

55th Annual Drosophila Research Conference



<u>Program Addendum</u>

Town & Country Resort & Conference Center San Diego, CA March 26-30, 2014

Sponsored by The Genetics Society of America 9650 Rockville Pike Bethesda, MD 20814-3998 301/634-7300 301/634-7079 fax <u>Society@genetics-gsa.org</u> http://www.drosophila-conf.org

PROGRAM CHANGES/ADDITIONS

Friday, March 28

11:15 am	Chromatin & Epigenetics session #62 has been cancelled and is replaced by #793A Targeting Heterochromatin Formation in Drosophila. Sarah C R Elgin	
11:45 am	Chromatin & Epigenetics session #64 has been cancelled and is replaced by #823A The SUUR Chromatin Protein Promotes Underreplication Through Inhibition of Replication Fork Progressio Jared T. Nordman	on
7:00-7:45 pm	The Fly Room Movie Special Event	California Room
<u>Saturday, March 29</u>		
8:30 am	Abstract #105 will be presented by Steve Small in the Regulation of Gene Expression Session.	
11:00 am	Abstract #127 will be presented by Doris Bachtrog in the Regulation of Gene Expression Session	

POSTER CANCELLATIONS/CHANGES

Poster #272B (Wang) cancelled Poster #273C (Gorski) cancelled Poster #556A (Agrawal) Presenter changed to Anjalika Chongtham Poster #625A (Yadav) cancelled **Poster #751A (Gutzwiller)** cancelled **Poster # 793A (Elgin)** Changed to platform session

LATE ABSTRACTS

(see complete text of abstracts at www.drosophila-conf.org)

Poster #	Presenting Author	Abstract Title and Co-Authors		
Cell Biology and Cytoskeleton				
892A		The role of Rap1 in regulation of actin dynamics during <i>Drosophila</i> border cell migration. Anna C. Jang, Zih-Min		
	Anna Jang	Liao, Yi-Shan Huang, Yi-Chi Hsieh, Tzu-han Huang.Institute of Biotechnology, National Cheng Kung University,		
		Tainan, Taiwan.		
893B	Christopher	Functional and expression analysis of a novel putative basement membrane degrader in <i>Drosophila melanogaster</i> .		
	Fields	Christopher J. Fields, Ajay Srivastava.Biology, Western Kentucky University, Bowling Green, KY.		
894C	James	First X-ray crystal structure of a Drosophila muscle myosin. James Caldwell, Girish Melkani, Tom Huxford,		
	Caldwell	Sanford Bernstein.Biology Dept, San Diego State University, San Diego, CA, 92182.		
Cell Bi	ology and Sig	nal Transduction		
895A	Derek Dean	<i>Wavy</i> , a gene affecting wing morphology, encodes an inositol 1,4,5-triphosphate kinase. Derek M. Dean ¹ , Eric		
		Spana ² , Luana Maroja ¹ , Brent Bomkamp ¹ , David L. Deitcher ³ .1) Biology, Williams College, Williamstown, MA; 2)		
		Biology, Duke University, Durham, NC; 3) Neurobiology and Behavior, Cornell University, Ithaca, NY.		
90 CD	Janine	Lolal is maternally required for proper Dpp responsiveness. Janine Quijano, Jacob Seemann, Stuart		
090D	Quijano	Newfeld.School of Life Sciences, Arizona State Univ, Tempe, AZ.		
897C	Hui-Ying Lim	ROS regulate cardiac function in Drosophila via a novel paracrine mechanism. Hui-Ying Lim ^{1,2} .1) Free Radical		
		Biology and Aging, Oklahoma Medical Research Foundation, Oklahoma City, OK; 2) Development, Aging and		
		Regeneration Program, Sanford-Burnham Medical Research Institute, La Jolla, CA.		
898A	Liping Zhang	Mucin-type O-glycosylation is required for polarized secretion in the Drosophila digestive system. Liping Zhang,		

