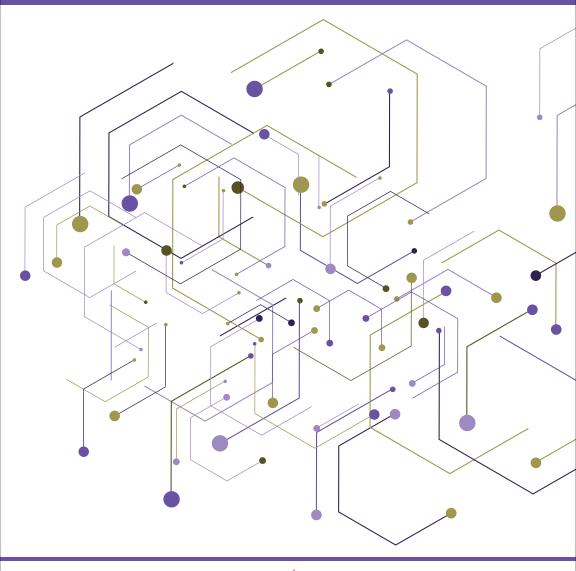


PROGRAM BOOK









Download the

59th Annual Drosophila Research Conference

MOBILE APP NOW!

conferences.genetics-gsa.org/drosophila/2018/meeting-app







See 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.



MEETING ORGANIZERS

Tin Tin Su, Chair Pamela Geyer
Gio Bosco Noah Whiteman

DROSOPHILA BOARD OF DIRECTORS

Officers

Maria	Office / Decise	V
Name	Office / Region	Year
Deborah Andrew	President	2021
Bruce Edgar	President-Elect	2022
Laura Johnston	Past-President (2017)	2020
David Bilder	Past-President (2016)	2019
Ken Irvine	Past-President (2015)	2018
Michelle Arbeitman	Treasurer	2020

Regional Representatives

Esther Verheyen	Canada	2018
Scott Barolo	Great Lakes	2018
Celeste Berg	Mountain	2020
Andrea Page-McCaw	Southeast	2018
Amy Kiger	California	2019
Michael Galko	Heartland	2018
Kim McCall	New England	2020
Chris Rushlow	Mid-Atlantic	2019
Bing Zhang	Midwest	2018

Primarily Undergraduate Institution Representative

Amanda Norvell	2020
----------------	------

International Representatives

Coral Warr	Australia/Oceania	2020
Li-Mei Pai	Asia	2019
Sarah Bray	Europe	2019
Juan Riesgo-Escovar	Latin America	2019

Thank you!

The Organizers would like to recognize and thank the following people who devoted countless hours to abstract review and programming:

Cell Biology & Signal Transduction

Laurel Raftery

Andrea Page-McCaw

Vicki Losick

Cell Death & Immunity

Andreas Bergmann

Eli Arama

Alla Amcheslavsky

Cell Division & Growth Control

Laura Johnston

Laura Buttitta

Yiqin Ma

Chromatin & Epigenetics

Kami Ahmad

Yukiko Yamashita

J. O. Nelson

Evolution & Populations Genetics

Nadia Singh

Dmitri Petrov

Sharon Greenblum

Evolution of Development/RNA Biology

Benjamin Prud'homme

Virginie Courtier-Orgogozo

Jack Green

Gametogenesis

Helen Salz

Prashanth Rangan

Nicole Crown

Intracellular Dynamics Cytoskeleton,

Organelles, and Trafficking

Brooke McCartney

Avi Rodal

Steve DelSignore

Models of Human Disease:

Neurodegeneration & Neurological

Disorders

Bing Wei Lu

Kanae Ando

Vafa Bayat

Models of Human Disease:

Developmental & Physiological

Disorders

Jun-Yuan Ji

Xu Hong

Zhe Chen

Neural Circuits & Behavior

Marcus Stensmyr

Marco Gallio

Emanuela Zaharieva

Neural Development & Physiology

Mani Ramaswami

Quentin Gaudry

Sonia Sen

Patterning, Morphogenesis &

Organogenesis

Helen McNeill

Sarah Hughes

Oguz Kanca

Physiology, Metabolism & Aging

Stephen Helfand

Daniela Drummond-Barbosa

Jackson R. Taylor

Regulation of Gene Expression

Victoria Meller

Judy Kasis

Sandip De

RNA Biology

Bob Duronio

Greg Matera

Jim Kemp

Stem Cells

Hannele Ruohola-Baker

Haifan Lin

Techniques & Technology

Amanda Simcox

Gwyneth Card

Ryan Williamson

TABLE OF CONTENTS

GSA's Mission and Board of Directors	1
Schedule of Events	2
Exhibits	10
General Information	14
Plenary and Platform Sessions	19
Posters	44
Presenting Author index	78
Workshops	85
FlyBase Genetic Index	94
Keyword Index	101
Meeting, Exhibits, and Poster Maps	Inside Back Cover

GENETICS SOCIETY OF AMERICA

The Genetics Society of America (GSA) is an international scientific society representing more than 5,000 researchers and educators around the world.

We work to advance the field and foster the research community. The Society has a deep commitment to supporting the next generation of geneticists, providing professional development opportunities, training, travel grants, and more. We work with our members and partner organizations to communicate the value of genetics and model organism research to the public and policymakers; we advocate for our scientific community and the vital work they do.

As well as encouraging communication among researchers through conferences, GSA publishes two peer-edited scholarly journals:



GENETICS GENETICS has been innovating since 1916, publishing high quality original research across the breadth of the field.



G3: Genes | *Genomes* | *Genetics* is an open access journal that publishes high quality, Genes | Genomes | Genetics useful results regardless of perceived impact.

2018 GSA BOARD OF DIRECTORS

Officers

Jeannie T. Lee, President	
Terry R. Magnuson, Vice-President	Lynn Cooley, <i>Immediate Past President</i>
David Greenstein, Secretary	Piali Sengupta, <i>Treasurer</i>

Directors

Jef D. Boeke	Matthew Hahn
Kirsten Bomblies	Hopi E. Hoekstra
JoAnne Engebrecht	Erika L. Matunis
Cassandra Extavour	Eric U. Selker
Mary Lou Guerinot	Huntington F. Willard

Journal Editors

,	
Brenda J. Andrews,	Mark Johnston,
Editor-in-Chief, G3:	Editor-in-Chief, GENETICS
Genes Genomes Genetics	

Trainee Advisory Representative

Alessandro A. Bailetti

WEDNESDAY, April 11		
9:00 a.m 4:00 p.m.	New Faculty Forum Pre-registration Required	4th Floor, Rm 411
11:50 a.m 1:15 p.m.	New Faculty Forum/Board Lunch Open to Forum participants and FlyBoard	5th Floor, Salons I-K
12:00 noon - 11:30 p.m.	Family/Nursing Mothers Room	3rd Floor, Rm 362
1:00 p.m 3:00 p.m.	New Faculty Forum Breakout Pre-registration Required	4th Floor, Rm 407
2:30 p.m 4:30 p.m.	GENETICS Peer Review Workshop (Part I) Ticket Required	4th Floor, Rm 405
2:30 p.m 4:30 p.m.	Ecdysone Workshop	5th Floor, Salon D
3:00 p.m 6:00 p.m.	Drosophila Board of Directors Meeting Open to Board Members and Invited Guests Only	3rd Floor, Independence Ballroom
3:00 p.m 6:30 p.m.	Speaker Ready Room	5th Floor, Rm 502
3:30 p.m 9:00 p.m.	Registration and Book/T-Shirt Pick Up Open	4th Floor, Franklin Hall
5:00 p.m 12:00 a.m.	Posters Open 24 Hours beginning at 5:00 pm	4th Floor, Franklin Hall
7:00 p.m 8:05 p.m.	Opening Session Chairs: Tin Tin Su; and Gio Bosco	5th Floor, Salons E-H
8:05 p.m 9:05 p.m.	Keynote Address - Terry Orr-Weaver	5th Floor, Salons E-H
9:15 p.m 11:00 p.m.	Mixer/Reception Sponsored by the GSA journals, GENETICS and G3: Genes Genomes Genetics	4th Floor, Franklin Hall

THURSDAY, April 12	THURSDAY, April 12		
12:01 a.m 12:00 a.m.	Posters Open 24 Hours	4th Floor, Franklin Hall	
7:00 a.m 3:00 p.m.	Speaker Ready Room Presenters must upload and test talk 24 hours in advance	5th Floor, Rm 502	
7:15 a.m 8:30 a.m.	Publishing Q & A Pre-registration encouraged	5th Floor, Salons I-K	
7:15 a.m 8:30 a.m.	Continental Breakfast	5th Floor, Grand Ballroom Foyer	
8:00 a.m 5:00 p.m.	Registration and Book/T-Shirt Pick Up Open	4th Floor, Franklin Hall Foyer	
8:30 a.m 12:00 noon	Plenary Session 1 Chairs: Pam Geyer; Noah Whiteman; Gio Bosco	5th Floor, Salons E-H	
8:30 a.m.	Image Award Presentation Nasser Rusan		
8:35 a.m.	Mechanisms and roles of tumor- suppressive cell competition Tatsushi Igaki		
9:05 a.m.	Lost in translation - RNA processing defects impact synaptic metabolism in neurodegeneration Daniela Zarnescu		
9:35 a.m.	Mechanisms of Odor-coding and its Manipulation to alter Behavior Anandasankar Ray		
10:05 a.m.	Break		
10:30 a.m.	Reproductive Capacity Evolves in Response to Ecology through Common Developmental Mechanisms Cassandra Extavour		
11:00 a.m.	The genomic basis of adaptation in Drosophila: sex, poison and other dramas Amir Yassin		
11:30 a.m.	The guts of Wnt signal transduction Yashi Ahmed		
12:00 noon - 12:15 p.m.	Year in Review	5th Floor, Salons E-H	
12:00 noon - 1:45 p.m.	Community, Connections and Lunch Ticket required	5th Floor, Salons I-K	
12:00 noon - 2:00 p.m.	G3 Editors' Meeting	5th Floor, Salon L	

THURSDAY, April 12 co	ntinued	
1:00 p.m 5:00 p.m.	FlyBase Demo Room Open for Tutorials & Discussions	4th Floor, Rm 407-409
1:45 p.m 2:00 p.m.	Special Reading from First in Fly Stephanie Mohr	5th Floor, Salons I-K
2:00 p.m 4:00 p.m.	Exhibits Open & Poster Presentations 2:00 pm EVEN Posters 3:00 pm ODD posters	4th Floor, Franklin Hall
4:30 p.m 6:30 p.m.	CONCURRENT PLATFORM SESSIONS I	
	Cell Death & Immunity Chairs: Andreas Bergmann; Eli Arama; and Alla Amcheslavsky	5th Floor, Salon E
	Neural Circuits and Behavior Chairs: Marcus Stensmyr; Marco Gallio; and Emanuela Zaharieva	5th Floor, Salons F-G
	RNA Biology (4 talks) Evolution of Development, other species (4 talks) Chairs: Bob Duronio; Greg Matera; Benjamin Prud'homme; and Virginie Courtier-Orgogozo	5th Floor, Salon H
7:45 p.m 9:45 p.m.	CONCURRENT WORKSHOPS I	
	Publishing Genetics Classroom Activities in CourseSource	4th Floor, Rm 405
	Building Community Through Mentoring	5th Floor, Salon I
	Autophagy in Development and Disease	5th Floor, Salon L
	The Hows and Whys of Drugging Flies - A Chemical Screening Workshop	5th Floor, Salon K
	Biogenic Amines and Behaviors	5th Floor, Salon H
	Overcoming barriers to effectively utilize Drosophila melanogaster in scholarship, research, and teaching at PUIs.	5th Floor, Salon J
	Reverse-engineering methods and quantitative analysis of signaling and organogenesis	4th Floor, Rm 411-412
	Drosophila Microbiome	5th Floor, Salon E
	Advocating Drosophila through using it as an Efficient Teaching Tool	5th Floor, Salons F-G
8:00 p.m 11:00 p.m.	Exhibits Open & Poster Viewing	4th Floor, Franklin Hall

FRIDAY, April 13		
12:01 a.m 12:00 a.m.	Posters Open 24/7	4th Floor, Franklin Hall
7:00 a.m 3:00 p.m.	Speaker Ready Room	5th Floor, Rm 502
7:00 a.m 11:00 p.m.	Family/Nursing Mothers Room	3rd Floor, Rm 362
8:15 a.m 5:00 p.m.	Registration and Book/T-Shirt Pick Up Open	4th Floor, Franklin Hall Foyer
8:30 a.m 10:15 a.m.	CONCURRENT PLATFORM SESSIONS II	
	Stem Cells Chairs: Hannele Ruohola-Baker; and Haifan Lin	5th Floor, Salon E
	Evolution and Population Genetics Chairs: Nadia Singh; Dmitri Petrov; and Sharon Greenblum	5th Floor, Salons F-G
	Models of Human Disease: Neurodegeneration and Neurological Disorders Chairs: Bing Wei Lu; Kanae Ando; and Vafa Bayat	5th Floor, Salon H
10:15 a.m 10:45 a.m.	Coffee Break	5th Floor, Grand Ballroom Foyer
10:45 a.m 12:30 p.m.	CONCURRENT PLATFORM SESSIONS III	
	Cell Division and Growth Control I Chairs: Laura Johnston; Laura Buttitta; and Yiqin Ma	5th Floor, Salon E
	Patterning, Morphogenesis and Organogenesis I Chairs: Helen McNeill; Sarah Hughes; and Oguz Kanca	5th Floor, Salons F-G
	Gametogenesis Chairs: Helen Salz; Prashanth Rangan; and Nicole Crown	5th Floor, Salon H
1:00 p.m 6:00 p.m.	FlyBase Demo Room Open for Tutorials & Discussion	4th Floor, Rm 407-409
	Presentations: 3:45-4:00 pm: FlyBase 2018: New look, new features 4:05-4:20 pm: Finding your way around large- scale datasets and single-cell technologies	

FRIDAY, April 13 conti	nued	
1:45 p.m 3:45 p.m.	CONCURRENT WORKSHOPS II AND PLATFORM SESSION	
	Drosophotoxicology: Examples and opportunities for fly research in toxicological sciences	5th Floor, Salon K
	Developmental Mechanics	5th Floor, Salon H
	Feeding Behavior, Nutrition and Metabolism	5th Floor, Salon J
	Techniques and Technology Platform Session Chairs: Amanda Simcox; Gwyneth Card; and Ryan Williamson	5th Floor, Salons F-G
	Functional Genomics Resources from the DRSC & TRIP	5th Floor, Salon E
	Everything you ever wanted to know about sex	5th Floor, Salon I
	Spotlight on Undergraduate Research	5th Floor, Salon L
2:00 p.m 4:00 p.m.	Open Poster and Exhibit Viewing	4th Floor, Franklin Hall
2:00 p.m 4:00 p.m.	Professional Development Tool Kit	4th Floor, Rm 411-412
2:30 p.m 4:30 p.m.	GENETICS Peer Review Workshop (Part II) Ticket Required	4th Floor, Rm 405
4:30 p.m 6:30 p.m.	CONCURRENT PLATFORM SESSIONS IV	
	Cell Division and Growth Control II Chairs: Laura Johnston; Laura Buttitta; and Yiqin Ma	5th Floor, Salon E
	Patterning, Morphogenesis and Organogenesis II Chairs: Helen McNeill; Sarah Hughes; and Oguz Kanca	5th Floor, Salons F-G
	Neural Development and Physiology Chairs: Mani Ramaswami; Quentin Gaudry; and Sonia Sen	5th Floor, Salon H
6:30 p.m 7:30 p.m.	Education Platform Session	5th Floor, Salon E
9:00 p.m 11:00 p.m.	Exhibits Open & (Optional) Poster Presentations Open Poster Viewing with Cash Bar (authors encouraged to be at their boards)	4th Floor, Franklin Hall

SATURDAY, April 14		
12:01 a.m 3:30 p.m.	Posters Open Close at 3:30 pm. Posters must be down by 4:00 pm	4th Floor, Franklin Hall
7:00 a.m 3:00 p.m.	Speaker Ready Room	5th Floor, Rm 502
7:00 a.m 11:00 p.m.	Family/Nursing Mothers Room	3rd Floor, Rm 362
8:15 a.m 3:00 p.m.	Registration and Book/T-Shirt Pick Up Open	4th Floor, Franklin Hall
8:30 a.m 10:15 a.m.	CONCURRENT PLATFORM SESSIONS V	
	Intracellular Dynamics: Cytoskeleton, Organelles and Trafficking Chairs: Brooke McCartney; Avi Rodal; and Steve DelSignore	5th Floor, Salon E
	Models of Human Disease: Developmental and Physiological Disorders Chairs: Jun-Yuan Ji; Hong Xu; and Zhe Chen	5th Floor, Salons F-G
	Chromatin and Epigenetics Chairs: Kami Ahmad; Yukiko Yamashita; and Jonathan Nelson	5th Floor, Salon H
10:15 a.m 10:45 a.m.	Coffee Break	5th Floor, Grand Ballroom Foyer
10:45 a.m 12:30 p.m.	CONCURRENT PLATFORM SESSIONS VI	
	Cell Biology & Signal Transduction I Chairs: Laurel Raftery; Andrea Page-McCaw; and Vicki Losick	5th Floor, Salon E
	Regulation of Gene Expression I Chairs: Victoria Meller; Judy Kasis; and Sandip De	5th Floor, Salon F-G
	Physiology, Metabolism and Aging I Chairs: Stephen Helfand; Daniela Drummond- Barbosa; and Jackson R. Taylor	5th Floor, Salon H
1:30 p.m 3:30 p.m.	Exhibits Open & Poster Presentations Presentations 1:30 pm ODD Posters 2:30 pm EVEN posters	4th Floor, Franklin Hall

SATURDAY, April 14 continued				
4:00 p.m 6:00 p.m.	CONCURRENT PLATFORM SESSIONS VII			
	Cell Biology & Signal Transduction II Chairs: Laurel Raftery; Andrea Page-McCaw; and Vicki Losick	5th Floor, Salon E		
	Regulation of Gene Expression II Chairs: Victoria Meller; Judy Kasis; and Sandip De	5th Floor, Salons F-G		
	Physiology, Metabolism and Aging II Chairs: Stephen Helfand; Daniela Drummond- Barbosa; and Jackson R. Taylor	5th Floor, Salon H		
7:45 p.m 8:45 p.m.	FLYght of the Champions! Awards and Recognition for those in our Community	5th Floor, Salon H		
8:45 p.m 10:00 p.m.	ScienceSlam	5th Floor, Salon H		
SUNDAY, April 15		-		
7:00 a.m 1:00 p.m.	Family/Nursing Mothers Room	3rd Floor, Rm 362		
8:30 a.m 12:00 noon	Plenary Session II Chairs: Pam Geyer; Noah Whiteman; and Gio Bosco	5th Floor, Salons E-H		
8:30 a.m.	Non-conventional autophagy in the prothoracic gland mediates a larval nutritional checkpoint through alteration of cholesterol trafficking Michael O'Connor			
9:00 a.m.	Sexual interactions and the evolution of species isolating barriers Leonie Moyle			
9:30 a.m.	Regulation of stem cell number in the intestine Benjamin Ohlstein			
10:00 a.m.	Break			
10:30 a.m.	Highways for repair: nuclear actin filaments and myosins relocalize heterochromatic DNA breaks to the nuclear periphery Irene Chiolo			
11:00 a.m.	Effects of the gut microbiota on host behavior and homeostasis Julien Royet			
11:30 a.m.	Looking at chromosomes Ting Wu			

Thank you to our sponsors:









EXHIBITORS

Archon Scientific

Booth 23

919/450-6744
info@archonscientific.com
www.ArchonScientific.com
Fly Food Made Easy! No cooking, no
prep: Your fly food comes pre-poured
and ready to use. Our standard
cornmeal/agar recipes include molassesbased, glucose-based, and Bloomingtonstyle. Available in vials and bottles, as
well as bulk bags for easy customization.
Ask about our new high-sugar and highfat recipes.

Azer Scientific

Booth 18

610/524-5810 info@azersci.com azerscie.com
From our founding in 2003, Azer Scientific is an industry leader in laboratory supplies and maintains an ISO 13485: 2003 certification. Our mission is to consistently supply customers with cost-effective, quality-engineered products, with exceptional customer service and proven reliability. We are here to serve scientists who change the world.

Bloomington Drosophila Stock Center

Booth 17

812/855-5783
flystock@indiana.edu
https://bdsc.indiana.edu
The Bloomington Drosophila Stock
Center maintains and distributes
Drosophila melanogaster cultures to labs
all over the world. We carry over 67,000
strains, which can be searched and
ordered on our new website
(https://bdsc.indiana.edu). Please come
by! BDSC staff will be on hand to answer
any questions and take suggestions.

DroBot Co., Ltd

Booth 1

886921067865 markustsao@gmail.com drobot.com.tw

DroBot (Drosophila robot) is dedicated to providing an efficient and affordable stock transfer machine which is at least six times faster than a trained technician. With our equipment, we offer stock maintenance of high quality and more time to unlock the mysteries of the world.

Drosophila Genomics Resource Center (DGRC)

Booth 16

812/855-5510
dgrc@cgb.indiana.edu
https://dgrc.bio.indiana.edu
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.

Easy Behavior

Booth 6

351915714550 itskovpa@gmail.com flypad.rocks

Are you measuring food intake? FlyPAD is an automated high throughput system to measure feeding behavior in Drosophila. It is easy to setup and use. In two clicks it provides scientifically validated and the most comprehensive quantitative description of feeding behavior in Drosophila on the market.

FlyTabs

Booth 9

805/748-5665 flytabs@yahoo.com flytabsci.com

FlyTabs is excited to present the latest innovation in Drosophila vial and bottle food filling. The Droso-Filler MAXX – is faster, more accurate, and takes far less effort. The MAXX retrofits on your existing Droso-Filler. The 1 finger, 1 button design is remarkably easy to use. Stop by for a demonstration!

Genesee Scientific

Booth 3 and 4

800/789-5550 support@geneseesci.com www.geneseesci.com Genesee Scientific is always innovating to provide you with the most effective tools in your lab. Our updated Flystuff™ catalog includes the latest advancements in Drosophila necessities such as our unmatched Nutri-Fly™ food formula and the best deals on vials. Ask about our top-of-the-line INVICTUS™ incubators at our booth and experience demonstrations!

Genetics Society of America

Booth 15 and 16

301/634-7300 ruth.isaacson@thegsajournals.org genetics-gsa.org Come explore the resources and opportunities that GSA has to offer; meet members of the GSA staff and leadership; and find out about publishing in GENETICS and G3: Genes | Genomes | Genetics.

GenetiVision Corporation

Booth 24

832/838-4441 info@genetivision.com www.genetivision.com GenetiVision offers comprehensive transgenic and molecular biology services. We provide P-element and sitespecific transgenesis; MiMIC, RMCE, and CRISPR injections; CRISPR design, gRNA and donor cloning, injection and screening; and large BAC injections and modification by recombineering. We have also generated a duplication collection of more than 1,000 transgenic 80 kb BAC stocks covering >90% of the genes on chromosomes 2 and 3. Our pricing is the most competitive and with the best guarantee in the business. Try us today!

NIGHTSEA

781/791-9508

Booth 22

NIGHTSEA@NIGHTSEA.com
www.NIGHTSEA.com
Economical fluorescence microscopy?
Not an oxymoron any longer thanks to
the NIGHTSEA Stereo Microscope
Fluorescence Adapter for all your
research, teaching, and outreach needs.
Screen, sort, dissect on any existing
microscope. Now with 5 available
excitation/emission combinations plus
'darkness on demand'. Stop by to see all
the latest. Bring your own samples to

Percival Scientific, Inc.

Booth 19

515-465-9363
sales@percival-scientific.com
www.percival-scientific.com
Percival Scientific's cutting edge
technology is at the core of our
commitment to delivering the best
products on the market today. This
commitment is clear with the Percival
DR-36 and DR-41 Series which are
dedicated to offer the best features for
Drosophila research.

Powers Scientific

Booth 11

215/230-7100
gail@powersscientific.com
powersscientific.com
Powers Scientific, Inc. - offering
Drosophila Growth Chambers with
thermoelectric (Peltier) or standard
cooling in 6 sizes (from 6-43 c.f. capacity)
with temperature, lighting, and/or
ultrasonic additive humidity control to fit
the application and price range. For
Mosquitos, Sand Flies and c. Elegans, too.

Rainbow Transgenic Flies, Inc.

Booth 14

805/482-2277
info@rainbowgene.com
www.rainbowgene.com
Located in beautiful California, RTF has
been serving Drosophila fly research
community since 2004. Top quality of
transgenic fly services and customer
satisfaction are our ultimate goal. Our
competitive price, fast turn-around time
and guaranteed rate of transformation
make RTF an affordable and reliable
resource for your research.

Sable Systems International, Inc.

Booth 12

702/269-4445
sales@sablesys.com
www.sablesys.com
Sable Systems International is the widely
cited, international standard in high
resolution metabolic screening and
calorimetry. Our systems can measure
Drosophila gas exchange in real time.
Technical support is by published experts
in insect respirometry. Please drop by
our booth and discuss what we can do
for your research.

Techshot

Booth 7

812/728-8136
rboling@techshot.com
www.techshot.space
Techshot provides all the equipment and
services that investigators need to
conduct Drosophila research in space
aboard the International Space Station.

Vienna Drosophila Resource Center (VDRC)

Booth 21

+43 1 7962324 7027

Office@vdrc.at
www.vdrc.at
The Vienna Drosophila Resource Center
(VDRC) is a non-profit research
organization promoting scientific
discoveries in Drosophila. We maintain
over 35,000 transgenic fly stocks
including RNAi, GAL4, Tagged FlyFos
TransgeneOme lines and other resources
and distribute them to researchers
worldwide. We also provide stock
keeping and fly food services.

Wellgenetics Inc.

Booth 2

886 3 2651 1809
info@wellgenetics.com
www.wellgenetics.com
Wellgenetics is dedicated to providing
research professional services in
microinjectionand gene
knockout/knockin in fly and mosquito
models. We are experts in molecular
biology and in microinjection for
generating a variety of genetic tools, such
as gene deletion; point mutation; gene
reports; tag knockin and RMOE knockin
to level up your research quality.

Zantiks Ltd

+44 0 7973381013

Booth 10

info@zantiks.com
www.zantiks.com
Zantiks produces affordable equipment
to enable animal behaviour to be
measured simply. Zantiks units are fully
integrated with a computer, software,
camera and built-in stimuli to automate
Drosophila studies. Each unit is
networked and operated from any
connected device where users can track
and download real-time data and video.

GENERAL INFORMATION

Badges

Badges are required for admission to all sessions, posters, the exhibit hall, and reception. Security will not allow individuals without badges to enter the exhibit hall. If you lose your badge, please request a replacement at the conference registration desk.

Presenters - Speaker Ready Room, 502

All those giving oral talks in platform or plenary sessions are required to load and check their presentation the day before the start of their session in Room 502, which will be open during the following hours:

```
    Wednesday, April 11 3:00 p.m. – 6:30 p.m.
    Thursday, April 12 7:00 a.m. – 3:00 p.m.
    Friday, April 13 7:00 a.m. – 3:00 p.m.
    Saturday, April 14 7:00 a.m. – 3:00 p.m.
```

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. If you are a workshop presenter, please coordinate with your workshop organizer.

Poster Sessions and Exhibits - Franklin Hall

All posters and exhibits will be in Franklin Hall on the fourth floor. The hall will be open to conference registrants on a 24-hour basis beginning at 5:00 p.m., Wednesday, April 11 until 3:30 p.m., Saturday, April 14. Security will be posted at the entrance to the Hall and only individuals with the official conference badge will be admitted. Posters must be removed by 4:00 p.m. on Saturday.

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

```
    Wednesday, April 11
    Thursday, April 12
    Friday, April 13
    Eriday, April 13
    Eriday, April 13
    Eriday, April 13
    Eriday, April 14
    Eriday, April 14
```

Authors should be at their posters to present according to the following schedule:

Thursday, April 12	2:00 p.m. – 3:00 p.m.	Even-numbered posters
	3:00 p.m. – 4:00 p.m.	Odd-numbered posters
Friday, April 13	9:00 p.m. – 11:00 p.m.	Not required, but recommended for authors to be present
Saturday, April 14	1:30 p.m. – 2:30 p.m.	Odd-numbered posters
	2:30 p.m. – 3:30 p.m.	Even-numbered posters

All posters must be removed from poster boards **no later than 4:00 p.m. on Saturday, April 14.** After that time, remaining posters will be removed and recycled. Posters may only be removed by their own authors. Posters that are not collected may not be taken by someone who is not an author on that poster.

Mobile App

Download the GSA 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 access previously downloaded information. You will only need access to the internet to download updates. Users of Blackberrys or Windows Mobile Devices have full access to the Program through the web version available on the meeting website

Registration

Registrants can pick up registration materials and Certificates of Attendance at the registration desk in the Franklin Hall Foyer during the following times:

```
Wednesday, April 11 3:30 p.m. – 9:00 p.m.

Thursday, April 12 8:00 a.m. – 5:00 p.m.

Friday, April 13 8:15 a.m. – 5:00 p.m.

Saturday, April 14 8:15 a.m. – 3:00 p.m.
```

Social Media/Photo/Video Policy

Live tweeting of presentations is allowed unless the speaker explicitly opts out by stating so at the start of his or her talk. Taking or sharing photos or videos of posters is permitted only with the presenter's consent during the assigned poster session. Taking photos of posters while the presenter is not present is strictly prohibited.

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

FlyBase Demonstrations (4th Floor, Rm 407-409)

FlyBase invites all attendees to come to the demo room to learn how to make the best use of the new FlyBase tools and features for your research and teaching. Throughout the afternoon, other than the scheduled group presentations noted below, FlyBase personnel are available in the demo room for one-on-one tutorials, troubleshooting, and discussions. Any thoughts on improvements we can make to FlyBase are gratefully appreciated.

