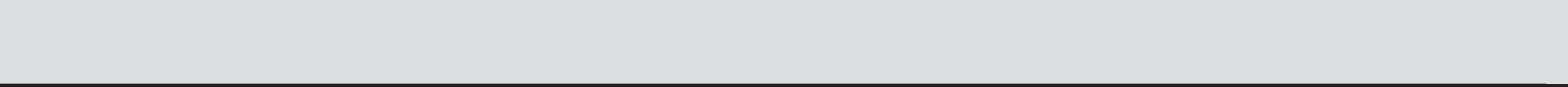


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¹King's College London School of Medicine at Guy's, King's College & St Thomas' Hospitals, Department of Medical & Molecular Genetics; ²U741 Inserm/Paris 7, Institut Jacques Monod, Paris; ³College of Physicians & Surgeons of Columbia University
- P2 RETROTRANSPOSITION: A MECHANISM FOR GENERATING NEW IMPRINTED GENES?**
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 Kings College London
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John Hancock, Mouse Phenotype Database Integration Consortium
 MRC Harwell, Harwell, UK
- P4 COMPARATIVE ANALYSIS OF THE POLYLEUCINE STRUCTURE IN THE MAMMALIAN TASTE RECEPTOR, T1R1 GENE.**
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 Dept. Food Science, Ishikawa Prefectural University
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Inge Seim, Adrian Herington, Lisa Chopin
 Institute of Health and Biomedical Innovation and School of Life Sciences, Faculty of Science, Queensland University of Technology, Brisbane, Australia
- P8 EXPLORING THE MOLECULAR BASIS FOR ATHLETIC PERFORMANCE TRAITS IN NORTH SWEDISH TROTTERS**
Gabriella Lindgren¹, Ingrid Jacobsson², Aneta Ringholm², Knut Roed³, Sofia Mikko¹, Leif Andersson²
¹Dept of Animal Breeding and Genetics, Swedish University of Agricultural Sciences, Sweden. ²Dept of Medical Biochemistry and Microbiology, Uppsala University, Sweden. ³Dept of Basic Sciences and Aquatic Medicine, Norwegian School of Veterinary Science, Norway
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 GSF-National Research Center for Environment and Health, Institute of Experimental Genetics, Munich/Neuherberg, Germany
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Judith A. Blake, David P. Hill, Mary E. Dolan, Harold J. Drabkin, Li Ni, and Dmitry Solnikov
 Mouse Genome Informatics Group, The Jackson Laboratory

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Department of Biosciences and Informatics, Keio University
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Keio University
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Kuniko Horie-Inoue¹, Ken-ichi Takayama^{1,2}, Satoshi Inoue^{1,2}
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- P15 ANALYSES OF NON-CODING RNAs IN BOVINE GENOME.**
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CSIRO Livestock Industries
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DNA Data Analysis Laboratory, Center for Information Biology and DNA Data Bank of Japan
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Kanagawa Cancer Center Research Institute, Division of molecular pathology and genetics
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The Jackson Laboratory
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Department of Medical Technology, Fooyin University
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Department of Biology. University of Texas at Arlington. USA
- P23 GENETIC CHARACTERIZATION OF THE WILD-DERIVED HOUSE MICE IN EAST ASIA**
[Jun J. Sato](#)¹, Yasunori Yamaguchi¹, Junpei Ueta¹, Hitoshi Suzuki², Wang Chunyan³, Alexei P. Kryukov⁴, Kazuyuki Mekada⁵, Naoyuki Takahata⁶, Kazuo Moriwaki⁵
¹Fukuyama University, ²Hokkaido University, ³Lanzhou Institute of Biological Products, ⁴Russian Academy of Sciences, ⁵RIKEN BRC, ⁶Graduate School of Advanced Studies
- P24 A MATHEMATICAL MODEL FOR AFFYMETRIX GENECHIP PROBE LEVEL DATA BASED ON FUNCTIONAL STATES OF GENE - ON/OFF**
[Keiko Otani](#)¹, Megu Ohtaki², Keiko Hiyama², Eiso Hiyama², Kenichi Satoh², Takeshi Shimamoto², Dokki Mohamad², Masataka Andoh², Tetsuji Tonda², Masahiko Nishiyama²
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- P25 A COMPARATIVE STUDY OF THE ABCG2 GENE IN MILK PRODUCTION**
[Jerry Wei](#), Julie A. Cavanagh, Mehar S. Khatkar, Lisa G. Riley, Paul A. Sheehy, Herman W. Raadsma and Peter Williamson
Centre for Advanced Technologies in Animal Genetics and Reproduction, Faculty of Veterinary Science, and CRC for Innovative Dairy Products, University of Sydney, Australia
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Department of Applied Physics, Graduate School of Engineering, Nagoya University
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[B. Karlak](#)¹, K. Frazer¹, C. Wade^{2,3}, M. Bogue⁴, D. Hinds¹, E. Beilharz¹, R. Gupta¹, J. Montgomery¹, M. Morenzone¹, G. Neilsen¹, S. Osborn¹, C. Pethiyagoda¹, L. Stuve¹, F. Johnson⁵, M. Daly^{2,3}, D. Cox¹
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Department of Animal Biotechnology; College of Animal Bioscience and Technology, Konkuk University, Seoul 143-701, Republic of Korea
- P29 IDENTIFICATION OF EVOLUTIONALLY CONSERVED FAT REGULATORY GENES USING COMPARATIVE GENOMIC APPROACH**
[Ken Yagi](#), Itoshi Nikaido, Yosuke Mizuno, Yasushi Okazaki
Division of Functional Genomics and Systems Medicine, Research Center for Genomic Medicine, Saitama Medical University
- P30 THE STATE OF ANNOTATION IN HAVANA**
[Laurens Wilming](#), J Almeida, C Amid, I Barnes, D Carvalho Silva, S Donaldson, A Frankish, R Gibson, E Hart, R Kinsella, G Laird, J Loveland, J Mudge, A Mujica, J Rajan, H Sehra, E Sheridan, C Steward, M-M Suner, M Thomas, Jennifer Harrow and Tim Hubbard
Informatics Department, Wellcome Trust Sanger Institute, Hinxton, Cambridgeshire CB10 1HH, UK

