 Y3028A
RAD1 Y3153C	SAF1 Y3120C	SPC42Y3028A
rad24 Y3071B	SCC2Y478	Split hand/-
RAD5Y486	Y3047B	foot malformation
RAD51 Y467	SCC4 Y478	Y3098B
Y3073A Y3081C	SCS2Y522	SPO77 Y3031A
RAD53	SCS22Y522	SPS1 Y3031A
Y3008B	SEC14 Y529	SRB2 Y3119B
RAD6	SET1 Y3085A	SRB5 Y3119B
Rap1 Y3082A	Set6	SRM1 Y3068B
RCO1 Y3083B	sfl1 Y3172A	Ssa1
Rcy1 Y3054C	sfl2	SSA1
REV3 Y3174C	SGO1 Y3009C	SSD1 Y3160A

SSL2 Y482	tpk3 Y3190A
SSM4 Y3030C	TPN1
SSN2 Y3042C	tra1 Y3108C
SSN3 Y3042C	Tra1 Y3101B
SSN6Y3109A	tsa1 Y3012C
SSN8Y3042C	Tsl1 Y466
SSP1 Y3031A	TUP1 Y464
SSP2 Y3033C	Y3109A
STB1 Y3004A	TY1 Y3119B
STD1Y530	UBC7 Y3030C
Std1Y526	UBI4
STE11Y3193A	UBP10 Y3110B
STE12 Y490	UBP3 Y3138C
Y493 Y3154A	UBP8 Y3110B
ste20Y3013A	UPF3 Y488
Y3106A	URA3 Y3047B
STE20Y3068B	ura7 Y3012C
STE5Y3154A	ura8 Y3012C
STE7Y3154A	URM1 Y3067A
Y3193A	VAM10 Y3045C
sts5Y3071B	Vhs1Y526
SUA7 Y482	VIP1 Y3193A
SUL1Y3118A	Vps1Y527
SUP35Y3027C	Vps17Y527
Y3045C	Vps26Y527
Sur7 Y3054C	Vps29Y527
SUT1Y3109A	Vps35Y527
Swa2Y3054C	Vps5Y527
Swc4Y3101B	VPS5 Y3045C
TAR1 Y504	VTC1 Y3016A
tco89Y3013A	VTC2 Y3016A
tea4/wsh3Y523	VTC4 Y3016A
TEL1Y513	VTS1Y474
TFG2 Y482	whi2Y518
THI2Y3112A	WHI5 Y3004A
Y3189C	wsc1Y495
THI3Y3112A	WSC1 Y3070A
Y3189C	wsc2Y495
TKL2Y3159C	wsc3Y495
TLC1Y476	XBP1Y510
Y3082A Y3103A	xrn1 Y3106A
TOR1 Y472	XRN1Y498
Y3058A Y3067A	yak1 Y3190A
tor1Y3013A	YCK1Y530
TOR2Y3067A	Y3069C
tor2Y3013A	YCK2Y530
Tpk1 Y466	Y3069C
tpk1Y3190A	YJRW-Ty1-2 Y504
tpk2Y3190A	Yku70 Y3082A
Tpk2	

