POSTERS

Posters will be mounted in the Magpie, Wasatch & Superior Lobby and will be available for viewing from 12:00 PM, Monday, October 2, 2017. The posters will remain on display for the duration of the meeting and can be viewed until the specified times:

Monday, October 2, 2017	**8:30 PM**
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Wednesday, October 4, 2017	**1:10 PM**

During the poster sessions, Monday, October 2, 12:05 – 1:30PM (even numbers) & Monday, October 2, 6:30 – 8:30PM (odd numbers), the authors of the posters will be present and available for more in-depth discussion.

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Raymond R. Asuncion, Jennifer R Goldsmith, Anna Pham, Vida Asghari, Deborah Siler, Melanie Domeyer, J. Colin Cox, Xin Y Rairdan, Rhonda Wiler

Genentech, Inc., South San Francisco, CA, United States

P-2 CRISPR/Cas9 mutant mouse model creation through in vitro fertilization and zygote electroporation

Shinya Ayabe[1], Tomohiro Tamari[2], Kenichi Nakashima[1], Eikichi Yanagisawa[2], Mizuho Iwama[1], Koji Nakade[1], Takehide Murata[1], Atsushi Yoshiki[1], Yuichi Obata[1]

[1]RIKEN BioResource Center, Tsukuba, Ibaraki, Japan; [2]Charles River Laboratories Japan, Inc., Ishioka, Ibaraki, Japan

P-3 Rat Resource and Research Center

Elizabeth C Bryda, Hongsheng Men, Yuksel Agca, Aaron C Ericsson, James M Amos-Landgraf, Craig L Franklin

College of Veterinary Medicine, University of Missouri, Columbia, Missouri, United States

P-4 Generation of interferon α/β receptor knockout sheep using CRISPR/Cas9 and SCNT techniques

Zhiqiang Fan, Misha Regouski, Min Yang, Kirsten Gash, Qinggang Meng, Christopher J Davies, Young-Min Lee, Irina A Polejaeva

Utah State University, Logan, Utah, United States

P-5 RHEB1 insufficiency and stress-induced seizures in aged male mice

Qi Tian[1], P Gromov[2], Y Wang[1], J Clement[3], M Riemann[4], F Weih[4], X Xin Sun[1], M Shui Dai[1], Lev Fedorov[1]
[1]Oregon Health & Science University, Portland, Oregon, United States; [2]Danish Cancer Society Research Center, Copenhagen, Denmark; [3]University Hospital, Jena, Germany; [4]Fritz Lipmann Institute, Jena, Germany

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Teppi Goto[1], Hideki Masaki[2], Hiromasa Hara[1], Makoto Sanbo[1], Hideyuki Sato[2], Tomoyuki Yamaguchi[2], Shinichi Hochi[3], Hiromitsu Nakauchi[4], Masumi Hirabayashi[1]
[1]National Institute for Physiological Sciences, Okazaki, Aichi, Japan; [2]The University of Tokyo, Tokyo, Japan; [3]Shinshu University, Ueda, Nagano, Japan; [4]Stanford University, Stanford, California, United States

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Steffen Guettler[1], Alexander Klimke[1], Petric Kuballa[1], Gesa Glöcke[1], Jeanette Keßler[1], Heidirun Kern[1], Kenneth Albrecht[2], Adriano Flora[1], Eleanor Kolossovski[2], Jochen Welcker[1]
[1]Taconic Biosciences GmbH, Cologne, Germany; [2]Taconic Biosciences Inc., Hudson, NY, United States

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Shuqin Zhang, Xiaohao Yao, Xianling Zhao, Shumei Zhao, Xin Su, Caiying Guo
HHMI, Janelia Research Campus, Ashburn, VA, United States

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James Kehler, Soojung Shin, Mark Kennedy, Joanna Asprer, David Kuninger
Thermo Fisher Scientific, Frederick, MD, United States

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Jason Klotz, Michael Grzybowski, Oleg Palygin, Aron M Geurts, Melinda Dwinell
Medical College of Wisconsin, Milwaukee, WI, United States