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RIKEN Genomic Sciences Center
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Keio University
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¹AIST, Computational Biology Research Center, ²Sony CSL
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National Center for Biotechnology Information, NIH, Bethesda, MD, U.S.A.
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National Center for Adult Stem Cell Research, Eskitis Institute for Cell and Molecular Therapies, Griffith University
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Paul Schofield¹, Vassilis Aidinis², Ewan Birney³, Steve Brown⁴, Duncan Davidson⁵, Michael Gruenberger¹, Anne-Marie Mallon⁴, Glenn Proctor³, Eli Reuveni⁶, Nadia Rosenthal⁶, Klaus Schughart⁷, Glauco Tocchini-Valentini⁸, Tom Weaver⁹, John Hancock⁴
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- P37 A GENOME-WIDE ANALYSIS OF TRANSCRIPTION REGULATION IN MACROPHAGE, THE ACTIVITY IN THE GNP-ECW/FANTOM4**
Harukazu Suzuki and The GNP-ECW/FANTOM4 consortium
Laboratory for Genome Exploration Research Group, RIKEN GSC, Yokohama, Japan
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Mitsuyoshi Murata, Sachiko Ishikawa. Yoshiko Hayashida. Kengo Hayashida. Hiromi Nishiyori. Hiromi Sano. Akira Hasegawa. Michihira Tagami. Shiro Fukuda. Shinji Kondo. Lassmann Timo. Arner Erik. Daub Carsten. Piero Carninci. Yoshihide Hayashizaki
RIKEN
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Ryuichi Sakate¹, Akihiro Matsuya^{1,2}, Yoshihiro Kawahara¹, Yoshiharu Sato¹, Takashi Gojobori^{3,4}, Takeshi Itoh^{3,5}, Tadashi Imanishi³

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P43 ONTOLOGICALDISCOVERY.ORG: A WEB RESOURCE FOR THE EMPIRICAL DISCOVERY OF PHENOTYPIC RELATIONS ACROSS SPECIES AND EXPERIMENTAL SYSTEMS

Erich J. Baker¹, Zuopan Li², Jeremy Jay², Vivek Philip³, Yun Zhang², Michael A. Langston^{2,3}, Elissa J. Chesler^{3,4}

¹Computer Science Department, Baylor University, Waco, TX, USA, ²Computer Science Department, University of Tennessee, Knoxville TN, USA, ³Genome Science and Technology Program, University of Tennessee, Knoxville TN, USA, ⁴Oak Ridge National Laboratory, Oak Ridge, TN, USA

P44 DIFFERENCES IN MICRORNA EXPRESSION ACROSS COMMON MOUSE INBRED STRAINS USING TAQMAN RT-PCR

Michael Parsons¹, Christina Grimm², Wilfried Nietfeld², Hans Lehrach², Leonard C Schalkwyk¹

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²Max-Planck-Institute for Molecular Genetics (MPIMG) in Berlin, Germany.

P45 TRANSCRIPTS AND THEIR EXPRESSION PATTERNS IN THE REGION CONTAINING THE HYBRID STERILITY 1 GENE

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P46 IDENTIFICATION OF NOVEL TRANSCRIPTOME SIGNATURES CHARACTERISTIC OF ERYTHROPOIETIC RESPONSE BY HIGH-RESOLUTION PROFILING OF MOUSE BLOOD USING SOLEXA 1G SEQUENCING TECHNOLOGY

Matthew N. Fedoruk, Jim L. Rupert
University of British Columbia

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- P48 ANALYSIS OF MICRO RNAS INVOLVED IN OSTEOLASTIC DIFFERENTIATION**
Yosuke Mizuno¹, Ken Yagi¹, Tatsuo Suda¹, Takenobu Katagiri², Toru Fukuda², Yasushi Okazaki¹
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- P49 GLOBAL ANALYSIS OF MICRORNA AND GENE EXPRESSION IN HUMAN CELL LINES**
Yoshinao Ruike¹, Atsuhiko Ichimura¹, Soken Tsuchiya², Kazuharu Shimizu², Ryo Kunimoto³, Yasushi Okuno³ and Gozoh Tsujimoto¹
¹Department of Genomic Drug Discovery Science, ²Department of Nanobio Drug Discovery, ³Department of Pharmacoinformatics, Graduate School of Pharmaceutical Sciences, Kyoto University.
- P50 MULTIPLEX CDNA QUANTIFICATION METHOD BY DNA ENCODING TECHNOLOGY**
Osamu Gotoh¹, Atsushi Kameda¹, Yasufumi Murakami², Akira Suyama¹
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- P51 CAGE-TSSCHIP; PROMOTER-BASED EXPRESSION PROFILING USING THE 5'-LEADING LABEL OF CAPPED TRANSCRIPTS**
Shintaro Katayama¹, Mutsumi Kanamori-Katayama¹, Yuki Tsujimura¹, Noriko Ninomiya¹, Kazumi Yamaguchi^{1,2}, Piero Carninci^{1,3}, Yoshihide Hayashizaki^{1,3}
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- P52 GENETIC CONTROL OF GENE EXPRESSION AND GENE NETWORK IN THE HIPPOCAMPUS OF LXS MICE**
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- P53 HIDDEN LAYERS OF HUMAN SMALL RNAS**
Hideya Kawaji¹, Mari Nakamura², Yukari Takahashi¹, Albin Sandelin³, Shintaro Katayama², Carsten Daub², Shiro Fukuda², Chikatoshi Kai², Jun Kawai², Jun Yasuda¹, Carninci Piero⁴, Yoshihide Hayashizaki^{1,2,4}
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- P54 DEVELOPMENT OF 454-CAGE METHOD FOR MONITORING DYNAMIC GENE EXPRESSION CHANGE**
Norihiro Maeda¹, Hiromi Nishiyori¹, Mari Nakamura¹, Tika Kawazu¹, Mitsuyoshi Murata¹, Hiromi Sano¹, Kengo Hayashida¹, Shiro Fukuda¹, Michihira Tagami¹, Akira Hasegawa¹, Kayoko Murakami¹, Kate Schroder², Katharine Irvine², David Hume², Piero Carninci¹, Harukazu Suzuki¹, Yoshihide Hayashizaki¹
¹RIKEN, Japan, ²University of Queensland, Australia
- P55 MATRIX RNAI AS A TOOL FOR DEPICTING A HUMAN INTER-TRANSCRIPTION FACTOR REGULATORY NETWORK**
Yasuhiro Tomaru, Misato Nakanishi, Hisashi Miura, Masanori Suzuki, Yoshihide Hayashizaki
GERG GSC RIKEN, Inter. Gra. Sch. of Arts and Sciences YCU.
- P56 TRANSCRIPTOME ANALYSIS BY 5'-3' DITAGS.**
Miki Kojima, Hiromi Nishiyori, Yoshiko Hayashida, Yuki Tsujimura, Hiromi Sano, Akira Hasegawa, Shiro Fukuda, Takahiro Suzuki, Atsutaka Kubosaki, Carsten Daub, Jun Kawai, Harukazu Suzuki, Yoshihide Hayashizaki, Piero Carninci
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P57 LOGIC OF REPEAT ELEMENTS TRANSCRIPTION