Cell Division and Growth Control				
899B John Poulton	Centrosomes are key components of mitotic spindle assembly and orientation in the symmetric divisions of Drosophila epithelial cells. John Poulton , John Cuningham, Mark Peifer.Biology, Univ North Carolina, Chapel Hill, NC.			
Physiology, Organism	nal Growth, and Aging			
900C Aditya Sen	The role of Clu in germ cell mitochondrial function. Aditya Sen , Rachel Cox.Biochemistry and Mol. Biology, Uniformed Services Univ., Bethesda, MD.			
901A Gayle Overend	Transcriptomic insights into extreme pH. Gayle Overend , Louise Henderson, Pawel Herzyk, Shireen A. Davies, Julian AT Dow.Molecular, Cell & Systems Biology, University of Glasgow, Glasgow, Scotland, United Kingdom.			
902B Maria Stefana	Diet-induced changes in <i>Drosophila</i> lifespan and metabolism. M. Irina Stefana , Timothy J. Ragan, Paul Driscoll, Alex P. Gould.Physiology and Metabolism, MRC National Institute for Medical Research, London, United Kingdom.			
903C Wen Bin Chng	Dietary regulation of amylase and maltase expression in the adult <i>Drosophila</i> midgut. Wen-Bin Alfred Chng .Global Health Institute, School of Life sciences, Station 19, EPFL, 1015 Lausanne, Switzerland.			
904A Sahar Emran	Target of Rapamycin Signalling Pathway as a Potential Mediator of the Lifespan-Extending Effects of Dietary Restriction by Essential Amino Acid Alteration. Sahar Emran , Mingyao Yang, Xiaoli He, Matthew Piper.University College London, London, United Kingdom.			
905B Kai Huang	The putative role of DCISD3 in <i>Drosophila</i> . KT Huang ^{1,2} , JC Li ² , HD Wang ¹ , CH Chen ² .1) National Tsing Hua University, Hsinchu, Taiwan, Taiwan; 2) National Health Research Institutes, Miaoli, Taiwan, Taiwan.			
Gametogenesis and (Drganogenesis			
906C Ming-Der Lin	Molecular dissection of Vasa function in germ plasm localization and assembly. Szu-Chieh Wang ^{1,2} , Hao-Jen Hsu ² , Gee-Way Lin ³ , Ting-Fang Wang ¹ , Chun-Che Chang ³ , Ming-Der Lin ^{1,2} .1) Dept. of Mol. Biol. & Human Genetics, Tzu-Chi University, Hualien, Taiwan; 2) Dept. of Life Science, Tzu-Chi University, Hualien, Taiwan; 3) Department of Entomolog. National Taiwan University, Taipei, Taiwan.			
Stem Cells	5) Department of Entoniolog, Parlonal Parlound entorsky, Parlon, Parlound			
907A Yalan Xing	pineapple eye, a putative Drosophila E3 ligase, functions as an essential factor in germline and intestinal stem cell self-renewal. Yalan Xing , Hannele Ruohola-Baker.Department of Biochemistry, University of Washington, Seattle, WA.			
