ORAL PRESENTATIONS & POSTERS

1 Active mechanisms prevent ectopic condensation of FG nucleoporins in the cytoplasm
Laura Thomas, Basma Taleb, Peter Askjaer, Geraldine Seydoux

2 Asymmetric BAR-1/β-catenin expression regulates neuron position during *C. elegans* ventral nerve cord assembly
Wesley Chan, Justin Evans, Tony Roenspies, Elicia Preston, John Murray, Antonio Colavita

3 CED-3/caspase and opposing kinesins direct mitochondrial confinement to govern Compartmentalized Cell Elimination
Rashna Sharmin, Sara P. Carmona, Ginger Clark, Karen Juanez, Aladin Elkhalil, Mark W. Pellegrino, Shai Shaham, Piya Ghose

4 Constructing alae: how the worm gets its racing stripes
Trevor Barker, Meera Sundaram

5 Endocytosis in the axon initial segment maintains neuronal polarity
Kelsie Eichel, Caitlin Taylor, Kang Shen

6 The chromokinesin Klp-19 regulates microtubule number and overlap in the midzone throughout mitosis in *C. elegans*
Stefanie Redemann, Vitaly Zimyanin, Magdalena Magaj, Che-Hang Yu, Daniel Needleman, Stefanie Redemann

7 Understanding how actomyosin dynamics drive apical constriction
Pu Zhang, Bob Goldstein

8 A sex-specific switch in glial gene expression patterns the apical extracellular matrix
Wendy Fung, Taralyn M. Tan, Irina Kolotuev, Maxwell G. Heiman

9 Kinesin-II motors differentially impact biogenesis of distinct extracellular vesicle subpopulations shed from *C. elegans* sensory cilia
Harini Kannan, King Lau Chow

10 Analyzing the spatiotemporal structure of heterochronic miRNA transcription using microfluidics based long term live-imaging
Shubham Sahu, Kelly Hills-Muckey, Christopher M. Hammell, Wolfgang Keil

11 Loss of sensory dendrite cilia is detected by surrounding glia via neuron/glia protein pair DGS-1/ FIG-1
Katherine C Varandas, Lauren Lubeck, Amelia Farinas, Yupu Liang, Yun Lu, Shai Shaham

12 DAF-18 prevents oocyte wastage through activating calcium signaling and contractility in the distal spermatheca
Patrick Narbonne, Jichao Deng, Vincent Roy, Olivier Gagné, Pier-Olivier Martel, Martin Simard

13 Characterization of a potential gene interaction between chromatin modifiers *spr-5*, *met-2*, and *mep-1* in determining germline versus soma in *C. elegans*
Sindy Chavez, Jovan Brockett, Brandon Carpenter, Onur Birol, Karen Schmeichel, David Katz

14 Epithelial polarity requires WAVE-dependent transport of E-Cadherin/HMR-1
Luigy Cordova Burgos, Deepti Rao, Joshua Egwuonwu, Martha Soto

15 A fluorescent toolkit for studying organelle biology in vivo reveals a distinct mitochondrial subclass lacking mtDNA
Jackie Lanzalotto, Jessica Leslie, Nitin Vidyasagar, Samantha Lewis

16 Polyploidy is essential for high rates of biosynthesis in the *C. elegans* intestine
Alex Lessenger, Jessica L. Feldman

17 A central role for cofilin in maintaining cortical actin cytoskeleton network integrity through filament turnover
Rachel Kadzik, Younan Li, Jon Michaux, David R. Kovar, Edwin M. Munro

18 SPE-13 is a sperm-specific small transmembrane protein required for fertilization in *C. elegans*
Yamei Zuo, Amber Krauchunas, Tim Kroft, Andrew Singson

19 Identification of direct insulin-signaling transcriptional targets in muscle cells
Shifei Wu, Wesley Hung, Charline Roy, Yan Li, Ying Wang, Ben Mulcahy, Jean-Louis Bessereau, John Calarco, Mei Zhen