Piero Carninci^{1,2}, Yasumasa Kimura², Timo Lassman², Carsten Daub², Kazunori Waki², Geoffrey Faulkner³, Sean Grimmond³, David Hume^{3,4}, Valerio Orlando⁵, Nadine Horning⁵, Yoshihide Hayashizaki^{1,2}
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P58 DECIPHERING THE PROMOTOME OF PURIFIED CELL TYPES WITH LONGER CAGE TAGS.

Charles Plessy, Roberto Simone, Yoshihide Hayashizaki, Takao Hensch, Piero Carninci.
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P59 BIOINFORMATICS APPROACH TO IDENTIFICATION OF GENES INVOLVED IN MULTIPLE PITUITARY HORMONE DEFICIENCY: NOTCH SIGNALING AND ORTHODENTICLE RELATED TRANSCRIPTION FACTORS

S. A. Camper¹, A. H. Mortensen, J. W. MacDonald¹, N. M. Solomon¹, M. L. Brinkmeier¹, D. Ghosh¹, P. Carninci², Y. Hayashizaki², R. H. Lyons¹
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P60 A GENETIC ANALYSIS OF MELANOCORTIN 1 RECEPTOR (MC1R) GENE AND ITS RELATIONSHIP TO COAT COLOR IN A “MELANIC” VOLE (*Eothenomys melanogaster*)

Yung-Chih Lai and Alex Hon-Tsen Yu
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P61 THE NATIONAL BIO RESOURCE PROJECT FOR THE RAT IN JAPAN - AN UPDATE

Birger Voigt, Tomoji Mashimo, Akiko Takizawa, Ryoko Okajima, Ken-ichi Yamasaki, Satoshi Nakanishi, Takashi Kuramoto and Tadao Serikawa
 Institute of Laboratory Animals, Graduate School of Medicine, Kyoto University, Japan

P62 GENOMIC ANALYSIS OF GASDERMIN A (GSDMA) AND GASDERMIN C (GSDMC) LOCI IN THE MAMMALIAN GENOME

Tamura M., Tanaka S., Fujii T., Kato Y. and Shiroishi T.
 Mammalian Genetics Laboratory, Research Strains Stock Center, National Institute of Genetics

P63 ANALYSIS OF GENE EXPRESSION RELATED TO THE ONE CARBON METABOLIC PATHWAY AND DNA METHYLATION STATUS IN THE RAT LIVER DURING VITAMIN B-12-DEFICIENCY.

Atsushi Uekawa¹, Tetsunori Kawata², Ken-ichi Kobayashi¹, Yuji Yamamoto¹, Tadahiro Tadokoro¹
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P64 TRANSCRIPTIONAL NETWORK ANALYSIS OF THE GLUCOCORTICOID RECEPTOR BASED ON THE HIERARCHICAL GENOMIC APPROACH

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P65 A NOVEL PEROXISOMAL PROTEASE TYSND1 IS REGULATED BY PPAR AGONIST AND PROCESSES PTS1- AND PTS2-CONTAINING ENZYMES INVOLVED IN β -OXIDATION OF FATTY ACIDS