Thursday, April 12

1:00 p.m. - 5:00 p.m. Demo room open for tutorials and discussions

Presentations:

2:00 p.m.-2:15 p.m.: FlyBase 2018: New Look,

2:20 p.m.-2:35 p.m.: Finding your way around large-scale datasets and single-cell

technologies

Friday, 13

1:00 p.m. - 6:00 p.m. Demo room open for tutorials and discussions

Presentations:

3:45 p.m.-4:00 p.m.: FlyBase 2018: New Look, New Features

4:05 p.m.-4:20 p.m.: Finding your way around large-scale datasets and single-cell

technologies

Security/Lost and Found

For emergencies and lost and found items, contact hotel security by dialing 0 from any house phone. The conference registration desk will also be able to assist you.

Meals

Meals are not included in your registration fee. However, as well as the restaurants on site, there are hundreds more within walking distance. Reading Terminal Market is right across the street and has eighty vendors offering a wide variety of grab-and-go food options, including local favorites, vegetarian, gluten free, and more. It is open 8 am-6 pm. The hotel concierge can help you find just what you want.

Parking

Parking is available at the hotel for \$54. Less expensive parking options are available in nearby parking garages and lots. BestParking or SpotHero apps can help you find costs and availability when you arrive.

Nursing Mother's Room

A private room for nursing mothers is located on the third floor of the hotel in Room 362. The room has power outlets, a bathroom, and seating. Please note that parents and guardians are responsible for providing infant care supplies. To access the room, sign out the key at the Conference Registration Desk, or if closed, go to the hotel front desk to request the key. You will be asked to show your badge. The Family Room is unsupervised, and the Genetics Society of America is not responsible for any accidents or injuries that may occur.

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 for additional information.

It is the responsibility of the parent(s), 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.

If you are having difficulty finding a babysitter, try Care.com. Please note GSA has no affiliation with them, but they offer babysitting matching services.

Children must be accompanied by a parent or guardian at all times in the Exhibit Hall. 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.

Code of Conduct

GSA expects attendees and exhibitors to respect each other, GSA staff, and Marriott staff, and to behave in a courteous fashion. Attendees should adhere to 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. When at the meeting, immediately report any incidents in which you feel a meeting attendee is abusive, insulting, intimidating, bothersome, or acting in an unsafe or illegal manner at the meeting registration desk or to Suzy Brown at sbrown@genetics-gsa.org. Please contact: society@genetics-gsa.org if you need to file a formal complaint.



60th Annual Drosophila Research Conference March 27-31, 2019 | Dallas, TX



PLENARY AND PLATFORM SESSIONS

Wednesday, April 11 7:00 p.m. – 8:05 p.m. 5th Floor Salons E-H

Opening Session

Session Chairs: Tin Tin Su, Gio Bosco

7:00 pm Welcome, Tin Tin Su

7:10 pm State of the Fly Community, **Debbie Andrew**

7:20 pm GSA Update and presentation of GSA Awards, **Lynn Cooley**

7:30 pm Larry Sandler Award Presentation, **Kim McCall**

7:35 pm Larry Sandler Lecture

8:05 p.m. – 9:05 p.m. 5th Floor Salons E-H

Keynote Address Terry Orr-Weaver

8:05 Research taking flight from foundational biology. **Terry Orr-Weaver**

Thursday, April 12 8:30 a.m. – 12:00 noon 5th Floor Salons E-H

Plenary Session 1

Session Chairs:
Pam Geyer,
Noah Whiteman,
Gio Bosco

8:30 Image Award Presentation. **Nasser Rusan**

8:35 Mechanisms and roles of tumorsuppressive cell competition. **Tatsushi Igaki**

9:05 Lost in translation – RNA processing defects impact synaptic metabolism in neurodegeneration. **Daniela Zarnescu**

9:35 Mechanisms of Odor-coding and its Manipulation to alter Behavior. **Anandasankar Ray**

10:05 - Break

10:30 Reproductive Capacity Evolves in Response to Ecology through Common Developmental Mechanisms. **Cassandra Extavour**

11:00 The genomic basis of adaptation in *Drosophila*: sex, poison and other dramas. **Amir Yassin**

11:30 The guts of Wnt signal transduction. **Yashi Ahmed**

Notes

Thursday, April 12 4:30 p.m. – 6:30 p.m. 5th Floor, Salon E

Cell Death & Immunity

Session Chairs: Andreas Bergmann, Eli Arama, Alla Amcheslavsky

- **1** 4:30 Determination of the interaction of STAT92E, Zfh2 and Wingless to regulate regeneration after radiation damage in *Drosophila melanogaster*. **Shilpi Verghese**
- **2** 4:45 High-dimensional microbiome interactions shape host fitness. **William Ludington**
- **3** 5:00 Plasmamembrane-localization of apoptotic caspases for non-apoptotic functions. **Alla Amcheslavsky**
- **4** 5:15 *Tango 7* and *dark* regulate mutually-exclusive subcellular domains of caspase activation during development. **Sarah Neuman**
- **5** 5:30 Regulation of *Wolbachia* by host autophagy across multiple cell-types in *Drosophila melanogaster*. **Mark Deehan**
- **6** 5:45 Stretch follicle cells utilize lysosomal machinery to eliminate nurse cells by phagoptosis. **Albert Mondragon**
- **7** 6:00 Peroxisomes join the fight against infection. **Francesca Di Cara**
- **8** 6:15 Functional analysis of cAMP-producing toxins in *Drosophila* identifies several chemical inhibitors. **Annabel Guichard**

Thursday, April 12 4:30 p.m. – 6:30 p.m. 5th Floor, Salons F-G

Neural Circuits and Behavior

Session Chairs:
Marcus Stensmyr,
Marco Gallio,
Emanuela Zaharieva

- **9** 4:30 Temperature sensitivity of GR28bD and its orthologs in *Drosophila*. **Aditi Mishra**
- **10** 4:45 The *Drosophila* small conductance potassium channel (SK) negatively regulates nociception. **Stephanie Mauthner**
- **11** 5:00 Humidity sensing in *Drosophila*. **Dominic Frank**
- **12** 5:15 Multisensory integration in the *Drosophila* mushroom body. **Jinzhi Li**
- **13** 5:30 On the ORigin of olfactory worlds. **Marianthi Karageorgi**
- **14** 5:45 Sing me a new song towards the neural basis of fly courthip song evolution. **Yun Ding**
- **15** 6:00 A circuit for the experience of mating in *Drosophila*. **Lisha Shao**
- **16** 6:15 From perception to reaction: a novel neuronal pathway to encode motion and regulate forward walking speed in *Drosophila*. **Jessica Eliason**

Thursday, April 12 4:30 p.m. – 6:30 p.m. 5th Floor, Salon H

RNA Biology (4 talks) Evolution of Development, other species (4 talks)

Session Chairs:

Bob Duronio,

Greg Matera,

Benjamin Prud'homme,

Virginie Courtier-Orgogozo

17 - 4:30 TDRD5P promotes germline differentiation through post-transcriptional gene regulation in cytoplasmic RNA granules. Caitlin

- **18** 4:45 Distinct RNP Classes in the *Drosophila* Germ Plasm Orchestrate Differential RNA Regulation. **Catherine Ruesch**
- **19** 5:00 *Dm* Ime4 regulates *chic* splicing in Drosophila spermatogenesis. **Antonio Rockwell**
- 20 5:15 Zc3h13/Flacc is required for adenosine methylation by bridging the mRNA binding factor Rbm15/Spenito to other components of the m6A machinery. Jean Roignant
- **21** 5:30 Novel approach to quantitative spatial gene expression uncovers cryptic evolution in the developing *Drosophila* eye. **Sarah Signor**
- 22 5:45 A gene network responsible for a male genital structure also patterns a potentially coevolving female genital trait. Eden McQueen
- **23** 6:00 Evolution of a new essential gene function in development via Alternative Transcription. **Yoseop Yoon**

24 - 6:15 Evolving *doublesex* expression correlates with the origin and diversification of male sexual ornaments in the *Drosophila immigrans* species group. **Gavin Rice**

Notes

PLENARY AND PLATFORM SESSIONS

Friday, April 13 8:30 a.m. – 10:15 a.m. 5th Floor, Salon E

Stem Cells

Session Chairs:

Hannele Ruohola-Baker, Haifan Lin

- 25 8:30 Centromeres epigenetically mark *Drosophila* germ line stem cell identity. **Anna Dattoli**
- 26 8:45 Multi-layered control of gene activities ensures timely exit from stemness during asymmetric neural stem cell division. **Hideyuki Komori**
- 27 9:00 Lin28 is a critical factor in the aging of *Drosophila* testis stem cell niche. **Sreejith Perinthottathil**
- 28 9:15 Stem Cell Cytokinesis is Disrupted with Age Due to Diminished Jak/STAT Activity. Kari Lenhart
- 29 9:30 Accelerated germline stem cell divisions in Drosophila males upon repeated mating a novel role for G-Protein signaling. Manashree Malpe
- **30** 9:45 Wingless promotes EGFR signaling in follicle stem cells to maintain self renewal. **Rebecca Kim**
- **31** 10:00 Vive la resistance: evidence from the Drosophila intestine that multidrug resistance is an ancient stem cell trait. **Michele Markstein**

Friday, April 13 8:30 a.m. – 10:15 a.m. 5th Floor, Salons F-G

Evolution and Population Genetics

Session Chairs:
Nadia Singh,
Dmitri Petrov,
Sharon Greenblum

- **32** 8:30 Adaptive genetic redundancy in *Drosophila* is driven by a vast reservoir of large-effect alleles. **Neda Barghi**
- **33** 8:45 The microbiota influences life history variation in *Drosophila melanogaster*. **Amber Wise**
- **34** 9:00 A genome-wide association study to identify genetic factors affecting resistance allele formation in CRISPR gene drives. **Jackson Champer**
- **35** 9:15 Comparative analysis of centromeric DNA sequences in Drosophila species. **Amanda**
- **36** 9:30 The Recombination Landscape of *Drosophila virilis* under hybrid dysgenesis. **Lucas Hemmer**
- **37** 9:45 Prophage WO genes that alter sperm and kill males in Drosophila. **Seth Bordenstein**
- **38** 10:00 Patterns of robustness and deregulation in gene expression networks under dietary stress. **Luisa Pallares**

Friday, April 13 8:30 a.m. – 10:15 a.m. 5th Floor, Salon H

Models of Human Disease: Neurodegeneration and Neurological Disorders

Session Chairs: Bing Wei Lu, Kanae Ando, Vafa Bayat

- **39** 8:30 Phosphatidylserine externalization is associated with developmental and pathological neurite degeneration in *Drosophila*. **Chun Han**
- **40** 8:45 Autophagolysosome disruption in a *Drosophila* model of ALS/FTD caused by C9orf72 expansion mutation. **Kathleen Cunningham**
- 41 9:00 Activation of BMP signaling in non-motor neurons rescues motor dysfunction in a Drosophila model of Amyotrophic Lateral Sclerosis. **Kristi Wharton**
- **42** 9:15 Interaction of LRRK2 with Rab GTPases *in vivo*. **Christopher Elliott**
- **43** 9:30 Roles of CaMKII in neurodegeneration caused by depletion of presynaptic mitochondria. **Kanako Shinno**
- **44** 9:45 Drosophila FMRP modulates energy metabolism and mitochondrial function. **Eliana Weisz**
- **45** 10:00 Transcriptomic and proteomic profiling of an epilepsy fly model reveals cell non-autonomous downregulation of synaptic proteins. **Kevin Hope**

Notes

Friday, April 13 10:45 a.m. – 12:30 p.m. 5th Floor, Salon E

Cell Division and Growth Control I

Session Chairs: Laura Johnston, Laura Buttitta, Yigin Ma

- **46** 10:45 Exploring C(2)M and its ability to promote assembly of the synaptonemal complex. **Kim McKim**
- **47** 11:00 Separating the contribution of chromatin versus that of repetitive DNA in centromere specification. **Jason Palladino**
- **48** 11:15 A centrosome asymmetry switch in fly neural stem cells. **Clemens Cabernard**
- **49** 11:30 Diverse Roles of Actin-Microtubule Crosslinker Shortstop in Cell Division. **Evan Dewey**
- **50** 11:45 Examining chromatin in different states of G0. **Yiqin Ma**
- **51** 12:00 An alternatively spliced form affecting the Marked Box domain of *Drosophila* E2F1 is required for proper cell cycle regulation during development. **Minhee Kim**
- **52** 12:15 Master regulators of the Minute phenotype: translation, growth, and cell competition depend on a regulatory pathway induced by ribosomal protein mutations. **Marianthi Kiparaki**

Friday, April 13 10:45 a.m. – 12:30 p.m. 5th Floor, Salons F-G

Patterning, Morphogenesis and Organogenesis I

Session Chairs: Helen McNeill, Sarah Hughes, Oguz Kanca

- **53** 10:45 Erk-dependent control of epithelial morphogenesis. **Heath lohnson**
- **54** 11:00 Optogenetic control of cell contractility during epithelial morphogenesis in *Drosophila*. **R. Marisol Herrera-Perez**
- **55** 11:15 Redundancy in supracellular actomyosin networks yields robust tissue folding. **Adam Martin**
- **56** 11:30 The scaffold protein Canoe and ZO1/Polychaetoid help link cell adhesion and the actomyosin cytoskeleton during tissue formation. **Lathiena Manning**
- **57** 11:45 Epithelial rotation is preceded by planar symmetry breaking of actomyosin and protects epithelial tissue from cell deformations. **Ivana Viktorinova**
- **58** 12:00 The dynamics of the EGFR signaling activation in the follicular epithelium. **Nicole Revaitis**
- **59** 12:15 Differential lateral and basal tension drives epithelial folding through two distinct mechanisms. **Christian Dahmann**

Friday, April 13 10:45 a.m. – 12:30 p.m. 5th Floor, Salon H

Gametogenesis

Session Chairs: Helen Salz, Prashanth Rangan, Nicole Crown

60 - 10:45 Distinct properties of wasp germ plasm correlate with its divergent complement of localized RNA. **Jeremy Lynch**

61 - 11:00 Studying the *cis*- and *trans*-regulation of *Sex lethal* in the germline of *Drosophila melanogaster*. **Raghav Goyal**

62 - 11:15 SETDB1/EGGLESS maintains female sex-identity in *Drosophila* germ cells. **Anne Smolko**

63 - 11:30 The nuclear transport protein Tnpo-SR promotes cell proliferation and oocyte specification in the early *Drosophila* germline. **Elizabeth Ables**

64 - 11:45 Development of a CRISPRbased meiotic double-strand break repair assay provides insight into regulation of meiotic recombination. **Nicole Crown**

65 - 12:00 The TORC1 inhibitor GATOR1 regulates early meiotic events during Drosophila oogenesis. **LUCIA BETTEDI**

66 - 12:15 Mitochondrial Fragmentation Drives the Selective Removal of Deleterious Mitochondrial DNA in the *Drosophila* Germline. **Thomas Hurd**

Notes

Friday, April 13 1:45 p.m. – 3:45 p.m. 5th Floor, Salons F-G

Notes

Techniques and Technology Platform Session

Session Chairs: Amanda Simcox, Gwyneth Card, Ryan Williamson

67 - 1:45 Synthetic biology in *Drosophila*: Engineering vitamin-producing flies. **Shu Kondo**

68 - 2:00 An expanded toolkit for CRISPR/Cas9 gene editing that complements MiMIC drive strategies. **David Li-Kroeger**

69 - 2:15 Pooled-format, genome-wide CRISPR/Cas9 screening in *Drosophila* cells. **Raghuvir Viswanatha**

70 - 2:30 An apparatus for automated, high-throughput, and detailed assessment of individual *Drosophila* free behavior. **Wallace Williamson**

71 - 2:45 Long-term optical brain imaging in live adult fruit flies. **Cheng Huang**

72 - 3:00 PhotoGal4: a new multipurpose light-dependent switch for spatiotemporal control of gene expression. **Lorena de Mena**

73 - 3:15 Microgravity research platform for longitudinal and multigenerational studies in Drosophila. **Gene Boland**

74 - 3:30 High-throughput System for Quantification of Food Consumption in Drosophila. Maria Jaime

Notes

Friday, April 13 4:30 p.m. – 6:30 p.m. 5th Floor, Salon E

Cell Division and Growth Control II

Session Chairs: Laura Johnston, Laura Buttitta, Yigin Ma

75 - 4:30 Tissue Organization in a Small Multicellular Structure. **Jasmin Imran Alsous**

- **76** 4:45 Repression of a CDK1 Myb Aurora B network remodels mitotic cycles into polyploid endocycles. **Michael Rotelli**
- 77 5:00 Variant cell cycles ensure a functional blood-brain barrier in Drosophila. Jessica Von Stetina
- **78** 5:15 JNK and Yorkie cooperate to drive tumor progression by generating polyploid giant cells in *Drosophila*. **BoJie Cong**
- **79** 5:30 Investigating the interaction of inflammatory pathways in tumor microenvironment using *Drosophila* cancer models. **KIRTI SNIGDHA**
- **80** 5:45 Deciphering the complexity of oncogenic Ras signaling. **Chiswili Chabu**
- **81** 6:00 The CAF-1 complex couples Hippo pathway target expression and cell cycle progression. **William Yee**
- **82** 6:15 Genetic analysis of invasive pathways engaged by the EcR-coactivator protein Taiman reveals requirement of Toll/Imd pathways and systemic immune response. **Phil Byun**

Friday, April 13 4:30 p.m. – 6:30 p.m. 5th Floor, Salons F-G

Patterning, Morphogenesis and Organogenesis II

Session Chairs: Helen McNeill, Sarah Hughes, Oguz Kanca

83 - 4:30 Integrins act as mechanosensors to regulate cell survival in *Drosophila* wing imaginal disc. **ANDREA VALENCIA EXPÓSITO**

84 - 4:45 Ecdysone limits wing imaginal disc regeneration through Broad Z1. **Faith Karanja**

- **85** 5:00 Regulation of the stability of selector gene expression by the Hippo pathway co-activator Yorkie. **Jo Downes**
- **86** 5:15 The architectural balance of the Ventral Nerve Cord depends on the level of JNK signaling activity. **Enrique Martin-Blanco**
- **87** 5:30 Programmed cell senescence is required for sensory organ development in *Drosophila*. **Yiran Zang**
- **88** 5:45 Roles of tricellular junctions and spindle orientation in tissue morphogenesis. **Eric van Leen**
- **89** 6:00 Cell Size and Nuclear Scaling Relationships in Multinucleated Muscle Fibers. **Stefanie Windner**
- **90** 6:15 Quantitative analysis of cell organization in tracheal tubes reveals unexpected cell behaviors and suggests an alternative role for Src42 in tracheal morphogenesis. **Ran Yang**

Friday, April 13 4:30 p.m. – 6:30 p.m. 5th Floor, Salon H

Notes

Neural Development and Physiology

Session Chairs:

Mani Ramaswami, Quentin Gaudry, Sonia Sen

- 91 4:30 Unc-4 governs the identity of cholinergic neurons in the ventral nerve cord. Haluk Lacin
- 92 4:45 Phenotypic convergence in the brain: distinct transcription factors regulate common terminal neuronal characters. Nikos Konstantinides
- **93** 5:00 The mechanism controlling stochastic photoreceptor specification in the fly eye. **Alexandra Neuhaus-Follini**
- 94 5:15 The Krebs cycle enzyme Isocitrate Dehydrogenase 3A couples mitochondrial metabolism to synaptic transmission. Berrak Ugur
- **95** 5:30 Combinations of DIPs and Dprs control olfactory receptor neuron axon sorting in *Drosophila*. **PELIN VOLKAN**
- **96** 5:45 Basigin regulates peripheral glia function and morphology. **Vanessa Auld**
- **97** 6:00 *dCORL* expression and function in insulin producing cells reversibly influences adult longevity. **Stuart Newfeld**
- 98 6:15 Neto the obligatory subunit of glutamate receptors, functions in both pre- and post-synaptic compartments to enable synapse development and homeostasis at the *Drosophila* neuromuscular junction. Mihaela Serpe

Friday, April 13 6:30 p.m. – 7:30 p.m. 5th Floor, Salon E

Notes

Education Platform Session

99 - 6:30 Examination of Perception and Performance in an Undergraduate Genetics Flipped Classroom. Judith Leatherman

100 - 6:45 Inspiring Genetics Classroom Innovation with the Journal *CourseSource*. **Michelle Smith**

101 - 7:00 The Genomics Education Partnership: Infusing Genomics into the Undergraduate Curriculum through Course-Based Research Experiences. **Justin DiAngelo**

102 - 7:15 Frontiers for Young Minds - Fruit Fly Genetics in Science Communication. **Michelle Juarez**

These talks will also be available as posters in the Educational Initiatives section of the poster boards.

Notes

Saturday, April 14 8:30 a.m. – 10:15 a.m. 5th Floor, Salon E

Intracellular Dynamics: Cytoskeleton, Organelles and Trafficking

Session Chairs:
Brooke McCartney,
Avi Rodal,
Steve DelSignore

103 - 8:30 dOCRL maintains immune quiescence by regulating endosomal traffic. **Steven Del Signore**

104 - 8:45 A morphogenetic switch that reprograms membrane trafficking from recycling to degradation. **Sara Laiouar**

105 - 9:00 Self-organization of the actin cytoskeleton drives secretion in *Drosophila* salivary glands. **Eyal Schejter**

106 - 9:15 Phosphatidylinositol 4,5-bisphosphate (PIP2) is essential for cilium assembly and function in Drosophila. **Julie Brill**

107 - 9:30 Coordinated contractility initiates cell dispersal at the onset of migration. **Benjamin Lin**

108 - 9:45 Multiple feedback mechanisms fine-tune Rho signaling to regulate morphogenetic outcomes. **Katy Ong**

109 - 10:00 The Role for Microtubules in Organizing Actomyosin Contractility during Ventral Furrow Formation. **Clint Ko**

Saturday, April 14 8:30 a.m. – 10:15 a.m. 5th Floor, Salons F-G

Models of Human Disease: Developmental and Physiological Disorders

Session Chairs: Jun-Yuan Ji, Hong Xu, Zhe Chen

110 - 8:30 Role of lipid droplets in *Drosophila* models of kidney disease. **Aleksandra Lubojemska**

111 - 8:45 Interphase localization of Abnormal Spindle to the nucleus is important for proper brain size. **Todd Schoborg**

112 - 9:00 Notch induced tumorigenesis in a *Drosophila* transition zone model. **Sheng-An Yang**

113 - 9:15 A genetic screen in Drosophila uncovers functional modulators of the NUP98-HOXA9 human oncoprotein. **Caroline Baril**

114 - 9:30 Branchless mediates muscle wasting in obesity-enhanced tumorigenesis. **Holly Newton**

115 - 9:45 Optogenetic Control of Drosophila Cardiac Function with Redlight Excitation. **Jing Men**

116 - 10:00 The multifaceted mechanisms of mitochondrial DNA selective inheritance in *Drosophila*. **Zhe Chen**

Saturday, April 14 8:30 a.m. – 10:15 a.m. 5th Floor, Salon H

Chromatin and Epigenetics

Session Chairs: Kami Ahmad, Yukiko Yamashita, Jonathan Nelson

117 - 8:30 Metazoan Nuclear Pores provide a scaffold for poised genes and stabilized induced Enhancer-Promoter contacts. **Pau Pascual**

118 - 8:45 Pairing TADs (PairiTs) drive homologous chromosomes together to promote interchromosomal gene regulation. **Kayla Viets**

119 - 9:00 Phase separation drives heterochromatin domain formation. **Amy Strom**

120 - 9:15 Small RNA and the epigentics of X recognition. **Nikita Deshpande**

121 - 9:30 The addition and removal of chrY in *D. melanogaster* females can alter expression of rDNA-associated sequences with phenotypic consequences. **Katherine Silkaitis**

122 - 9:45 rDNA-specific retrotransposons maintain rDNA copy number in the *Drosophila* male germline. **Jonathan Nelson**

123 - 10:00 Inaccessible chromatin and transcriptional repression cooperate to promote late replication during S phase. **Robin Armstrong**

Notes

Saturday, April 14 10:45 a.m. – 12:30 p.m. 5th Floor, Salon E

Cell Biology & Signal Transduction I

Session Chairs: Laurel Raftery, Andrea Page-McCaw, Vicki Losick

124 - 10:45 Store-operated calcium entry functions downstream of *Oamb* in mature follicle cells for *Drosophila* ovulation. **Lylah Deady**

125 - 11:00 Emei Regulates ER Ca²⁺ storage to Drive Hippo-mediated Tumorigenesis. **Xianjue Ma**

126 - 11:15 A Yorkie-inhibitory checkpoint downstream of the tumor suppressor dFbw7. **Joanna Wardwell-Ozgo**

127 - 11:30 The transcriptional corepressor CtBP functions antagonistically to the JNK pathway to control tissue growth via regulation of the pro-growth microRNA *bantam*. **Taryn Sumabat**

128 - 11:45 Polyploid cell growth is required for wound repair to prevent mitotic induced cell death. **Vicki Losick**

129 - 12:00 Two distinct actin regulations are controlled by Annexins, RhoGEFs, and Rho family GTPases to orchestrate actomyosin ring dynamics in cell wound repair. **Mitsutoshi Nakamura**

130 - 12:15 The regulation of E-cadherin endocytosis by p120-catenin is dependent on RhoA and Arf1. **Joshua Greig**

Saturday, April 14 10:45 a.m. – 12:30 p.m. 5th Floor, Salon F

Regulation of Gene Expression I

Session Chairs: Victoria Meller, Judy Kasis, Sandip De

131 - 10:45 Defining the solution space for the *even-skipped* expression pattern suggests regulatory plasticity in Drosophila. **Ben Vincent**

132 - 11:00 Nuclear microenvironments modulate transcription from low-affinity enhancers. **Justin Crocker**

133 - 11:15 Assessing the role of Hox-cofactor interactions *in vivo*. **Siqian Feng**

134 - 11:30 Changes in a Hox gene and its downstream regulatory network drive microevolution. **Yang Liu**

135 - 11:45 Transcriptional bursting of segmentation gene expression in living *Drosophila* embryos. **Bomyi Lim**

136 - 12:00 Mechanisms regulating Grainy head activity during development. **Markus Nevil**

137 - 12:15 The Ecdysone Hormone Receptor directs genome-wide changes in gene expression and chromatin accessibility during wing morphogenesis. **Christopher Uyehara**

Saturday, April 14 10:45 a.m. – 12:30 p.m. 5th Floor, Salon H

Physiology, Metabolism and Aging I

Session Chairs:

Stephen Helfand, Daniela Drummond-Barbosa, Jackson R. Taylor

138 - 10:45 Protein valuation modulates aging under a complex nutritional environment. **Yang Lyu**

139 - 11:00 Regulation of lifespan by dSirt6 in *Drosophila* melanogaster. **Jackson Taylor**

140 - 11:15 The translation inhibitor 4E-BP regulates the effect of ambient temperature on *Drosophila* metabolism and lifespan. **Ilaria Drago**

141 - 11:30 A genetic program for germline quiescence. **Ethan Greenblatt**

142 - 11:45 A Virus-acquired host cytokine controls systemic aging by antagonizing apoptosis. **Jason Karpac**

143 - 12:00 Increasing glucose uptake prevents age-dependent reductions in local ATP levels in brain neurons and suppresses declines in locomotor functions in *Drosophila*. **Mikiko Oka**

144 - 12:15 An ABC transporter regulates aging-induced intestinal stem cell dysplasia in the midgut of Drosophila. **Ayaka Sasaki**

Notes

Saturday, April 14 4:00 p.m. – 6:00 p.m. 5th Floor, Salon E

Cell Biology & Signal Transduction II

Session Chairs: Laurel Raftery, Andrea Page-McCaw, Vicki Losick

145 - 4:00 Role of the adherens junction protein α-Catenin in the regulation of tissue growth. **Lidia Kazakova**

146 - 4:15 Class III PI3K (PI3K-III) controls epithelial integrity through endosomal LKB1 regulation. **Fergal O'Farrell**

147 - 4:30 Characterization of a putative prion-like phosphatase, CG5830, in *Drosophila melanogaster*. **Zelha Nil**

148 - 4:45 Extracellular adenosine as a cytoprotectant and growth regulator. **Michal Zurovec**

149 - 5:00 Activation-induced substrate engagement in ERK signaling. **Sayantanee Paul**

150 - 5:15 Ras-dependent control of tissue morphogenesis. **Jared Toettcher**

151 - 5:30 Dynamic 3D tissue architecture directs BMP morphogen signaling during *Drosophila* wing morphogenesis. **Martin Kracklauer**

152 - 5:45 'Tethered' Wingless (Nrt-Wg) is released and signals at a distance, consistent with Wg function as a morphogen. **Samuel Petshow**

Saturday, April 14 4:00 p.m. – 6:00 p.m. 5th Floor, Salons F-G

Regulation of Gene Expression II

Session Chairs: Victoria Meller, Judy Kasis, Sandip De

153 - 4:00 Damage-Activated Regeneration Enhancers (DAREs) permit control of regenerative capacity independent of the developmental program in imaginal discs. **Rob Harris**

154 - 4:15 M1BP, a master regulator of housekeeping genes, functions with TRF2 and a coactivator that has glutathione S transferase activity. **David Gilmour**

155 - 4:30 Promoter proximal pausing as a possible mechanism for transcriptional regulation by HP1 paralogs. **Schoelz John**

156 - 4:45 Context matters: chromatin context effects Polycomb domain formation and function. **SANDIP DE**

157 - 5:00 Multiple roles for insulator complex LBC in regulating gene expression in Drosophila at the local and global levels. **Amina Kurbidaeva**

158 - 5:15 A DNA/RNA dual activity topoisomerase regulates transcription through distinct mechanisms . **Seung Kyu Lee**

159 - 5:30 Activating and repressing stochastic gene expression between chromosomes. **Elizabeth Urban**

160 - 5:45 LlamaTags: A genetic tool to visualize rapid transcription factor dynamics in living embryos. **Jacques Bothma**

Saturday, April 14 4:00 p.m. – 6:00 p.m. 5th Floor, Salon H

Physiology, Metabolism and Aging II

Session Chairs:

Stephen Helfand, Daniela Drummond-Barbosa, Jackson R. Taylor

161 - 4:00 VEGF/Pvf1 mediated muscleoenocyte communication regulates systemic lipid homeostasis. **Arpan Ghosh**

162 - 4:15 Lipid droplets: Novel mediators of antibacterial immunity in *Drosophila*. **SNEH HARSH**

163 - 4:30 Mechanisms underlying peripheral insulin resistance and metabolic dysfunction caused by chronic immune activation. **Brittany Martinez**

164 - 4:45 Non-canonical autophagy controls steroid hormone synthesis and developmental timing by regulating cholesterol trafficking. **Xueyang Pan**

165 - 5:00 Pigment-dispersing factor signalling functions in the *Drosophila* prothoracic gland to regulate body size and developmental timing. **Melissa Saligari**

166 - 5:15 Allatostatin-A promotes larval developmental progression. **Nuria Romero**

167 - 5:30 The *Drosophila* mitochondrial citrate transporter regulates L-2-hydroxyglutarate accumulation by coupling the tricarboxylic acid cycle with glycolysis. **Hongde Li**

168 - 5:45 Regulation of Mitochondrial Complex I Biogenesis in *Drosophila* Flight Muscles. **Edward Owusu-Ansah**

Notes

Sunday, April 15 8:30 a.m. – 12:00 noon 5th Floor Salons E-H

Notes

Plenary Session II

Session Chairs:
Pam Geyer,
Noah Whiteman,
Gio Bosco

Presentations:

8:30 Non-conventional autophagy in the prothoracic gland mediates a larval nutritional checkpoint through alteration of cholesterol trafficking. **Michael O'Connor**

9:00 Sexual interactions and the evolution of species isolating barriers. **Leonie Moyle**

9:30 Regulation of stem cell number in the intestine. **Benjamin Ohlstein**

10:00 - **Break**

10:30 Highways for repair: nuclear actin filaments and myosins relocalize heterochromatic DNA breaks to the nuclear periphery. **Irene Chiolo**

11:00 Effects of the gut microbiota on host behavior and homeostasis. **Julien Royet**

11:30 Looking at chromosomes. **Chaoting Wu**





Fly Food Made Easy

Ready-made fly food for Drosophila since 2012

Guaranteed Consistent Quality
Standard cornmeal-agar media
High Fat and High Sugar options
Affordable Subscriptions
Anytime Online Ordering

Your research is worth it.