908B Kyu-Sun Lee	Roles of PINK1, mTORC2, and mitochondria in preserving brain tumor-forming stem cells in a noncanonical Notch signaling pathway. Kyu-Sun Lee ^{1,2} , Zhihao Wu ¹ , Yan Song ³ , Siddhartha S. Mitra ⁴ , Abdullah H. Feroze ^{4,5} , Samuel H. Cheshier ^{4,5} , Bingwei Lu ¹ .1) Department of Patholgy, Stanford University, Stanford, CA 94305 USA; 2) BioNanotechnology Research Center, Korea Research Institute of Bioscience and Biotechnology, Daejeon, Korea; 3) Peking-Tsinghua Center for Life Sciences, Peking University, Beijing, China; 4) Institute of Stem Cell Biology and Regenerative Medicine, Stanford, CA 94305 USA; 5) Department of Neurosurgery, Stanford University School of Medicine, Stanford, CA 94305 USA.			
909C Chenhui Wang	EGFR and Notch signaling respectively regulate proliferative activity and multiple cell lineage differentiation of <i>Drosophila</i> gastric stem cells. Chenhui Wang ^{1,2} , Xingting Guo ^{1,2} , Rongwen Xi ¹ .1) National Institute of Biological Sciences, No. 7 Science Park Road, Zhongguancun Life Science Park, Beijing 102206, China; 2) College of Life Sciences, Beijing Normal University, Beijing ,100875, China.			
Immunity and Patho	genesis			
910A Lei Zhou	P53-Mediated Rapid Induction of Apoptosis Conveys Resistance to Viral Infection. Bo Liu ¹ , Susanta Behura ² , Rollie Clem ³ , Anette Schneemann ⁴ , James Becnel ⁵ , David Severson ² , Lei Zhou ¹ .1) Dept Molec Genetics/Microbiol, Univ Florida Col Medicine, Gainesville, FL; 2) Eck Institute for Global Health, Department of Biological Sciences, University of Notre Dame, Notre Dame, IN; 3) Division of Biology, Kansas State University, Manhattan, KS; 4) Department of Molecular Biology, The Scripps Research Institute, La Jolla, CA; 5) Center for Medical, Agricultural and Veterinary Entomology, USDA/ARS, Gainesville, FL.			
Neural Development				
911B Dominique Siegenthaler	Molecular mechanisms underlying Neuroglian (L1 CAM) mediated axonal interactions essential for mushroom body development. Dominique Siegenthaler , Eva-Maria Enneking, Eliza Moreno, Jan Pielage.Friedrich Miescher Institute, Basel, Switzerland.			
912C Cecilia Lu	The Conserved MicroRNA miR-8 Regulates Synapse Morphogenesis. Cecilia S. Lu ^{1,2} , Bo Zhai ² , Alex Mauss ^{3,4} , Matthias Landgraf ³ , Stephen Gygi ² , David Van Vactor ^{1,2} .1) Okinawa Institute of Science and Technology, Onnason, Okinawa, Japan; 2) Department of Cell Biology, Harvard Medical School, Boston, MA, USA; 3) Department of Zoology, University of Cambridge, Cambridge, UK; 4) Max Planck Institute of Neurobiology, Martinstried, Germany.			
913A Husam Babikir	Aplip1/JIP1 is a transport adaptor for axonal transport of active zone proteins. Husam Babikir ^{1,2} , Matthias Siebert ^{1,2} , Matthias Böhme ^{1,2} , Nicole Holton ³ , Stephan Sigrist ^{1,2} .1) Institute of Biology & Genetics -FU Berlin, Berlin, Germany; 2) NeuroCure Cluster of Excellence, Charité Berlin, Berlin, Germany; 3) Institut für Chemie und Biochemie, Abteilung Strukturbiochemie, Freie Universität Berlin,.			