Igor V. Kurochkin¹, Yumi Mizuno², Ken Yagi², Yuichi Ninomiya², Akihiko Konagaya¹, Yoshiyuki Sakaki¹, Christian Schönbach¹ and Yasushi Okazaki²
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- P66 EXPLORATION OF ADIPOSE TISSUE TRANSCRIPTOME NETWORK TRIGGERED IN VIVO BY AN INSULIN SENSITIZING AGENT, PIOGLITAZONE**
Yoshinori Ochiai, Yi-Qiang Liang, Masakuni Serizawa, Naoko Birukawa, Sabrina Jesmin, Norihiro Kato
International Medical Center of Japan
- P67 CLONING, SEQUENCING AND QUANTIFICATION OF BCL-2 AND BAX GENES FROM LAGOSTOMUS MAXIMUS (Rodentia)**
Jensen CF, Ostermann K, Vitullo AD, Vollmer G
Centro de Estudios Biomédicos, Biotecnológicos, Ambientales y Diagnósticos -CEBBAD-, Universidad Maimónides
- P68 THE RAT GENOME DATABASE: INTEGRATING BIOLOGICAL INFORMATION INTO THE GENOMIC CONTEXT**
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Human and Molecular Genetics Center, Medical College of Wisconsin, Milwaukee, Wisconsin
- P69 CELL DEATH WITH EXCESSIVE AUTOPHAGY OCCURS IN SERINE PROTEASE INHIBITOR KAZAL TYPE 3 DEFICIENT ACINAR CELLS**
Masaki Ohmuraya, Kimi Araki and Ken-ichi Yamamura
Institute of Molecular Embryology and Genetics, Kumamoto University
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Masaki Ohmuraya, Kimi Araki and Ken-ichi Yamamura
Institute of Molecular Embryology and Genetics, Kumamoto University
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Jingye Xu, Haibo Sha, Mingyan Yu and Xiang Gao
Model animal research center, Nanjing University
- P72 MOUSE KIDNEY PROXIMAL TUBULE-CELL SPECIFIC ABLATION MEDIATED BY HUMAN DIPHThERIA TOXIN RECEPTOR**
Michiko Sekine¹, Chouji Taya¹, Kunie Matsuoka¹, Sumiyo Takahama¹, Yoshiko Akita¹, Satomi Yamada¹, Toshiaki Monkawa², Akemi Suzuki³ and Hiromichi Yonekawa¹
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- P73 EPITHELIAL-SPECIFIC BLOCKAGE OF THE MYD88-DEPENDENT TLR SIGNALING PATHWAY CONTRIBUTES TO SPONTANEOUS INTESTINAL INFLAMMATION**
Jianfeng Gong^{1,2}, Xiang Gao¹, Weiming Zhu², Ning Li², Jiesshou Li²
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- P74 EMMA - THE EUROPEAN MOUSE MUTANT ARCHIVE**
Michael Hagn¹, Glauco Tocchini-Valentini², Yann Herault³, Steve Brown⁴, Urban Lendahl⁵, Jocelyne Demengeot⁶, Martin Hrabè de Angelis¹, Ewan Birney⁷
¹GSF- National Research Center for Environment and Health GmbH
- P75 FBXO11, MUTATED IN OM MOUSE MUTANT MODEL JEFF, BINDS THE SMAD3/SMAD4 ANCHOR PROTEIN SPECTRIN BETA II**
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- P76 WHICH C57BL/6 SUBSTRAIN IS USED FOR THE BACKGROUND STRAIN OF YOUR MOUSE?**
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 RIKEN BioResource Center
- P77 LASER-ASSISTED IVF - AN ALTERNATIVE APPROACH FOR SUCCESSFUL CRYOPRESERVATION OF MUTANT MOUSE LINES ON C57BL/6 BACKGROUND**
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- P78 SCREENING FOR DYNEIN COMPLEX MUTATIONS IN AN ENU MOUSE LIBRARY**
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- P83 MOUSE EMBRYO/SPERM BANK AT THE CENTER FOR ANIMAL RESOURCES AND DEVELOPMENT (CARD), KUMAMOTO UNIVERSITY**
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- P86 A BREEDING SCHEME FOR THE FUNCTIONAL ANALYSIS OF THE MOUSE X CHROMOSOME**
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- P87 CHARACTERIZATION AND MAPPING OF BARTHEZ, A NEW MOUSE MUTATION WITH A COMPLEX PHENOTYPE THAT INCLUDES ALOPECIA**
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Laboratory for Immunogenetics, Research Center for Allergy and Immunology (RCAI), RIKEN Yokohama Institute
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- P90 EGTC, DATABASE FOR THE EXCHANGEABLE GENE TRAP CLONES; RESOURCE OF MOUSE AND ES CELL LINES FOR THE FUNCTIONAL ABALYSIS OF THE MOUSE GENOME**
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- P91 THE MASK MUTATION REVEALS THE FUNCTION OF TRANSMEMBRANE SERINE PROTEASE 6 (TMPRSS6), WHICH REGULATES HEPCIDIN AND CONTROLS ABSORPTION OF DIETARY IRON**
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- P92 A DOMINANT-NEGATIVE MUTATION IN GDF5 GENERATED BY ENU MUTAGENESIS IMPAIRS JOINT FORMATION AND CAUSES OSTEOARTHRITIS (OA): A NOVEL MOUSE MODEL FOR OA**
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- P93 A NOVEL *PTGIS* GENE MUTATION SPONTANEOUSLY FOUND IN AN ICR CLOSED COLONY MOUSE**
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- P94 G3 RECESSIVE SCREENS FOR LOCI CONTROLLING MOUSE DEVELOPMENT**
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- P95 A NOVEL SPONTANEOUS STERILE MOUSE THAT WAS FOUND IN ICR CLOSED COLONY IS CAUSED BY *SMC1B* GENE MUTATION.**
 Shuji Takabayashi¹, Yumika Yamauchi¹, Jiro Kimura¹, Motoko Noguchi² and Hideki Katoh¹
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- P96 CHARACTERIZATION OF A NEW DWARFING MUTATION, PEEWEE, IN THE MOUSE**
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- P97 SEARCHING FOR SOD1 ALS MODIFIERS IN THE MOUSE**
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- P98 IDENTIFYING GENES THAT MODIFY HUNTINGTON'S DISEASE IN THE MOUSE**
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- P99 NMR BASED METABOLIC DISEASE MODEL MOUSE SCREENING IN ENU MUTAGENESIS PROGRAM**
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- P100 DEVELOPMENT OF DATABASE FOR EXPERIMENTAL PARAMETERS OF REPRODUCTIVE TECHNOLOGIES**
 Hideki Kaneda¹, Hiroshi Masuya¹, Kenji Mochida², Atsuo Ogura², Toshihiko Shiroishi¹, Naomi Nakagata³, Ken-ichi Yamamura⁴, Yuichi Obata² and Shigeharu Wakana¹
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- P101 MUTANT MODELS FOR ESOPHAGEAL CARCINOGENESIS IN RIKEN MOUSE ENU-MUTAGENESIS PROJECT**
 Hideaki Toki¹, Yuriko Saiki³, Noriko Yamamoto³, Yoshiyuki Sakuraba², Hiromi Motegi¹, Maki Inoue¹, Hideki Kaneda¹, Osamu Minowa¹, Shigeharu Wakana¹, Yoichi Gondo², Toshihiko Shiroishi^{1,4}, Tetsuo Noda^{1,3}
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P102 ANALYZING MULTIPLE MOUSE LINES POSSESSING POINT MUTATION ON BETA-CATENIN (CTNNB1) GENE

Takuya Murata, Kumiko Karouji, Ai Nakahara, Taichi Yamaguchi, Emi Nakayama, Norie Uemura, Yoshiyuki Sakuraba, Ryutaro Fukumura, Hideki Kaneda, Shigeharu Wakana, Tetsuo Noda, Toshihiko Shiroishi, Yoichi Gondo

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P103 RIKEN BRC TO ESTABLISH MOUSE RESOURCES OF THE HIGHEST GLOBAL STANDARDS

Atsushi Yoshiki, Fumio Ike, Noriko Hiraiwa, Hatsumi Nakata, Kazuyuki Mekada, Yasuyuki Kitaura, Keiji Mochida, Masayo Kadota, Ayumi Murakami, Maiko Fujita, Megumi Ohkawa, Atsuo Ogura, Kuniya Abe, Kazuo Moriwaki, Yuichi Obata

RIKEN BRC

P104 EVALUATION OF ENU-INDUCED MUTATION SCREENING SYSTEM BY NON-FLUORESCENT TILLING METHOD

Ryutaro Fukumura, Yoshiyuki Sakuraba, Naomi Fujimoto, Takuya Murata, Shigeharu Wakana, Tetsuo Noda, Toshihiko Shiroishi, Yoichi Gondo

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P105 ESTABLISHMENT OF EMBRYONIC STEM CELL LINES DERIVED FROM MSM/MS STRAIN ORIGINATED FROM MUS MUSCULUS MOLOSSINUS.