919-450-6744

www.ArchonScientific.com



BestGene Inc. www.thebestgene.com

2140 Grand Ave. Suite#205 Chino Hills, CA 91709 U.S.A.

Tel: +1-888-821-9155 Fax: +1-888-822-8445 info@thebestgene.com



Drosophila Embryo Injection Services

- The cheapest price for the best service! Starting from \$200 per injection.
- User friendly system! Real time tracking of service progress online.
- Inject 200+ embryos per service.
- Deliver transformed and/or balanced flies. We do the crosses!
- One shipping & handling charge per order! No matter how many services purchased.
- Selection of w¹¹¹⁸, yw or your own strain for transposable-element injection.
- PhiC31 integrase-mediated site-specific transgenesis the broadest selection of attP sites.
- Screen for white, yellow, vermillion, and/or GFP/RFP/DsRed/YFP/CFP.
- MiMIC injection service.
- CRISPR injection service.
- Over 80,000 individual constructs were successfully injected and over 420,000 transformants delivered!

Mutant screen results gathering dust in your lab notebook?

WGS datasets languishing on your hard drive?

New software tools going unshared?

We've got an article format for that.

Mutant Screen Reports

Describe results of mutant screens

Genome Reports



Describe whole genome sequence (WGS) data of organisms and/or strains

Software & Data Resources



Describe novel software for genetic data analyses and database resources

g3journal.org/content/article-types







The Developmental Studies Hybridoma

Bank

Dear Drosophila Community:

mAbs to Drosophila scientists, at a cost of \$40 per ml, with the lowest shipping charges available. And we provide customer support by experts in the field of mAb application. We support the against human targets. For the Drosophila Community, we have banked and distribute over 250 monoclonal antibodies (mAbs). Our bank has grown to include over 5,000 hybridomas, mostly Drosophila mAbs against 216 targets. Last year we sent out approximately 11,700 units of these Drosophila Community and appreciate the reciprocal support you have provided us Created by the NIH in 1986, the DSHB has been a source of high quality, low cost

David R. Soll, Director, and Staff.



View the Drosophila collection at our website. http://dshb.biology.uiowa.edu Email: dshb@uiowa.edu Phone: 319-335-3826 Fax: 319-359-4079

POSTERS

Intracellular Dynamics: Cytoskeleton, Organelles and Trafficking	169-203
Cell Biology and Signal Transduction	204-257
Cell Division and Growth Control	258-306
Cell Death and Immunity	307-338
Physiology, Metabolism and Aging	339-418
Gametogenesis	419-453
Stem Cells	454-470
Neural Development and Physiology	471-517
Neural Circuits and Behavior	518-562
Models of Human Disease: Neurodegeneration and Neurological Disorders	563-615
Models of Human Disease: Developmental and Physiological Disorders	616-641
Evolution and Population Genetics	642-696
Evolution of Development, other Species	697-711
Patterning, Morphogenesis and Organogenesis	712-760
Regulation of Gene Expression	761-814
Chromatin and Epigenetics	815-849
RNA Biology	850-863
Techniques and Technology	864-882
Educational Initiatives	. 883-888

Intracellular Dynamics: Cytoskeleton, Organelles & Trafficking

- Phosphorylation of septin protein Pnut is important during early stages of embryonic development in *Drosophila*. **Katarina Akhmetova**
- Myosin regulation during *Drosophila* salivary gland invagination. **Se-Yeon Chung**
- Characterization of a novel actin regulator, HtsRC. **Juli Gerdes**
- The polarity protein kinase Par-1 promotes Diaphanous activity for cleavage furrow ingression in the syncytial *Drosophila* embryo. **Tao Jiang**
- 173 Microtubules and microtubule plus end-binding proteins EB1 and CLIP-190 are essential for the spatiotemporal regulation of actin cable initiation and for the organization of the actin cable array during oogenesis. Ashley Leslie
- Spatiotemporal precision of actin cable production is regulated by actin assembly factors and microtubule crosstalk in nurse cells of the Drosophila egg chamber. **Gregory Logan-Graf**
- Novel concepts of microtubule regulation during neuronal growth, maintenance and degeneration. **Andreas Prokop**
- Echinoid Negatively Regulates Actomyosin network during Epithelial Morphogenesis. **Rahul Rote**

- Proximity-dependent biotinylation as a tool to identify ring canal protein interactomes in the *Drosophila* ovary. **Rebecca Starble**
- 178 Identification of components of Abl signaling pathways that direct cell migration during morphogenesis. Madison Ward
- Zasp52 LIM domains mediate protein recruitment to the Z-discs. **Yushu Xiao**
- Collision of expanding actin caps with actomyosin borders for cortical buckling and mitotic rounding in a syncytium. **Yixie Zhang**
- Endosomal vacuoles of the prepupal salivary glands of *Drosophila* play an essential role in the metabolic reallocation of iron. **Robert Farkas**
- Non-apoptotic function of the executioner caspase drICE is required for endosomal trafficking and tracheal elongation. **Saoirse McSharry**
- **183** Proper Endoplasmic Reticulum partitioning is necessary for mitotic progression in Drosophila neuroblast. **Jose Ortega**
- Mechanisms for EGFR signaling regulation by intracellular trafficking in Glioblastoma. **Marta Portela Esteban**
- Cholinergic activity-dependent episodic anterograde transport of Choline Acetyltransferase by Kinesin-2. **Krishanu Ray**
- The V-ATPase V1 subunit A1 is required for rhodopsin anterograde trafficking in *Drosophila*. **Haifang Zhao**
- Coordination of Class II PI3-kinase and Mtm PI3-phosphatase functions in autophagy. **Amy Kiger**

- Regulation of endosomal Microautophagy in Drosophila. **Ana Mesquita**
- Stabilized Acinus manages cellular stress and extends life by elevating basal levels of Autophagy. **NILAY NANDI**
- The role of Clueless in mitochondrial function. **Kelsey Sheard**
- Inappropriate physical interactions between storage organelles interfere with their normal trafficking during embryogenesis. **Michael Welte**
- Tracking Centrosomes to Follow Endoplasmic Reticulum Inheritance in *Drosophila* Embryos. **Cecelia Brown**
- Dynein associates the endoplasmic reticulum with centrosomal microtubules but is not required for mitotic partitioning of the organelle. **Darya Karabasheya**
- Maintenance of visual neurotransmission during prolonged light requires AMPylation of BiP. **Andrew Moehlman**
- Roles of spastic paraplegia proteins in organising a dynamic axonal ER network. **Cahir O'Kane**
- Investigating the role of nucleocytoplasmic transport in Inclusion Body Myositis. **Kyla Britson**
- Nuclear Wash functions in multiple nuclear complexes to affect nuclear morphology/events. **Susan Parkhurst**
- Dynamics of histone nuclear import in the early *Drosophila* embryo. **Yuki Shindo**
- A New Twist in an Old Saga: an Essential Role of *Drosophila* RanGAP at the Nuclear Pore. **Shane Chen**

- Analysis of Gp210 function in *Drosophila melanogaster*. **Sean Speese**
- 201 Unused program number
- Investigating the roles of Fascin in collective cell migration using Drosophila border cell migration. **Maureen Lamb**
- Balance of action by integrinassociated proteins revealed by myofibril attachment. **Nicholas Brown**

Cell Biology & Signal Transduction

- Understanding how Hedgehog signaling regulates Cubitus Interruptus using the CRISPR/Cas9 gene editing system. **Jamie Little**
- Examining the effectiveness of knocking down the Hedgehog signaling pathway using different RNAi lines in *Drosophila*. **Julia Spear**
- 206 Screening Candidates from a Genetic Screen to Identify Novel Regulators of Wingless Signaling. Alan Gutierrez
- Emc regulates wingless signaling through Hippo-dependent non-apoptotic caspase signaling. **Sudershana Nair**
- Drosophila Glioma models to study therapy resistance. **Logan Roebke**
- Dally-like differentially regulates Wnt ligands in *Drosophila* germarium to promote GSC maintenance and differentiation. **Indrayani Waghmare**
- Wg signaling *in vivo* alters Axin-Sgg interactions to inhibit destruction complex activity. **Marcel Wehrli**

- 211 Length and Organization of Interfollicular Stalks is Critical for Oogenesis and Fecundity. Alexandra Mascaro
- 212 Muscle secreted Myoglianin regulates imaginal disc size. **Ambuj Upadhyay**
- Stem cell-niche interactions in the *Drosophila* ovarian germline. **Scott Wilcockson**
- 214 The *Drosophila* TGF-beta/Activin-like ligands Dawdle and Myoglianin modulate adult lifespan through regulation of 26S proteasome function in adult muscle. **Changqi Zhu**
- Lgl regulates endosomal vesicle acidification and Notch signaling by promoting Vap33 interaction with the V-ATPase complex. **Marta Portela Esteban**
- Molecular characterization of JAK/STAT regulation of spermatid differentiation. **Sepideh Dadkhah**
- Understanding the role of a nurse cell protein Cup, in border cell migration during *Drosophila* oogenesis. **Banhisikha Saha**
- Mind bomb 2, a negative regulator of STAT activity, is required for normal border cell migration. **Sunny Trivedi**
- Loss of the mucosal barrier alters the progenitor cell niche via JAK/STAT signaling. **Liping Zhang**
- Tools for tracking Akt kinase kinetics in *Drosophila melanogaster*. **Didem Sarikaya**
- 221 Identifying the molecular mechanism of the Jub/α-Catenin mechanosensitive interaction. **Herve Alegot**

- β -Integrin is required for wound-induced polyploidization. Rose Besen-McNally
- The role of Yorkie in different stages of eye development through the utilization of different binding partners of? *Drosophila melanogaster*. **Batoul Nasser**
- Dorsal/NF-κB in the Drosophila Embryo Exhibits a Ventral-to-Dorsal Gradient in Mobility. **Hadel Al Asafen**
- Feedback by Sprouty controls the effects of activating mutations from RASopathies. **Rob Marmion**
- A functional screen identifying novel *Drosophila* Egf receptor targets with roles in eggshell morphology. **Alexis Morgan**
- Investigation of eRpL22-like function in *Drosophila melanogaster* eye development through consequences on EGF signaling. **Caroline Pritchard**
- Probing PLC-y function in Drosophila by *in vitro* mutagenesis. **Justin Thackeray**
- A Deficiency Screen for Genetic Interactors of Jagunal in Drosophila. **Sydney Alvarado**
- Characterization of Antibodies Developed against Two Basement Membrane Degraders in *Drosophila melanogaster*. **Afolasayo Aromiwura**
- Genetic dissection of interommatidial cell calcium signaling. **Henry Chang**
- Ecdysone regulates epithelial barrier maturation in wing imaginal discs. **Danielle DaCrema**
- **233** 4e Binding Protein is essential for adaptation to hypoxia in *Drosophila*. **Maximiliano Katz**

- **234** Tissue homeostasis in the context of DNA damage, cell death and cellular signalling: Non-apoptotic role of Dronc in DDR and cell protective function of JNK via dp53. **Chaitali Khan**
- 235 Differential response of *Drosophila* cell lines to high extracellular adenosine. **Lucie Kucerova**
- **236** Functional characterization of concentrative nucleoside transporter 2 (CNT2) in *Drosophila melanogaster*. **Houda Ouns Maaroufi**
- **237** Role of STIM and Orai Ca²⁺ signaling proteins in developmental cardiomyocyte growth. **Courtney Petersen**
- **238** Identification of Novel Proteins Required for Ras Membrane Localization Using the *Drosophila* Eye. **Julie Gates**
- 239 Identification of a conserved Rabex-5 ubiquitination signal in Ras. Rewatee Gokhale
- **240** The small GTPase Rala is required for lymph gland homeostasis in *Drosophila* . **Helene Knaevelsrud**
- **241** Calcium-dependent regulation of actomyosin contractility in epithelia. **Megan Levis**
- **242** Investigating precise regulation of the RhoA GTPase in tissue folding. **Marlis Kristina Denk-Lobnig**
- 243 Protein Kinase C δ regulates the structure and dynamics of cellular protrusions of migrating border cells. **Dorothea Godt**
- 244 Role of α -Catenin actin-binding domain in regulating cadherin complex interaction with the F-actin cytoskeleton. **Ritu Sarpal**

- **245** Using pathway-specific downstream genes to quickly evaluate changes in signaling status in RNA-seq data. **Wei Song**
- **246** Coordinated regulation of microRNAs by ATM/E2F1/p53 in Drosophila at physiological condition and at DNA damage response. **Xiaolin Bi**
- **247** Defining the mechanisms by which the Crk family of adaptor proteins regulate cell adhesion and actin dynamics during neural development and morphogenesis. **Andrew Spracklen**
- 248 Identifying kin17 as a potential novel regulator of autophagy, using GWAS technologies in *D. melanogaster*. AXelle Weeger
- **249** Establishing a model of BM damage and analyzing its repair. **Angela Howard**
- **250** Calcium signaling dynamics in the early response to epithelial wounds. **James O'Connor**
- **251** A targeted RNAi screen for conserved cell junction genes involved in collective cell migration of border cells in the Drosophila ovary. **Nirupama Kotian**
- **252** Study the roles of *mir-274* on cell invasion in the *Drosophila* wing epithelia model. **Chih-Hsuan Chang**
- **253** Defining the Role of the Novel Protein CG1674 in Adult Muscle Development. **Emily Czajkowski**
- **254** Maintenance of retinal integrity by the Abelson kinase during *Drosophila* eye morphogenesis. **Xiao Sun**
- **255** A novel role for Sex Peptide in packaging seminal proteins in the male accessory gland for delivery to females. **Mark Wainwright**

- **256** Coordination and crosstalk between muscle development and innate immunity in *Drosophila melanogaster*. **Nicole Green**
- Elucidating the Role of Eip63E in *Drosophila* Axonal Transport. **Susan Klinedinst**

Cell Division and Growth Control

- Neuroblast populations are dependent on ER conserved protein responsible for asymmetric division Jagunal. **Alonso Castro**
- Sensing mechanical force during cell division. **Ines Cristo**
- Crumbs and Xpd regulate mitotic motor kinesin-5 for chromosome segregation in Drosophila. **Jihyun Hwang**
- IRBIT promotes differentiation during tissue regeneration in the Drosophila midgut. **Alexei Arnaoutov**
- Collective Dynamics of Cell Cycles in the Drosophila Germline. **Caroline Doherty**
- Noncanonical functions of Phenylalanyl tRNA synthetase. **Beat Suter**
- Genetic control of tissue-specific growth in the larval trachea of *Drosophila*. **Kayla Wilson**
- Understanding coiled-coil function during synaptonemal complex assembly. **Katherine Billmyre**
- Regulation of the meiotic spindle and sister centromere cohesion in oocytes by antagonism between PP2A and Aurora B kinase. **Amy Gladstein**

- Female meiotic drive of B chromosomes in *D. melanogaster*. **Stacey Hanlon**
- Redox state alteration at the onset of development in *D. melanogaster.* **Boryana Petrova**
- The roles of Dalmatian in meiotic cohesin regulation in *Drosophila*. **Zachary Sisco**
- PP1-87B antagonizes Polo and BubR1 in controlling microtubule dynamics to achieve sister chromatid coorientation in metaphase I in *Drosophila* oocytes. **Lin-Ing Wang**
- 271 Structural-Functional characterization of Pericentrin like proteinprotein(*Plp*). **RAMYA VARADARAJAN**
- Naturally derived, Blm-dependent Y chromosome genetic variation affects sex-specific survival in *Drosophila melanogaster*. **Joshua Mundell**
- Error-prone DNA repair in *Drosophila*: the missing link between polymerase theta structure and function. **Justin Blanch**
- Elucidating the multiple functions of POLDIP2 in *Drosophila melanogaster*. **Juan Castaneda**
- Uncovering new regulation of acentric DNA segregation. **Delisa Clay**
- Conservation of RecQ helicases between Drosophila and humans. **Rebecca Cox**
- *Drosophila* chromosome fragile sites. **Hunter Hill**
- Altering substrate specificity of the Holliday junction resolvase GEN. **Caitlin Moffatt**

- The Role of DmBlm in DNA Doublestrand Break Repair and Gene Conversion. **Noori Srivastava**
- The role of systemic factors in regulating mitotic and hypertrophic injury responses. **Scott Allen**
- An RNAi screen to discover deubiquitinases (DUBs) important for the cell cycle. **Jennifer Bandura**
- Stem cell proliferation is regulated by Myt1 in the *Drosophila* intestine. **Reegan Willms**
- *jim lovell (lov)* acts downstream of *dmyc* to regulate endopolyploid growth in the larval stages. **Kathleen Beckingham**
- A switch from compensatory proliferation to compensatory hypertrophy in the injured *Drosophila* hindgut. **Erez Cohen**
- 285 Cell cycle re-entry in the adult *Drosophila* melanogaster brain. Shyama Nandakumar
- Novel role of dGATAe Transcription Factor in the Drosophila Renal Tubule. **Guillermo Martinez Corrales**
- Scaling up the myoblast precursor pool through motor neuron signaling. **Joyce Fernandes**
- A new paradigm for regulation of apoptosis by intracellular pH dynamics. **Jobelle Peralta**
- **289** Modulation of CRL4^{Cdt2} activity in the syncytial embryo. **Christina Swanson**
- Regulation of Dap protein stability in the female germline. **Christina Swanson**

- **291** CRL4^{Cdt2} function during chorion gene amplification. **Christina Swanson**
- Modification of tumorigenesis microenvironment by a microRNA. **Wu-Min Deng**
- Expression pattern observation of *CG6191* (*Mary Shelley*) in *Drosophila melanogaster* and the link between its homolog *Cables1* and epithelial based cancers in humans. **Amber Elinsky**
- Regulation of *dronc* in development and cancer. **Karishma Gangwani**
- Yorkie drives tumor progression by antagonizing Pointed/ETS-mediated cellular senescence. **Takao Ito**
- Tumor suppressive roles of Nucleoporins 98 and 96 in *Drosophila* epithelium. **Ajai Joseph Pulianmackal**
- Cell-type-specific role of Snr1 in the developing optic lobe in Drosophila. **Sophie Keegan**
- **298** Cell Type-Specific Response to Spindle Misorientation and Effects on Tissue Growth. **Amalia Parra**
- Cell Competition as a Model for Pre-neoplastic Development. **Timothy Crawley**
- Cell competition eliminates aneuploid cells after irradiation. **Zhejun Ji**
- **301** Growth regulation by the bZipdomain protein Xrp1 in *Minute* ($Rp^{+/-}$) cells . **Amit Kumar**
- Mechanisms of clonal extrusion maintain epithelial homeostasis. **Jamie Lahvic**
- Hyperinsulinemia abrogates tumor-suppressive cell competition. **Yuya Sanaki**

- Loss of *foxo* rescues stem cell aging in *Drosophila* germ line. **Hannele Ruphola-Baker**
- Tsc/Tor pathway regulates specific *de2f1* transcript-isoforms to control cell size and proper development. **Mary-Rose Bradley-Gill**
- An RNAi based screen to identify upstream regulators and downstream effectors of the TORC1 inhibitor GATOR1. **Yngbiao Zhang**

Cell Death and Immunity

- Regulation of different developmental apoptosis through *fs*(1)*h*. **Antoine Borensztein**
- Cut alters the chromatin landscape of the reaper locus to facilitate neuroblast death. **Seda Gyonjyan**
- Restriction of apoptosis in *Drosophila* neural stem cells. **Katherine Harding**
- Modifiers of *Bar* eye facet cell death using DGRP sequenced genomes. **Tomas Holy**
- Exocytosis and lysosomal gene involvement in nurse cell phagoptosis. **Oandy Naranjo**
- Identifying natural genetic modifiers of apoptosis and retinal degeneration. **Elaine Ong**
- Loss of the fatty acid elongase ELOVL6 rescues ER stress-induced apoptosis. **Rebecca Palu**
- Investigating the scramblase function for corpse clearance in the *Drosophila* ovary. **Jeanne Peterson**

- The ABC transporter *Eato* promotes cell clearance in the *Drosophila melanogaster* ovary. **Clarissa Santoso**
- Characterizing stretch follicle cell dynamics during nurse cell phagoptosis. **Yuanhang Zhang**
- Actin cytoskeletal remodelling mediates activation of apoptosis-induced cell proliferation. **Luchi Farrell**
- Use of fluorescent bacteria to probe the phagosomal environment in wild-type and mutant hemocytes. **Catherine Brennan**
- 319 Determining the role of innate immunity in phagocytic defect-driven neurodegeneration. Johnny Elguero
 320 Nubbin isoform antagonism governs intestinal immune homeostasis. Bo Lindberg
- **321** Induction and inhibition of host immune responses to Kallithea Virus, a natural dsDNA virus of *D. melanogaster*. **William Palmer**
- Defining the Transcriptional Program that Limits Enteric Viral Infections in Drosophila. **Elisha Segrist**
- *Drosophila* crystal cells undergo pyroptosis to release pro-phenoloxidase at wound sites. **Alexis Dziedziech**
- Lipid droplet dynamics during phagocytosis. **Amber Myers**
- Natural variation in larval crystal cell number across the DGRP. **Brian Tang**
- Effects of simulated microgravity on a host-pathogen system. **Rachel Gilbert**
- Effect of Infection on Female Mating Bias and Male Cuticular Hydrocarbons in *Drosophila melanogaster*. **Melissa McCarter**

- Impact of Chronic Infection on Tolerance and Resistance in *Drosophila melanogaster*. **Francesco Satriale**
- Enterotoxigenic *E. coli* heat-stable toxin disrupts trafficking to intercellular junctions. **Curtis Sera**
- 330 Unused program number
- Bacterial interactions drive protection against antibiotics in the fly gut. **Andres Aranda-Diaz**
- Microbiota-induced expression of Obp28a alters *Drosophila* systemic immune responses. **Rose Dziedzic**
- 333 Unused program number
- The uneven playing field of the gut microbiome: early colonizers dominate late arrivals. **Benjamin Obadia**
- Specificity in the early gut microbiome: species- and strain-level effects on development and their long-term fitness consequences. **Vivian Zhang**
- Absorbing epithelium of the midgut as the model to study toxicity mechanisms of the heavy metal cadmium. **Anton Bryantsev**
- Dissecting JNK-mediated cell elimination in *Drosophila*. **Mai Nakamura**
- Investigating neurodegeneration that arises from defective glial phagocytosis. **Katie Tiemeyer**

Physiology, Metabolism & Aging

The role of FOXO during hypoxia in *Drosophila*. **Elizabeth Barretto**

- Translational control of stress responses in *Drosophila*. **Rujuta Deshpande**
- FLies in A MinE: metabolomics in a particle physics lab to improve the mining workplace. **Thomas Merritt**
- A phenotypic landscape of mechanisms underlying resistance to multiple stressors. **hiroshi nishida**
- How does Wolbachia infection affect lifespan in *Drosophila melanogaster*? **Joel Parker**
- A transcriptional switch during oxidative stress of p38 MAP Kinases revealed through species comparisons. **Kaitie Wildman**
- The control of fat storage by splicing factors in *Drosophila*. **Ryan Bennick**
- Examination of the competition between the SR proteins 9G8 and RFS1 in the alternative splicing of CPT1 in lipid metabolism. **Benjamin Borokhovsky**
- The regulation of triglyceride storage by Ornithine decarboxylase (Odc1) in *Drosophila*. **Austin Fruin**
- The gene alan shepard (shep) regulates organismal energy homeostasis in multiple metabolic organs. **Claire Gillette**
- Role of Chloride intracellular channels in the aging heart. **Shubha Gururaja Rao**
- Downregulation of mTOR requires cysteine degradation and anaplerosis. **Patrick Jouandin**
- **351** The Regulation of Lipid Metabolism by Heterogeneous Nuclear Ribonucleoproteins (hnRNPs) in *Drosophila*. **Jacqueline Kanaskie**

- Defining how dERR regulates growth during *Drosophila* Oogenesis. **Nader Mahmoudzadeh**
- Large Scale Genetic Screen to Identify Metabolic Regulators of Specification and Differentiation. **Rose Massey**
- The Role of SR Protein Kinases in Regulating Lipid Metabolism. **Jonathan Mercier**
- Characterization of two possible phosphoglycolate phosphatase orthologs in *Drosophila melanogaster* . **Daniel Moskop**
- Role of *LanA* in diet-induced Type-2 diabetes in *Drosophila* melanogaster. **YounJi Nam**
- Detecting *Drosophila* SR splicing factor proteins by Western Blot. **Yesha Patel**
- Metabolic characterization of the *Drosophila* E78 nuclear receptor. **Sophia Praggastis**
- A *Drosophila* model of *D-2-hydroxyglutaric aciduria*. **Michael Shen**
- Drosophila ceramide synthase Schlank regulates transcription according to lipid status. **Mariangela Sociale**
- Calcium Independent Phospholipase A₂-beta Is Non-essential for Somatic Phospholipid Metabolism but Is Required for Maximal Lifespan and Fertility. **Josefa Steinhauer**
- The identification of SR proteins crucial to the alternative splicing of the glucose-6-phosphate dehydrogenase coding gene by NADPH production assays. **Mason Tracewell**
- Reduced lipogenesis alters lipid profiles and exacerbates type 2 diabetic phenotypes in *Drosophila*. **Bryon Tuthill**

- Muscle directs diurnal energy homeostasis through a myokine-dependent hormone module in Drosophila. **xiao zhao**
- Intergenerational Effects of Nutrition on Abdominal Cuticle Pigmentation in *Drosophila Melanogaster*. **Carolina Alvarez**
- Characterization of adult *Drosophila melanogaster* insulin pathway mutants. **Jessica Alvarez**
- A novel dye-based method for measuring solid media consumption in adult Drosophila. **Michael Grotewiel**
- Assessing the genetic- and sexspecific interactions of adult exercise and poor larval diet in *Drosophila*. **Kelsey Lowman**
- SIK2 coordinates animal growth via protein and carbohydrate sensing. **Linda Parsons**
- Effect of dietary additives on intestinal permeability in *Drosophila*. **Matthew Pereira**
- Effects of Diet and Genotype on Cardiovascular Health in Drosophila. **Christopher Quaglia**
- 372 GATA factor Pannier plays an essential role for proper sperm storage in adult spermathecae. Wei Shen
 373 Metabolic analysis of critical weight. Tharindu Fernando
- Identification of novel FOXObinding partners regulating oxidative stress response in Drosophila melanogaster. **Allison Birnbaum**
- Expression and localization of superoxide dismutase (SOD) enzymes in mammalian cell systems. **Joel Parker**