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Martha V Koerner, Jim Selfridge, Adrian P Bird
University of Edinburgh, Edinburgh, United Kingdom

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Ondrej Mihola[1], Vladimir Landa[2], Petr Flachs[1], Michal Pravenec[2], Zdenek Trachtulec[1]
[1]Institute of Molecular Genetics AS CR, Prague, Czech Republic; [2] Institute of Physiology of the ASCR, Prague, Czech Republic

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University of Missouri, Columbia, Missouri, United States

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Laramie Pence, Jessica Martin, Bhanu Telugu
University of Maryland, College Park, MD, United States

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Penn State University Hershey College of Medicine, Hershey, Pennsylvania, United States

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[1]Mirimus Inc., Brooklyn, NY, United States; [2]Charles River Laboratories, Wilmington, MA, United States; [3]Memorial Sloan Kettering Cancer Center, New York, NY, United States; [4]Weill Cornell Medical College, New York, NY, United States; [5]Research Institute of Molecular Pathology, Viena, Austria

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Nick Robl, Rong Li, Zhongde Wang
Utah State University/Auratus Bio LLC., Logan, UT, United States

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[1]University of Glasgow, Glasgow, Scotland, United Kingdom; [2]CRUK Beatson Institute, Glasgow, Scotland, United Kingdom; [3]Academic Medical Center, Amsterdam, Netherlands

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[1]Medical College of Wisconsin, Milwaukee, WI, United States; [2]Central Institute for Experimental Animals, Kawasaki, Kanagawa, Japan; 3National Institute for Physiological Sciences, Okazaki, Aichi, Japan

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Teruhisa Tsuzuki[1], Mizuki Ohno[1], Noriko Takano[1], Ken-ichi Taguchi[2], Yusaku Nakabeppu[3], Yoshimichi Nakatsu[1]

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Dario Riccardo Valenzano

Max Planck Institute for Biology of Ageing, Cologne, Germany

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Iuri Viotti Périssé*, Zhiqiang Fan*, Zhongde Wang, Kenneth L White, Irina A Polejaeva

Utah State University, Logan, UT, United States * these authors contributed equally to this project.

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Sophie Wood, Fanny Decarpentrie

Francis Crick Institute, London, UK

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Foshan University, Foshan, Guangdong, China # Co-First authors

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Fabien Delerue, Lars M Ittner

University of New South Wales, SYDNEY, New South Wales, Australia

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Hiroshi Arakawa

Institue of Molecular Oncology Foundation, Milan, Italy

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Roger Askew
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Cicera R Lazzarotto[1], Carlos Pinzon[2], Hanah Georges[2], Marcelo Bertolini[3], Charles R Long[2], Luciana R Bertolini[1]
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Katharina M Boroviak, Beiyuan Fu, Graham Duddy, Brendan Doe, Edward Ryder, Fengtang Yang, Allan Bradley
Wellcome Genome Campus, Cambridge, Cambridgeshire, United Kingdom

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Nay Chi Khin, Jenna Lowe, Lora Starrs,Gaetan Burgio
The Australian National University, Canberra, ACT, Australia

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Romina Pagotto[1], Micaela Sureda[1,2], Belen Harreguy[1], Geraldine Schlapp[2], Martina Crispo[2], Mariela Bollati-Fogolín
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Daniel J Davis, Hongsheng Men, Anagha S Bock, Mary L Shaw, Kari L Chesney, Miriam A Hankins, Elizabeth C Bryda
University of Missouri, Columbia, Missouri, United States

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Rachel B. Delston[1], Edward J Weinstein[1], Xiaoxia Cui[2], Yi-Hsien Chen[2], Lucy Liaw[3], Laura A Arthur[2], Sergej Djuranovic[2]
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[1]Charles River Leiden, Leiden, Netherlands; [2]Charles River Wilmington, Wilmington, MA, United States

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Ferenc Erdélyi, Z Máté, É Kriván, K Kovács, N Hájos, G Szabó
Institute of Experimental Medicine, Budapest, Hungary