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P106 ENU-BASED GENE-DRIVEN MUTAGENESIS IN THE MOUSE: MUTATIONS IN CODING/NONCODING AND TRANSCRIBED/NONTRANSCRIBED SEQUENCES

Yoshiyuki Sakuraba, Ryo Takahasi, Ryutaro Fukumura, Takuya Murata, Shigeru Makino, Naomi Fujimoto, Keiko Tsuchihashi, Hiroshi Masuya, Hideki Kaneda, Osamu Minowa, Shigeharu Wakana, Tetsuo Noda, Toshihiko Shiroishi, Yoichi Gondo

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P107 HAIR MORPHOLOGICAL MUTANTS GENERATED IN THE RIKEN MUTAGENESIS PROJECT

Miura I¹, Tanaka S², Yokoyama H¹, Shinogi A¹, Kobayashi K¹, Kaneda H¹, Toyoda T¹, Yoshiki A³, Yonekawa H⁴, Kikkawa Y⁵, Kunieda T⁶, Tamura M², Masuya H¹, Wakana S¹, Shiroishi T^{1,2}

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S1-3/P108 IDENTIFICATION OF A NOVEL LOSS-OF-FUNCTION MISSENSE MUTATION IN THE RANKL GENE USING ENU MUTAGENESIS

Eleni Douni, Eleni Makrinou and George Kollias

Biomedical Sciences Research Center Alexander Fleming

P109 IDENTIFICATION OF GENETIC MODIFIERS USING RANDOM MUTAGENESIS IN MODELED RHEUMATOID ARTHRITIS AND INFLAMMATORY BOWEL DISEASE

Eleni Douni, Eleni Makrinou and George Kollias

Biomedical Sciences Research Center Alexander Fleming

P110 ESTABLISHMENT OF ENU-INDUCED DOMINANTLY INHERITED RETINAL DEGENERATION IN MICE

Tomohiro Suzuki¹, Hajime Sato², Kyoko Ikeda¹, Hiroshi Masuya¹, Haruka Yokoyama¹, Hideki Kaneda¹, Ikuo Miura¹, Kimio Kobayashi¹, Yoichi Gondo¹, Tetsuo Noda¹, Koji Nishida², Shigeharu Wakana¹, Toshihiko Shiroishi¹

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P111 MICE OF ALL TYPES: INTEGRATING PHENOTYPIC DATA FOR SCREENS, MODELS, AND COMPLEX GENOTYPES

Janan Eppig, Cynthia Smith, Susan Bello, Howard Dene, Anna Anagnostopoulos, Monika Tomczuk, Hiroaki Onda, Jill Lewis, James Kadin

The Jackson Laboratory

P112 WHERE IN THE WORLD? USING IMSR TO FIND MOUSE RESOURCES

Janan Eppig, Beverly Richards-Smith, Peter Frost, Sharon Cousins, Mark Airey

The Jackson Laboratory

P113 EXAMINATION OF THE SPATIAL AND TEMPORAL EXPRESSION OF SICKLE TAIL (SKT) GENE IN NOTOCHORDAL CELLS.

Kei Semba^{1,2}, Takashi Andou^{1,2}, Kyushima Fumie^{1,2}, Hiroshi Mizuta², Masatake Araki³, Kuniya Abe⁴, Kimi Araki¹, and Ken-ichi Yamamura¹

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P114 GENE-DRIVEN SCREEN OF AN ENU ARCHIVE OF MOUSE DNA AND SPERM.

Zuzanna Tymowska-Lalanne, Mohamed Mohideen Quwailid, Anne Southwell, Debra Brooker, Sian Polley, Amanda Pickard, Martin Fray, Emma Coghill, Roger D. Cox, Paul Denny and Steve D.M. Brown.

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P115 AN E3 UBIQUITIN LIGASE, RNF41, IS ASSOCIATED WITH ANXIETY-LIKE BEHAVIOR, MAJOR DEPRESSION, AND BETA-CARBOLINE-INDUCED SEIZURE

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P116 PROTEOMIC ANALYSIS REVEALS MITOCHONDRIAL DYSFUNCTION IN NEURODEGENERATION-PRONE MICE LACKING MAHOGUNIN RING FINGER-1

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P117 EFFECT OF FLUOXETINE ON THE BEHAVIOR OF MICE WITH ANXIOUS DEPRESSION UNDER PREVENTIVE AND THERAPEUTICAL ADMINISTRATION

Irina L. Kovalenko, Damira F. Avgustinovich, Nataliya N. Kudryavtseva

P118 CHROMOSOMAL ASSIGNMENT OF QTLs INFLUENCING MOUSE ANXIETY-RELATED BEHAVIOR IN THE MODIFIED HOLE BOARD USING CONSOMICS

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P119 GENETIC DISSECTION OF MOUSE ANXIETY-RELATED BEHAVIOR

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P120 A GENETIC ANALYSIS OF ENU INDUCED MOUSE MUTANT THAT SHOWS ADHD LIKE BEHAVIOURAL PHENOTYPES

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P121 MUTATION OF THE NADPH OXIDASE COMPONENT, P22PHOX/NMF333, RESULTS IN BOTH IMMUNOLOGICAL AND VESTIBULAR DEFICITS

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P122 ANALYSES ON LEARNING AND MEMORY IN MICE CARRYING mtDNA WITH A LARGE-SCALE DELETION.

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P123 SYSTEMATIC ANALYSIS OF BEHAVIORAL TRAITS USING CONSUMIC MOUSE STRAINS ESTABLISHED FROM C57BL/6J AND WILD-DERIVED MSM

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P124 MODELING PARKINSON'S DISEASE IN MICE

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P125 mRNA-LIKE NON-CODING RNAs INVOLVED IN CELL FATE SPECIFICATION OF NEURONAL STEM CELLS

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P126 TRANSCRIPTOME PROFILES OF A SMALL NUMBER OF IDENTIFIED NEURONS BY COMBINING LASER CAPTURE MICRODISSECTION AND nanoCAGE-ILLUMINA- SOLEXA TECHNOLOGY.