- The mitochondrial proteome of flies expressing the alternative oxidase under different dietary conditions. **Marina Chioda**
- *Drosophila tafazzin* mutants have impaired exercise capacity. **Deena Damschroder**
- The mitochondrial alternative oxidase mitigates the effects of cold stress in *Drosophila* melanogaster. **Geovana Garcia**
- Mitochondrial Genotype Alters Metabolic and Transcriptional Regulation by TOR Signaling in *Drosophila*. **John Santiago**
- The role of the ribonucleoprotein Clu in mitochondrial health and protein import. **Aditya Sen**
- A soma to germline signaling relay triggers OXPHOS biogenesis during early oogenesis essential for *Drosophila* mitochondrial inheritance. **Zong-Heng Wang**
- A mitochondrial rescue of a nuclear defect in starvation resistance and lipid levels in Drosophila. **Shawn Williams**
- Effects of Hemocytes and Hemocyte Signaling on Longevity in Drosophila. **Anton Bryantsev**
- Exploring the role of histones in replicative and organismal ageing in *Drosophila melanogaster*. **Sudarshan Chari**
- RiboTag Profiling of aging and oxidative stress responses in adult hepatocyte-like cells. **Kerui Huang**
- Circadian environmental cues modulate aging in *Drosophila melanogaster*. **Jacob Johnson**

- The Anti-aging Effect of Resveratrol-Enriched Rice Callus DJ526 on Wild-type *Drosophila melanogaster*. **Mousumee Khan**
- De novo retrotransposon insertions mediated by Myc affect lifespan and aging-associated phenotypes in *Drosophila melanogaster*. **Shannon Lightcap**
- How can the anti-senolytic drug combination of Dasatinib and Quercetin extend lifespan in *Drosophila melanogaster?* **Joel Parker**
- How does social environment affect aging in *Drosophila melanogaster?* **Joel Parker**
- Toward a Genome-Wide Association Study of Diet Related Mortality in *Drosophila melanogaster*: High Sugar Diet. **Sumit Patel**
- Dh31 signaling regulates *Drosophila* oogenesis. **Tianlu Ma**
- Neprilysin 4 modulates SERCA activity via cleavage of Sarcolamban A. **Ronja Schiemann**
- Octopamine drives endurance exercise adaptations in *Drosophila*. **Alyson Sujkowski**
- Identifying the receptor for the *Drosophila melanogaster* seminal fluid protein ovulin. **Melissa White**
- PERIOD O-GlcNAcylation regulates its interaction with CLOCK to prevent premature initiation of circadian repression phase in the *Drosophila* clock. **Ying Li**
- Structure-function analysis of Tribbles identifies conserved motifs in the protein regulating subcellular trafficking and novel targets modulating Notch signaling. **Leonard Dobens**

- The effects of IIS/TOR signaling on sex-differential gene expression in Drosophila. **Rita Graze**
- Identification of transcriptional mechanisms that locally and distantly control cell and whole animal size in response to fat body Toll signaling. **Miyuki Suzawa**
- Characterizing a null mutant for *spargel/dPGC-1*, a homologue of mammalian *PGC-1* gene supports its essential requirement in embryonic development. **MOHAMMAD BASAR**
- Activin-Beta/TGF-Beta signaling in skeletal muscle controls insulin/TOR signaling, metabolism and final body size. **Lindsay Moss-Taylor**
- **402** Ribosome synthesis and the control of growth and development in *Drosophila*. **Lisa Deliu**
- A role for *takeout* and juvenile hormone in the high fat diet obesity state of *Drosophila melanogaster?* **Zach Palowsky**
- Identification and functional characterisation of two putative ecdysteroid kinases in *Drosophila*. **Jack Scanlan**
- Disruptions in *fried/CG31320* cause precocious larval wandering, delayed pupariation, and larvael lethality. **Kalliopi Chatzis**
- Novel Microbe-Regulated Host Genes, Proteins, and Traits Identified Through Transcriptome and Proteome Analysis of the *Drosophila* Head. **Scott Keith**
- A dominant modifier screen to identify novel pH-sensitive proteins. **Jeremy Middleman**

- The Aging Gene lamin Is Regulated by the p38 MAPK and the CASA Complex. **Michael Almassey**
- Muscle Atrophy in Cancer Cachexia. **Ruth Silimon**
- Genome-wide association analysis reveals novel regulators of basal autophagy in *Drosophila*. **Hua Bai**
- High-Throughput mRNA Sequencing to Identify Components of the Polyamine Transport System. **Michael Haney**
- Genetic analysis of rapid tracheal fluid absorption and air filling during Drosophila ecdysis. **Javier Alvarez**
- Complete deletion of the endogenous *white* gene using CRISPR/Cas9 to utilize a novel interhomolog recombination reporter assay. **Hanan Bloomer**
- Characterization of exercise response genes in *Drosophila melanogaster*. **Nicole Riddle**
- Gut Microbiome Effects on Desiccation Resistance in *Drosophila melanogaster*. **Andrea Darby**
- Determination of the Lethality of Thujone and its Derivatives on Adult Drosophila melanogaster. **Anna Mykytyn**
- Maintaining cell identity by a single transcription factor and nuclear lamins. **Eliya Bitman**
- Carbonic anhydrases mediate respiratory activation in *Drosophila melanogaster*. **Noura Maziak**

Gametogenesis

- Roles for two novel genes in postmeiotic mitochondrial shaping during *Drosophila* spermatogenesis. **Katherine Copenhaver**
- Phosphoinositides modulate specific nuclear morphogenesis events during spermiogenesis. **Lacramioara Fabian**
- Phenocopying the spermatid individualization defect of *mulet* using germline-specific RNAi. **James Fabrizio**
- Tubulin-binding cofactor E-like (TBCEL), the protein product of the *mulet* gene, is required in the germline for spermatid individualization for the regulation of inter-flagellar microtubule dynamics. **James Fabrizio**
- Characterization of putative testisspecific sugar transporters in *Drosophila melanogaster*. **Emily Fontenoy**
- Importin α1 is required for maintenance of male germline stem cells. **Gary Hime**
- Sex chromosome pairing can be mediated by euchromatic homology in male meiosis. **Christopher Hylton**
- Knockdowns in Protamine A and Protamine B can imitate the abnormal function of Sd-RanGAP. **Janna McLean**
- Defects in spermatogenesis underlying hybrid male sterility. **Colin Meiklejohn**
- The Dlg-module and clathrin-mediated endocytosis regulate EGFR signaling levels and cyst cell-germline coordination in the *Drosophila* testis. **Fani Papagiannouli**

- Nmd regulates peroxisome biogenesis and mitochondrial shaping in *Drosophila* spermatogenesis. **M. Qureshi**
- Small Ubiquitin-like Modifer (SUMO) posttranslational modifications mediate critical regulatory events required for proper sperm development and transfer to seminal vesicles during *Drosohila* spermatogenesis. **Janet Rollins**
- Fertility and sperm storage in aged *Drosophila* males. **Yonatan Schwartz**
- An evolutionarily conserved protein required for sperm motility in *Drosophila*. **Ryan Snow**
- The PNG kinase activator GNU interacts with RNP granule components in mature Drosophila oocytes. **Emir Aviles Pagan**
- *orb* functions in the initial specification and maintenance of oocyte identity. **Justinn Barr**
- **435** Spargel/dPGC-1 is essential for nutrient-mediated ovarian growth. **MOHAMMAD BASAR**
- *small ovaries* negatively regulates ovarian transposable element expression. **Leif Benner**
- Defining the function of p53 isoforms in *Drosophila* melanogaster. **Ananya Chakravarti**
- Nuclear lamina dysfunction triggers of a novel germline stem cell-specific checkpoint. **Tingting Duan**
- A Proteomic Analysis of Me31B Interactome in *Drosophila* Germ Granules. **Ming Gao**
- The Surprising composition and biophysical properties of a synaptonemal polycomplex. **Elizabeth Hemenway**

- **441** The NR5A nuclear receptor Hr39 functions in both reproductive glands and mature follicles to regulate ovulation. **Elizabeth Knapp**
- A role for the axon guidance receptor *frazzled* in *Drosophila* oogenesis. **Kaitlin Laws**
- NADPH oxidase-generated reactive oxygen species in mature follicles are essential for *Drosophila* ovulation. **Wei Li**
- **444** Towards understanding the effects of insulin/insulin-like growth factor signaling (IIS) and IIS-dependent pathways on ovariole number and other fitness aspects in the specialist species *Drosophila sechellia*. **Aracely Newton**
- Investigating non-canonical Frazzled signaling in oogenesis. **Samantha Russell**
- The protein kinase CK2 substrate Jabba regulates lipid metabolism during *Drosophila* oogenesis. **Todd Strochlic**
- *In vivo* evidence for the role of *CG15436* during endoreplication within ovary follicle cells. **Rachel Williamson**
- **448** Regulation of Germline Sexual Identity in *Drosophila melanogaster*. **Pradeep Bhaskar**
- Postmating modification to the *Drosophila melanogaster* sperm proteome. **Emma Whittington**
- Guidance of stem cell niche assembly, position, and architecture. **LAUREN ANLLO**
- The role of prostagandins in collective, invasive cell migration. **Emily Fox**
- Role of *rib* in Gonad Development and Function. **Danielle Talbot**

Signalling interactions in *hippo*-dependent somatic cell number regulation during *Drosophila melanogaster* ovarian morphogenesis. **Tarun Kumar**

Stem Cells

- Sex-specific specification of the follicle stem cells in the developing *Drosophila* ovary. **Abigail Fuchsman**
- "Survival of the fittest": Understanding hypercompetition in the follicle stem cell niche. **Sumitra Tatapudy**
- *Small ovary* regulates germline stem cell survival and differentiation by promoting heterochromatin formation. **Ferenc lankovics**
- Germline stem cell maintenance control by adipocyte collagen in adult *Drosophila* females. **Lesley Weaver**
- Molecular mechanisms of neuroblast reactivation in *Drosophila*. **Jiawen Huang**
- Cullin4-RING ubiquitin Ligase (CRL4) complex regulates reactivation of *Drosophila* neural stem cells. **Phuong Thao Ly**
- Eyeless uncouples neuroblast proliferation from dietary nutrients in *Drosophila*. **Conor Sipe**
- Groucho controls proliferation and differentiation of *Drosophila* intestinal stem cells by co-operating with E(spl) factors. **Xingting Guo**
- Coordinated regulation of adult stem cell proliferation and differentiation by Sox21a and Sox100B in the *Drosophila* intestine. **Fanju Meng**

- The POU/Oct transcription factor Nubbin controls the balance of intestinal stem cell maintenance and differentiation by isoform-specific regulation. **Xiongzhuo Tang**
- Mitochondrial pyruvate metabolism suppresses stem cell proliferation both cell autonomously and non-autonomously. **Dona Wisidagama**
- A positive feedback regulatory circuit mediated by Phyllopod promotes enteroendocrine cell commitment from *Drosophila* intestinal stem cells. **Chang Yin**
- Transcriptional targets in the neuronal regulation of resident hematopoietic sites. **Katja Brückner**
- Role(s) of *bric-à-brac* and *engrailed* in Germline Stem Cell Niche (GSC) formation, in the *Drosophila melanogaster* ovary. **Laurine Miscopein Saler**
- BMP Signaling in the CySCs of the *Drosophila* Testis Stem Cell Niche. **Nastaran Mues**
- Development of ovarian Follicle Stem Cells during pupal stages. **Amy Reilein**
- The Role of Centromere Components in Germline Stem Cell Identity and Asymmetric Division. **Ben Carty**

Neural Development and Physiology

Brain Tumor promotes axon growth across the midline through interactions with the microtubule stabilizing protein Apc2. **Elise ARBEILLE**

- d-HURP (Mars) cooperates with the Frazzled receptor to promote axon growth across the midline in the Drosophila embryonic CNS. **Katherine Blocklove**
- Minimal structural elements required for midline repulsive signaling and regulation of the Drosophila axon guidance receptor Robo1. **Haley Brown**
- The Scar/Wave complex as a direct downstream effector of axon guidance receptors. **Karina Chaudhari**
- A novel role for Plexin A in photoreceptor axon targeting. **Jessica Douthit**
- Slit-independent guidance of longitudinal axons by *Drosophila* Robo3. **Tim Evans**
- Identifying Natural Variation in Midline Axon Guidance Using the *Drosophila melanogaster* Genetic Reference Panel. **Maya Gosztyla**
- **478** Analysis of Slit Protease in Nerve Growth. **Leah Heydman**
- The functional and structural analysis of Drosophila Robo2. **LaFreda Howard**
- Regulating the Slit-Robo system in flies and mice. **Riley Kellermeyer**
- Evolutionary conservation of axon guidance: midline repulsive signaling by Robo family receptors in flies and mice. **Alli Loy**
- Conservation of the Netrin receptor Frazzled in insects. **Benjamin Wadsworth**
- Formin3 regulates dendritic architecture via microtubule stabilization and is required for peripheral sensitivity to nociceptive stimuli. **Jamin Letcher**

- Mediating activity-dependent plasticity of *Drosophila* central synapses by tuning nicotinic receptor clustering. **Justin Rosenthal**
- Uncovering the role of a Drosophila tRNA methyltransferase in neurons. **Caley Hogan**
- Synaptic development within the optic glomeruli of *Drosophila melanogaster*. **Brennan McFarland**
- Tao is required in neurons to restrict neuromuscular junction development. **Pam Vanderzalm**
- Effect of thrombospondin in synaptogenesis at the *Drosophila* larval NMJ. **Norma Velazquez Ulloa**
- A conserved BMP-responsive *cis*-regulatory activation element mediates widesepread target-dependent gene activation in *Drosophila* neurons. **Douglas Allan**
- The suboptimization of a *cis*-regulatory BMP response element confers its cell subtype-specific gene activation in *Drosophila* neurons. **Douglas Allan**
- The function of intrinsic and extrinsic factors on temporal identity transitions in mushroom body progenitors. **Anthony Rossi**
- Shep regulates neuronal remodeling by controlling expression of its chromatin target genes. **Dahong Chen**
- *slit* is required for proper lch5 chordotonal neuron morphology and migration in the embryonic PNS. **Madison Gonsior**
- *Nopo* is an E3 ubiquitin ligase linking DNA damage response and centrosomes in mushroom body development. **Ryan O'Neill**

- Motor Neurons and the Path to Synaptic Specificity. **Lalanti Venkatasubramanian**
- The role of molecular heterogeneity at individual active zones in establishing diverse neurotransmitter release properties. **Karam Khateeb**
- Glial-expressed BMP ligand impacts motor neuron development. **Tracy Knight**
- Maintaining Neuronal Function: The Role of the Transcription Factor Gooseberry in Synaptic Growth and Stability. **Marizabeth Perez**
- The class I bHLH protein Daughterless interacts with the class V HLH protein Extramacrochaetae in postmitotic neurons. **Edward Waddell**
- Screening the Candidacy of Monosodium Glutamate (MSG) as an Addictive Substance in *Drosophila melanogaster*. **Curteisha Jacobs**
- Epigenetic reprogramming of courtship behaviors with social experience. **Bryson Deanhardt**
- Gut microbiota influences the severity of neurological phenotypes in *Drosophila* voltage-gated sodium channel mutants. **Toshihiro Kitamoto**
- Wide spread identification of an Axon Initial segment like region in the neurons of Drosophila Melanogaster using *para*-GFP. **Thomas Ravenscroft**
- 504 Interactions between photoreceptors and wrapping glia to control neuronal and glial morphogenesis in developing visual system. Yen-Ching Chang
- Identification of a Novel Regulator of Glial Development. **Jennifer Jemc**

- Regulation of retinal basal glia differentiation in *Drosophila* eye disc. **CHIA-KANG TSAO**
- Nutrient-dependent Development of the Glial Niche Coordinates Neuroblast Exit from Quiescence. **Xin Yuan**
- **508** Identification of a novel neuronal circuit controlling Dilps secretion and systemic growth according to nutrition. **Eleonora Meschi**
- **509** A genetic approach for the understanding of the brain microenvironment that regulates the plasticity of neural stem cells. **Hiroshi Kanda**
- Combinatorial action of Grainyhead, Extradenticle and Notch in regulating Hox mediated apoptosis in Drosophila larval CNS. **Risha Khandelwal**
- *Drosophila globin 1* is required for the development of nervous system. **Nisha Kumari**
- E93 activates autophagy to terminate mushroom body neuroblast proliferation. **Matthew Pahl**
- JAK/STAT guarantees robust differentiation of neural stem cells by shutting off biological noises in the developing fly brain. **Makoto Sato**
- Regulation of the *Drosophila* ID protein Extramacrochaetae by proneural dimerization partners. **Ke Li**
- Characterization of epithelial machinery required for ensheathment of somatosensory neurons. **Kory Luedke**
- **516** Gal80^{ts} analysis defines threshold for WND-driven axonal sprouts in R7 photoreceptor cells. **Catherine Bruno**
- Roles of N-cadherin in columnar unit organization in the medulla. **Olena Trush**

Neural Circuits and Behavior

- Logic of an aminergic/glutamatergic circuit in egglaying. **Sonali Deshpande**
- Genome-wide association analysis of amphetamine sensitivity. **Caline Karam**
- Nitric oxide signaling in *Drosophila* ethanol sedation. **Rebecca Schmitt**
- Effect of point mutations in the vesicular acetylcholine transporter on acetylcholine-linked behavioral paradigms in *Drosophila*. **Shardae Williams**
- Central Neuropeptide Neurons that Relay Sex Peptide Signaling and Regulate Female Mating Receptivity in *Drosophila melanogaster*. **Yong-Hoon Jang**
- Calcium activated chloride channels are required for distinguishing between noxious and innocuous stimuli in multimodal sensory neurons. **Nathaniel Himmel**
- A forward genetic screen to identify modifiers of neurological phenotypes in *Drosophila* voltage-gated sodium channel mutants. **James Mrkvicka**
- Unveiling Mechanisms that Regulate Glial Signaling to Neurons. **Carlos Rivera**
- Transgenerational inheritance of behavior in *Drosophila*. **Julianna Bozler**
- Gut microbial diversity is important for the maintenance of learning behavior in *Drosophila melanogaster*. **Michael DeNieu**

- Drosophila species learn dialects through communal living. **Balint Kacsoh**
- Walking down the Line: Fruit Flies' Decision-making Behavior inside a Heat-Box. **RUICHEN SUN**
- Neuronal *fruitless* and *doublesex* Ex pression Clusters in Brains across *Drosophila* Species. **Sammi Ali**
- Investigating the role of the *Drosophila* female nervous system in sperm competition. **Dawn Chen**
- **532** A neural mechanism that biases sperm storage according to the nutritional status of both sperm donor and acceptor in *Drosophila melanogaster*. **Kang-Min Lee**
- The genetic and neural basis of female mate preferences isolating species. **Amanda Moehring**
- Elucidating the contribution of central brain histamine-mediated signaling in courtship behavior in *Drosophila melanogaster*. **Austin Van Velsen**
- Discerning the sex peptide spermbinding pathway. **Andrea Vogel**
- Network and environmental regulation of circadian behavioral phase. **Stephanie Haase**
- A sleep state in *Drosophila* larvae required for neural stem cell proliferation. **Milan Szuperak**
- 538 Translational profiling of the head fat body yields insights into the function of the Drosophila adipose tissue clock. Amy Yu
- Sleep deprivation suppresses aggression via the dorsal fan-shaped body. **Ben Mainwaring**

- Developmental gating of aggressive behaviors in *Drosophila*. **Emilia Moscato**
- The Molecular and Cellular Basis of Food Texture Sensation. **Yali Zhang**
- Carbon dioxide nhibits *Drosophila* startle responses. **Gerald Call**
- The role of ovipositor bristles in tasting in *Drosophila* melanogaster. **Julianne Pelaez**
- Functional classification of olfactory receptor neurons in *Drosophila*. **David Clark**
- Novel olfactory coding mechanisms in response to repellent odors. **Jonathan Clark**
- The evolution of olfactory receptors coupled with transition to herbivory in Drosophilidae. **Teruyuki Matsunaga**
- Differential Modulation of Olfactory Receptor Neurons in a *Drosophila* Olfactory circuit. **Seth Odell**
- A novel role for odorant binding proteins in deactivation of chemosensory neurons. **Elizabeth Pelser**
- *Drosophila* Gr64e mediates fatty acids sensing via phospholipase C pathway. **Hyeyon Kim**
- A Novel Visual Assay for Escape Behavior in Drosophila. **David Goodman**
- The Role of the IgSF Protein Dpr11 in the Development of Neural Circuits for Nociception. **Melanie Chin**
- Investigation of the role of *smoke alarm* in sensory dendrite morphogenesis. **Katherine Fisher**

- The role of LNd clock cells in the regulation of circadian rhythms. **Nicholas Bulthuis**
- The circadian clock network constantly monitors environmental temperature to set sleep timing. **swathi Yadlapalli**
- Transmitter synthesis and release machinery in glia influences *Drosophila* alcohol sedation. **Kristen Lee**
- **556** Assessment and selection of *Drosophila melanogaster* directional orientation behavior. **Kristin Latham-Scott**
- Complex visual processing during action selection in *Drosophila melanogaster*. **HyoJong Jang**
- RNA pseudouridylation sites in the *Drosophila* transcriptome. **Wan Song**
- Novel genes involved in pain perception in *Drosophila* melanogaster. **Elizabeth Vinton**
- IRE1α inhibition suppresses sleep in *Drosophila*. **Sarah Ly**
- Evolutionarily conserved "genetic toolkit" drives animal sociality. **Iris Chin**
- A unique switch in thermal preference in *Drosophila* larvae depends on rhodopsins/lipases/TRPA1 signal pathway. **Takaaki Sokabe**

Models of Human Disease: Neurodegeneration and Neurological Disorders

- Neurodegeneration and Tau Proteostasis Modulation Promoted by miR-219 Misregulation. **Mercedes Arnes**
- **564** Effect of the human cathelicidin antimicrobial peptide, LL-37, on $A\beta_{42}$ neurotoxicity in a *Drosophila* model of Alzheimer's disease. **Brandy Baird**
- Glucose Availability and its Effect on the Neuromuscular Junction in a Drosophila Model of ALS. **Dianne Barrameda**
- Identification of common biological pathways that protect against neurodegeneration associated with Amyotrophic Lateral Sclerosis models in *D. melanogaster*. **Mathieu BARTOLETTI**
- Functional Interactions between TDP-43 and Translational Machinery in a Drosophila Model of Amyotrophic Lateral Sclerosis. **Rachel Bear**
- Increasing Tip60 HAT levels in the brain restores Cognitive Function in Drosophila models of Huntington's and Parkinson's Disease. **Mariah Beaver**
- **569** Active wingless vampirization by glioblastoma network leads to brain tumor growth and neurodegeneration. **Sergio Casas-Tinto**
- Multi-level misregulation of Parkin and PINK1 revealed in *Drosophila* and cell models of TDP-43 proteinopathies. **Yanshan Fang**

- Testing the Factors Affecting Ethanol Sedation and Tolerance of *Drosophila melanogaster*. **Moshan Guo**
- The Effect of a Hyperglycemic Diet on Alzheimer's Disease in Drosophila melanogaster. **Rachel Hawkins**
- *highroad* is a *Drosophila* carboxypetidase induced by retinoids and clears mutant Rhodopsin-1 in *Drosophila* Retinitis Pigmentosa models. **Huai-Wei Huang**
- Synthetic Lethal Interactions Associated with Polyglutamine disease and Amyotrophic Lateral Sclerosis. **Kavitha Kannan**
- Identifying physiologically relevant targets of tdp-43 translational inhibition. **Erik Lehmkuhl**
- Specific depletion of Dipeptide Repeat Proteins in a fly model of C9ORF72 mediated ALS/FTD. **Kirstin Maulding**
- Tip60 HAT activity reverses early epigenetic alterations and reinstates cognition in multiple *Drosophila* neurodegenerative models. **Priyalakshmi Panikker**
- Anesthetics influence mortality in a *Drosophila* blunt trauma model. **Misha Perouansky**
- **579** Identification of genetic modulators of TDP-43 production in a new autoregulatory TDP-43 Drosophila model. **Marine Pons**
- The effects of SOD2 antioxidant on LC3 localization in a *Drosophila* model of Machado-Joseph Disease. **Henna Ragoowansi**

- Notch target gene E(spl)mδ is a Mediator of Methylmercury-Induced Myotoxicity in Drosophila. **Matthew Rand**
- Drosophotoxicology: Toxicity mechanisms of methylmercury in a Drosophila model of Minamata Disease. **Matthew Rand**
- Characterization of dSod1 knock-in mutations associated with ALS. **Kathryn Russo**
- An inducible expression system to delineate developmental versus homeostatic defects in photoreceptor neurons. **Johnathan Rylee**
- Wingless, a mediator of crosstalk between Amyloid-beta 42 expressing and wild-type neurons in Alzheimer's disease. **Ankita Sarkar**
- **586** Innate immunity at the fulcrum of aging and neurodegeneration in a p35/Cdk5 model. **Arvind Shukla**
- Deciphering the role of key metabolic genes regulating lipid homeostasis in *Drosophila* model of Huntington's disease. **AKANKSHA SINGH**
- Impairment of circadian oscillations in core clock genes in *Drosophila* model of Huntington's disease. **Khyati Singh**
- Altered activity of Cdk5/p35 kinase causes neurodegeneration in part by accelerating the rate of aging. **Joshua Spurrier**
- Copper-mediated oxidative stress correlates to memory deficits in a Drosophila model of Alzheimer's Disease. **Anne Marie Sullivan**

- Do reactive oxygen species contribute to neurodegeneration in a Drosophila model of Machado-Joseph Disease. **Yibo Wang**
- **592** Mitochondrial dysfunction associated with a SOD1-ALS knock in model. **Kristi Wharton**
- Neuroprotective role of histone acetyltransferase Tip60 in Alzheimer's disease. **Haolin Zhang**
- Stress granule assembly disrupts nucleocytoplasmic transport. **KE ZHANG**
- Thermal injury results in nociceptive sensitization in *D. melanogaster*. **Giselle Dion**
- Characterizing the neuronal and cognitive defects of histone demethylase *kdm5* mutants in a *Drosophila* model of intellectual disability. **Hayden Hatch**
- Down syndrome kinase minibrain control dendritic morphogenesis in *Drosophila*. **Kyu-Sun Lee**
- Traumatic injury induces Stress Granule Formation and enhances Motor Dysfunctions in fly models of ALS. **Udai Pandey**
- Reduced presentilin activity alters insulin signaling in a *Drosophila* model of Alzheimer's Disease. **Meridith Toth**
- High-volume functionalization of human autism PTEN variants in multiple models including *Drosophila*. **Payel Ganguly**
- Gene-environment interaction in social spacing in mutants of *Drosophila* neuroligin 3. **Anne Simon**
- **602** Actin reorganization in a photoreceptor model of polyglutamine repeat disorders. **Adam Haberman**

- New Drosophila models of repeat expanded diseases generated by CRISPR/CAS9 technology. **Herve TRICOIRE**
- Loss of scaffold protein RACK1 could suppress polyQ induced cell death. **Jun Xie**
- Using Drosophila models to study PNPO deficiency and epilepsy. **Wanhao Chi**
- Investigation of genetic interactors with *julius seizure*, a bang-sensitive locus. **Derek Dean**
- Regulators of BMP signaling control injury induced nociceptive sensitization. **Courtney Brann**
- Modeling Parkinson's Disease in Drosophila: A Platform for Drug Testing. **Christina Frasik**
- Uncovering neuroregenerative mechanisms in the adult *Drosophila* brain. **Kassi Crocker**
- Identification of *SAD* and its gliaspecific function in maintaining neural integrity during aging. **Shunpan Shu**
- **611** Repair on the Fly: Trinucleotide Repeat Expansion during Homologous Recombination in *Drosophila Melanogaster*. **Jane Blackmer**
- Candidate Genes for Cocaine and Methamphetamine Preference in *Drosophila melanogaster*. **Chad Highfill**
- **613** Bi-allelic Mutations in *ATP5D*, a Subunit of ATP Synthase, Cause a Metabolic Disorder. **Wan Hee Yoon**
- Draper-dependent phagocytic glia mediate trans-synaptic, prion-like transmission of mutant huntingtin aggregates in *Drosophila* brains. **Margaret Pearce**

A large-scale RNAi screen in Drosophila unravels robust modifiers of human TDP-43 toxicity. **Deepak Chhangani**

Models of Human Disease: Developmental and Physiological Disorders

- Modeling Chronic Myeloid Leukemia in *Drosophila melanogaster*. **Amani Al-Outa**
- Using the *Drosophila melanogaster* accessory gland as a model for prostate cancer. **Allison Box**
- Pharmacological screens in a fly model of polycystic kidney disease. **Chiara Gamberi**
- Modeling pheochromocytoma and paraganglioma in *Drosophila*. **Juan-Martin Portilla**
- **620** NOTCH2-NOTCH3-DLL3-MAML1-ADAM17 signaling network is associated with ovarian cancer. **Jesse Underwood**
- Probing intracellular pH dynamics during invasive migration in the *Drosophila* wing. **Vivian Bui**
- Heart-specific activin signaling promotes cardiomyopathy and organismal aging through autophagy inhibition. **Kai Chang**
- Creating *Drosophila* model of infantile hypertrophic cardiomyopathy to study the underlying mechanism of this pathology. **Edward Dubrovsky**

- Neurodevelopmental and transcriptional defects caused by KDM5 loss of function. **Helen Belalcazar**
- Functional analysis of ANKLE2 in microcephaly using a genetic model system. **Nichole Link**
- A small molecule screen identifies defective prothoracic gland function in a fly model of N-glycanase 1 deficiency. **Joshua Mast**
- The Involvement of the Myogenic Gene *nautilus* in Muscle Development. **Johnathan Cordova**
- Study of Human Ovarian Development & Dysgenesis Mechanisms in a Drosophila Model . **Offer Gerlitz**
- The use of the Drosophila Genetic Reference Panel to map Genes and Gene Network Underlying High Fat-Diet induced Mortality. **BRIDGET KONADU**
- 630 Studying the *in vivo* effects of human pathogenic mutations in the mttRNA processing complex Mitochondrial RNase P. **Maithili Saoji**
- WRNexo protects against aging and oxidative stress in Drosophila. **Elyse Bolterstein**
- **632** When You Give a Fly a Tuna Sandwich: Screen of Tox21 Compounds Identifies Methylmercury as an Intestinal Toxin. **Jonathan DiRusso**
- *Drosophila* as an Essential Genetic Model for Kidney Stones. **Saurav Ghimire**
- High-throughput drug screening and automation platforms in *Drosophila*. **Tamy Portillo Rodriguez**
- A systematic, flexible approach to teaching human disease biology using principles from *Drosophila* genetics. **Linda Restifo**