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Yasuyuki Fusamae, Tomohiko Okuda
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Dawn E. Watkins-Chow[1], Lisa J. Garrett[2]
Genetic Disease Research Branch and [2]Embryonic Stem Cell and Transgenic Mouse Core, National Human GenomeResearch Institute, NIH Bethesda, Maryland , United States

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Teresa M Gunn[1], Paul Taylor[2], Jesse Gavin[2]
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Ashley M Jacobi, Christopher Vakulskas, Michael A Collingwood, Garrett R Rettig, Mark A Behlke
Integrated DNA Technologies, Inc., Coralville, IA, United States

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Yingming Wang, Qi Tian, Lev Fedorov
Oregon Health & Science University, Portland, Oregon, USA

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Michelle N Knowlton, Cynthia L Smith
The Jackson Laboratory, Bar Harbor, ME, United States

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Kathy J Krentz
University of Wisconsin, Madison, WI, United States

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Duke University, Durham, North Carolina, United States

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I-Shing Yu[2], Tzu-Shan Huang[1], Tzu-Wen Wang[1], Chien-Hui Wu[1], Hsiao-Ying Yu[1], Shen-Wen Wang[1], Cheng-Ju Wang[1], Bo-Yueh Wu[1], Chun-Yu Chen[1], Shu-Wha Lin[1,3,4]
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Nils O Lindstrom, Andrew P McMahon
University of Southern California, Los Angeles, California, United States

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Evguenia Kouranova, Zhenyi Liu, and Kevin Forbes
Horizon Discovery, St. Louis, MO, United States

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Marie Teixeira[1], Valérie Risson[1,3], Farida Henry[1], Agnès Couzon[1,2], Denise Aubert[1,2], Frédéric Flamant[2], Suzy Markossian[1,2]
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Javier Martin Gonzalez[1], Xiaogang Guo[2], Niels Alvaro Menezes[2], Luca Mariani[2], Elisabetta Ferretti[2]
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Regeneron Pharmaceuticals Inc.

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Haitao Wang, Xiaojuan Liu; Xiaoxiang Hu, Ning Li
State Key Laboratory for Agrobiotechnology, College of Biological Sciences, China Agricultural University, Beijing, China

P-56 Preliminary Characterization of p53 Knockout Golden Syrian Hamster Created by CRISPR/Cas9 System

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P-57 Overall evaluation of gene modified mouse production by embryo-based genome editing

Kanako Kato[1], Saori Mizuno-Iijima[1], Yoshihisa Ikeda[2], Yoko Daitoku[1], Yoshikazu Hasegawa[1], Shinya Ayabe[3], Yoko Tanimoto[1], Ken-ichi Yagami[1], Satoru Takahashi[1], Fumihiro Sugiyama[1]
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CNB-CSIC and CIBERER-ISCIII, Madrid, Spain

P-59 Use of vitrified/warmed zygotes by spatula-MVD to generate CRISPR/Cas9 conditional knockout mouse

Ana P Mulet, María N Meikle, Geraldine Schlapp, Martina Crispo
Institut Pasteur de Montevideo, Montevideo, Montevideo, Uruguay

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Masato Ohtsuka[1], Hiromi Miura[1], Channabasavaiah B Gurumurthy[2], Masahiro Sato[3]
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Jaime Muñoz[1], Pierfrancesco Vargiu[1], Lucía Pérez de Ayala[1], Martina Reiss[2], Estefanía Ayala[1], Harald Kranz[2,] Sagrario Ortega[1]
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Pelczar Pawel[1], Wildner[2], Oller[1], Zeilhofer[2]
[1]University of Basel, Basel, Switzerland; [2]University of Zurich, ETH Zurich, Zurich, Switzerland

P-63 V2G locus editing for production of GLP1Ser8-M3R transgenic pig islets

Andrea Perota[1], Irina Lagutina[1], Roberto Duchi[1], Nizar Mourad[2], Elisa Zanfrini[1], Constanza Lopez[1], Silvia Colleoni[1], Giovanna Lazzari[1,3], Pierre Gianello[2] and Cesare Galli[1,3]
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Anna Pham, Deborah Siler, Maria Martinez, Emily Hunley, J. Colin Cox
Genentech, Inc., South San Francisco, CA, United States