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- P127 GENETIC DETERMINATION OF LEPTIN, ADIPONECTIN, INSULIN AND IGF-1 LEVELS IN THE BERLIN FAT MOUSE INBRED 860 LINE**
 Claudia Hantschel, Asja Wagener, Christina Neuschl, Armin O. Schmitt, Gudrun A. Brockmann
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- P128 CONSOMIC STRAINS AS A TOOL FOR DISSECTION OF REGULATORY NETWORKS**
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- P129 EFFECTS OF COMPLETE DEFICIENCY AND C-TERMINAL DELETION OF ADAMTS13 ON HEMOSTATIC FUNCTION IN MICE**
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- P130 GENOME-WIDE SEARCH FOR GENES WHICH MODULATE INFLAMMATORY ARTHRITIS CAUSED BY ALI18 MUTATION IN MICE**
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- P131 REVERSE GENETIC STUDIES ON PATHOGENESES OF MITOCHONDRIA-RELATED MALE INFERTILITY**
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- P132 A COMPREHENSIVE QTL ANALYSIS ON THE SERUM CHOLESTEROL LEVEL BEFORE AND AFTER A HIGH-CHOLESTEROL DIET IN SHRSP**
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- P133 FINE MAPPING OF ADIPOSITY QTL ON MOUSE PROXIMAL CHROMOSOME 2 BY SUBCONGENIC ANALYSIS**
 Md. Bazlur Rahman Mollah and Akira Ishikawa
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- P134 MEIOTIC ARREST IN MALES OF THE B6.CHRXMSM CONSOMIC STRAIN**
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- P135 GENETIC SUSCEPTIBILITY TO PORPHYROMONAS GINGIVALIS-INDUCED ALVEOLAR BONE LOSS IN MICE**
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P136 GENETIC DISSECTION OF QUANTITATIVE TRAIT LOCI AFFECTING MULTIPLE PHENOTYPES IN HETEROGENEOUS STOCK MICE

William Valdar, Jen Taylor, Binnaz Yalcin, Richard Mott, Jonathan Flint
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P137 EXPRESSION OF PLA2G2A PREVENTS TUMORIGENESIS IN AZOXYMETHANE-TREATED C57BL/6 MICE; GENE EXPRESSION STUDIES REVEAL PLA2G2A TARGET GENES IN MOUSE COLON

Remond J.A. Fijneman¹, Lindsey K. Bade², Johannes R. Peham¹, Mark A. van de Wiel¹, Victor W.M. van Hinsbergh¹, Gerrit A. Meijer¹, Michael G. O Sullivan³ and Robert T. Cormier²
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P138 IDENTIFICATION OF A NEONATAL GROWTH GENE CANDIDATE USING INTEGRATIVE GENOMICS

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P139 GENETIC DISSECTION OF AN ICR CLOSED COLONY OF THE MOUSE

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P140 HIGH-RESOLUTION FULL COLOR DIGITAL MOUSE ANATOMY BY THREE-DIMENSIONAL INTERNAL STRUCTURE MICROSCOPY

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P141 LYMPHOMA SUSCEPTIBILITY AFFECTS THE DEVELOPMENT OF CLONALLY GROWING PRE-LYMPHOMA CELLS

Ryo kominami, Takashi Yamamoto, Yoshinori Katsuragi, Satoshi Hirose
Center for Transdisciplinary Research

P142 FINE MAPPING OF AHL3 AFFECTING BOTH AGE-RELATED AND NOISE-INDUCED HEARING LOSS

Yuka Morita, Sachiko Hirokawa, Hitoshi Okumura, Yoshiaki Kikkawa, Hiromichi Yonekawa, Ryo Kominami
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P143 GENOMIC COPY NUMBER AND EXPRESSION VARIATION WITHIN THE C57BL/6J INBRED MOUSE STRAIN

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P144 FINE MAPPING OF LOCI THAT MODIFY SUSCEPTIBILITY TO N-METHYL-N-NITROSOUREA (MNU)-INDUCED T-CELL TUMORS