- Characterizing *Drosophila* Multidru g Resistance genes by CRISPR/Cas9 mediated Gal4 knock-ins. **Olivia** Williamson
- Genetic modifiers of *NGLY1* deficiency, a rare deglycosylation disorder, identified by exploiting natural variation in *Drosophila* . **Emily Coelho**
- Modulation of dopamine-mediated behavior by the adhesion G protein-coupled receptor dCirl. **Lilian Coie**
- Developmental defects in *Drosophila melanogaster* caused by Twinkle mutations cannot be rescued by the alternative oxidase. **Marcos Oliveira**
- *Staphylococcus aureus* Tolerance to Antimicrobial Peptides. **Alexis Page**
- Flight and Jump muscles respond differently to experimental cachexia and impaired insulin signaling. **Anton Bryantsev**

Evolution & Population Genetics

- Cancer, speciation, and chromosomes: how interspecies hybrids break somatic pairing. **James Baldwin-Brown**
- **643** Intragenomic conflict resulting from incomplete transposable element domestication. **Anne-Marie Dion-Côté**
- The Roles of Nuclear-Encoded Mitochondrial Duplicated Genes in Spermatogenesis in *Drosophila melanogaster*. **Mohammadmehdi Eslamieh**

- 9:30 Identifying hybrid male sterility factors in Drosophila. **Rodolfo Villegas**
- Microbiome influence on *Drosophila melanogaster* life-history evolution. **Rachel Hughes**
- Satellite DNA evolution across *D. melanogaster* and the *simulans* clade. **Danielle Khost**
- Unleashing cryptic sex chromosome conflict in Drosophila melanogaster. **MacKenzie Mauger**
- *De novo* evolved genes have essential roles in male *Drosophila* reproduction. **Emily Rivard**
- Rapid evolution dictates population dynamics in orchard populations of *Drosophila melanogaster*. **Seth**
- Recurrent turnover of the specialized retrotransposons that maintain Drosophila chromosome length. **Bastien Saint-leandre**
- Patterns of polymorphic duplications in *Drosophila melanogaster*. **Chau-Ti Ting**
- Haploid selection model for new gene evolution. **Maria Vibranovski**
- Genomics of parallel adaptation at multiple timescales in *Drosophila*. **Li Zhao**
- Testing the Bet-Hedging hypothesis: is intragenotypic variability in *Drosophila* thermal preference adaptive? **Jamilla Akhund-Zade**
- Variability in recombination rates as explanation for differences in levels of diversity among *Drosophila melanogaster* populations. **Johnny Cruz Corchado**

- What's the best way to sequence a *Drosophila* genome? Applications for population and evolutionary genomics. **Kevin Deitz**
- **658** Network constraints on local adaptation in *Drosophila melanogaster*. **Angela Early**
- **659** The Influence of Migration on Adaptation in Natural Populations of *Drosophila melanogaster*. **Ozan Kiratli**
- Complex satellite DNA variation within and between populations of *Drosophila melanogaster* . **Arif Kodza**
- Filling in the gaps in the *Drosophila yakuba* genome to obtain an accurate genome-wide high-resolution recombination map. **Nikale Pettie**
- Subfunctionalization of *SRPK*—a new Y-linked gene family in the *Drosophila simulans* clade. **Ching-Ho Chang**
- Comparative cytology of female meiosis among *Drosophila* species. **William Gilliland**
- Inversion polymorphism in populations with sexual antagonism and reproductive skew. **Christopher McAllester**
- Inversions and nucleotide diversity in *Drosophila yakuba*. **Patrick Reilly**
- Quantitative evolution of gene activity follows many different mutational paths. **David Loehlin**
- Quantitative genetics of ovipositor traits in the fruit pest *Drosophila* suzukii. **Eunice Kim**
- Understanding ovariole number regulation in *Drosophila melanogaster* using Quantitative trait loci (QTL) maps. **Tarun Kumar**

- Fine-mapping the genetic basis of wing spot evolution between *Drosophila elegans* and *D. gunungcola*. **Jonathan Massey**
- Parallel Evolution of Ethanol Tolerance found in Four Populations of *Drosophila melanogaster*. **Quentin Sprengelmeyer**
- Misregulation of proteolytic genes and hybrid male sterility in crosses between *D. p. pseudoobscura* and *D. p. bogotana*. **Doaa Alhazmi**
- The genetic basis of female preference and incipient speciation. **Dean Castillo**
- Hybrid male sterility between subspecies of *Drosophila willistoni*: A case of azoospermia. **Alberto Civetta**
- Introgression of *Drosophila simulans* alleles into *D. sechellia* alters female attractiveness. **Jennifer Gleason**
- Determining if *Ntu* affects female rejection of heterospecific males in *Drosophila*. **Joshua Isaacson**
- A conserved function for pericentromeric satellite DNA. **Madhav Jagannathan**
- Functional evolutionary genomics of duplicated genes in the *Drosophila melanogaster* lineage. **Alexandra Jones**
- Behavioral analysis of mate discrimination by *Drosophila* sechellia against *D. melanogaster* by using partial hemizygous hybrid females. **Masatoshi Tomaru**
- Expanding functional horizons or evolutionary combat? Evaluating drivers of the rapid evolution of *bag of marbles* in *Drosophila*. **Jaclyn Bubnell**

- **680** Variation in stress tolerance is associated with environmental differences in *Drosophila americana* group. **Jeremy Davis**
- X chromosome homozygosity in D. melanogaster females does not reduce lifespan as predicted by the unguarded X hypothesis. **Christopher Kimber**
- Maximum likelihood estimation of sex-dependent fitness costs of a *yellow* mutant allele in *Drosophila melanogaster*. **Jingxian Liu**
- Nuclear influence on mitochondrial DNA competition and transmission. **Hansong Ma**
- A battle for mitochondrial DNA transmission. **Hansong Ma**
- Impacts of Recurrent Hitchhiking on Divergence and Demographic Inference in *Drosophila*. **John Pool**
- Discerning the historical and genetic relationship between the endosymbiotic bacteria *Wolbachia* and the *Drosophila* germline stem cell gene *bag of marbles*. **Miwa Wenzel**
- Evolutionary Probability: A population-orthogonal framework for investigating ancient and contemporary selection. **Rayi Patel**
- Pervasive correlation of molecular evolutionary rates in the tree of life. **Qiqing Tao**
- Putting up with parasites: *bruno* reduces tolerance of transposition in the female germline. **Erin Kelleher**
- Satellite Repeats are Associated with Host Tolerance of an Active TE. **Jyoti Lama**
- Natural genetic variation in color perception in *Drosophila*. **India Reiss**

- Identifying genetic modifiers of flight performance using the Drosophila Genetic Reference Panel. **Adam Spierer**
- Genome Wide Association studies on nutraceutical effects of various chili peppers on *Drosophila* melanogaster. **Nirwan Tandukar**
- Repeated horizontal gene transfer from bacteria to *Drosophila*. **Kirsten Verster**
- *Scaptomyza flava* as a model for testing the role of gut bacteria in the evolution of herbivory. **Rebecca Duncan**
- Interspecific bias in *Drosophila* aggression depends on genetic distance. **Brent Lockwood**

Evolution of development, other species

- **697** Determining binding specificities of cell adhesion molecules from *Drosophila* and other related Dipterans. **Leah Anderson**
- **698** Identifying mechanisms of cold hardiness across metamorphosis in *Drosophila melanogaster*. **Philip Freda**
- Identifying the genetic basis of eye size variation in *Drosophila* melanogaster and *Drosophila simulans* . **Pedro Gaspar**
- Axon Guidance at the Midline: Evolution of the Commissureless Protein Family. **DAVID GLASBRENNER**
- Incorporation of horizontally transferred genes into the embryonic patterning network of the wasp *Nasonia*. **Daniel Pers**

- **702** Investigating morphological novelty in the evolution of the *Drosophila* genitalia. **Gavin Rice**
- **703** Investigating the developmental network of the posterior lobe, a novel morpholical structure. **Donya Shodja**
- **704** The cellular mechanisms accounting for the evolutionary adaptation of closed to open rhabdoms in compound eyes. **Andrew Zelhof**
- **705** Stop codon readthrough of a POU/Oct transcription factor regulates *Drosophila* development. **Yunp o Zhao**
- **706** Interommatidial bristles: An exceptionally variable trait in the Dipteran tree of life. **Markus Friedrich**
- **707** The show must go on: Maintaining a segmented body plan after the loss of a key regulatory gene. **Alys Cheatle larvela**
- **708** Identification of *Aedes* Cadherin protein function and examination of its localization by recent gene editing tools. **Jianwu Chen**
- **709** Epistatic interspecies allelic interactions generate facial developmental defects in haploid hybrid Nasonia wasps. **Jeremy Lynch**
- **710** Canonical telomeres in *Photinus* pyralis. **Isaac Wong**
- 711 Sexed Adult Tissue Expression Atlas for the Drosophila genus. **Haiwang** Yang

Patterning, Morphogenesis and Organogenesis

- **712** Rpd3 controls the concentration-dependent gap genes homeostasis in *Drosophila* embryos. **Paromita Das**
- **713** Understanding diversity along Antero-posterior body axis. **Narendra Singh**
- **714** Opposing transcriptional and post-transcriptional roles for Scalloped in Hippo-dependent fate decisions. **Tiffany Cook**
- 715 Eyeless/Pax6 Promotes Eye Development from the Peripodial Membrane through Pattern Formation and Dpp Expression. Luke Baker
- 716 Armadillo (β-catenin) transduces canonical Wnt signaling to specify the peripodial epithelium of the developing *Drosophila* eye. **Dana DeSantis** 717 Growth Regulatory Pathway collaborates with Axial Patterning Genes to regulate Patterning and Growth in *Drosophila* Eye. **NEHA GOGIA**
- **718** Yki promotes non-neural PE fate in the eye imaginal disc and is indirectly regulated by PP2A. **Scott Neal**
- **719** Identifying Gene Regulatory Networks within the Drosophila Eye-Antennal Disc. **Bonnie Weasner**
- **720** The IAP inhibitors *reaper*, *hid*, *and grim* prevent neoplastic transformation of regenerating tissues. **Cristina D'Ancona**
- **721** The role of the *Rbf1* tumor suppressor in the differentiation and maintenance of *Drosophila* muscles. **Anton Bryantsev**

- Examining the genetic mechanisms underlying muscle identity. **Krista Dobi**
- Mrtf has an early SRF-independent role in adult muscle development. **Tracy Dohn**
- Analysis of novel heart defects in *akirin* mutants. **Hayley Milner**
- Akirin interacts with chromatin remodeling complexes to influence myogenic gene transcription. **Kristina Palermino-Rowland**
- Slik phosphorylation of talin T152 is crucial for proper talin recruitment and muscle attachment in *Drosophila*. **Frieder Schoeck**
- dLmx1a is required for the development of the ovarian stem cell niche in *Drosophila*. **Benoit Biteau**
- 728 Pri peptides temporally repress the expression on cuticle genes during Drosophila development. Helene Chanut-Delalande
- Trithorax Group proteins cooperate with Pax6 to control proper fate identity in the *Drosophila* eyeantennal disc. **Alison Ordway**
- *Mirror* Regulates Proper fate Determination in the *Drosophila* Eye-Antennal Disc. **Gary Teeters**
- Loss of general transcription factors leads to tissue specific phenotypes. **Lena Weber**
- Functional divergence between eRpL22 paralogues in *Drosophila melanogaster* interommatidial bristle morphogenesis. **Brett Gershman**
- Characterizing the regulatory role of DV patterning during axis elongation. **Matthew Lefebvre**

- *Drosophila melanogaster* imaginal disc model to identify and determine the regeneration potential of *Notophthalmus viridescens*-newt- genes. **Abijeet Mehta**
- Integrins: Shaping organs and cells. **Carmen Santa-Cruz Mateos**
- Mechanical stress-induced cell cycle modification in epithelial morphogenesis. **Yoichiro Tamori**
- CRISPR/Cas9 Survey of Drosophila modENCODE Cell Lines. **Andrew Zelhof**
- Influence of Ecdysone Receptor Signaling on Border Cell Migration Kinetics. **Mallika Bhattacharya**
- Modifier screen in *D. melanogaster* identifies genes involved in tubulogenesis. **Claudia Espinoza**
- Biophysical and genetic analysis of mechanical forces behind collective cell migration. **Anna Kabanova**
- The extracellular protease *AdamTS-B* plays an important role in tracheal tube formation during embryogenesis. **Abigail Thuringer**
- *Macroglobulin complement-related* is required for border cell migration in *Drosophila melanogaster*. **Lindsay Ussher**
- The separation of Dorsal-Ventral layers during cellularization is orchestrated by a morphogen-regulated cell migration. **Yongqiang Xue**
- *kayak* isoforms in Drosophila. **CARLOS ALFONSO GONZALEZ**
- *Macroglobulin complement-related* is required for egg shape during *Drosophila melanogaster* oogenesis. **Haifa Alhadyian**

- What's in a wrap? Steps that link patterning and morphogenesis during dorsal appendage formation. **Rachel Dam**
- Synchrony and Timing of Nuclear Cycles Ensure Proper Epithelial Morphogenesis. **Nareg Djabrayan**
- Spindle Orientation Drives Tissue Regularity in an Elongating Epithelium. **Tara Finegan**
- The FERM protein Yurt is required for the stability of adherens junctions and couples DE-cadherin to actomyosin. **Milena Pellikka**
- **750** Cytonemes mediate formation of a morphogen gradient of FGF during branching morphogenesis of Drosophila trachea
- . Sougata Roy
- Proteolytic cleavage of Bnl is necessary for its long-range dispersion and signaling. **Alex Sohr**
- The Notch signaling pathway specifies cardiac cell subtypes by utilizing distinct permissive and instructive mechanisms to regulate the expression of different pericardial genes. **John Dallou**
- Drosophila *fibulin* is required for proper somatic and visceral muscle development during embryogenesis. **Anna Doane-Ramkhalawon**
- Downstream targets of the Forkhead domain transcription factor Jumeau mediate cardiac progenitor cell specification and division. **Andrew Kump**
- The role of Forkhead domain transcription factors and their downstream targets in mediating proper positioning of cardiac cells. **Manoj Panta**

- **756** Ribbon determines cell growth during tubulogenesis by transcriptional regulation of the translational machinery. **Raiprasad Loganathan**
- Septate junction proteins play a critical role during dorsal closure. **Clinton Rice**
- A different perspective on the role of *crumbs* in rhabdomere morphogenesis: linking redox balance and sphingolipid metabolism in eye development. **Sarita Hebbar**
- Functional domains of the ADAMTSL-protein Lonely heart and its role on cardiac matrix formation. **Yanina Post**
- **760** *Imaginal Disc Growth Factor (IDGF)* mutant phenotype worsens under CO₂ stress. **Anne Sustar**

Regulation of Gene Expression

- Using Oxford Nanopore Sequencing to Investigate the Y Chromosomes of the Malaria Mosquitoes. **Austin Compton**
- Investigating sequence interdependencies in *Drosophila* and human core promoter elements. **Jacqueline Dresch**
- The role of protein-protein interaction motifs in coordinating the DNA binding and regulatory specificity of Hox proteins. **William Glassford**
- A structural and biochemical dissection of the Histone Locus Body. **James Kemp**

- A CTD of RNA polymerase II composed solely of consensus heptads is sufficient for *Drosophila* development. **Feiyue Lu**
- An optogenetic approach to investigate Zelda function in the early embryo. **Stephen McDaniel**
- Post-Translational Modification of Vestigial Is Required for Proper Fate Specification in Wings and Embryonic Muscle. **Virginia Pimmett**
- The gene *tfiia-s-2* encodes a testis-specific homolog of a TFIIA subunit. **Helen Shapiro-Albert**
- Systematic Screening for Transcriptional Regulators of Adult Myogenesis in Drosophila by RNAi. **Tommy Soudachanh**
- Pointed is necessary and sufficient for establishing the posterior end of the follicular epithelium. **Cody Stevens**
- modERN project update. **Alec Victorsen**
- 772 Insulators flanking the *even skipped* locus, *homie* and *nhomie*, block transcription read-through that would otherwise cause enhancer imbalance. **Miki Fujioka**
- Notch activity elicits changes in Su(H) nuclear dynamics. **Sarah Bray**
- Dynamic localization of Zelda in syncytial mitoses. **Shao-Kuei Huang**
- 775 A dominant modifier genetic screen for factors that interact with CDK8-Cyclin C identifies components of the Dpp signaling pathway in *Drosophila*. Mengmeng Liu
- Identifying Gcm/Repo transcription co-regulators in glial cell development. **Glendin Pano**

- Novel roles for Retinoblastoma proteins: linking cell cycle and cellular growth. **David Arnosti**
- Polymerization-driven transcriptional regulation and dysregulation in the developing fly eye: a view from the human ETS repressor TEL/ETV6. **Juana Delao**
- **779** Understanding the role of Capicua in genome-wide regulation in the early fly embryo. **Shannon Keenan**
- Temporal features of transcriptional enhancer activity dynamically specify segment polarity in *Drosophila*. **Philippe Batut**
- 781 Unused program number
- Capturing the MicroFoam Structure of Regulatory Modules via Maximal Homology Alignment. **Albert Erives**
- Visualization of transvection suggests the occurrence of transcription hubs in living *Drosophila* embryos. **Tyler Heist**
- Investigating the evolutionary conservation of insulator sequences in *Drosophila*. **Laya Manoj**
- *Cis*-regulatory requirements for wing-specific expression of the *apterous* gene. **Martin Müller**
- Enhancer decommissioning during *Drosophila* wing development. **Matthew Niederhuber**
- Proper coordination of gene expression and chromatin accessibility during wing metamorphosis requires the Broad-Complex. **Spencer Nystrom**
- Enhancer communication: Individual enhancers with non-overlapping expression patterns can modulate each other's activity. **Joao Raimundo**

- Dissection of the regulatory logic that underlies color vision. **Jens Rister**
- Caudal counter-represses Hunchback to regulate *even-skipped* stripe 2 expression in Drosophila embryos. **Ben Vincent**
- Characterizing the regulatory network of Salvador-Warts-Hippo pathway. **Lan-Hsin Wang**
- **792** Zelda Coordinates Transcriptional Kinetics in the Early Drosophila Embryo. **Peter Whitney**
- Determination of EGFR Signaling Output by Opposing Gradients of BMP and JAK/STAT Activity. **Scott De Vito**
- The Holes in Muscles Gene is a contributor to myogenesis and muscle development. **Sam McKitrick**
- **795** The m⁶A pathway facilitates sex determination and neuronal function in *Drosophila*. **lijuan kan**
- Tools to Regulate Gene Expression in *Drosophila*. **Thomas Jacobsen**
- Translational regulation during embryogenesis by the Bin3 RNA methyltransferase. **Ryan Palumbo**
- miRNA regulation of *dacapo* expression in the *Drosophila* embryo. **Christina Swanson**
- *miR-31b* regulates adult muscle development in *Drosophila melanogaster*. **Daniel Wilson**
- Temperature regulated silencing of genomic repeats. **Elinor Wood**
- Identifying chromatin modifiers that regulate stochastic *spineless* expression. **Luorong xin Yuan**

- Predicting microRNA targeting efficacy in Drosophila. **Vikram Agarwal**
- Expanding the *Drosophila melanogaster* pigmentation gene regulatory network to include post-transcriptional regulation by microRNAs. **Abigail Lamb**
- Evolutionarily conserved transcription factor binding sites and S2 cell occupancy as context-specific gene regulatory network priors. **Isabelle Berger**
- Exploring the universal mechanism of feedback regulation of gene activity in *Drosophila*. **Daiki Kitamura**
- Determining the function of the transcription factor Zelda in driving neural stem-cell fate. **Elizabeth Larson**
- Cooperative recruitment of Yan to paired high affinity ETS sites organizes repression to confer specificity and robustness to cardiac cell fate specification. **Jean-Francois Lachance**
- Deciphering the role of *cis*-regulatory elements in stochastic gene expression. **Jin Lu**
- **809** *cis*-regulatory architecture of an EGFR organizing center in *Drosophila melanogaster* distal leg. **Roumen Voutev**
- 810 Profiling the Effects of Endogenously Expressed Fat Intracellular Domain Mutants on the Wing Disc Transcriptome. Daniel Potter
- 811 Generation of Novel Tools to Study *IroC* Gene Function and Transcriptome-wide Analysis of *Iroquois-Complex* Target Genes in the *Drosophila* Olfactory System. **Ecem** Cayiroglu
- Optogenetic control of gene expression in Drosophila ex vivo cultures. **Lorena de Mena**

- Step-by-step evolution of Bicoid's target specificity. **Pinar Onal**
- *Drosophila* third instar larval testes transcriptome study by single cell RNA sequencing (scRNA-Seq). **Sharvani Mahadevaraju**

Chromatin and Epigenetics

- Positional information dependent acquisition of unique chromatin accessibility states. **Shelby Blythe**
- Condensin II and *Drosophila* telomere clustering dynamics. **Vibhuti Rana**
- **817** Histone abundance changes chromatin accessibility in the early Drosophila embryo. **Henry Wilky**
- The chromatin remodeling protein Kismet regulates synaptic pruning by controlling steroid hormone receptor expression. **Nina Latcheva**
- HDAC inhibitors rescue aberrant phenotypes associated with loss of chromatin reader Kismet. **Jennifer Viveiros**
- Using photoswitchable proteins to assess chromatin stability. **Julianne Ray**
- Identification and characterization of inseparabile, a mutation that gives rise to compound chromosomes. **Farah Bughio**
- Driving Gene Expression in the Heterochromatic Environment of the Fourth Chromosome of *D. melanogaster.* **Jacob Cantrell**
- Repeat-induced Silencing in *Drosophila melanogaster*. **Sarah Elgin**

- Epigenetic changes but no derepression of transposable elements or global loss of gene regulation in aging *D. melanogaster* germline and reproductive tissue. **Alexandra Erwin**
- Epigenetic effects of transposable elements in 3D nuclear space. **Grace Lee**
- Sequence and organization of *Drosophila melanogaster* centromeres. **Barbara Mellone**
- Functions of the *Drosophila* melanogaster HP1 homolog HP1B. **Mina Momeni**
- Reassessing the fundamental mechanisms of transgenerational epigenetic inheritance. **Nicholas Panayi**
- Functional genomics study of satellite DNAs in *Drosophila* melanogaster. **Xiaolu Wei**
- Germline stem cell maintenance factor Stonewall regulates transposons and testis-specific clusters in ovaries. **Daniel Zinshteyn**
- Zinc-finger containing protein CLAMP promotes *gypsy* chromatin insulator function. **INDIRA BAG**
- Determining isoform and cell-type specificity of RNA-binding protein Shep in antagonism of *gypsy* insulator activity. **Margarita Brovkina**
- High content genome-wide RNAi screening for factors involved in the formation of *gypsy* insulator bodies. **shue chen**
- COMPASS-like complex regulation of cell survival in *Drosophila* eye development. **David Ford**
- The recognition of target gene transcriptional state by Polycomb Group Proteins. **Elnaz Ghotbi Rayandi**

- Early developmental roles of the Cmi/Trr COMPASS-like complex in *Drosophila*. **Timothy Nickels**
- Uncovering a role for the nucleoporin Megator in dosage compensation. **Jennifer Aleman**
- Chromatin-bound nuclear pore proteins recruit chromatin remodeling complexes to induce DNA decondensation. **Terra Kuhn**
- Dissecting the mechanism of X recognition in *Drosophila melanogaster* using a luciferase reporter. **Reem Makki**
- Functional interplay between MSL1 and Cdk7 in transcription regulation. **Maria Samata**
- Do satellite-binding proteins play a role in *D. melanogaster* dosage compensation? Do satellite-binding proteins play a role in *D. melanogaster* dosage compensation? **Maggie Sneideman**
- The role of satellite-binding protein, proliferation disrupter, in chromocenter formation. **Ryan Cummings**
- Argonaute2 and LaminB modulate gene expression by controlling chromatin topology. **Ezequiel Nazer**
- Condensin II drives large-scale chromatin folding and genome compartmentalization in Drosophila. **Leah Rosin**
- **845** Similarity in replication timing between polytene and diploid cells is associated with the organization of the *Drosophila* genome. **Tatiana Kolesnikova**
- Rif1 inhibits replication fork progression and controls copy number in Drosophila. **Jared Nordman**

- A screen to identify genes that modify cell survival after loss of a single telomere in *Drosophila melanogaster*. **Rebeccah Kurzhals**
- Social isolation mediates epigenetic changes in dopaminergic neurons of *Drosophila*. **Pavan Agrawal**
- The histone demethylase KDM5 is essential for larval growth. **Coralie Dreion**

RNA Biology

- The microRNA *miR-33* is a regulator of pigmentation in *D. melanogaster*. **Charmaine Chan**
- Fragments of tRNA in Drosophila development. **Lingyu Guan**
- Functional divergence among adaptively evolving TE regulators in *Drosophila*. **Luyang Wang**
- Transposon landscapes in aging *Drosophila* and hybrid dysgenesis crosses. **Nelson Lau**
- Long non-coding RNA regulation of Autophagy in Drosophila. **Mark Bouska**
- *abd-A* regulation by the *iab-*8ncRNA. **Javier Castro-Alvarez**
- Modeling polycystic kidney disease in the fly. **Chiara Gamberi**
- Muscleblind is a novel modifier of FUS-associated amyotrophic lateral sclerosis (ALS). **Udai Pandey**
- *Drosophila* germ granule mRNAs self-organize through a nucleation and cis-regulated recruitment mechanism. **Matthew Niepielko**

- Mechanism of mRNA localization to *Drosophila* germ granules. **Tatjana Trcek Pulisic**
- Epigenetic control of metazoan transcription and pre-mRNA processing by histone PTMs. **A. Gregory Matera**
- Exploring a possible link between mRNA splicing and Nuclear Envelope Budding. **Sean Speese**
- Regulation of Grk translation by cytoplasmic polyadenylation. **Krista Budinich**
- Tet function in Drosophila. **Hiep Tran**

Techniques and Technology

- Convolutional Neural Networks Based Segmentation of *in vivo* Drosophila Heart Imaging with Optical Coherence Microscopy. **Lian Duan**
- Measuring Feeding Behavior of Individual Flies in a 96-well Format. **Sean Karott**
- **866** Using shRNA-mediated embryonic arrest to control for size differences in pooled sequencing. **Hyunho Lee**
- Cell-based screen technologies at the Drosophila RNAi Screening Center. **Stephanie Mohr**
- Optimized tissue-specific knockout via CRISPR/Cas9 reveals gene perdurance and redundancy in neuronal morphogenesis in *Drosophila*. **Chun Han**
- A new resource from the TRiP: sgRNA stocks for gene overexpression and knockout by CRISPR-Cas9. **Jonathan Zirin**

- Functional characterization of ultraconserved small open reading frame (smORF) genes. **Justin Bosch**
- 482 Billion Reads and Counting: Remapping the Entire Drosophila Sequence Read Archive. **Justin Fear**
- Pool-ddRADseq: accelerating the discovery of subtle segregation distortion. **Sarah Sander**
- CloneScape: Discovering the landscape of clonal architecture from bulk sequencing profiles. **Sayaka Miura**
- A web system for super-fast mining of Drosophila data using Sequence Bloom Trees. **Anton Nekrutenko**
- FlyAtlas2.org just like FlyAtlas.org, but even better. **Julian Dow**
- DRSC Informatics Tools for Functional Genomics Studies 2018 update. **Claire Hu**
- FlyExpress 7: A novel discovery platform that integrates genome sequence data with spatiotemporal patterns of expression from in situ hybridizations in Drosophila. **Rob Kulathinal**
- New supervised and unsupervised machine-learning methods on p38 MAPK longevity reveals regulation of agedependent disease proteins. **Basheer Becerra**
- Combining the auxin-inducible degradation system with CRISPR/Cas9-based genome editing: a novel tool for the conditional depletion of endogenous proteins in *Drosophila melanogaster*. **Melinda Bence**
- Toward an automated systematic approach to multicellular motif analysis in tissue organization. **Tomer Stern**

- Transgenesis 2.0: Selection-based genome manipulation in *Drosophila melanogaster*. **Nick Matinyan**
- Drosophila larval fat body preparations to reveal regionalized gene expression. **Dilan Khalili**

Educational Initiatives

- You're a fly scientist? How do I get the flies out of my kitchen? **Thomas Merritt**
- Why the Fly? A K-12 outreach program that promotes the use of *Drosophila* as a model organism. **Alexis Nagengast**
- Sequencing of a novel mutation in *Stat92E* by a student-led, open-ended research course. **Jennifer Armstrong**
- Identification of genes required for viability through undergraduate research experiences. **Jamie Dyer**
- First Year Research Experience [FYRE, course based research]: Introducing undergraduates to the research enterprise using Drosophila adult myogenesis as a model. **Joyce Fernandes**
- Exploring PCR and RT-PCR as wetbench alternatives to augment student experiences in a genomics based CURE. **Princess Mae Visconde**