Y513
Y3103A
Y3082A
Y513
Y488
Y473
Y3111C
Y3159C

Zfin GENETIC INDEX TO ABSTRACTS

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actr10Z650	bbs10 Z6175A	cdh2Z6237C
Z6225C	bbs4 Z6013A	Cdh2 Z6060C
acvr1ba7592	Z6176B	cdh23
Z6048C	BCL6a Z6097A	cdk5Z6082A
acvr1IZ6164B	becn1	cdx4 Z6023B
adck4Z6142A	bmpZ6114C	celsr3Z6247A
adgra2 Z648	bmp1aZ593	cep290 Z618
adgra3Z6064A	bmp2bZ535	Z6013A
adgrg1 Z6219C	Z6068B	cers2b
agrnZ619	bmp3 Z6073A	CFP Z6032B
agrp Z6240C	bmp4 Z6274A	chdZ593
agrp2 Z6240C	bnip1 Z6170B	chd8Z6113B
ahr2 Z6084C	brca2 Z6008B	Z6194B
alx1Z6038B	Z6149B Z6180C	clo Z6261C
ambra1a Z6051C	brd1b	cnr1Z6234C
ambra1b Z6051C	bsxZ6240C	cnr2Z6234C
amhZ544	btr01 Z6159C	cnrip1aZ6234C
Z6103A	buc Z543	cnrip1b Z6234C
and1Z586	c/ebpβ/cebpb	cntn2Z6223A
and2Z586	Z6139A	cntnap2a Z640
angptl4Z608	cacna2d3Z576	cntnap2b Z640
ano5aZ582	camk2g2 Z6159C	col22a1 Z581
anxa5bZ6196A	camta1a Z6217A	col4a1 Z580
ap2s1Z576	cart1 Z6213C	coq6Z6142A
apcZ6244A	cart2 Z6213C	crb2a Z654
apoa1aZ639	cart3 Z6213C	crhZ553
apoa1bZ639	cart4 Z6213C	crtc3Z6159C
apobaZ639	Cas9 Z6032B	ctbp2aZ6196A
6127A	casq1aZ582	ctbp2IZ6196A
apobb.1 Z639	CaSR Z551	ctnnb2 Z656
Z6127A	cc2d2a Z618	cx34.1 Z616
apobb.2 Z639	ccnb1Z6059B	cx35a Z616
aqp3a Z613		

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cx43 Z614	ewsr1aZ6166A	gata1Z6129C
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cxcl12b Z580	faahZ6234C	gata2a Z6117C
cxcr4aZ6119B	fabp10aZ595	gata4Z544
cxcr4b Z6239B	fancZ6149B	gbf1 Z6015C
cyp19a1a Z544	fancaZ6149B	gbx1 Z6037A
cyp1aZ6084C	fancbZ6149B	gcga Z6100A
daglaZ6234C	fanccZ6180C	gdf3 Z6058A
daglbZ6234C	fanciZ6149B	gdf6aZ633 Z644
dand5 Z6058A	fanclZ6149B	gdf6b Z633
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dcaf7Z6110B	fat1bZ545	Gpc4 Z6060C
Z6274A	fer116Z6183C	grem2 Z6274A
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ddx4 Z543	fezf2Z572	grin2ba Z6194B
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dlc1Z6122B	fgf24 Z544	gsc Z6227B
dnah2Z6169A	Z6034A	gsdf Z6106A
dnajb6b Z582	fqf3Z617	gyg1aZ582
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drp1Z650	fgfr1Z536	hdac1Z559
dscaml1 Z547	fgfr1aZ617	hey1 Z6274A
Z6212B	fgfr2Z617	hh Z6232A
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dync2li1 Z6169A	flk1Z6129C	hnf4aZ608
dyrk1aa Z6028A	flt1Z580	hnrnpaba Z6056B
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dyrk1abZ6110B	Z6121A	hrh1 Z6189C
Z6194B	fn1Z6049A	hsd17b4 Z6137B
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efnb2bZ6052A	foxc1aZ6077B	id3 Z6103A
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egfraZ6197B	foxc1bZ6120C	ift88Z618 Z6013A
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elovl1b Z611	foxf1Z6173B	igf3 Z6103A
EosFPZ6032B	foxj1aZ656	ihhaZ605
ephb4bZ6052A	fscn1aZ6072C	il15ra Z6136A
ercc4Z6149B	fshbZ6103A	il1b Z6261C
ergZ6166A	fstaZ6045C	il2rb Z6136A
ERT Z6032B	fzd3aZ6188B	il2rga Z6136A
ERT2Z6078C	Z6247A	ing4Z532
esco2Z6145A	Fzd7aZ652	inha Z6103A
etv1Z6166A	fzd9bZ612	inpp5eZ655
etv2 . Z643 Z6025A	Gal4FF Z6032B	ins Z6100A
etv4 . Z544 Z6166A	GAL4FFZ6078C	insl3 Z6103A
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itgb1Z6049A	med12 Z6244A	opn4a Z577
itgb3Z6049A	meis2a Z6116B	otofaZ6196A
itgb8Z6218B	meis3 Z6245B	otofb Z6196A
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jak3 Z626	mib Z6253A	otx5Z6240C
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kctd15bZ6199A	mks1Z618	par2Z6189C
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kdrZ595 Z6121A	mmp9 Z6254B	parlb Z6161B
kdrlZ6121A	mpp5aZ654	pax2aZ546 Z6227B
khk Z6138C	mpv17Z595	Pax2a Z6231C
kiaa0753Z6146B	mpz Z6236B	Pax2bZ6231C
kif5b Z651	mrc Z548	Pax8Z6231C
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klf4Z635	mtp Z6127A	pbx4 Z579
kras Z595	musk Z619	pcdh15a Z548
kRASG12D Z628	myd88Z627	Z6201C
kremen1Z545	myh6Z561	Pcdh18a Z652
krt 5 Z6165C	myl7Z6012C	Pcmt Z6243C
lamb1aZ605	myo1D Z541	Pcmtl Z6243C
lef1Z545 Z573	myom1a Z6187A	pcxa Z584
Z612	myom1b Z6187A	pdgfaa Z556
Leg1 Z610	myom2 Z6095B	pdgfbb Z6263B
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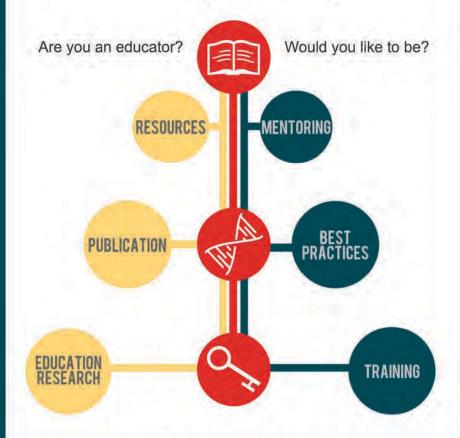
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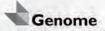