Neur	ophysiology and	Behavior
914B	Matthew Meiselman	Ecdysis Triggering Hormone: Metamorphosis of a Developmental Signal into a Regulator of Reproduction in the Fruit Fly Drosophila melanogaster. Matthew R. Meiselman ¹ , Hongjiu Dai ¹ , Sang Soo Lee ¹ , Crisalejandra Rivera-Perez ² , Fernando Noriega ² , Thilini Wijesekera ³ , Brigitte Dauwalder ³ , Adams Michael E. ¹ .1) Department of Cell, Molecular, and Developmental Biology, University of California, Riverside, Riverside, CA 92521; 2) Department of Biological Sciences, Florida International University, Miami, FL 33199; 3) Department of Biology and Biochemistry, University of Houston, 369 SR2, Houston, TX 77204.
915C	Mohammed Khan	Functional Consequences of Amyloid-like Oligomerization of Drosophila Orb2. Mohammed R. Khan .Stowers Institute For Medical Research, Kansas City, KS.
916A	Sang Soo Lee	Ecdysis Triggering Hormone Mediates Courtship Memory via Regulation of Juvenile Hormone Levels. Sang Soo Lee ¹ , Natalie Karapetians ² , Crisalejandra Rivera-Perez ³ , Fernando Noriega ³ , Thilini Wijesekera ⁴ , Brigitte Dauwalder ⁴ , Michael Adams ^{1,2} .1) Neuroscience Graduate Program; 2) Department of Entomology and Cell Biology & Neuroscience, University of California, Riverside, Riverside, CA 92521; 3) Department of Biological Sciences, Florida International University, Miami, FL 33199; 4) Department of Biology and Biochemistry, University of Houston, 369 SR2, Houston, TX 77204.
Drose	phila Models of	Human Diseases
917B	Santiago Pineda	The BK Channel Slowpoke and Cardiac Function. Santiago Pineda ¹ , Karen Ocorr ¹ , Rolf Bodmer ¹ , Diane Fatkin ² .1) Biomedical Sciences, Sanford Burnham Medical Research Institute, La Jolla, CA; 2) Victor Chang Cardiac Research Institute,405 Liverpool Street, Darlinghurst NSW 2010.
918C	Mark Kankel	Identification of Modifiers of Amyotrophic Lateral Sclerosis in <i>Drosophila</i> . Mark W. Kankel ¹ , Anindya Sen ¹ , Douglas Dimlich ² , Marianthi Kiparaki ² , Marina Theodorou ² , Nicole Sakellari ² , Basel Tarab ² , Spyros Artavanis-Tsakonas ^{1,2} .1) Molecular Discovery, BiogenIdec, Cambridge, MA; 2) Department of Cell Biology, Harvard Medical School, Boston, MA.
919A	Anindya Sen	Identification of modifiers of Parkinson's disease in <i>Drosophila</i> . Anindya K. Sen ¹ , Mark Kankel ¹ , Doug Dimlich ² , Harsha Kuthethur Gururaj ¹ , Basel Tarab ² , Christina Wong ² , Nicole Sakellari ² , Samia Aly ² , Chapman Beekman ² , Spyros Artavanis-Tsakonas ^{1,2} .1) Molecular Discovery, Biogen-Idec, Cambridge, MA 02142; 2) Department of Cell Biology, 240 Longwood Avenue, LHRRB 410, Boston, MA 02115.
920B	David Hess- Homeier	Astrocyte-specific regulation of human MeCP2 expression in <i>Drosophila</i> . David Hess-Homeier ¹ , Chia-Yu Fan ³ , Tarun Gupta ² , Ann-Shyn Chiang ^{3,4} , Sarah Certel ^{1,2} .1) Department of Biological Sciences, University of Montana, Missoula, MT; 2) Neuroscience Graduate Program, University of Montana, Missoula, MT; 3) Brain Research Center, National Tsing Hua University, Taiwan; 4) Institute of Biotechnology, National Tsing Hua University, Taiwan.