A Ables, E. T., 63*	Barr, J.,	Brown, N. H., 203* Brückner, Katja, 466* Bruno, Catherine, 516*
Agarwal, V., 802*	Bartoletti, Mathieu,566*	Bryantsev, Anton, 336*,
Agrawal, Pavan, 848*	Basar, Mohammad,	383*, 641*, 721*
Ahmed, Yashi, Plenary	400*, 435*	Bubnell, J. E., 679*
Session 1*	Batut, P., 780*	Budinich, K., 862*
Akhmetova, K., 169*	Bear, R., 567*	Bughio, F.,
Akhund-Zade, J., 655* Al Asafen, H., 224*	Beaver, M., 568* Becerra, B., 878*	Bui, V., 621* Bulthuis, N., 553*
Alegot, H., 221*	Beckingham, K. M.,283*	Byun, P. K., 82*
Aleman, Jennifer, . 837*	Belalcazar, H. M., . 624*	C C
Alfonso Gonzalez,	Bence, M., 879*	
Carlos,	Benner, L., 436*	Cabernard, C., 48*
Alhadyian, H., 745*	Bennick, R., 345*	Call, G. B.,542*
Alhazmi, Doaa, 671*	Berger, I., 804*	Cantrell, J., 822*
Ali, S., 530*	Besen-McNally,	Carty, B., 470*
Allan, Douglas,489*,	R. S., 222*	Casas-Tinto, S., 569*
490*	Bettedi, Lucia, 65*	Castaneda, J. C., 274*
Allen, S. R., 280*	Bhaskar, Pradeep,448*	Castillo, Dean, 672*
Almassey, M., 408*	Bhattacharya, M., 738*	Castro, Alonso,258*
Al-Outa, A., 616*	Bi, Xiaolin,246*	Castro-Alvarez, J.,. 855*
Alvarado, Sydney, 229*	Billmyre, Katherine	Cayiroglu, E., 811*
Alvarez, C., 365*	Kretovich, 265*	Chabu, C., 80*
Alvarez, Jessica, 366*	Birnbaum, A., 374*	Chakravarti, A., 437*
Alvarez, J. V., 412*	Biteau, Benoit, 727*	Champer, J., 34*
Amcheslavsky, A.,3*	Bitman, E., 417*	Chan, C.,850*
Anderson, Leah, 697*	Blackmer, J., 611*	Chang, C., 252*, 662*
Anllo, Lauren, 450*	Blanch, J., 273*	Chang, H. C., 231*
Aranda-Diaz, Andres, 331*	Blocklove, Katherine M., 472*	Chang, K.,
Arbeille, E., 471*	Bloomer, H. C., 413*	Chang, Y.,504* Chanut-Delalande,
Armstrong, J. A., 885*	Blythe, S. A., 815*	H.,728*
Armstrong, R., 123*	Boland, Eugene, 73*	Chari, S.,384*
Arnaoutov, A., 261*	Bolterstein, Elyse, 631*	Chatzis, Kalliopi, 405*
Arnes, M., 563*	Bordenstein, S., 37*	Chaudhari, K., 474*
Arnosti, D. N., 777*	Borensztejn, A., 307*	Cheatle Jarvela,
Aromiwura, A. A.,. 230*	Borokhovsky, B., 346*	Alys M., 707*
Auld, V. J., 96*	Bosch, J. A., 870*	Chen, D., 492*
Aviles Pagan, E., 433*	Bothma, Jacques, . 160*	Chen, D. S., 531*
	Bouska, M., 854*	Chen, J.,708*
В	Box, A., 617*	Chen, S., 833*
	Bozler, J. E., 526*	Chen, Shane, 199*
Bag, I., 831*	Bradley-Gill, M., 305*	Chen, Z.,116*
Bai, Hua, 410*	Brann, C. L., 607*	Chhangani, D., 615*
Baird, Brandy, 564*	Bray, Sarah, 773*	Chi, W.,605*
Baker, Luke, 715*	Brennan, C., 318*	Chin, I. M.,561*
Baldwin-Brown, J.Guy.,	Brill, J. A., 106*	Chin, M. R.,551*
	Britson, K., 196*	Chioda, M. M., 376*
Bandura, J., 281*	Brovkina, M., 832*	Chiolo, Irene,Plenary
Barghi, N., 32*	Brown, C., 192* Brown, H., 473*	Session II*
Baril, C., 113*	ы оwп, п., 4/3"	Chung, S., 170*

Civetta, Alberto, 673* Clark, D. A., 544* Clark, J. T., 545*	Deng, Wu-Min,292* DeNieu, M.,527* Denk-Lobnig, M., 242*	Evans, T.,476* Extavour, Cassandra G., . Plenary Session 1*
Clay, D.,275* Coelho, E.,637*	DeSantis, D.,716* Deshpande, N.,120*	F
Cohen, E.,284*	Deshpande,	•
Coie, Lilian A., 638*	Rujuta,340*	Fabian, L.,420*
Compton, Austin, . 761*	Deshpande,	Fabrizio, James J., .421*
Cong, B. J.,78*	Sonali,518*	Fabrizio, J. J.,422*
Cook, T.,	De Vito, S.,793*	Fang, Yanshan,570*
Copenhaver,	Dewey, E.,49*	Farkas, R.,181*
Katherine,419*	DiAngelo, J., 101*	Farrell, L.J,317*
Cordova, J., 627*	Di Cara, F., 7*	Fear, Justin,871*
Cox, R. L.,276*	Ding, Yun,14*	Feng, Siqian,133*
Crawley, Timothy, 299*	Dion, G. M.,595*	Fernandes,
Cristo, I.,259*	Dion-Côté,	J. J.,287*, 887*
Crocker, J.,132*	Anne-Marie,643*	Fernando, T.,373*
Crocker, K. L., 609*	DiRusso, J., 632*	Finegan, T. M.,748*
Crown, Nicole,64*	Djabrayan, N. J.,747*	Fisher, K. H.,552*
Cruz Corchado,	Doane-Ramkhalawon,	Fontenoy, Emily,423*
Johnny,656*	Anna,753*	Ford, D.,834*
Cummings,	Dobens, L. L.,397*	Fox, E.,451*
R.Allen., 842*	Dobi, K. C.,722*	Frank, D.,11*
Cunningham,	Doherty, C.,262*	Frasik, C. M.,608*
Kathleen,40*	Dohn, Tracy,723*	Freda, P. J.,698*
Czajkowski, E. R.,253*	Douthit, J.,475*	Friedrich, Markus, 706*
	Dow, Julian,875*	Fruin, A.,347*
D	Downes, J.,85*	Fuchsman, A.,454*
	Drago, I.,140*	Fuchsman, A.,454* Fujioka, M.,772*
DaCrema, D. F., 232*	Drago, I.,140* Drelon, C.,849*	Fujioka, M.,772*
DaCrema, D. F., 232* Dadkhah, S., 216*	Drago, I.,140* Drelon, C.,849* Dresch, J. M.,762*	
DaCrema, D. F., 232* Dadkhah, S., 216* Dahmann, C., 59*	Drago, I.,140* Drelon, C.,849* Dresch, J. M.,762* Duan, L.,864*	Fujioka, M.,772* G
DaCrema, D. F., 232* Dadkhah, S., 216* Dahmann, C., 59* Dalloul, J. M., 752*	Drago, I.,	Fujioka, M.,772* G Gamberi, C.,856*
DaCrema, D. F., 232* Dadkhah, S., 216* Dahmann, C., 59* Dalloul, J. M., 752* Dam, Rachel, 746*	Drago, I.,	Fujioka, M.,772* G Gamberi, C.,856* Gamberi, Chiara,618*
DaCrema, D. F., 232* Dadkhah, S., 216* Dahmann, C., 59* Dalloul, J. M., 752* Dam, Rachel, 746* Damschroder,	Drago, I.,	Fujioka, M.,772* G Gamberi, C.,856* Gamberi, Chiara,618* Ganguly, P.,600*
DaCrema, D. F., 232* Dadkhah, S., 216* Dahmann, C., 59* Dalloul, J. M., 752* Dam, Rachel, 746* Damschroder, Deena, 377*	Drago, I.,	Fujioka, M.,772* G Gamberi, C.,856* Gamberi, Chiara,618* Ganguly, P.,600* Gangwani, K.
DaCrema, D. F., 232* Dadkhah, S., 216* Dahmann, C., 59* Dalloul, J. M., 752* Dam, Rachel, 746* Damschroder, Deena, 377* D'Ancona, Cristina, 720*	Drago, I.,	Fujioka, M.,772* G Gamberi, C.,856* Gamberi, Chiara,618* Ganguly, P.,600* Gangwani, K. Sanjay.,294*
DaCrema, D. F., 232* Dadkhah, S., 216* Dahmann, C., 59* Dalloul, J. M., 752* Dam, Rachel, 746* Damschroder, Deena, 377* D'Ancona, Cristina, 720* Darby, A., 415*	Drago, I.,	Fujioka, M.,772* G Gamberi, C.,856* Gamberi, Chiara,618* Ganguly, P.,600* Gangwani, K. Sanjay.,294* Gao, M.,439*
DaCrema, D. F., 232* Dadkhah, S., 216* Dahmann, C., 59* Dalloul, J. M., 752* Dam, Rachel, 746* Damschroder, Deena, 377* D'Ancona, Cristina, 720* Darby, A., 415* Das, P., 712*	Drago, I.,	Fujioka, M.,772* G Gamberi, C.,856* Gamberi, Chiara,618* Ganguly, P.,600* Gangwani, K. Sanjay.,294* Gao, M.,439* Garcia, G. S.,378*
DaCrema, D. F., 232* Dadkhah, S., 216* Dahmann, C., 59* Dalloul, J. M., 752* Dam, Rachel, 746* Damschroder, Deena, 377* D'Ancona, Cristina, 720* Darby, A., 415* Das, P., 712* Dattoli, A. A., 25*	Drago, I.,	Gamberi, C.,
DaCrema, D. F., 232* Dadkhah, S., 216* Dahmann, C., 59* Dalloul, J. M., 752* Dam, Rachel, 746* Damschroder, Deena, 377* D'Ancona, Cristina, 720* Darby, A., 415* Das, P., 712* Dattoli, A. A., 25* Davis, Jeremy, 680*	Drago, I.,	Gamberi, C.,
DaCrema, D. F., 232* Dadkhah, S., 216* Dahmann, C., 59* Dalloul, J. M., 752* Dam, Rachel, 746* Damschroder, Deena, 377* D'Ancona, Cristina, 720* Darby, A., 415* Das, P., 712* Dattoli, A. A., 25* Davis, Jeremy, 680* De, Sandip, 156*	Drago, I.,	Fujioka, M.,
DaCrema, D. F., 232* Dadkhah, S., 216* Dahmann, C., 59* Dalloul, J. M., 752* Dam, Rachel, 746* Damschroder, Deena, 377* D'Ancona, Cristina, 720* Darby, A., 415* Das, P., 712* Dattoli, A. A., 25* Davis, Jeremy, 680* De, Sandip, 156* Deady, L., 124*	Drago, I.,	Fujioka, M.,
DaCrema, D. F., 232* Dadkhah, S., 216* Dahmann, C., 59* Dalloul, J. M., 752* Dam, Rachel, 746* Damschroder, Deena, 377* D'Ancona, Cristina, 720* Darby, A., 415* Das, P., 712* Dattoli, A. A., 25* Davis, Jeremy, 680* De, Sandip, 156* Deady, L., 124* Dean, D. M., 606*	Drago, I.,	Fujioka, M.,772* G Gamberi, C.,856* Gamberi, Chiara,618* Ganguly, P.,600* Gangwani, K. Sanjay,294* Gao, M.,439* Garcia, G. S.,378* Gaspar, P.,699* Gates, Julie,238* Gerdes, J.,171* Gerlitz, O.,628* Gershman, Brett, .732*
DaCrema, D. F., 232* Dadkhah, S., 216* Dahmann, C., 59* Dalloul, J. M., 752* Dam, Rachel, 746* Damschroder, Deena, 377* D'Ancona, Cristina, 720* Darby, A., 415* Das, P., 712* Dattoli, A. A., 25* Davis, Jeremy, 680* De, Sandip, 156* Deady, L., 124* Dean, D. M., 606* Deanhardt,	Drago, I.,	Fujioka, M.,
DaCrema, D. F., 232* Dadkhah, S., 216* Dahmann, C., 59* Dalloul, J. M., 752* Dam, Rachel, 746* Damschroder, Deena, 377* D'Ancona, Cristina, 720* Darby, A., 415* Das, P., 712* Dattoli, A. A., 25* Davis, Jeremy, 680* De, Sandip, 156* Deady, L., 124* Dean, D. M., 606* Deanhardt, Bryson, 501*	Drago, I.,	Fujioka, M.,
DaCrema, D. F., 232* Dadkhah, S., 216* Dahmann, C., 59* Dalloul, J. M., 752* Dam, Rachel, 746* Damschroder, Deena, 377* D'Ancona, Cristina, 720* Darby, A., 415* Das, P., 712* Dattoli, A. A., 25* Davis, Jeremy, 680* De, Sandip, 156* Deady, L., 124* Dean, D. M., 606* Deanhardt, Bryson, 501* Deehan, M., 5*	Drago, I.,	Fujioka, M.,
DaCrema, D. F., 232* Dadkhah, S., 216* Dahmann, C., 59* Dalloul, J. M., 752* Dam, Rachel, 746* Damschroder, Deena, 377* D'Ancona, Cristina, 720* Darby, A., 415* Das, P., 712* Dattoli, A. A., 25* Davis, Jeremy, 680* De, Sandip, 156* Deady, L., 124* Dean, D. M., 606* Deanhardt, Bryson, 501* Deehan, M., 5* Deitz, K. C., 657*	Drago, I.,	Gamberi, C.,
DaCrema, D. F., 232* Dadkhah, S., 216* Dahmann, C., 59* Dalloul, J. M., 752* Dam, Rachel, 746* Damschroder, Deena, 377* D'Ancona, Cristina, 720* Darby, A., 415* Das, P., 712* Dattoli, A. A., 25* Davis, Jeremy, 680* De, Sandip, 156* Deady, L., 124* Dean, D. M., 606* Deanhardt, Bryson, 501* Deehan, M., 5* Deitz, K. C., 657* Delao, J., 778*	Drago, I.,	Gamberi, C.,
DaCrema, D. F., 232* Dadkhah, S., 216* Dahmann, C., 59* Dalloul, J. M., 752* Dam, Rachel, 746* Damschroder, Deena, 377* D'Ancona, Cristina, 720* Darby, A., 415* Das, P., 712* Dattoli, A. A., 25* Davis, Jeremy, 680* De, Sandip, 156* Deady, L., 124* Dean, D. M., 606* Deanhardt, Bryson, 501* Deehan, M., 5* Deitz, K. C., 657* Delao, J., 778* Deliu, Lisa, 402*	Drago, I.,	Gamberi, C.,
DaCrema, D. F., 232* Dadkhah, S., 216* Dahmann, C., 59* Dalloul, J. M., 752* Dam, Rachel, 746* Damschroder, Deena, 377* D'Ancona, Cristina, 720* Darby, A., 415* Das, P., 712* Dattoli, A. A., 25* Davis, Jeremy, 680* De, Sandip, 156* Deady, L., 124* Dean, D. M., 606* Deanhardt, Bryson, 501* Deehan, M., 5* Deitz, K. C., 657* Delao, J., 778*	Drago, I.,	Gamberi, C.,

Gladstein, A., 266*	Hu, C. Y., 876*	Kannan, Kavitha,574*
Glasbrenner, D., 700*	Huang, C., 71*	Karabasheva,
Glassford, W., 763*	Huang, H., 573*	Darya S.,193*
Gleason, J. M., 674*	Huang, J., 458*	Karageorgi, M., 13*
Godt, Dorothea, 243*	Huang, K., 385*	Karam, Caline,519*
Gogia, N., 717*	Huang, S., 774*	Karanja, Faith, 84*
Gokhale, Rewatee,239*	Hughes, R., 646*	Karott, S. J., 865*
Gonsior, Madison, 493*	Hurd, T., 66*	Karpac, J.,142*
Goodman, David,. 550*	Hwang, J., 260*	Katz, M. J., 233*
Gosztyla, M. L., 477*	Hylton, C. A., 425*	Kazakova, Lidia, 145*
Goyal, R., 61*		Keegan, S., 297*
Graze, R. M., 398*	I	Keenan, S. E., 779*
Green, N. M., 256*		Keith, Scott, 406*
Greenblatt, Ethan, 141*	lgaki,	Kelleher, Erin S.
Greig, J., 130*	T.,Plenary Session 1*	Kelleher, 689*
Grotewiel, Michael,367*	Imran Alsous, Jasmin,	Kellermeyer, R., 480*
Guan, L., 851*	75*	Kemp, James P., 764*
Guichard, Annabel,8*	Isaacson, J. R., 675*	Khalili, D., 882*
Guo, Moshan, 571*	Ito, T., 295*	Khan, C.,234*
Guo, X., 461*		Khan, M.,387*
Gururaja Rao, S., 349*	J	Khandelwal, R., 510*
Gutierrez, A., 206*		Khateeb, Karam, 496*
Gyonjyan, S., 308*	lacobs,	Khost, D. E., 647*
3 33	Curteisha L., 500*	Kiger, A. A., 187*
н	Jacobsen, T., 796*	Kim, E. N., 667*
	Jagannathan, M., 676*	Kim, Hyeyon, 549*
Haase, S., 536*	Jaime, M. D. L.A, 74*	Kim, M.,51*
Haberman, A. S., 602*	Jang, HyoJong, 557*	Kim, Rebecca, 30*
Han, Chun, 39*, 868*	Jang, Y., 522*	Kimber, C. M., 681*
Haney, Michael, 411*	Jankovics, F., 456*	Kiparaki, M., 52*
Hanlon, S. L., 267*	Jemc, J. C., 505*	Kiratli, O., 659*
Harding, K., 309*	Ji, Zhejun,300*	Kitamoto,
Harris, R., 153*	Jiang, T., 172*	Toshihiro, 502*
Harsh, S., 162*	John, S., 155*	Kitamura, D., 805*
Hatch, H.A M., 596*	Johnson, Heath, 53*	Klinedinst, S., 257*
Hawkins, R. L., 572*	Johnson, J., 386*	Knaevelsrud, H., 240*
Hebbar, S., 758*	Jones, Alexandra, . 677*	Knapp, E.,441*
Heist, Tyler, 783*	Joseph Pulianmackal,	Knight, T.,497*
Hemenway,	Ajai,296*	Ko, C.,109*
Elizabeth, 440*	Jouandin, P., 350*	Kodza, A.,660*
Hemmer, L. W., 36*	Juarez, M. T., 102*	Kolesnikova,
Herrera-Perez, M.,. 54*		Tatyana, 845*
Heydman, L., 478*	K	Komori, H.,26*
Highfill, C. A., 612*		Konadu, B.
Hill, Hunter, 277*	Kabanova, A., 740*	Danso,629*
Hime, G. R., 424*	Kacsoh, B. Z., 528*	Kondo, Shu,67*
Himmel, N. J., 523*	Kan, I., 795*	Konstantinides, N., 92*
Hogan, Caley, 485*		
Holy, T., 310*	Kanaskie, I., 351*	NULIAII, IN. 3
	Kanaskie, J., 351* Kanda, H 509*	Kotian, N. S., 251* Kracklauer
	Kanaskie, J., 351* Kanda, H., 509*	Kracklauer,
Hope, K., 45*		Kracklauer, Martin,151*
		Kracklauer,

Kulathinal, Rob,877*	Liu, Y.,134*	Maziak, N.,418*
Kumar, A., 301*	Lockwood, Brent L.,696*	McAllester, C.,664*
Kumar, T.,453*, 668*	Loehlin, D. W., 666*	McCarter, M.,327*
Kumari, N.,511*	Loganathan, R., 756*	McDaniel, S.,766*
Kump, A. J.,754*	Logan-Graf, G., 174*	McFarland, B.
Kurbidaeva, A., 157*	Losick, V. P., 128*	Walter.,486*
Kurzhals, R. L.,847*	Lowman, Kelsey, 368*	McKim, Kim,46*
	Loy, A.,481*	McKitrick, S.,794*
L	Lu, Feiyue,765*	McLean, J. R.,426*
	Lu, J.,808*	McQueen, E. W.,22*
Lachance,	Lubojemska, A.,110*	McSharry, S. S.,182*
JF. B.,807*	Ludington, W., 2*	Mehta, A. S.,734*
Lacin, H., 91*	Luedke, K. P., 515*	Meiklejohn, Colin, 427*
Lahvic, J. L.,302*	Ly, P. Thao,459*	Mellone, B.,826*
Laiouar, S.,104*	Ly, S.,560*	Men, J.,115*
Lama, J.,690*	Lynch,	Meng, F.,462*
Lamb, A. M.,803*	Jeremy A.,60*, 709*	Mercier, J.,354*
Lamb, M.,202*	Lyu, Y.,138*	Merritt,
Larracuente, A. M., 35*		T.J S.,341*, 883*
Larson, Elizabeth, 806*	M	Meschi, E.,508*
Latcheva, Nina,818*		Mesquita, A.,188*
Latham-Scott,	Ma, H.,683*	Middleman,
Kristin L.,556*	Ma, Hansong, 684*	Jeremy,407*
Lau, Nelson,853*	Ma, T.,392*	Milner, H.,724*
Laws, K. M.,442*	Ma, X.,125*	Miscopein Saler, L.,467*
Leatherman, J. L., 99*	Ma, Y.,50*	Mishra, A., 9*
Lee, Grace Y. C., 825*	Maaroufi, H. O.,236*	Miura, S.,873*
Lee, H.,866*	Mahadevaraju, S., 814*	Moehlman,
Lee, K.,597*	Mahmoudzadeh,	Andrew,194*
Lee, KM.,532*	N.,352*	Moehring, A.,533*
Lee, Kristen,555*	Mainwaring, B., 539*	Moffatt, C.,278*
Lee, S.,158*	Makki, R.,839*	Mohr, S.,867*
Lefebvre, M.,733*	Malpe, M. M.,29*	Momeni, M.,827*
Lehmkuhl, Erik, 575*	Manning, L. A.,56*	Mondragon, A. A., 6*
Lenhart, K., 28*	Manoj, L.,784*	Morgan, A.,226*
Leslie, A. E.,173*	Markstein, M.,31*	Moscato, E. H.,540*
Letcher, J. M.,483*	Marmion, R. A.,225*	Moskop, D.,355*
Levis, M. K.,241*	Martin, A. C.,55*	Moss-Taylor, L.,401*
Li, Hongde,167*	Martin-Blanco, E.,86*	Moyle, L. C., Plenary
Li, J., 12*	Martinez, B. A., 163*	Session II*
Li, K.,514*	Martinez Corrales,	Mrkvicka, J.,524*
Li, W.,443*	G.,286*	Mues, N.,468*
Li, Y.,396*	Mascaro, A. R.,211*	Müller, M.,785*
Lightcap, S.,388*	Massey, Jonathan, 669*	Mundell, J. J.,272*
Li-Kroeger, D., 68*	Massey, R. C.,353*	Myers, A.,324*
Lim, B.,135*	Mast, J. D.,626*	Mykytyn, A. V., 416*
Lin, Benjamin Lin, 107*	Matera, A. Gregory,860*	
Lindberg, B. G., 320*	Matinyan, N.,881*	N
Link, N., 625*	Matsunaga, T.,546*	
Little, Jamie,204*	Mauger, M.,648*	Nagengast, A.,884*
Liu, J.,682*	Maulding, K.`.,576*	Nair, S.,207*
Liu, Mengmeng, 775*	Mauthner, S. E., 10*	Nakamura, M., 129*,
. 5 5,	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	., ., == ,

337*	P	Pool, J. E., 685*
Nam, Younji, 356*		Portela Esteban,
Nandakumar,	Page, A., 640*	M.,184*, 215*
Shyama, 285*	Pahl, Matthew C.,. 512*	Portilla, J. M., 619*
Nandi, Nilay, 189*	Palermino-Rowland,	Portillo Rodriguez,
Naranjo, O., 311*	K., 725*	T.,634*
Nasser, B., 223*	Palladino, J. T., 47*	Post, Y., 759*
Nazer, E., 843*	Pallares, L. F., 38*	Potter, D., 810*
Neal, Scott, 718*	Palmer, W. H., 321*	Pozmanter, Caitlin, 17*
Nekrutenko, Anton,874*	Palowsky,	Praggastis, S. A., 358*
Nelson, J. O., 122*	Zachary,403*	Pritchard, C. E., 227*
Neuhaus-Follini,	Palu, R. A. S., 313*	Prokop, Andreas, . 175*
Alexandra, 93*	Palumbo, Ryan, 797*	
Neuman, S.,4*	Pan, Xueyang, 164*	Q
Nevil, M., 136*	Panayi, Nicholas, . 828*	
Newfeld, S. J., 97*	Pandey, Udai,598*, 857*	Quaglia,
Newton, Aracely A.,444*	Panikker,	Christopher, 371*
Newton, H., 114*	Priyalakshmi, 577*	Qureshi, M. Ummer,
Nickels, T. J., 836*	Pano, G. K., 776*	429*
Niederhuber, Matthew,	Panta, M., 755*	
786*	Papagiannouli, F., 428*	R
Niepielko, M. G., 858*	Parker, J. D., 343*	
Nil, Zelha, 147*	375*, 389*, 390*	Ragoowansi, H., 580*
Nishida, Hiroshi, 342*	Parkhurst, S. M., 197*	Raimundo, João, 788*
Nordman, J. T., 846*	Parra, A.S, 298*	Rana, V., 816*
Nystrom, S. L., 787*	Parsons, L.May., 369*	Rand, M. D., 581*, 582*
	Pascual, Pau, 117*	Ravenscroft, T. A., 503*
0	Patel, R., 687*	Ray, A.
	Patel, S.	, Plenary Session 1*
Obadia, B., 334*	Pravinbhai., 391*	Ray, J. F.,820*
O'Connor, J., 250*	Patel, Y., 357*	Ray, Krishanu, 185*
O'Connor, M. B.,Plenary	Paul, S., 149*	Reilein, A.,469*
Session II*	Pearce, M. M. P., 614*	Reilly, Patrick F., 665*
Odell, Seth, 547*	Pelaez, Julianne, 543*	Reiss, I., 691*
O'Farrell, F., 146*	Pellikka, M., 749*	Restifo, Linda, 635*
Ohlstein, Benjamin,	Pelser, Elizabeth, . 548*	Revaitis, N., 58*
Plenary Session II*	Peralta, J., 288*	Rice, C. A., 757*
Oka, M., 143*	Pereira, M., 370*	Rice, G. R., 24*, 702*
O'Kane, Cahir J., 195*	Perez, M., 498*	Riddle, N. C., 414*
Oliveira, M. T., 639*	Perinthottathil,	Rister, J.,789*
Onal, Pinar, 813*	Sreejith, 27*	Rivard, E.,649*
O'Neill, R. S., 494*	Perouansky,	Rivera, C. E., 525*
Ong, E., 312*	Misha, 578*	Rockwell, Antonio, . 19*
Ong, Katy, 108*	Pers, D., 701*	Roebke, L., 208*
Ordway, A. J., 729*	Petersen, C. E., 237*	Roignant,
Orr-Weaver, T. L.,	Peterson, J. S., 314*	Jean-Yves, 20*
Keynote Address - Terry	Petrova, Boryana, 268*	Rollins, J. E., 430*
Orr-Weaver*	Petshow, S., 152*	Romero, N. M., 166*
Ortega, Jose, 183*	Pettie, N., 661*	Rosenthal, J. S., 484*
Owusu-Ansah, E.,. 168*	Pimmett, V. L., 767*	Rosin, L., 844*
	Pons, M., 579*	Rossi, A. M., 491*
		Rote, Rahul, 176*