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Sandra Turon[1], Anna Arbo´s[1], Joan Bertolin[2], Fa`tima Bosch[2], Anna Pujol[1]
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Masahiro Sato[1], Shingo Nakamura[2], Channabasavaiah B Gurumurthy[3], Satoshi Watanabe[4], Masato Ohtsuka[5]
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P-67 CRISPR/Cas9 Genome Editing Pipeline for Mice and Rats

Thom L Saunders, Wanda E Filipiak, Galina B Gavrilina, Anna K La Forest, Corey E Ziebell, Michael G Zeidler, Elizabeth D Hughes
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William Shawlot, Jinxiang Ren
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P-69 Precision Medicine in Action: Using CRISPR/Cas9 to generate a human disease SNP rat model by electroporation of a single stranded DNA oligo

Leslie A Stewart[1], Brandon C Willis[1], Diana L Young[1], Nichole L Anchell[1], Kayla M Jager[1], Phuong T Dao[1], Kristin N Grimsrud[1], Joshua A Wood[1], Kent C Lloyd[1,2], Hermann Zbinden-Foncea[4], Keith Baar[3]
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P-70 Multi-gene Combined Intervention of Metastasis in Nasopharyngeal Carcinoma mediated by Gene Targeting with High Efficiency

Dongsheng Tang[1]#, Wenzhu Huang[2]#,Tingting Luo, Hong Jiang, Cuilan Feng, Aifen Yan
1Medical School, Foshan University, Foshan, Guangdong, China [2]Foshan Fifth People's Hospital, Foshan University, Foshan, Guangdong, China # Co-First authors

P-71 Generation of TP53-modified pigs by GEEP method: CRISPR/Cas9-mediated gene modification introduced into porcine zygotes by electroporation

Fuminori Tanihara[1], Do Thi Kim Lanh[1], Thanh-Van Nguyen[1], Toshiki Kunihara[1], Katsutoshi Nishio[1], Tatsuya Takemoto[2], Takeshige Otoi[1]
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P-72 Extending the range of alleles obtained using CRISPR/Cas9 technology in mouse embryos: Generation and validation of mutations

Gemma Codner, Francesca Pike, Joffrey Mianné, Adam Caulder, Ruairidh King, Rachel Fell, Alasdair Allan, Jorik Loeffler, Skevoulla Christou, Christopher McCabe, MLC Gene Delivery team, Sara Wells, Lydia Teboul
MRC Harwell Institute, Didcot, Oxon, UK

P-73 IN-DEPTH ANALYSIS OF CRISPR OFF-TARGETS IN GENETICALLY ENGINEERED RODENTS

Keith R Anderson[1], Maximillian Haussler[2], Colin Watanabe[1], Steffen Durinck[1], Charles Yu[1], Sobha R Thamminana[1], Lucinda Tam[1], Tuija Alcantar[1], Jinjie Li[1], Natasha O'Neil[1], Xin Rairdan[1], Merone Roose-Girma[1]
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P-74 Targeting human SerpinA1 by Cas9 therapeutic gene editing reverts liver damage phenotypes in a humanized α1-antitrypsin disease mouse model

Mikael Bjursell[1], Michelle J Porritt[1], Elke Ericson[1], Amir Taheri-Ghahfarokhi[1], Maryam Clausen[1], Lisa Magnusson[1], Therese Admyre[1], Roberto Nitsch[1], Lorenz Mayr[1], Leif Aasehaug[2], Frank Seeliger[2], Marcello Maresca[1], Mohammad Bohlooly-Y[1], John Wiseman[1]
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P-75 Efficient generation of genetically edited rodent models using CRISPR-Cas9 by high throughput electroporation of zygotes

Brandon C. Willis[1], K. C. Kent Lloyd[1,2], Joshua A. Wood[1]
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P-76 Single strand DNA-mediated knock-in for large genomic regions in rodents
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P-77 Efficient generation of gene knockout rats using CRISPR/Cas9
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P-78 Whole genome analysis of a germline transmitted calf by next generation sequencing
Soo-Young Yum[1], Sinki Park[2], SongJeon Lee[3], Hee-Soo Kim[3], Hyeong-Jong Kim[3], Yun-Kyeong Jin[1], Ji-Hyun Lee[1], Goo Jang[1]
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P-79 A new, easy and reliable cryopreservation protocol for zebrafish sperm
Sandra Martins, Ana Catarina Certal
Champalimaud Foundation, Lisbon, Portugal