921C	Patricia Jumbo- Lucioni	Altered Glycosylated Synaptomatrix Composition and Synaptic Architecture in a Drosophila Classic Galactosemia Disease Model. Patricia P. Jumbo-Lucioni , Kendal S. Broadie.Department of Biological Sciences, Vanderbilt University, Nashville, TN.
922A	Dominika Korzekwa	Systems biology and metabolomics approaches: towards the core metabolic map of <i>Drosophila melanogaster</i> . Dominika Korzekwa ¹ , Dan Erben ¹ , Shireen A. Davies ¹ , David G. Watson ² , Julian A. T. Dow ¹ .1) University of Glasgow, Glasgow, United Kingdom; 2) University of Strathclyde, Glasgow, United Kingdom.
Evolu	ition and Quanti	tative Genetics
923B	Carlos Diaz- Castillo	Heterochromatin Dynamics in Early Embryogenesis Might Contribute to a Sexual Dimorphism for Gene Expression Noise. Carlos Diaz-Castillo .Independent Researcher, Irvine, CA.
924C	Richard Meisel	Evolution and Function of Positionally Relocated Genes in Drosophila Genomes. Richard P. Meisel .Biology and Biochemistry, University of Houston, TX.
925A	Shuoyang Wen	Courtship songs in the <i>Drosophila montium</i> species-subgroup. Chuancheng Chen ¹ , Xiaoshen Lu ¹ , Masayoshi Watada ² , Michael G. Ritchie ³ , Shuoyang Wen ¹ .1) Department of Entomology, South China Agricultural Univ. 483 Wushan Road, Guangzhou, Guangdong, China; 2) Graduate School of Science and Engineering, Ehime University, 3 Bunkyo-Cho, Matsuyama, Ehime 790-8577, Japan; 3) School of Biology, University of St Andrews, St Andrews, Fife KY16 9TH, UK.
926B	Yerbol Kurmangaliyev	Allele-specific splicing in panel of genotype-specific transcriptomes of Drosophila melanogaster. Yerbol Kurmangaliyev ^{1,2} , Kjong Lehmann ³ , Daniel Campo ¹ , Peter Chang ¹ , Alexander Favorov ⁴ , John Tower ¹ , Mikhail Gelfand ² , Sergey Nuzhdin ¹ .1) Molecular and Computational Biology, University of Southern California, Los Angeles, CA; 2) Institute for Information Transmission Problems, Moscow, Russia; 3) Memorial Sloan-Kettering Cancer Center, New York, NY; 4) Johns Hopkins University School of Medicine, Baltimore, MD.
927C	Allison McClish	Cytoplasmic incompatibility and infection frequency of <i>Wolbachia</i> in a Michigan population of <i>D. melanogaster</i> . Allison McClish , Roger Albertson. Albion College Biology Department, Albion, MI.
928A	Alison Egge	Genotype-by-environment interactions of demographic values in fluctuating thermal environments using <i>Drosophila melanogaster</i> . Alison Egge, Olivia Eller, Theodore Morgan.Kansas State University, Manhattan, KS.
929B	Timothy Karr	Protein evolution through the lens of the sperm proteome. Timothy Karr .Biodesign Inst, PO Box 875001, Arizona State Univ, Tempe, AZ.
930C	Minako Izutsu	Comprehensive Analysis of Genes Involved in the Dark Adaptation of a <i>Drosophila</i> Line. Minako Izutsu ¹ , Osamu Nishimura ² , Kiyokazu Agata ¹ , Naoyuki Fuse ^{1,2} .1) Laboratory for Molecular Developmental Biology, Graduate School of Science, Kyoto University; 2) RIKEN Center for Developmental Biology, Japan.