Rotelli, M.,76*	Shodja, D.,703*	Т
Roy, Sougata,750*	Shu, S.,610*	
Royet, julien,Plenary	Shukla, Arvind K., . 586*	Talbot, Danielle E.,452*
Session II*	Signor, S. A.,21*	Tamori, Y.,736*
Rudman, S. M,650*	Silimon, Ruth, 409*	Tandukar, Nirwan,693*
Ruesch, C., 18*	Silkaitis, K.,121*	Tang, B.,325*
Ruohola-Baker, H.,304*	Simon, A. F.,601*	Tang, XZ,463*
Rusan, N.,Plenary	Singh, A.,587*	Tao, Q.,688*
Session 1*	Singh, K.,588*	Tatapudy, S. D., 455*
Russell, S. A.,445*	Singh, N. P.,713*	Taylor, Jackson,139*
Russo, K.,583*	Sipe, Conor,460*	Teeters, G.,730*
Rylee, J.,584*	Sisco, Z.,269*	Thackeray, J.,228*
	Smith, M.,100*	Thuringer, Abigail, 741*
S	Smolko, A. E.,62*	Tiemeyer, K.,338*
	Sneideman, M., 841*	Ting, CT.,652*
Saha, B.,217*	Snigdha, K.,	Toettcher, J. E.,150*
Saint-Leandre,	Snow, R.,432*	Tomaru, M.,678*
Bastien, 651*	Sociale, M.,360*	Toth, Meridith,599*
Saligari, M. J., 165*	Sohr, Alex,751*	Tracewell, M.,362*
Samata, Maria, 840*	Sokabe, T.,562*	Tran, Hiep,863*
Sanaki, Y.,303*	Song, Wan,558*	Trcek Pulisic, T.,859*
Sander, S.,872*	Song, Wei,245*	Tricoire, H.,603*
Santa-Cruz Mateos,	Soudachanh,	Trivedi, S.,218*
C.,735*	Tommy,769*	Trush, O. I.,517*
Santiago, J. C., 379*	Spear, Julia,205*	Tsao, Chia-Kang,506*
Santoso, C. S.,315*	Speese,	Tuthill, B. F.,363*
	Sean,200*, 861*	Tutilii, b. 1.,
Saoji, M.,		П
Sarikaya, D. P.,220*	Spierer, A. N.,692*	U
Sarikaya, D. P.,220* Sarkar, A.,585*	Spierer, A. N.,692* Spracklen, A. J.,247*	
Sarikaya, D. P.,220* Sarkar, A.,585* Sarpal, Ritu,244*	Spierer, A. N.,692* Spracklen, A. J.,247* Sprengelmeyer,	Ugur, B.,94*
Sarikaya, D. P., 220* Sarkar, A., 585* Sarpal, Ritu, 244* Sasaki, A., 144*	Spierer, A. N.,692* Spracklen, A. J.,247* Sprengelmeyer, Q. D.,670*	Ugur, B.,94* Underwood,
Sarikaya, D. P., 220* Sarkar, A., 585* Sarpal, Ritu, 244* Sasaki, A., 144* Sato, M., 513*	Spierer, A. N.,692* Spracklen, A. J.,247* Sprengelmeyer, Q. D.,670* Spurrier, J.,589*	Ugur, B.,94* Underwood, Jesse,620*
Sarikaya, D. P., 220* Sarkar, A.,	Spierer, A. N.,692* Spracklen, A. J.,247* Sprengelmeyer, Q. D.,670* Spurrier, J.,589* Srivastava, N.,279*	Ugur, B.,94* Underwood, Jesse,620* Upadhyay, Ambuj, 212*
Sarikaya, D. P.,	Spierer, A. N.,692* Spracklen, A. J.,247* Sprengelmeyer, Q. D.,	Ugur, B.,94* Underwood, Jesse,620* Upadhyay, Ambuj, 212* Urban, E.,159*
Sarikaya, D. P.,	Spierer, A. N.,692* Spracklen, A. J.,247* Sprengelmeyer, Q. D.,	Ugur, B.,94* Underwood, Jesse,620* Upadhyay, Ambuj,212* Urban, E.,159* Ussher, L.,742*
Sarikaya, D. P.,	Spierer, A. N.,692* Spracklen, A. J.,247* Sprengelmeyer, Q. D.,	Ugur, B.,94* Underwood, Jesse,620* Upadhyay, Ambuj, 212* Urban, E.,159*
Sarikaya, D. P.,	Spierer, A. N.,692* Spracklen, A. J.,247* Sprengelmeyer, Q. D.,	Ugur, B.,94* Underwood, Jesse,620* Upadhyay, Ambuj,212* Urban, E.,159* Ussher, L.,742* Uyehara, C. M.,137*
Sarikaya, D. P.,	Spierer, A. N.,692* Spracklen, A. J.,247* Sprengelmeyer, Q. D.,	Ugur, B.,94* Underwood, Jesse,620* Upadhyay, Ambuj,212* Urban, E.,159* Ussher, L.,742*
Sarikaya, D. P.,	Spierer, A. N.,692* Spracklen, A. J.,247* Sprengelmeyer, Q. D.,	Ugur, B.,94* Underwood, Jesse,620* Upadhyay, Ambuj, 212* Urban, E.,
Sarikaya, D. P.,	Spierer, A. N.,692* Spracklen, A. J.,247* Sprengelmeyer, Q. D.,	Ugur, B.,
Sarikaya, D. P.,	Spierer, A. N.,692* Spracklen, A. J.,247* Sprengelmeyer, Q. D.,589* Srivastava, N.,279* Starble, Rebecca,177* Steinhauer, J.,361* Stern, T.,880* Stevens, C.,770* Strochlic, T.,446* Strom, A. R.,119* Sujkowski, Alyson, 394* Sullivan, AM.,590*	Ugur, B.,
Sarikaya, D. P.,	Spierer, A. N.,692* Spracklen, A. J.,247* Sprengelmeyer, Q. D.,	Ugur, B.,
Sarikaya, D. P.,	Spierer, A. N.,692* Spracklen, A. J.,247* Sprengelmeyer, Q. D.,	Ugur, B.,
Sarikaya, D. P.,	Spierer, A. N.,692* Spracklen, A. J.,247* Sprengelmeyer, Q. D.,	Ugur, B.,
Sarikaya, D. P.,	Spierer, A. N.,	Ugur, B.,
Sarikaya, D. P.,	Spierer, A. N.,	Ugur, B.,
Sarikaya, D. P.,	Spierer, A. N.,	Ugur, B.,
Sarikaya, D. P.,	Spierer, A. N.,	Ugur, B.,
Sarikaya, D. P.,	Spierer, A. N.,	Ugur, B.,
Sarikaya, D. P.,	Spierer, A. N.,	Ugur, B.,
Sarikaya, D. P.,	Spierer, A. N.,	Ugur, B.,
Sarikaya, D. P.,	Spierer, A. N.,	Ugur, B.,

Victorsen, Alec, 771*	Wise, A., 33*
Viets, Kayla, 118*	Wisidagama,
Viktorinova, I., 57*	D.Roonalika., 464*
Villegas, R. A., 645*	Wong, Isaac, 710*
Vincent, Ben,131*, 790*	Wood, E., 800*
Vinton, E., 559*	Wu, Ct.,Plenary
Visconde, P. M., 888*	Session II*
Viswanatha,	
Raghuvir, 69*	X
Viveiros, J., 819*	
Vogel, A., 535*	Xiao, Y., 179*
Volkan, P. C., 95*	Xie, J., 604*
Von Stetina, J. R., 77*	Xue, Y., 743*
Voutev, R., 809*	
	Υ
W	
	Yadlapalli, Swathi, 554*
Waddell, E. A., 499*	Yang, H., 711*
Wadsworth, B., 482*	Yang, R., 90*
Waghmare, I., 209*	Yang, S., 112*
Wainwright, M., 255*	Yassin, A.,Plenary
Wang, L., 270*, 791*	Session 1*
Wang, Luyang, 852*	Yee, W. B.,
Wang, Y.,	Yin, C.,
Wang, ZH., 381*	Yoon, W. H., 613*
Wardwoll Ozgo I 126*	Yoon, Y.,
Wardwell-Ozgo, J., 126* Weasner, B.M, 719*	Yuan, L., 801*
Weaver, L., 457*	Yuan, X., 507*
Weber, L. R., 731*	ruari, 7.,
Weeger, A., 248*	Z
Wehrli, M., 210*	
Wei, X., 829*	Zang, Y., 87*
Weisz, E. D., 44*	Zarnescu, D. C., Plenary
Welte, M. A., 191*	Session 1*
Wenzel, M., 686*	Zelhof, A., 704*, 737*
Wharton, Kristi, 41*	Zhang, H., 593*
Wharton, Kristi A., 592*	Zhang, Ke, 594*
White, M., 395*	Zhang, L., 219*
Whitney, P. H., 792*	Zhang, V., 335*
Whittington, E., 449*	Zhang, Y., 180*, 316*,
Wilcockson, Scott, 213*	541*
Wildman, K., 344*	Zhang, Yingbiao, 306*
Wilky, H.,	Zhao, H., 186*
Williams, S., 382*, 521*	Zhao, Li, 654*
Williamson, O., 636*	Zhao, X.,
Williamson, Rachel,447*	Zhao, Y.,
Williamson, W. R., 70*	Zhu, C. C., 214*
Willers, R. J., 282*	Zinshteyn, Daniel, 830*
Wilson, D.Lloyd., 799* Wilson, K., 264*	Zirin, J.,
Windner, S. E., 89*	Zur Ovec, milcridi, 148"
vviiidilei, J. L., 05	

Workshop applications were submitted and approved by the conference organizers. For a full agenda, where available, visit the conference website.

Wednesday, April 11 9:00 a.m. – 4:00 p.m. 4th Floor, Rm 411

New Faculty Forum

Your first faculty appointment brings many new challenges. Network, learn, and find support at the New Faculty Forum, a one-day workshop designed for new faculty (those within the first five years of their appointment) and advanced postdocs. Attendees will discuss common challenges, share their elevator pitches, and have opportunities to learn about:

- tools and techniques for managing budgets effectively;
- tips for negotiating and establishing relationships with vendors;
- how to be a supportive mentor;
- the basics of designing and teaching a new course;
- and more!

Revised to reflect participant feedback from last year, this focused event will allow you to form a strong network of peers with whom you can continue to collaborate, commiserate, and celebrate long after the meeting ends.

Wednesday, April 11 2:30 p.m. – 4:30 p.m. 5th Floor, Salon D

Ecdysone Workshop

Organizers:

Elizabeth Ables, Kim Rewitz

The Ecdysone Workshop highlights the diverse roles of insect hormones (e.g., 20hydroxyecdysone, juvenile hormone, peptide hormones, insulin) and hormone receptors in growth, metamorphosis, reproduction, and metabolism. Presentations from trainees and new investigators will highlight recent findings in insect endocrinology, and foster discussion among individuals from diverse research interests. Topics include, but are not limited to: hormone synthesis and secretion, hormone-gated signaling and transcription, cross-talk between hormone signaling pathways, and hormonal control of differentiation, morphogenesis, growth, metabolism, reproduction, and behavior

Part I: Wednesday, April 11 2:30 p.m. – 4:30 p.m. 4th Floor, Rm 405

Part II: Friday, April 13 2:30 p.m. – 4:30 p.m. 4th Floor, Rm 4

GENETICS Peer Review Workshop

This two-part workshop will provide an introduction to peer reviewing for early career researchers, including graduate students. Led by *GENETICS* editors, the workshop will cover best practices and reviewing exercises. Becoming a better reviewer will help you hone some of the skills central to scientific success, including critical thinking, evaluating research, providing helpful feedback, and understanding the mindset and expectations of peer reviewers and editors.

NOTES

Thursday, April 12 7:45 p.m. – 9:45 p.m. 5th Floor, Salons F-G

Advocating Drosophila through using it as an Efficient Teaching Tool

Organizer:

Andreas Prokop

Science communication and science education are closely interlinked. Science education provides uniquely powerful opportunities to advocate Drosophila by reaching out to audiences at young age. This workshop will introduce to effective strategies and resources for extracurricular school events, curricular lessons taught by teachers, K12 practicals, and the training of university students. All these modalities use the fly as a teaching tool, introducing students to the idea of Drosophila research through teaching science WITH flies rather than educating ABOUT flies. Both, the scientist and the teacher perspective will be explained, alerting to the need of engaging in true school collaboration.

Thursday, April 12 7:45 p.m. – 9:45 p.m. 5th Floor, Salon E

Drosophila Microbiome

Organizers:

Nichole Broderick, Will Ludington, Brooke McCartney

Microbiomes have profound impacts on the physiology and development of animal hosts and Drosophila has risen as a model to investigate mechanisms underlying these associations. This workshop will assemble a diverse group of presentations that highlight recent advances in the field of Drosophilamicrobiome interactions. A major goal of the workshop is to provide a discussion forum that fosters the exchange of ideas and collaboration. The workshop will also provide an entry point to researchers who are interested in the microbiome, but less familiar with the techniques and field.

Thursday, April 12 7:45 p.m. – 9:45 p.m. 4th Floor, Rm 411-412

Reverse-engineering methods and quantitative analysis of signaling and organogenesis

Organizers:

Jeremiah Zartman, Gregory Reeves, Stanislav Shvartsman

The goal of the workshop is to identify new problems in which engineering and tools from disciplines such as microfluidics, machine learning, control theory, computational modeling, ex vivo organ culture, novel biosensors, and synthetic constructs are integrated into the experimental analysis of cell signaling and organ development. A focus is the integration of multiple disciplines including engineering, biophysics, systems and synthetic biology, and applied math to quantitatively analyze gene regulation, cell signaling and organ development. An additional goal of the workshop is to provide a forum to identify new questions in the fields of biophysics and systems bioengineering that are best posed in the fruit fly. The emphasis is on identifying applications for the Drosophila model system as an ideal testbed for testing new ideas and inventions.

Thursday, April 12 7:45 p.m. – 9:45 p.m. 5th Floor, Salon J

Overcoming barriers to effectively utilize Drosophila melanogaster in scholarship, research, and teaching at PUIs

Organizers:

Matthew Logan Johnson, Afshan Ismat, Jamie Sanford

The workshop will have two components, lighting talks followed by a breakout session as described below: Each lightning talk will focus on one of four common obstacles within PUIs. These areas include challenges in data collection in undergraduate research, student involvement in publishing, interdisciplinary studies, and effective experimental procedures. During breakout sessions, attendees will join small group discussions on one of the four areas that most interest them. Discussions will focus on strategies for effectively overcoming the particular barrier of interest.

Thursday, April 12 7:45 p.m. – 9:45 p.m. 5th Floor, Salon K

The Hows and Whys of Drugging Flies - A Chemical Screening Workshop

Organizers:

Daniela Zarnescu, Michele Markstein

Whole animal drug screens, using Drosophila and other model systems, are emerging as a method of choice to chemically probe features of biology that cannot be easily recapitulated in vitro. These include cell-cell signaling, behavior, stem cell biology, and whole organ function. Talks from expert speakers will focus on the challenges and opportunities of screening for therapeutics in Drosophila. Topics will include paradigms relevant to human disease and recent advances screening technologies. A summary panel 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.

Thursday, April 12 7:45 p.m. – 9:45 p.m. 4th Floor, Rm 405

Publishing Genetics Classroom Activities in CourseSource

Organizer:

Michelle Smith

This workshop is designed for GSA members who have designed and taught an activity, and are ready for specific advice for how to publish it in CourseSource.

Thursday, April 12 7:45 p.m. – 9:45 p.m. 5th Floor, Salon H

Biogenic Amines and Behaviors

Organizers:

Sonali A. Deshpande, David E. Krantz, Kyung-An Han

Drosophila is widely used as a model system for studying neurological disorders and neuronal mechanisms involved in behavioral regulation. This workshop welcomes a diverse group interested in discussing the role of biogenic amines in various behaviors. The goal of this workshop is to provide a forum for investigators working on biogenic amines to encourage discussions and collaborations.

Thursday, April 12 7:45 p.m. – 9:45 p.m. 4th Floor, Franklin 2

Building Community Through Mentoring

Organizers:

Zach Farrow, Alexandra Erwin, Alessandro Bailetti

The purpose of this event is to continue the GSA's and community's efforts to build a supportive and inclusive scientific community. We aim to begin fostering meaningful and lasting relationships that connect scientists within and across scientific fields. Attendees will learn strategies for building successful mentorship relationships and addressing their needs with a supportive network of mentors.

Thursday, April 12 7:45 p.m. – 9:45 p.m. 5th Floor, Salon L

Autophagy in Development and Disease

Organizers:

Andreas Jenny, Tor Erik Rusten, Serge Birman

Autophagy is a highly conserved process that delivers cytosolic components including aggregated proteins and damaged organelles to lysosomes for degradation. It is essential for cellular homeostasis and stress resistance. In addition to its requirement during development, autophagy is deregulated in various diseases, and its reduction leads to aging-like phenotypes. In this workshop, an overview of recent progress in the field given by Dr. Gábor Juhász will be followed by talks selected from interested applicants that will show novel data and discuss pressing open questions with the goal to foster discussions and interactions among scientists at various stages of their careers.

Friday, April 13 1:45 p.m. – 3:45 p.m. 4th Floor, Franklin 2

Spotlight on Undergraduate Research

Organizers:

Eric Stoffregen, Kimberly A. Carlson, Jennifer Mierisch

This session will highlight undergraduate research accomplishments from Drosophila research labs. Selected by faculty reviewers, student speakers will deliver oral presentations on their projects. This undergraduate-specific session will illustrate ways in which research has become an important part of the college experience through its integration into courses and mentoring in individual research labs.

Friday, April 13 1:45 p.m. – 3:45 p.m. 5th Floor, Salon J

Feeding Behavior, Nutrition and Metabolism

Organizers: Tânia Reis, William W. Ja

Drosophila has emerged as a powerful model system for studying how diet and nutrition can influence a wide range of metabolic processes. This workshop is designed to assemble a diverse group of presentations that highlight recent advances in the field of nutrition and metabolism. 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.

Friday, April 13 1:45 p.m. – 3:45 p.m. 5th Floor, Salon I

Everything you ever wanted to know about sex

Organizers:

Michelle Arbeitman, Rita Graze, Brian Oliver, Artyom Kopp, Mark Siegal, Mark Van Doren

The workshop will cover the molecular genetics, development, neurobiology, genomics, evolution, and population genetics of sexual dimorphism, with an emphasis on cross-disciplinary interactions. Presentations by invited speakers and selected abstracts from each discipline will be followed by moderated discussions. The speakers are encouraged to summarize the key ideas behind their research for people working in other fields, outline the main unsolved questions, offer their opinions about future directions, and suggest connections that could be built with other disciplines.

Friday, April 13 1:45 p.m. – 3:45 p.m. 5th Floor, Salon H

Developmental Mechanics

Organizers:

Guy Tanentzapf, Rodrigo Fernandez-Gonzalez

Developmental biology has undergone a revolution over the last two decades, largely as a result of work in Drosophila, that placed biomechanical, quantitative imaging, and mathematical modeling approaches at the forefront of the study of tissue morphogenesis. In particular, the establishment of tools to measure and manipulate mechanical forces in living organisms has demonstrated that mechanical forces profoundly shape animal development. In this workshop, we will review the most recent technical advances to visualize and quantify force generation in Drosophila, and we will discuss the latest results demonstrating the interplay between physical forces, molecular dynamics and tissue morphogenesis.

Friday, April 13 1:45 p.m. – 3:45 p.m. 5th Floor, Salon E

Functional Genomics Resources from the DRSC & TRIP

Organizers:

Jonathan Zirin, Claire Hu, Norbert Perrimon

As the Drosophila RNAi Screening Center (DRSC) enters its 15th year, and the Transgenic RNAi Project (TRiP) enters its 10th, we are looking to the future. We will present an overview of functional genomics technologies we offer to the Drosophila research community, including RNAi and CRISPR technologies in cells and in vivo, and bioinformatics resources that support identification of reagents, data mining, and additional applications. From the workshop, attendees will learn how to make best use of our resources, online tools, and data sets, as well as learn about new technologies in cell modification, gene editing, and functional screening, and vectors to be used.

Friday, April 13 1:45 p.m. – 3:45 p.m. 5th Floor, Salon K

Drosophotoxicology: Examples and opportunities for fly research in toxicological sciences

Organizers:

Matthew D. Rand, Robert Anholt

This workshop will exemplify the use of Drosophila in modern regimens of toxicological science. Toxicology is largely about gene X environment interactions hence, the fly model is poised to greatly expand understanding of toxicant action. Likewise, toxicants offer unique inroads to understanding fly development and behavior. The demand for high throughput, high information content and low cost assays for environmental toxicology and drug development has turned attention to small organism models. This workshop will highlight recent applications of Drosophila genomics, molecular and behavioral assays in toxicological studies. Discussion will center on the strengths of Drosophila for mechanism-based toxicity studies.

Friday, April 13 2:00 p.m. – 4:00 p.m. 4th Floor, Rm 411-412

Professional Development Tool Kit

The value of transferable skills gained during an advanced degree in the life sciences has been shared anecdotally with recent work quantifying skill strengths and gaps provided by doctoral training. This workshop aims to f.amiliarize trainees with data on skills organizations seek, highlight the value of transferable skills, and help trainees identify strengths and gaps in their own experiences that can be utilized to develop plans to strengthen skills.

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: 168 and less are oral presentations and 166 and beyond are poster presentations.

ab 597	716	bru1 689
abd-A	armi 852	bs
307 309 510 763 855	Arp2203	Bsg 96
Abd-B 134 763	Arp3180 203	bsk 112 320 381 734
Abl .178 247 254 410	ash2801	bt635
Ac13E325	asp111	by 203
ACC 163	AstA	C15445
Acn 189	Atg1622	cac414 496
Act5C217	Atg8a410 580 586	cact256
Actβ 401 466	ato 514	cad 797
AdenoK 235	ATPsynδ 613	Caf1-18081
Adgf-A 235	Atpα 45	CAH2418
Adh666	aub439 852	caix418
Adk1 721	Axn 210	CaMKII418
AdoR148 235		
	B 310	Cap-H2816 844
Ady43A235	babo	cas454
AGO1 712	Baldspot 313	Cat
AhcyL1 261	bam 679 686	caup 811
akirin 724	ban 834	cav 816
Akt1 220 245 850	bark	CCDC53 197
Ama	barr	Cdk1 282
ana2 494	baz 172	Cdk5 189 586
Ankle2 625	bcd	Cdk5 α586
anne 411	712 774 797 813 815	Cdk8 775
Antp 133	BicC 618 856	CecA1 320
aop 778 807	bin3 797	Ced-12 6
ap 785	Blm 272 275 276 279	cep290 106
Apc2 210 471	bnl 114 750 751	CG10939 633
ara 811	br 84 787	CG12909 424
Arf51F 8 80	brat 471 806	CG13604 404
Arf79F 130	brk 490	CG13813 404
arm	Brkd 256	CG14438 436
152 206 210 471 569	brp 569	CG14605 423
	0.4	

CG15436 447	Cyt-c1L 644	Dsim\GD18654 674
CG1561 404	D1 842	Dsor1 225
CG15930 17	D2hgdh 359	dsx 24 398 530
CG17807 485	da 499 514 782	Dyak\bam 679
CG31999 753	Dad 489	Dys 635
CG3809 235	Dana\GF17434 679	e 134
CG4096 741	Dark 453	E(Pc) 113
CG4701 429	daw622	E(spl)mδ-HLH 581
CG5043 419	Dcr-1 712	e(y)1 731
CG5050 419	Desat1 363 371	E2f1 .51 246 305 721
CG5522 240	Desat2 672	eas 163
CG5567 355	Dh31 392	Eb1 175
CG5577 355	Dh31-R 392	EcR 137 232 738 818
CG5830 147	Dh44 532	ed 113 176
CG8331 195	Dhc64C 193	Egfr 184 793 809
ChAT 185	dia105 172	egg 62
cher 171 203	Diap1	egr 296 381 720
CHES-1-like 755	182 336 718 720	eIF3b 113
chico 303	dib 705	elF3i 113
chn 847	Dif 321 399	eIF4H1 561
ci 85 734	DIP-y 551	Eip63E 257
cic149 779 815	dl	Eip78C 358
cid 35	82 256 321 399 743 7	Eip93F 512
Cka 718	74 782 792	elav 855
Cks30A 754	DI 620	emb 113
Clic 349	dlg1 172	emc207 499 514 814
clu 190 380	Dlip3 782	en 85 156 780
Cnb 48	DII 152	Ent2148 235
cnc 336	dlp 209	Epac 8
cno 748	Dmau\OdsH 36	ERR 352
CNT1235	Doa 354	esg 336 463 641
CNT2235	dom 325	eve
comm 442 473 700	Dp 721	131 135 780 790 807
cora232 757	dpp 151	exd 133 510 763
COX4L644	223 715 743 775 793	Exo84 240
COX5A 721	dpr11 551	ey 277 460 715
Cp1 6 311 316	Drice 182	eys 704
Crk 247	Dronc 294	Fak 203
Cul4 459	drpr 6 319 338 614	FAM21 197
cup 217	Drsl2 320	Fancd2 275
CycC 775	Dsec\DesatF674	FANCI 275
CycE 718	Dsec\GM23846 674	Fas2104
CycH 424	dsh 381	FASN1 163
Cyp18a1 404	Dsim\bam 679	fh 603
Cyt-c-d 644	Dsim\DesatF 674	Fic 194

fid 485	gukh743	ihog569
fkh170	Gyc76C 329	llp297 303
flw 180	Gycα99B 520	llp6398 399
Fmr1	Gycβ100B 520	llp884
44 141 158 528 635	Gαq 562	ImpL2398
FMRFa 490	Gy1 755	ImpL3352
fog 170	h 780	Incenp754
fon 256	H15 793	ind743
for329	hb 712 790	INPP5E106
form3 483	HDAC1712	InR
foxo245 295 304 374	Hdc534	245 366 398 635 641
fra	HEATR2 405	inv156
442 445 471 472 474	Hexim797	iPLA2-VIA361
482 743	hh 80	Ir40a 11
fried 405	hid720	Ir68a 11
fru 501 530	Him 752 794	Iswi 729
fs(1)h 307	НірНор 277	Itp-r83A124
ft 810	HIS-C860	Jabba 191
ftz 135	Hml383	jbug 45
ftz-f1 491	HnRNP-K 351	jing847
fuss97	hop 112 256 793	Jra505
fz 561 569	HP1b155 827	jub221
		=
fzr 128 284	HP1c 155	jumu /54 /55
GATAe 286	HP1c 155 hpo	jumu754 755 jus606
GATAe 286		
	hpo	jus 606
GATAe 286 gbb 41 489 497 814	hpo 294 453 714 718 734	jus 606 Kap-α1 424
GATAe	hpo 294 453 714 718 734 Hr38 606	jus
GATAe	hpo 294 453 714 718 734 Hr38	jus
GATAe 286 gbb41 489 497 814 Gclc 581 582 gcm 776 Gen 278	hpo 294 453 714 718 734 Hr38	jus
GATAe 286 gbb41 489 497 814 Gclc 581 582 gcm 776 Gen 278 gfzf 154	hpo 294 453 714 718 734 Hr38	jus
GATAe 286 gbb41 489 497 814 Gclc 581 582 gcm 776 Gen 278 gfzf 154 glo 351	hpo 294 453 714 718 734 Hr38	jus
GATAe 286 gbb41 489 497 814 Gclc 581 582 gcm 776 Gen 278 gfzf 154 glo 351 glu 754	hpo 294 453 714 718 734 Hr38	jus
GATAe 286 gbb41 489 497 814 Gclc 581 582 gcm 776 Gen 278 gfzf 154 glo 351 glu 754 Glut3 423	hpo 294 453 714 718 734 Hr38	jus
GATAe 286 gbb41 489 497 814 Gclc 581 582 gcm 776 Gen 278 gfzf 154 glo 351 glu 754 Glut3 423 gnu 433	hpo 294 453 714 718 734 Hr38	jus
GATAe 286 gbb41 489 497 814 Gclc 581 582 gcm 776 Gen 278 gfzf 154 glo 351 glu 754 Glut3 423 gnu 433 goddard 649 Gp210 200	hpo 294 453 714 718 734 Hr38	jus
GATAe	hpo 294 453 714 718 734 Hr38	jus
GATAe 286 gbb41 489 497 814 Gclc 581 582 gcm 776 Gen 278 gfzf 154 glo 351 glu 754 Glut3 423 gnu 433 goddard 649 Gp210 200 gpp 113	hpo 294 453 714 718 734 Hr38	jus
GATAe 286 gbb41 489 497 814 Gclc 581 582 gcm 776 Gen 278 gfzf 154 glo 351 glu 754 Glut3 423 gnu 433 goddard 649 Gp210 200 gpp 113 Gr28b 9	hpo 294 453 714 718 734 Hr38	jus
GATAe	hpo 294 453 714 718 734 Hr38	jus
GATAe	hpo 294 453 714 718 734 Hr38	jus
GATAe 286 gbb41 489 497 814 Gclc 581 582 gcm 776 Gen 278 gfzf 154 glo 351 glu 754 Glut3 423 gnu 433 goddard 649 Gp210 200 gpp 113 Gr28b 9 Gr63a 542 grh 113 136 510 grim 720	hpo 294 453 714 718 734 Hr38	jus
GATAe 286 gbb41 489 497 814 Gclc 581 582 gcm 776 Gen 278 gfzf 154 glo 351 glu 754 Glut3 423 gnu 433 goddard 649 Gp210 200 gpp 113 Gr28b 9 Gr63a 542 grh 113 136 510 grim 720 grk 58 809 862 gro 445 461 491 gsb 498	hpo 294 453 714 718 734 Hr38	jus
GATAe 286 gbb41 489 497 814 Gclc 581 582 gcm 776 Gen 278 gfzf 154 glo 351 glu 754 Glut3 423 gnu 433 goddard 649 Gp210 200 gpp 113 Gr28b 9 Gr63a 542 grh 113 136 510 grim 720 720 grk 58 809 862 gro 445 461 491	hpo 294 453 714 718 734 Hr38	jus

LanB1 740	msps 175	nos 277 858
Larp7 797	mt:Col 381	Not1 860
Letm1 45	mtDNA-helicase 639	Nox 443
lid596 624 849	mtm 187	Nrt 152
Lmx1a 727	Mtor 837	Nrx-1635
loh 759	mtrm 267	nub 320 463
lok304 847	mud88 748	Nup98-96113 296
lola283	mus308273	nvd 705
lolal283	MvI181	Oamb124 441
lov283	Мус	Obp28a 332
Lpt 834	153 283 381 398 460	Ocrl 103
Lsp1y 256	856	Oda 347
M1BP 154	myo 212	Odc1347
Mad 223 489 490 775	mys	opa 23
mars472	.83 203 222 451 735	Or47b 501
mbl 861	Myt1 282	Or67b 546
Mbs 172 180	N	orb 434
Mcr745 757	112 215 397 435 510	orb2 528
me31B 439	620 734 752 773	Orco 501
Med 489 490	na 536	ort 534
MED11 731	nAChRα1 484	osk 18 689 815
MED16 731	nAChRα6 484	Ote 438
Mer 81	ncd 193	p120ctn 130
Mettl14 795	ND-24L 644	p38a 344
Mettl3 19 795	ND-49L 644	p38b 344 408 767 878
Mhc 256	ND-51L1 644	p38c 344
mib1 397	ND-51L2 644	p53 246
mid 793	Ndae1 418	par-1 172
milt 43	neb 754	para 502 503 524 635
Mip 522	nej 501	park 570
mir-133292	Nep4 393	Patronin 109
mir-33850	nesd 800	pav 177
mirr730 793 811	NetA 442 471	Pdfr 165
Mitf6 40 586	NetB 442	pdm3 134
mldr 630	Neto 98	pea 861
mlt 421 422	neur397	per396
Mmp1	Nhe2288 407 621 633	pgc858
112 153 264 505	ninaA 559	Phf7 62 448 814
Mmp2441	ninaE584	Phm705
mnb 597	Nlg3601	phol445
Mnn1801	nmd429	phyl465
mod(mdg4)425	nompC736	Pi3K21B366
Moe633	nopo494	Pi3K68D187
Mondo371	norpA562	Pi3K92E 184 507
Mrtf723	Nos 520	pic 459