20 SYD-2 acts through AP complexes to regulate cell body retention and polarized trafficking of a LRK-1 dependent synaptic vesicle-lysosomal intermediate compartment
Sandhya Koushika, Sravanthi Nadiminti, Shirley Dixit, Padmapriya Boyanapalli

21 Rapid rates of transcription in the early *C. elegans* embryo
Priya Sivaramakrishnan, Cameron Watkins, John Isaac Murray

22 Cluster assistance factors ERH and SAFB2 globally inhibit miRNA biogenesis in the *C. elegans* embryo
Bing Yang, Karl-Frederic Vieux, Yini Li, Rima Sakhawala, Nasser Rusan, Katherine McJunkin

23 TOM-1/Tomosyn acts with the UNC-6/Netrin receptor UNC-5 to inhibit VD growth cone protrusion during outgrowth
Snehal Mahadik, Erik A. Lundquist

24 Cyclin B isoforms coordinate mitotic entry and exit events to ensure the normal pace of embryonic divisions
Pablo Lara Gonzalez, Smriti Variyar, Jacqueline Budrewicz, Aleesa Schlientz, Jack Houston, Karen Oegema, Arshad Desai

25 CED-12/ELMO/ELMOD can switch from promoting to inhibiting F-actin formation in the same tissue
Martha Soto, Thejasvi Venkatachalam, Luigy Cordova Burgos

26 TES-1/Tes protects junctional actin networks under tension from self-injury during epidermal morphogenesis in the *C. elegans* embryo
Yuyun Zhu, Allison M. Lynch, Bethany G. Lucas, Jonathan D. Winkelman, Sterling C.T. Martin, Samuel D. Block, Keliya Bai, Jonathan Pettitt, Anjon Audhya, Margaret L. Gardel, Jeff Hardin

27 The conserved, secreted protease inhibitor MLT-11 is necessary for *C. elegans* molting and embryogenesis
Jordan Ward, James Matthew Ragle, Max Levenson, John Clancy, Anthony Vo, Vivian Pham

28 Neuroendocrine regulation of the *Caenorhabditis elegans* microbiome by aryl-hydrocarbon receptor
Ciara Hosea, Adrien Assié, Fan Zhang, Dana Blackburn, Buck Samuel

29 Cohesin and a PLZF protein act together to direct a GABAergic neural fate and inhibit a tyraminergic neural fate
Dongyeop Lee, Takashi Hirose, Bob Horvitz

30 TOP-2 is differentially required for the proper maintenance of sister chromatid cohesion pathway components on meiotic chromosomes in spermatogenesis and oogenesis
Christine Rourke, Aimee Jaramillo-Lambert

31 Identifying functional interaction motifs within *C. elegans* eggshell vitelline layer proteins
Sara Olson, Julián Prieto, Ysabella Alcaraz, Norani Abilo, Mohamad Alkhatib, Khadi Diallo, Louie Kulber, Essi Cathérine Logan, Katiannah Moise, Chris Vazquez, Angie Wang

32 Anaphase B spindle elongation and rigidity in female meiosis
Wenzhe Li, Francis J. McNally

33 Modeling congenital generalized lipodystrophy in *Caenorhabditis elegans*
Xiaofei Bai, Leng-Jie Huang, Sheng-Wen Chen, Benjamin Nebenfuehr, Brian Wysolmerski, Jui-Ching Wu, Sara Olson, Harold Smith, Chao-Wen Wang, Andy Golden

34 TORC1, BORC, ARL-8 cycling, and Kinesin-1 drive vesiculation of cell corpse phagolysosomes
Ann Wehman, Gholamreza Fazeli, Roni Levin-Konigsberg, Michael C. Bassik, Christian Stigloher