946C	Moises Paramo	Dispersal at the Chromosomal Level of the NK gene family in Drosophila willistoni. Moises S. Paramo , Carolus Chan, Jose Ranz University of California, Irvine, Irvine, CA			
Patte	rn Formation				
I atte	Iennifer	A Structure-Function analysis of <i>Drosonhila</i> Tolloid Jennifer Winstanley Clair Baldock Hilary Ashe Faculty			
931A	Winstanley	of Life Sciences, University of Manchester, Manchester, United Kingdom.			
932B	Emilia Esposito	Dynamic Regulation of Eve Stripe 2 Expression in Living Embryos. Emilia Esposito ^{1,3} , Jacques Bothma ^{1,3} , Gavin Shlissel ^{1,3} , Hernan Garcia ² , Thomas Gregor ² , Michael Levine ¹ .1) Dept. of MCB, UC Berkeley, Berkeley, CA; 2) Dept of Physics, Princeton University, Princeton, NY; 3) These authors contributed equally to the work.			
933C	Sudha Kumar	Understanding the mechanism of pigment rim formation at the periphery of the fly eye. Sudha R. Kumar , Andrew Tomlinson.Genetics & Development, Columbia University, New York, NY.			
934A	Adam Majot	$E(spl)^{D}$ -mediated repression of R8 cell-fate occurs independently of N^{spl} . Adam Majot, Ashok Bidwai.Biology, West Virginia University, Morgantown, WV.			
Regu	lation of Gene Ex	xpression			
935B	Jasmine Kharazmi	Investigation of dmyc Promoter and Regulatory Regions. Jasmine Kharazmi ¹ , Cameron Moshfegh ² .1) Department of Neuroanatomy, UZH, Zurich, Switzerland; 2) Department of Health Sciences, ETHZ, Zurich, Switzerland.			
936C	Hsiao-Yun Liu	Zelda functions in larval disc and brain development. Hsiao-Yun Liu , Kevin O'Brien, Christine Rushlow.Biology, New York University, New York, NY.			
937A	Lisa Deignan	Dynamic regulation of the Dpp signalling-responsive transcriptional network in the <i>Drosophila</i> embryo. Lisa Deignan , Abbie Saunders, Catherine Sutcliffe, Tim Burgis, Leo Zeef, Ian Donaldson, Hilary L. Ashe.Faculty of Life Sciences, University of Manchester, Manchester, United Kingdom.			
947A	Laura Youngblood	<i>Drosophila melanogaster</i> and the role of genetic background in eggshell phenotype. Laura Youngblood, Lisa Goering.St. Edward's University, Austin, TX.			
Chro	matin and Epige	netics			
938B	Jack Bateman	Analysis of transvection using fluorescent reporters. Jack R. Bateman , Amanda J. Blick, Ilana Mayer-Hirshfeld, Beatriz Malibiran, Justine E. Johnson.Biology Department, Bowdoin College, Brunswick, ME.			
939C	Qingjiao Li	Analysis of the D. melanogaster genome organization. Qingjiao Li , Harianto Tjong, Xianghong Jasmine Zhou, Frank Alber.CMB, University of Southern California , Los Angeles, CA.			
RNA	Biology				
940A	Ya-Chen Lin	Role of MicroRNA Turnover in the Maternal to Zygotic Transition in <i>Drosophila</i> . YC Lin ^{1,2} , JC Li ² , HD Wang ¹ , CH Chen ² .1) National Tsing Hua University, Hsinchu, Taiwan; 2) National Health Research Institutes, Miaoli, Taiwan.			
941B	Coline Goriaux	A new swing for flamenco, transcriptionnal analysis of a master piRNA cluster. Coline Goriaux , Sophie Desset, Yoan Renaud, Chantal Vaury, Emilie Brasset.GReD, Clermont Ferrand, France.			
942C	Sachi Inagaki	Lobe-less RNA is essential for mushroom body morphogenesis in <i>Drosophila</i> . Sachi Inagaki ¹ , Masanao Sato ^{2,3} , Tomoyuki Miyashita ⁴ , Natsuki Nakamura ⁵ , Satoru Kobayashi ^{2,3} , Minoru Saitoe ⁴ , Yuji Kageyama ^{1,5} .1) Research Center for Environmental GenomicsKobe University, Kobe, Japan; 2) Okazaki Institute for Integrative Bioscience, Japan; 3) National Institute for Basic Biology, National Institutes of Natural Sciences, Japan; 4) Tokyo Metropolitan Institute of Medical Science, Japan; 5) Department of Biology, Graduate School of Sciences, Kobe University, Japan.			
943A	Jenna Schwarz	Characterisation of a broadly expressed long non-coding RNA, lnc703, in <i>Drosophila melanogaster</i> . Jenna Schwarz, Andrew Bassett, Robert Young, Chris Ponting, Jilong Liu.MRC Functional Genomics Unit, University of Oxford, Oxford, United Kingdom.			
Tech	Techniques and Resources				
944B	Andrew Bassett	Mutagenesis and homologous recombination in <i>Drosophila</i> cell lines using CRISPR/Cas9. Andrew Roger Bassett.MRC Functional Genomics Unit, University of Oxford, Oxford, Oxfordshire, United Kingdom.			
945C	Susan Celniker	De novo Assemblies of Drosophila melanogaster using third-generation PacBio sequencing. Jane Landolin ² , Kristi Kim ² , Sergey Koren ³ , Chen-Shan Jason Chin ² , Charles Yu ¹ , Bill Fisher ¹ , Roger Hoskins ¹ , Casey Bergman ⁴ , Adam M. Phillippy ³ , Susan E. Celniker ¹ .1) Berkeley Dros Genome Ctr, Lawrence Berkeley National Lab, Berkeley, CA; 2) Pacific Biosciences, 1380 Willow Road, Menlo Park, CA 94025; 3) 3125 Biomolecular Sciences Bldg #296, University of Maryland, College Park, MD 20742; 4) Michael Smith Building, Oxford Road, University of Manchester, M13 9PT.			