Dials4 F70	Dhm1 245	catuum (40
Pink1 570	Rbp1 345	saturn 649
pins748	Rbp1-like 345	sax 41
Pkcδ243	Reep1 195	sc465
Pkg21D329	ref(2)P 40	SCAR 474
ple555	Rel 319 320 383 586	ScIA393
PlexA475	repo776	SclB 393
Plp48 271	Ret 635	Scr 24 133
Pngl 626	RFeSP 721	scra754
pnr 372	Rh5 562 714	scrib 79 303
pnt.295 778 793 807	Rh6 562	scu 630
pnut 169	rhea726	sd 223 714 718 767
poe 141	rho 743 809	SdhAL 644
POLDIP2274	Rho1 105 130 242	SdhB 721
polo 48	RhoGAP71E 105 242	SdhBL 644
Pph13 584	RhoGEF2 242	sea 167
PPO1 325	rib 283 756	Sec5 240
prc 759	Rif1 846	sens 152
prod 842	Rip118	SERCA 393
prom 704	rl 53 149 150	sesB 45
Prp19 861	RluA-1 558	Set2 860
ps 861	RluA-2558	SF2 345
Pten208 528	RNaseZ 623	sgg 210
Ptth 166	RnrL747	sgll 605
put 466	robo1473 474 481	shep 348
Pxt 451	robo2473 479	shg 130 749
R1A1-element\ORF2	robo3476	shn 490
122	Rok 105 170 180	shot 49 175
R2-element\ORF . 122	roX1 837	shrb 182
Rab10 42	RpII215 860	sina 465
Rab11 8 103 240 329	RpL10 296	Sirt6 139
Rab4 435	RpL22 732	sisA 61
Rab7 103	RpL22-like 732	SK 10
RabX1 104	rpr 307 720	sktl 106
Rad23 822	RpS12 52	sl 228
Rae1 113	Rsf1 345	slbo 397
Rala 240	Rsp 426 690	sli 473 476 493
RanGAP 426	rswl630	Slik 726
Rap1 8	Rtnl1 195	slp1 734
ras 150	ru 809	smal 552
Ras85D	S6k 366	SMC2 754
53 79 80 208 238 239	SA-2 425	Smn 861
295 302 383 621	sad 705	Smox 401 466
raw 505	SAK 494	sn 202
Rbf 383 721 777	Sap47 45	sna 743
Rbf2 777	Sas-4 494	Snr1 297

snRNA:7SK	.797	Tace	381	twin	860
Sod1 41 375 566	592	Taf1	154	twit	489
Sod2 336	591	tai	82	Ube3a	45
Sod3 375	443	Tao 104	487	Ubx	763
sog	. 792	tau	175	uif	264
sov 436	456	Taz	377	unc-4	91
Sox100B	.814	Tbh	555	upd1 217	793
SPE	. 256	TBPH 566	5 567	upd3	320
spg	. 180	Tdc2	555	UQCR-14L	644
spi	. 809	Tdrd3	158	Vap33	215
Spn	. 414	tef	425	vas 439	879
spn-E	. 852	tefu	246	vg	767
spz	82	tej	814	Vha100-2	6
sqd	. 862	TfIIA-S-2	768	Vha36-1	418
sqh 57 180	749	Tgi	767	Vha44	104
Src42A	90	Thor 140 233 24	5 398	Vha55	418
SREBP	.163	thv	223	Vha68-3	215
srl 400	435	Tig	256	VhaAC39-1	418
sro	. 705	tj	243	VhaPPA1-1	418
Srp54	. 345	tkv	489	VhaSFD	418
SRPK	.354	TI 82 163 256 39	9 815	Vinc	203
Srpk79D	.354	tll	712	Vmat	555
ss 118 159	801	Tmc	541	vn 287	809
stai	. 175	tnc	264	vnd 743	782
stan	.113	Tnpo-SR	63	vvl 97	
Stat92E		Τορ3β	158	w	413
112 217 320 448	793	tor	53	wash	197
885		Tor		wdb	718
stg 128	397	304 305 435 622	2 856	Wdr62	48
Stim	.124	toy	729	Wee1	282
Strip	.718	trbl	397	wg	
Strumpellin	.197	Tret1-2	423	84 152 153 206	209 2
stwl	.830	Trf2	154	10 471 498 569	702 7
sty	. 225	Trl	815	16 729 730 734	
Su(H) 752 773	782	TrpA1 562	2 655	wgn 79	296
Su(var)205	. 155	trr	834	wit489	490
sunz	.814	trx729	730	Wnt2	209
sut3		Tsc1 304	305	Wnt4 209	716
sut4		tsl	815	Wnt6 153	209
SuUR 447	846	Tsp	488	WRNexo	631
SWIP		ttk 283		wts	294
sxe2		tud		x16	
Sxl 61 62		tum		Xbp1	
Syn		twe		Xrp1	
Syt1	94	twi	782	y 34 134	682

yki

79 81 85 128 182 223 294 295 641 714 718

yrt 749
Ythdc1 795
Ythdf 795
Zasp52 179
Zasp66 179
zfh1 752
zip 53 105 180
zld
766 774 782 792 806
815
zyd 45
α-Cat 221 244
α-PheRS 263
αTub84B 217
β-PheRS 263

KEYWORD INDEX

The following index is composed of keywords selected by presenting authors from a list on the Abstract Submission Site. Abstract program numbers follow each keyword.

Cell Biology &	pathways	6 307 308 309 310	
<u>Signal</u>	124 148 229 230	311 312 313 314	
<u>Transduction</u>	231 232 233 234	315 316	
	235 236 237		
a. hedgehog		d. apoptosis-	
204 205	k. small gtpases	induced	
	129 238 239 240	proliferation	
b. wingless		1 3 317	
152 206 207 208	l. lipids in		
209 210	signaling	g. cellular	
	146	immunity	
c. tgfbeta		7 318	
151 211 212 213	m. morphogens		
214	241	i. innate	
		immunity	
d. notch	n. live imaging	319 320 321 322	
215	242 243 244	313 320 321 322	
213	2-12 2-13 2-1-1	n. hemocytes	
e. JAK/STAT	o. computational	323 324 325	
216 217 218 219	models	323 324 323	
210 217 210 219	245	q. host/pathogen	
f. insulin	243	interactions	
signaling	p. networks	8 326 327 328 329	
220	246	0 320 327 320 329	
220	246	\\\ - - - - - -	
		r. Wolbachia -	
g. hippo	s. other	5	
125 126 127 128	130 147 149 247		
145 221 222 223	248 249 250 251	s. microbiome	
	252 253 254 255	2 331 332 334 335	
h. nf-kb	256 257		
224		t. other	
		336 337 338	
i. receptor	<u>Cell Death and</u>		
tyrosine	<u>Immunity</u>		
kinase/phosphata		Cell Division and	
se	a. caspases	Growth Control	
150 225 226 227	4		
228		a. mitosis	
	b. death	49 258 259 260	
j. other signaling	mutants/genes		

KEYWORD INDEX

aa. tissue growth

75 261 262 263

264

b. meiosis

46 265 266 267 268

269 270

d. centrosome

48 271

e. kinetochores

and cohesion

47

i. DNA replication

272

j. DNA repair

273 274 275 276

277 278 279

k. cell cycle control

51 280 281 282

m. endocycle

76 77 283 284 285

p. transcriptional

regulation

286

q. developmental modulation

50 287 288 289 290

291

r. tumor

suppressors and oncogenes

78 79 80 82 292

293 294 295 296

297 298

s. cell competition

299 300 301 302

303

t. regeneration

304

w. hippo signaling

81

z. cell growth

52 305 306

Chromatin and

Epigenetics

a. chromatin

structure

157 815 816 817

c. remodeling complexes

818 819

d. histone

variants and modifications

820

e.

heterochromatin

119 121 821 822

823 824 825 826

827 828 829 830

f.

insulators/bound ary elements

831 832 833

g.

polycomb/trithor

ax complexes

834 835 836

h. nuclear pore

complex

117 837 838

i. dosage

compensation

120 839 840 841

j.

pairing/transvecti

on

118

k. nuclear organization

842 843 844

I. DNA replication

123 845 846

m. telomeres

847

n. other

122 848 849

Educational Initiatives

a. K-12

curriculum

883 884

b.

college/university curriculum

curriculum

99 100 885 886

887

KEYWORD INDEX

i. c. genomics education canalization/robu b. oogenesis partnerships stness 62 63 64 65 66 433 101 888 38 434 435 436 437 438 439 440 441 g. other n. computational 442 443 444 445 102 models 446 447 687 688 c. preo. genome-wide **Evolution &** gametogenic **Population** association germ cell **Genetics** studies development 34 689 690 691 692 60 a. genome 693 evolution d. sex 35 642 643 644 645 p. other determination 646 647 648 649 37 694 695 696 61 448 650 651 652 653 654 e. sex-specific **Evolution of** traits and b. population development, molecules variation other species 449 33 655 656 657 658 659 660 661 a. development k. stem cells 21 22 23 24 697 450 698 699 700 701 c. chromosome structural 702 703 704 705 m. cell migration variation 451 662 663 664 665 b. adaptation 706 o. other d. evolution of 452 453 gene expression h. other 666 organisms 707 708 709 710

711

e. quantitative

667 668 669 670

675 676 677 678

32 679 680 681 682

683 684 685 686

f. speciation 36 671 672 673 674

h. selection

traits

Gametogenesis

a. spermatogenesis 419 420 421 422 423 424 425 426 427 428 429 430 431 432

a. cytoskeleton 108 169 170 171 172 173 174 175 176 177 178 179 180

<u>Intracellular</u>

Cytoskeleton,

Organelles &

Trafficking

Dynamics:

b. cell polarity

109

c. endocytosis

181 182

d. membrane dynamics

104 183

e. intracellular transport

103 184 185 186

f. secretion

105

g. autophagy

187 188 189

h. mitochondria

190

i. cellular organelles

106 191

j. endoplasmic reticulum

192 193 194 195

n. nucleus

196 197 198

o. nuclear pore complex

....

199 200

q. cell migration

107 202

s. cell junctions and adhesion

203

Models of Human

Disease:

<u>Developmental</u>

and Physiological

Disorders

a. tumorigenesis

112 616 617 618

619 620

b. metastasis

621

c. cardiovascular

disease

622 623

d. developmental

disorders

624 625 626

e. muscle

disorders

114 627

f. sterility

628

h. obesity

629

i. metabolic disorders

110 630

k. stress

631 632

I. renal disease

633

n. drug discovery

634

o. cell biology of

disease

111 116 635 636

p. genetic modifiers of

disease

113 637 638 639

640

q. other

115 641

Models of Human

Disease:

Neurodegeneration n and Neurological

Disorders

a. neural

degeneration

39 40 41 42 43 563

564 565 566 567

568 569 570 571

572 573 574 575

576 577 578 579

580 581 582 583

584 585 586 587

588 589 590 591

592 593 594

b. neural disorder

595 596 597 598

599

c. models of ASD

600 601

d. trinucleotide repeat expansion

602 603 604

e. epilepsy

45 605 606

f. drug discovery

607 608

g. regeneration

609

h. other

44 610 611 612 613

614 615

Neural Circuits
and Behavior

a.

neurotransmitter

S

518 519 520 521

b. neuropeptides

522

d. ion channels

9 523 524

e. synaptic function and

organization 525

f.

learning/memory

526 527 528 529

g. courtship and

mating

14 15 530 531 532

533 534 535

h. circadian rhythms and

sleep

536 537 538

i. aggression

539 540

k. feeding

behavior 541

I.

locomotion/flight

542

n.

chemosensation

543

o. olfaction

13 544 545 546 547

548

p. gustation

549

q. vision

16 550

r. circuits

11 12 551 552

s. circadian rhythms

553 554

t. other

10 555 556 557 558

559 560 561 562

Neural

Development and

Physiology

a. axon guidance

95 471 472 473 474 475 476 477 478

479 480 481 482

b. dendrites

483 484

c. synaptogenesis

98 485 486 487

488

d. neuronal specification

91 93 97 489 490

491

e. neuronal morphogenesis

92 492 493 494

495

f. neuromuscular

junction

94 496 497 498

499

g.

neurotransmitter

S

500

i. hormones

501

j. ion channels

502 503

k. glia

96 504 505 506

507

l. hormonal control

508

m. CNS

509 510 511

343 344 o. tissue growth and remodeling o. stem cells 512 513 85 732 733 734 735 b. metabolism 161 162 167 345 736 737 346 347 348 349 r. sensory cell development p. cell migration 350 351 352 353 514 515 57 738 739 740 741 354 355 356 357 742 743 358 359 360 361 t. other 362 363 364 516 517 q. epithelial c. nutrition sheets 59 88 744 745 746 365 366 367 368 Patterning, 747 748 749 369 370 371 **Morphogenesis** and r. cell-cell d. nutrient interactions sensing **Organogenesis** 56 750 751 138 a. axis t. mesodermal e. endocrine specification derivatives 712 713 function 752 753 754 755 164 165 166 372 e. commitment 714 u. ectodermal f. dietary derivatives restriction/fasting 756 f. eye disc 715 716 717 718 373 719 w. biomechanical forces g. oxidative 54 55 86 757 g. wing disc damage 83 84 87 720 374 375 x. computational j. muscle models h. mitochondria 89 721 722 723 724 58 90 168 376 377 378 725 726 379 380 381 382 z. other I. gonads 758 759 760 i. lifespan 139 140 142 383 727 384 385 386 387 m. epidermis 388 389 390 391 Physiology. Metabolism & 728 j. physiology of **Aging** n. tissue adult organs specification a. stress 392 393 394 395 53 729 730 731

responses 339 340 341 342

k. circadian c. siRNA/RNAi b. transcription rhythms and 853 initiation/elongati sleep on/termination 135 158 772 396 d. IncRNAs 854 855 I. insulin c. signaling/insuline. RNA binding activators/coactiv like peptides proteins ators 163 397 398 399 856 857 773 774 775 776 m. TOR signaling f. RNA transport d. 400 401 and localization repressors/corepr 858 859 essors 777 778 779 n. hormonal control g. 402 403 404 stability/turnover e. enhancers 131 132 133 137 p. post-embryonic 18 860 153 780 782 783 tissue or organ 784 785 786 787 h. splicing 788 789 790 791 remodeling 405 regulation 792 19 861 g. homeostasis f. pattern 141 143 144 406 i. translational formation 407 160 793 794 regulation 17 862 863 r. proteostasis g. alternative 408 409 j. other splicing 20 795 s. autophagy 410 h. translational Regulation of regulation t. other **Gene Expression** 796 797 798 799 411 412 413 414 415 416 417 418 a. core promoters j. epigenetics and general 155 156 800 801 **RNA Biology** transcription factors I. non-coding a. miRNA 136 154 761 762 **RNAs** 763 764 765 766 802 803 850 851 767 768 769 770 b. piRNA 771 n. networks 852 134 804

ο.

canalization/robu

stness

805 806

logic

Techniques and Technology

a. microscopy

864

p. cis-regulatory

159 807 808 809

q. other

810 811 812 813

814

c. RNAi

866

Stem Cells

a. follicle stem

cell

30 454 455

b. germline stem

cell

25 28 29 456 457

c. neural stem

cells

26 458 459 460

d. intestinal stem cells

31 461 462 463 464

465

e. hematopoietic

stem cells

466

f. niche and other local signaling

27 467 468 469

g. asymmetric cell

division

470

b. live imaging

71 73 865

d. mutational

screens

867

e. gene targeting and modification

67

g. crispr/cas9

68 69 868 869

h. high-

throughput phenotyping

70 870

k. next-

generation

sequencing

871 872

I. computational

algorithms

873 874

m. webtools and

databases

875 876 877

n. proteomics

878

p. other

72 74 879 880 881

882

Why publish in GENETICS & G3?

Fast Decisions, Fast Access

Tired of reformatting manuscripts? We welcome initial submissions in any format and impose no limits on length, figures, or supplemental information. Plus, we answer pre-submission inquiries within days—and can even fast-track handling in some circumstances.



Time to first decision? About a month.

Initial call on whether to send for review takes just days.

Within days of initial manuscript submission, we will let you know whether the manuscript will be sent for review. For reviewed manuscripts, the editors strive to reach a decision in less than 30 days. For revised papers, more than 90% are accepted without an additional round of reviews.



Average time from submission to acceptance is **less than 8 weeks.**

High-Quality Review & Peer Editors

Ever struggled with an unclear decision letter or reviews that don't give you a clue about where to start your revision? Our journals are known for providing insightful and helpful reviews.



At least **two editors** consult on every decision.

Your manuscripts will be handled by practicing scientists like you, who understand from experience what it takes to tell a significant story, to create a useful method or resource, or to extract meaning from large datasets. Rather than simply tally reviewer 'votes,' your editor synthesizes the reviews into a single, clear decision letter that offers guidance and explains rationales for all decisions, helping to improve your paper's impact. Still have questions? Contact the editorial office or the editor. Speak with a real person who'll be up front with you.



Consolidated, clear feedback from your editor.Decision letter offers specific guidance for revisions.

Sister Journals, One-Touch Transfer

If you submit a manuscript to GENETICS that reports high-quality and useful findings—but lacks the broad appeal, significance, or novelty of a published GENETICS article—you may be offered a transfer to G3. This seamless process either guarantees review at G3, or G3 editors will use the GENETICS reviews to offer a decision within days.



After Acceptance



Within days, manuscripts are published Early Online, indexed in PubMed, and available to colleagues. You may be selected for highlights in GENETICS, featured article in G3, cover art, press releases, promotion on GSA's Genes to Genomes blog, social media, e-news, and other outreach. We enhance discovery and use of your research, which in turn increases its impact.

Community Support

Our journals are run by and for scientists under the aegis of the Genetics Society of America. GSA represents us, advocates for us, convenes us, publicizes us, provides educational resources, and fosters our work.

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 show mentions on Twitter, Facebook, in the popular press, plus other alternative metrics.

Access to Data

Our data policy, instituted in 2010, requires that all primary data and source code associated with the paper's findings must be publicly available. Besides providing everything needed for replication, this policy allows your research to have the greatest possible impact and ensures your findings will be used for years to come.





Not sure if your work is a good fit for our journals?



The PALM Network Grant

up to \$2000 per Fellow / \$500 mentor stipend \$1000 meeting travel each for Fellow and mentor



Cultivate an active learning practice in lecture classes in which undergraduate students are engaged in their own learning

PALM Fellows will:

- · Gain mentorship from leaders in undergraduate biology teaching and learning
- · Learn best practices in teaching and in assessing active learning
- · Create an original teaching module that engages students in active learning
- Join a community of scientists dedicated to active teaching and learning, and share ideas and support
- Participate in Fellow-mentor journal clubs, meetings, and networking opportunities
- Obtain invaluable career development for faculty careers
- Be part of a network of scientific societies dedicated to supporting scientists in teaching and learning careers

Apply to be a PALM Fellow

Establish mentor-Fellow relationship Submit PALM proposal Fellow submits pre-mentoring teaching video Fellow works with, visits, observes mentor

Fellow records Present to post-mentoring PALM Network teaching video

For more information, including **eligibility requirements**, **application details**, and to **learn about how to be paired with a mentor** if you don't have one in mind, visit

palmnetwork.org

2018 Application Deadlines: Feb 28, April 30, July 30, Oct 30



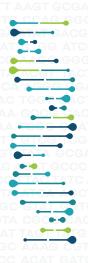
PALM is funded by NSF Research Coordination Network in Undergraduate Biology Education grant #1624200.



Publish in

GENETICS &





Support Your Field

Society-owned, not-for-profit journals are edited and managed by practicing scientists. By reinvesting in the community, the members of the SSPA are committed to delivering important discoveries worldwide.

byscientistsforscience.org



GENETICS

Peer Review Training Program

Receive mentoring in scientific reviewing from members of the *GENETICS* Editorial Board. Participants receive training in preparing manuscript reviews and personalized feedback from journal editors.



- · Gain practical experience
- Understand reviewer & editor expectations
- Practice evaluating research
- Learn to give constructive feedback
- Demonstrate professional skills
- Learn about publishing practices

GSA members within ten years of receiving their PhD degree are eligible to apply, including senior graduate students and early career faculty.

Learn more:

www.genetics-gsa.org/careers/training_program.shtml



Early Career Scientist Leadership and Professional Development Program

Propose, develop, and implement programming that addresses unmet needs in our community. Participants work closely with other students and postdocs, GSA staff, and experienced advisors.



- Advance the scientific enterprise
- Receive training and mentoring
- Collaborate with geneticists working in diverse sectors and industries
- Produce deliverables that demonstrate your skills
- Develop professional skills

Grad student and postdoc GSA members are eligible to apply.

Learn more:

www.genetics-gsa.org/about/earlyleadershipdescription.shtml



FlyBook continues to grow

In October 2015, *GENETICS* launched FlyBook, a comprehensive compendium of review articles presenting the current state of knowledge in *Drosophila* research. Each month, *GENETICS* publishes one or two FlyBook articles spanning the breadth of biology, genetics, genomics, and evolution of *Drosophila*.

Here are the most recent entries to this exciting collection:

Development and Growth

Regulation of Carbohydrate Energy Metabolism in Drosophila melanogaster

Jaakko Mattila and Ville Hietakangas December 2017. 207: 1231-1253.

Ecology and Evolution

Moving Speciation Genetics Forward: Modern Techniques Build on Foundational Studies in *Drosophila* Dean M. Castillo and Daniel A. Barbash

November 2017. 207: 825-842.

Molecular Population Genetics

Sònia Casillas and Antonio Barbadilla March 2017. 205: 1003-1035.

Gene Expression

Polycomb and Trithorax Group Genes in *Drosophila Judith A. Kassis, James A. Kennison, and John W. Tamkun* August 2017. 206: 1699-1725.

Three-Dimensional Genome Organization and Function in *Drosophila*

Yuri B. Schwartz and Giacomo Cavalli January 2017. 205: 5-24.

Repair, Recombination, and Cell Division

Female Meiosis: Synapsis, Recombination, and Segregation in *Drosophila melanogaster*

Stacie E. Hughes, Danny E. Miller, Angela L. Miller, and R. Scott Hawley March 2018. 208: 875-908.

DNA Replication Control During *Drosophila*Development: Insights into the Onset of S Phase, Replication Institution, and Fork Progression

Brian L. Hua and Terry L. Orr-Weaver September 2017. 207: 29-47.

The Centrioles, Centrosomes, Basal Bodies, and Cilia of *Drosophila melanogaster*

Ramona Lattao, Levente Kovács, and David M. Glover May 2017. 206: 33-53.

DNA Repair in *Drosophila*: Mutagens, Models, and Missing Genes

Jeff Sekelsky February 2017. 205: 471-490.

Methods

RNA Interference (RNAi) Screening in Drosophila

Florian Heigwer, Fillip Port, and Michael Boutros March 2018. 208: 853-874.

Mosaic Analysis in Drosophila

Federico Germani, Cora Bergantinos, and Laura A. Johnston January 2018. 208: 473-490.

Advances in Engineering the Fly Genome with the CRISPR-Cas System

Ethan Bier, Melissa M. Harrison, Kate M. O'Connor-Giles, amd Jill Wildonger January 2018. 208: 1-18.

Gene Tagging Strategies To Assess Protein Expression, Localization, and Function in *Drosophila*

Oguz Kanca, Hugo J. Bellen, and Frank Schnorrer October 2017. 207: 389-412.

Metabolomic Studies in Drosophila

James E. Cox, Carl S. Thummel, and Jason M. Tennessen July 2017. 206: 1169-1185.

A Short History and Description of *Drosophila melano-gaster* Classical Genetics: Chromosome Aberrations, Forward Genetic Screens, and the Nature of Mutations

Thomas C. Kaufman June 2017. 665-689.

Nervous System and Behavior

Circadian Rhythms and Sleep in *Drosophila* melanogaster

Christine Dubowy and Amita Sehgal April 2017, 205: 1373-1397.

Stem Cells and Germline

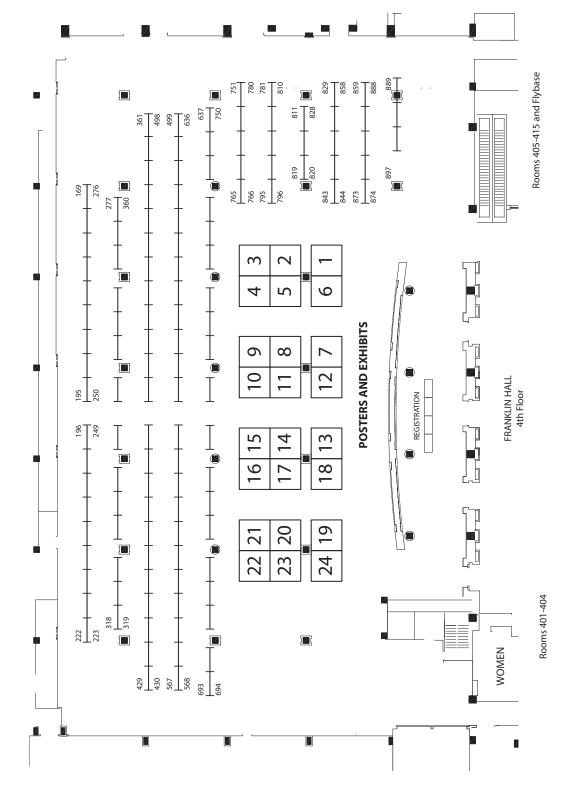
Protecting and Diversifying the Germline

Ryan J. Gleason, Amit Anand, Toshie Kai, and Xin Chen January 2018. 208: 435-471.

Subcellular Specialization and Organelle Behavior in Germ Cells

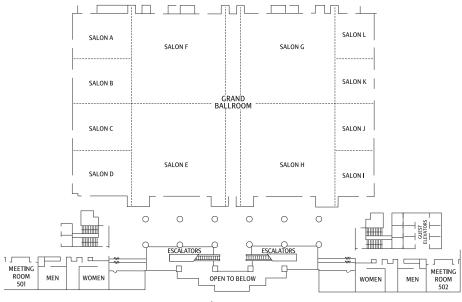
Yukiko M. Yamashita January 2018. 208: 19-51.

genetics.org/content/flybook





FRANKLIN HALL Posters and Exhibits OPEN TO BELOW 4th FLOOR



5th FLOOR

WEDNESDAY, April 11*	T				
3:00 p.m 6:30 p.m.	Speaker Ready Room	5th Floor, Rm 502			
7:00 p.m 9:05 p.m.	Opening Session/Keynote	5th Floor, Salons E-H			
9:15 p.m 11:00 p.m.	Mixer/Reception	4th Floor, Franklin Hall			
THURSDAY, April 12*					
7:00 a.m 3:00 p.m.	Speaker Ready Room	5th Floor, Rm 502			
7:15 a.m 8:30 a.m.	Publishing Q & A	5th Floor, Salons I-K			
8:30 a.m 12:15 p.m.	Plenary Session	5th Floor, Salons E-H			
12:00 noon - 1:45 p.m.	Community Lunch Ticket required	5th Floor, Salons I-K			
1:00 p.m 5:00 p.m.	FlyBase Demo Room Open	4th Floor, Rm 407-409			
1:45 p.m 2:00 p.m.	Special Reading from First in Fly	5th Floor, Salons I-K			
2:00 p.m 4:00 p.m.	Exhibits & Poster Presentations	4th Floor, Franklin Hall			
4:30 p.m 6:30 p.m.	Concurrent Platform Sessions	5th Floor, Grand Ballroom			
7:45 p.m 9:45 p.m.	Concurrent Workshops	Multiple Locations			
8:00 p.m 11:00 p.m.	Exhibits Open & Poster Viewing	4th Floor, Franklin Hall			
FRIDAY, April 13*					
7:00 a.m 3:00 p.m.	Speaker Ready Room	5th Floor, Rm 502			
8:30 a.m 12:30 p.m.	Concurrent Platform Sessions	5th Floor, Grand Ballroom			
1:00 p.m 6:00 p.m.	FlyBase Demo Room Open	4th Floor, Rm 407-409			
1:45 p.m. – 3:45 p.m.	Concurrent Workshops/Events	Multiple Locations			
2:00 p.m 4:00 p.m.	Open Poster and Exhibit Viewing	4th Floor, Franklin Hall			
4:30 p.m 6:30 p.m.	Concurrent Platform Sessions	5th Floor, Grand Ballroom			
6:30 p.m 7:30 p.m.	Education Platform Session	5th Floor, Salon E			
9:00 p.m 11:00 p.m.	Exhibits Open & Poster Viewing	4th Floor, Franklin Hall			
SATURDAY, April 14*					
7:00 a.m 3:00 p.m.	Speaker Ready Room	5th Floor, Rm 502			
8:30 a.m 12:30 p.m.	Concurrent Platform Sessions	5th Floor, Grand Ballroom			
1:30 p.m 3:30 p.m.	Exhibits & Poster Presentations	4th Floor, Franklin Hall			
4:00 p.m 6:00 p.m.	Concurrent Platform Sessions	5th Floor, Grand Ballroom			
7:45 p.m 8:45 p.m.	FLYght of the Champions!	5th Floor, Salon H			
8:45 p.m 10:00 p.m.	ScienceSlam	5th Floor, Salon H			
SUNDAY, April 15					
8:30 a.m 12:00 noon	Plenary Session	5th Floor, Salons E-H			

^{*}Posters open 24 hours Wed 5 p.m.-Sat 4 p.m.; Nursing Mothers Room 362