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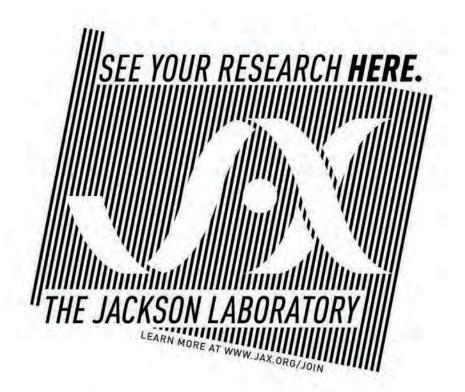
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GENETICS and G3 are committed to integrating with community resources. We've long supported the use of preprints, and in 2014 we partnered with Cold Spring Harbor Laboratories to enable seamless deposits of manuscripts from our submission systems to bioRxiv, and vice versa. Articles feature links to model organism databases like SGD, FlyBase, WormBase and FungiDB. We provide custom templates for authors who use LaTex, saving them time at submission. So you can assess your research impact in multiple ways, each paper features article level metrics that shows mentions on Twitter, Facebook, in the popular press, plus other alternative metrics.

Access to Data

Our data policy, instituted in 2009, requires that all primary data and source code associated with the paper's findings must be publicly available, either as supplemental information or in a public repository like Dryad, FigShare, and GenBank. Besides providing everything needed for replication, this policy allows your research to have the greatest possible impact, and to ensure that your findings will be used for years to come.





Not sure if your work is a good fit for our journals? **We welcome pre-submission inquiries!**

Download the TAGC 2016 MOBILE APP NOW!