P-80 Enhanced CRISPR-mediated gene knockin by delaying zygote cell cycle progression with low temperature
Tzu-Yu Chou, Mei-Ling Chang, Pi-Fang Tsai and Ching-Yen Tsai
Transgenic Core Facility, Inst. of Molecular Biology, Academia Sinica, Taiwan

P-81 Efficient CRISPR reagent generation and genome engineering
Xiaoxia Cui, Monica Sentmanat, Yi-Hsien Chen, Mike White, Colin Florian
Washington University in St. Louis, St. Louis, MO, United States

P-82 Sperm Cryopreservation of Genetically Engineered Mouse Models: WhyQuality Control by In Vitro Fertilization is Important?
Amarnath Dasari, Andrea Foley, Susan Vanvliet, Sarah Erickson, Rosemary Leonard
Taconic Bio Sciences, Inc., Hudson, NY, United States

P-83 Genetics meets 3 R´s: Genetic background of transgenic mouse strains
Peter Dobrowolski, Melina Fischer, Olaf Gelsen
GVG Genetic Monitoring GmbH, Leipzig, Germany

P-84 A comparison of pseudopregnant F1c
Timothy Corbin, Michael H Durnin, Rodney McCay, Jessica McCann, Heather Marshall
Stowers Institute for Medical Research, Kansas City, Missouri, United States

P-85 Optimized co-transfection of murine ES cells
Victor Badillo Lisakowski, Annette C. Fu¨chtbauer, Ernst-Martin Füchtbauer
Department of Molecular Biology and Genetics, Aarhus University, Aarhus, Denmark

P-86 Genome editing at TIGM: Production of various mutant alleles via CRISPR/Cas9
Andrei Golovko, Huiping Guo, Johnathan Ballard, Amy Gonzales, John Adams, Benhamin Morpurgo
Texas A&M Institute for Genomic Medicine, College Station, TEXAS, United States

P-87 Electroporation of Rat Embryonic Fibroblasts to Assess Function of CRISPR-Cas9 Plasmids
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P-88 Validating custom and imported rodent lines during colony creation with PCR, qPCR and ddPCR
Emily Hunley, Deborah Siler, Carol Cain-Hom, Anna Pham, Maria Martinez, Sanjeet Aujla, Rhonda Wiler, J Colin Cox
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P-89 Precision genome editing in the chicken using the CRISPR/Cas9 system
Alewo Idoko Akoh, Helen Sang, Mike McGrew
University of Edinburgh, Easter Bush, Midlothian, Scotland, United Kingdom

P-90 Generation of Novel Neurofibromatosis Type I Rodent Models
Laura J Lambert, PhD, Anil K Challa, PhD, Ashley NTurner, MS, Daniel Kennedy, Bruce R Korf, MD, PhD, Robert A Kesterson, PhD
University of Alabama at Birmingham, Birmingham, AL, United States

P-91 Harnessing the one-step generation of genetically engineered mice with CRISPR/Cas9 in zygotes
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P-92 Streamlining the generation of knockout and knockin mice using the CRISPR-Cas system
Suman Komketi, Michela Ascolani, Alessandra Pisaniello, Antonella Vecchio, Marco Riposati, T. Neil Dear
EMBL Rome, Rome, Italy

P-93 Improved Oviduct Transfer Surgery for Genetically Modified Rat Production
Laura J. Lambert[1], Larry W. Johnson[1], Daniel Kennedy[1], Joan Cadillac[2], Robert A. Kesterson[1],
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P-94 Employing single-stranded DNA oligonucleotides for the high throughput production of conditional knockout alleles in mice