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- P145 ANALYSIS OF SKTS-FP1 LOCUS FOR SKIN TUMOR SUSCEPTIBILITY IN DOMINANT RESISTANT BACKCROSS**
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- P146 Idd1a, Idd1b, Idd1c and Idd1d EXERT THEIR FUNCTIONS FROM 2 DAYS OLD THROUGH 14 DAYS OLD IN THE NEONATAL INDUCTION OF DIABETES BY DIABETOGENIC CD4+BDC2.5 T CELL CLONES**
 Masakazu Hattori^{1,2,3}, Kimie Hattori², Shinsuke Noso^{2,4}, Tomomi Fujisawa^{2,4}, Chie Owa², Yoshito Furuichi¹, Katie Haskins⁵, Torben Lund^{2,6}
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- P147 SEARCH FOR GENES CONTRIBUTING TO COLON CANCER SUSCEPTIBILITY**
 Rosemary Elliott, Michael Rusiniak
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- P148 MORPHOMETRIC AND MOLECULAR ANALYSIS OF BXD RECOMBINANT INBRED STRAINS**
 Lisa S. Webb¹, Terri E. Kaminsky¹, Susan C. Kenney¹, Chiaki Nakata², Ian Malm³, Darla R. Miller⁴, Elissa J. Chesler⁴, Dabney K. Johnson⁴, Brynn H. Voy⁴
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- P149 HYPOTHYROIDISM-INDUCED DEAFNESS IS ASSOCIATED WITH POOR INNERVATION, REDUCED POTASSIUM CHANNEL GENE EXPRESSION, AND GENETIC MODIFIERS**
 Q Fang¹, M Mustapha-Chaib¹, SA Camper¹, DF Dolan², RK Duncan³, TW Gong², MI Lomax², Y Raphael², KR Johnson³
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- P150 NOVEL C-KIT MUTATION KASUMI (KA) CAUSING STEM-CELL DEFICIENCY AND MODIFYING TESTICULAR AND OVARIAN TERATOCARCINOGENESIS IN KA-CONGENIC MICE**
 Motoko Noguchi¹, Yukiko Fukui¹, Mami Tsume¹, Hatsumi Ikuma¹, Toshinobu Tokumoto¹, Shuji Takabayashi², Hideki Kato²
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- P151 SYSTEMS GENETICS APPROACH TO GENE-ENVIRONMENT INTERACTIONS**
 Rachel Lynch¹, Elissa Chesler², Darla Miller², Ginger Shaw², Suchita Das², Stephen Kania¹, James Bogard², Michael Langston², Arnold Saxton¹ and Brynn Voy²
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- P152 MULTI-DIMENSIONAL BEHAVIORAL, ALCOHOL AND DRUG ADDICTION PHENOTYPE ANALYSIS IN BXD RI MICE**
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- P153 EXPLORATION OF COMPLEX EPISTATIC GENETIC CONTROL OF NASAL BONE SHAPE IN THE MOUSE USING INTERSPECIFIC RECOMBINANT CONGENIC STRAINS**
Gaëtan Burgio^{1,2}, Michel Baylac³, Evelyne Heyer², Jean-Jacques Panthier¹ and Xavier Montagutelli¹
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- P154 INTERSPECIFIC RECOMBINANT CONGENIC STRAINS BETWEEN C57BL/6 AND MICE OF THE MUS SPRETUS SPECIES: A POWERFUL TOOL TO DISSECT GENETIC CONTROL OF COMPLEX TRAITS**
Charlène Blanchet¹, Gaëtan Burgio^{1,2}, Elisabeth Carniel³, Jean-Louis Guenet¹, Jean-Jacques Panthier¹, and Xavier Montagutelli¹
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- P155 PHENOTYPIC ANALYSIS OF A SET DOMAIN-TRUNCATED MUTATION OF MOUSE ASH1**
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- P156 REVERSIBLE CONTROL OF METASTASIS BY A PATHOGENIC mtDNA MUTATION**
Kaori Ishikawa¹, Keizo Takenaga², Miho Akimoto³, Nobuko Koshikawa², Aya Yamaguchi¹, Yoshio Honma³, Jun-Ichi Hayashi¹
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- P157 CANCER GENETIC STUDY FROM MOUSE TO HUMAN: CANCER RISK ASSOCIATED POLYMORPHISMS IN THE AURORA-A GENE**
Makoto T. Kimura^{1,2}, Takahiro Mori³, Allan Balmain⁴, Norma Nowak², Hiroki Nagase^{1,2}
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- P158 ANALYSIS OF CALCIUM OSCILLATION OF OOCYTES BY ARTIFICIAL MUTANTS OF SPERM-SPECIFIC PHOSPHOLIPASE C zeta IN THE MOUSE**
Akihiro Yoneda, Tomomasa Watanabe
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- P159 PROTEOMIC ANALYSIS OF EARLY DEVELOPMENT IN MICE**
Ryo Yamashita¹, Koichiro Miike², Masashi Aoki¹, Yumiko Takegawa¹, Ken-ichi Yamamura¹
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- P160 CHROMOSOME SEGREGATION IN MOUSE MEIOSIS**
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- P161 WHIRLIN COMPLEXES WITH p55 AT THE STEREOCILIA TIP DURING HAIR CELL DEVELOPMENT**
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- P162 NEURAL CREST DEFICIT OCCURS IN DOWN SYNDROME MICE AND IS ASSOCIATED WITH SONIC HEDGEHOG MITOTIC RESPONSE DEFICIT**
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- P163 MITOCHONDRIAL BOTTLENECK DUE TO THE REDUCTION OF MTDNA CONTENT IN THE FEMALE GERMLINE DOES NOT OCCUR IN MICE**
 Hiroshi Shitara¹, Liqin Cao^{1,2}, Takuro Horii³, Yasumitsu Nagao³, Hiroshi Imai³, Kuniya Abe⁴, Takahiko Hara¹, Jun-Ichi Hayashi², Hiromichi Yonekawa¹
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- P164 CHANGE OF PATHOGENIC MUTANT mtDNA WITH AGE IN MITOCHONDRIAL DISEASE MODEL MICE (MITO-MICE)**
 Akitsugu Sato¹, Kazuto Nakada¹, Hiromichi Yonekawa², Jun-Ichi Hayashi¹
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- P165 SCREENING OF METASTASIS RELATED NON-CODING RNA IN MOUSE CELL LINES**
 Emi Maeno¹, Takehiro Hashimoto², Carsten Daub², Yoshihide Hayashizaki^{1,2} and Jun Yasuda¹
¹FRS RNA, ²GSC
- P166 ABNORMAL ASSEMBLY OF KERATIN INTERMEDIATE FILAMENTS IN MOUSE MUTATIONS OF TYPE I INNER ROOT SHEATH KERATIN**
 Shigekazu Tanaka¹, Ikuo Miura², Atsushi Yoshiki³, Yoriko Kato¹, Haruka Yokoyama², Akiko Shinogi², Hiroshi Masuya³, Shigeharu Wakana², Masaru Tamura¹, Toshihiko Shiroishi^{1,2}
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- P167 WHOLE GENOME MAPPING OF HISTONE H3 LYS4 AND 27 TRIMETHYLATIONS REVEALS DISTINCT GENOMIC COMPARTMENTS IN HUMAN EMBRYONIC STEM CELLS**
 Xiao Dong Zhao¹, Xu Han², Joon Lin Chew³, Jun Liu¹, Kuo Ping Chiu², Andre Choo⁴, Yuriy L. Orlov², Wing-Kin Sung², Atif Shahab², Vladimir A. Kuznetsov², Guillaume Bourque², Steve Oh⁴, Yijun Ruan¹, Huck-Hui Ng³, Chia-Lin Wei¹
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- P168 MOUSE EMBRYOS LACKING SFRP1 AND SFRP2 EXHIBIT ABNORMALITIES OF MALE SEXUAL DEVELOPMENT**
 Nick Warr¹, Pam Siggers¹, Debora Bogani¹, Wataru Satoh², Akihiko Shimono² and Andy Greenfield¹
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- P169 X CHROMOSOME REACTIVATION INITIATES IN NASCENT PRIMORDIAL GERM CELLS IN MICE**
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- P170 DEVELOPMENTAL ABNORMALITIES OF SPERM IN PCD MUTANT MICE IS ACCOMPANIED BY INSUFFICIENT NUMBER OF SERTOLI CELLS IN THE TESTIS**
Nameun Kim, Rui Xiao, Chanjin Woo, Jinhoi Kim and Chankyu Park
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- P171 IMMUNOHISTOCHEMICAL AND FUNCTIONAL ANALYSIS OF PROTEIN 4.1 IN THE INNER EAR HAIR CELL**
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- P172 ANALYSIS OF DIFFERENTIALLY METHYLATED REGIONS AMONG VARIOUS TISSUES AND DURING SKIN CARCINOGENESIS IN C57BL/6J MICE**
Hiroki Nagase^{1,2}, Srymoyee Ghosh², Kyoko Fujiwara², Fei Song², William A. Held², Eiko Kitamura¹, Jun Igarashi¹, and Makoto Kimura^{1,2}
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- P173 FUNCTIONAL ANALYSIS OF microRNAs IN HUMAN LUNG CANCER CELL LINE**
Yukari Takahashi¹, Takehiro Hashimoto², Shiro Fukuda², Emi Maeno¹, Carsten Daub², Yoshihide Hayashizaki^{1,2} and Jun Yasuda¹
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- P174 USE OF THE SMART-AMPLIFICATION PROCESS FOR RAPID DETECTION OF EGFR MUTATIONS IN LUNG CANCER**
A. Lezhava, K. Hoshi, H. Takakura, Y. Mitani, K. Tatsumi, N. Momiyama, Y. Ichikawa, S. Togo, T. Miyagi, Y. Kawai, T. Kikuchi, P. Cidziel, N. Ogawa, T. Arakawa, H. Shimada, Y. Hayashizaki
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- P175 A NODAL-INDEPENDENT LEFT-RIGHT ASYMMETRIC GENE MAY PROVIDE A DIRECT READ OUT OF NODAL FLOW**
Jonathan Stevens and Dominic Norris
MRC Mammalian Genetics Unit
- P176 MAPPING OF ALLELIC IMBALLANCES IN MURINE OSTEOSARCOMA USING WHOLE GENOME MD SNP ARRAYS REVEALES A NEW POTENTIAL TUMOR-SUPPRESSOR-LOCUS ON MMU 13**
Christine Ruemenapp¹, Jan Smida^{2,4}, Michaela Nathrath^{3,4}, Leticia Quintanilla-Fend², Mike J. Atkinson^{1,4} and Michael Rosemann^{1,4}
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- P177 HUMAN FCR-LIKE B CELL-SPECIFIC RECEPTORS: LIGAND SEARCHING**
 Konstantin Baranov, Ludmila Mechetina, Olga Volkova, Nikolai Chikaev, Alexander Taranin, Alexander Najakshin
¹Konstantin Baranov, ²Ludmila Mechetina, ³Olga Volkova, ⁴Nikolai Chikaev, ⁵Alexander Taranin, ⁶Alexander Najakshin
- P178 A MICROARRAY BASED APPROACH FOR THE IDENTIFICATION OF GENES INVOLVED IN RESISTANCE/SUSCEPTIBILITY TO H. PARASUIS INFECTION**
 Jamie Wilkinson
 University of Cambridge
- P179 MICROBIAL DIVERSITY IN INTESTINAL TRACTS OF TWO SPECIES OF RODENTS IN MONTANE AREAS IN TAIWAN**
 Hsiao-Pei Lu
 Institute of Zoology, National Taiwan University, Taipei, Taiwan 106, ROC.
- P180 ESTABLISHMENT OF AN EOSINOPHIL-LESS MOUSE LINE BY TRECK METHOD**
 Kunie Matsuoka¹, Asuka Motoda¹, Hiroshi Shitara¹, Kenji Kohno² and Hiromichi Yonekawa¹
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- P181 CONDITIONAL GENE TARGETING OF CYP51 (LANOSTEROL 14a-DEMETHYLASE)**
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- S1-5/P182 QUANTITATIVE TRAITS FOR THE TAIL SUSPENSION TEST: AUTOMATION, OPTIMISATION AND BXD RI MAPPING**
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- S2-4/P183 MAPPING AND CHARACTERIZING ENU-INDUCED MUTANT MOUSE MODELS OF THROMBOCYTOPENIA**
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- P184 HYPOTHYROIDISM-INDUCED DEAFNESS IS ASSOCIATED WITH POOR INNERVATION, REDUCED POTASSIUM CHANNEL GENE EXPRESSION, AND GENETIC MODIFIERS**
 Qing Fang¹, Mirna Mustapha-Chaib¹, Sally A. Camper¹, David F. Dolan², R.Keith Duncan², Tzy-Wen Gong², Margaret I. Lomax², Yoash Raphael², Kenneth R. Johnson³
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S1-4/P185 PHENOTYPIC EFFECTS OF THE “MINI-MUSCLE” ALLELE IN A LARGE HR x C57BL/6J MOUSE BACKCROSS