http://www.Genetics2016.org/MeetingApp





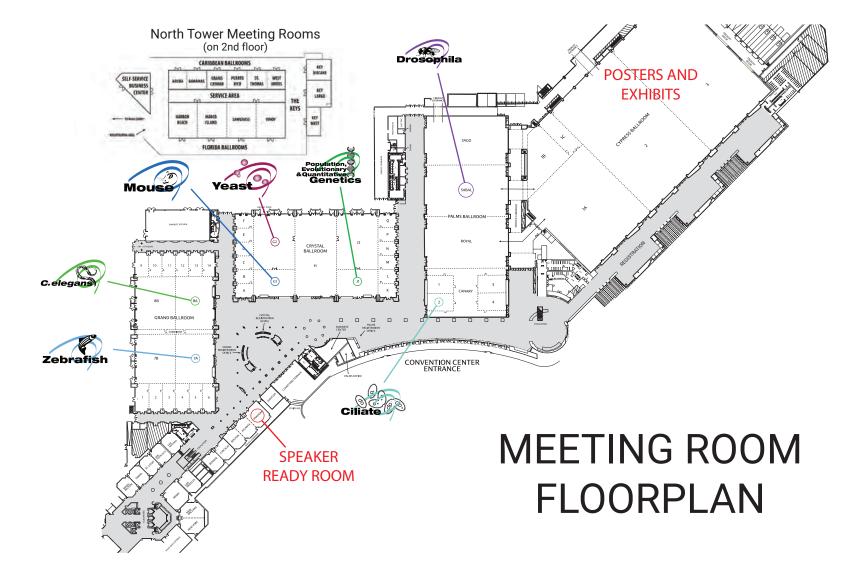


Complete abstract and speaker info, personalize your schedule, view venue maps, take notes __ _ and more.



You can scan this code with a QR Reader on your device.





* Ticketed Event

SCHEDULE AT-A-GLANCE

Wednesday, July 13		
2:00pm- 9:30pm	Speaker Ready Room Open	Hall of Cities - Anaheim
7:00pm-9:00pm	Scientific Sessions	Multiple locations
9:00pm-11:00pm	Opening Mixer with Exhibits	Cypress Ballroom
Thursday, July 14		
7:00am-5:00pm	Speaker Ready Room Open	Hall of Cities - Anaheim
7:45am-10:00am	Joint Plenary Session	Palms Ballroom
8:00am-4:00pm	Exhibits Open	Cypress Ballroom
10:30am-12:30pm	Scientific Sessions	Multiple locations
12:30pm-1:30pm	* Mentoring Roundtables #1	North Tower - Harbor Beach
12:30pm-1:30pm	Speaking UpMod Org Research	Crystal Ballroom H
1:30pm-3:30pm	Poster Presentations	Cypress Ballroom
1:30pm-3:30pm	GeneticsCareers Center /Job Fair	Cypress Ballroom 1C
4:00pm-6:00pm	Scientific Sessions	Multiple locations
7:45pm-9:45pm	Scientific Sessions	Multiple locations
10:00pm-11:30pm	* Science Cafe Event	Palms Ballroom Sabal
Friday, July 15		
7:00am-5:00pm	Speaker Ready Room Open	Hall of Cities - Anaheim
8:00am-9:30am	Scientific Sessions	Multiple Locations
8:00am-4:30pm	Exhibits Open	Cypress Ballroom
10:00am-12:00pm	Scientific Session	Multiple locations
12:00pm-1:30pm	* Editor's Panel Discussion	North Tower - Harbor Beach
1:30pm-3:30pm	Poster Presentations	Cypress Ballroom
1:30pm-3:30pm	GeneticsCareers Center	Cypress Ballroom 1C
2:00pm-2:45pm	GeneticsCareers Workshop	Cypress Ballroom 1B
4:00pm-6:00pm	Scientific Sessions	Multiple locations
6:00pm-7:30pm	* WIG Panel and Networking	North Tower - Harbor Beach
7:30pm-9:30pm	Joint Plenary Session	Palms Ballroom
Saturday, July 16		
7:00am-5:00pm	Speaker Ready Room Open	Hall of Cities - Anaheim
8:00am-10:00am	Workshops	Multiple locations
8:00 am - 12:00pm	Exhibits Open	Cypress Ballroom
10:00am-12:00pm	Poster Presentations	Cypress Ballroom
10:00am-12:00pm	GeneticsCareers Center	Cypress Ballroom 1C
10:30am-11:15am	GeneticsCareers Workshop	Cypress Ballroom 1B
12:15pm-1:45pm	* Mentoring Roundtables #2	North Tower - Harbor Beach
1:45pm-3:45pm	Scientific Sessions	Multiple locations
4:00pm-6:00pm	Scientific Sessions	Multiple locations
7:30pm-9:30pm	Scientific Sessions	Multiple locations
9:30pm-11:00pm	* Closing Reception	Cypress Ballroom 1
Sunday, July 17		
8:00am-10:00am	Scientific Sessions	Multiple locations
10:30am-12:30pm	Joint Plenary Session	Palms Ballroom