Angelina Gaspero[1], Ying Wang[1], Isabel Lorenzo[1], Lan Liao[1], John Seavitt[1], Mary Dickenson[1], Arthur Beaudet[1], Francisco DeMayo[2], Jianming Xu[1], Jason D Heaney[1], Denise Lanza[1],
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P-95 Development of KCNQ1 knockout golden Syrian hamsters as a model of Jervell and Lange-Nielsen syndrome

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P-96 A sensitive method for detecting multiple mutations generated by CRISPR/Cas9 genome editingediting

Don Liu, Gregory Martin, Uma Saha, Cheryl DiCarlo
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P-97 Development of a mouse model suitable for in vivo genome editing efficiency studies

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P-98 Cas9 RNA-guided nuclease – efficient model generation by microinjection and electroporation

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P-99 Opportunity Knocks

Nicola Osborne
Responsible Research in Practice, West Sussex, Horsham, UK

P-100 Effects of voltage strength on development and quality of electroporated porcine embryos

Katsutoshi Nishio, Fuminori Tanihara, Thanh-Van Nguyen, Toshiki Kunihara, Takeshige Otoi
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P-101 Analysis of mouse blastocysts to assess in vivo activity of sgRNAs

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P-102 Management of mouse sperm freezing and quality control

Nicole Kuepper, Julia Mock, Sonja Kropp, Klaus Pfeffer
Heinrich-Heine-University Duesseldorf, Duesseldorf, Germany

P-103 Generating Murine Models in NZBWF1/J Background for Systemic Lupus Erythematosus

Tuija M Alcantar, Jinjie Li, Natasha O'Neil, Mandy Thayer, Lisa Lima, Linda Ta, Xin Y Rairdan,
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P-104 CRISPR and the 3Rs - reducing animal numbers in high-throughput mouseproduction

Edward Ryder, Brendan Doe, Joanna Bottomley, Katharina Boroviak, Graham Duddy, Diane Gleeson, Hannah Wardle-Jones, Ramiro Ramirez-Solis, James Bussell, Sanger Mouse Genetics Project
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P-105 Non-Surgical Embryo Transfer in Rats; A 3Rs Refinement for Assisted Reproductive Technology

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P-106 Optimization of CRISPR reagent delivery using the zygote electroporation of nucleases (ZEN) method

Wenhua Li, Timothy Dahlem, Susan Tamowski
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P-107 Assessing the Effects of Filtering CRISPR Reagents through a Centrifuge Tube Filter Prior to Microinjection

Michael Woods, Brendan Doe, Caroline Sinclair, Ellen Brown, Katharina Boroviak, Graham Duddy, Ed Ryder
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P-108 CRISPR/Cas9 Gene Editing in Mice
Zhenjuan Wang, Ying Chen, Laurie R Chen, Sarah J Johnson, Lin Wu
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P-109 Improve Knock in Efficiency through CRISPR/CAS9 Guide RNA Rescue
Dongshan Yang, Jun Song, Jie Xu, Jinxue Ruan, Jifeng Zhang, Yuqing Eugene Chen
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P-110 Recombineering Bacterial Artificial Chromosome Transgenes
Michael Zeidler, Thomas L Saunders
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P-111 Towards an optimized workflow for CRISPR/Cas mediated mouse transgenesis
Simon Tröder, Sonja Assenmacher, Kerstin Weisheit, Patrick Jankowski, Branko Zevnik
CECAD, University of Cologne, Cologne, Germany

P-112 Production of immunodeficient rabbits by multiplex embryo transfer and multiplex gene targeting
Jun Song[1], Dongshan Yang[1], Jinxue Ruan, Jifeng Zhang, Yuqing Eugene Chen, Jie Xu
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P-114 Refining Chimera Production via Microinjection
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P-115 Development of Cre driver rat strains for creating conditional and physiologically relevant models of human diseases
James Jinping Luo, Jinling Li, Ruby Yanru Chen-Tsai
Applied StemCell, Inc. Milpitas, CA, USA

P-116 How To Generate Mouse Models: Right Tool For The Right Job
Roger Caothien, Charles Yu, Lucinda Tam, Sobha Thamminana, Anu Sebin, Ana Carolina Magalhaes Mota, Soren Warming, Merone Roose-Girma
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