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S1-1/P186 UNFOLDING POPULATION STRUCTURE AND ANALYSING GENETIC VARIABILITY OF ZALAWADI, GOHILWADI AND SURTI GOAT BREEDS OF GUJARAT(INDIA) USING MICROSATELLITES

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S2-6/P187 PSTPIP2 IS MUTATED IN THE FIREWALKER MOUSE TO CAUSE AN AUTOIMMUNE DISEASE

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P188 GENETIC DISSECTION OF MOUSE ANXIETY-RELATED BEHAVIOR

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P189 GENETIC POLYMORPHISM STUDY OF IGF-I GENE IN DAIRY BUFFALOES OF GUJARAT (INDIA).

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S2-3/P190 AN N-ETHYL-N-NITROSOUREA MUTAGENESIS SCREEN IN MOUSE IDENTIFIES A CANDIDATE REGION FOR CARDIOMYOPATHY IN THE PROXIMAL END OF CHROMOSOME 1

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S2-1/P191 GEMIN2 PLAYS AN IMPORTANT ROLE IN STABILIZING THE SURVIVAL OF MOTOR NEURON COMPLEX

Chihiro Ogawa^{1,2}, Kengo Usui^{1,3}, Makoto Aoki^{1,3}, Fuyu Ito^{1,3}, Masayoshi Itoh¹, Chikatoshi Kai¹, Mutsumi Kanamori-Katayama¹, Yoshihide Hayashizaki^{1,2} and Harukazu Suzuki¹

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S2-5/P192 HAIR-LOSS MUTATION (DEP) CAUSED BY A MUTATION IN PALMITOYL TRANSFERASE ZDHHC21

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S2-2/P193 TRANSCRIPTION REGULATORY CASCADES IN RETINOIC ACID-INDUCED GROWTH ARREST OF HEPG2 CELLS.

Misato Nakanishi, Yasuhiro Tomaru, Hisashi Miura, Mizue Fujiwara, Masanori Suzuki, Yoshihide Hayashizaki

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S1-6/P194 IDENTIFICATION OF CONSERVED DNA REGIONS AND A SET OF TRANSCRIPTION FACTORS INVOLVED IN COMBINATORIAL REGULATION OF SEVERAL HUMAN LIVER-ENRICHED TRANSCRIPTION FACTOR GENES

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S1-2/P195 GENOME-WIDE ANALYSIS ON ABNORMAL H3K9 ACETYLTATION IN ADULT CLONED MICE

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