35 Variants in the neurodevelopmental disorder gene *unc-116* (KIF5C) alter axon targeting by disrupting function of the NEKL-3 (NEK6/NEK7) kinase in axons
Cody J. Drozd, Christopher C. Quinn

36 Lysosome-related organelles contain an expansion compartment that mediates zinc transporter delivery to promote zinc homeostasis in *C. elegans*
Adelita Mendoza, Nicholas Dietrich, Chieh-Hsiang Tan, Daniel Herrera, Jennysue Kasiah, Zach Payne, Daniel Schneider, Kerry Kornfeld

37 MIG-6/papilin and extracellular matrix remodelling in the context of neuronal architecture

Claire Bénard, Malika Nadour, Marie Biard, Lise Rivollet, Philippe St-Louis, Andrea Thackeray

P38 Proteasomal subunit depletions differentially affect germline integrity in *C. elegans*
Anna Allen, Lourds Michelle Fernando, Cristina Quesada-Candela, Makaelah Murray, Caroline Ugoaru, Judith Yanowitz

P39 Investigating how NuRD component LET-418 promotes DSB repair in the germline
Deepshikha Ananthaswamy, Sereen El Jamal, Paula M. Checchi, Teresa W. Lee

P40 Cytoskeletal remodeling and nuclear vesicle release during neuronal extrusion events
Rebecca Androwski, Barth Grant, Monica Driscoll

P41 Early birds, night owls, and adolescent worms: investigating a role for mammalian circadian rhythm homologs, LIN-42 and KIN-20, in nematode developmental timing
Guinevere Ashley, Becca Spangler, Kathrin Braun, Carrie Partch, Helge Helge Großhans, Jordan Ward

P42 H4K20 methylation regulation in dosage compensation and cell cycle
Anati Alyaa Azhar, Jianhao Jiang, Györgyi Csankovszki

P43 SEM-2/SoxC regulates multiple aspects of postembryonic mesoderm development in *C. elegans*
Marissa Baccas, Vanathi Ganesan, Lucas Pineiro, Amy Leung, Alexandra McKillop, Herong Shi, Jun Liu

P44 Skin proteostasis regulator UNC-23/BAG2 maintains glia-neuron cell shape through βH-spectrin and FGFR signaling
James Bent, Cecilia Martin, Aakanksha Singhvi

P45 Development across evolutionary time at a single-cell resolution in the Caenorhabditis nematode embryo
Christopher Large, Rupa Khanal, Priya Sivaramakrishnan, Felicia Peng, Qin Zhu, Erik Nordgren, Jean Rosario, Junhyong Kim, John I. Murray

P46 5'-tyrosyl-DNA phosphodiesterase 2 (*tdpt-1*) is required for meiotic fidelity through suppression of a Topoisomerase 2 (*top-2*) mutation in *C. elegans*
Nirajan Bhandari, Ji Kent Kwah, Aimee Jaramillo-Lambert

P47 Developmental system drift in *Caenorhabditis* nematodes
Jessica Bloom, Scott Rifkin

P48 Probing the function of GLH dimerization
James Bosco, Ekaterina Voronina

P49 A novel passive mechanism for adult distal tip cell elaboration
Theadora Tolkin, Julia Burnett, E. Jane Albert Hubbard

P50 DREAM interrupted: establishing a CRISPR/Cas9 functional genomics pipeline in *Caenorhabditis elegans*

Paul Goetsch, Spencer Snider, Emily Washeleski, Christian Holmstrom, Alex Richards, Megan Guyer, Amanda Bekkala, Jillian Kuizenga

P51 De novo genome assemblies reveal structural variations between laboratory and natural isolates of *C. elegans*
Zachary Bush, Alice S. Naftaly, Devin Dinwiddie, Kenneth J. Hillers, Diana E. Libuda

P52 Somatic phenotypes caused by the inappropriate inheritance of histone methylation require the Polycomb Repressive Complex 2
Sydney Morgan, Brandon Carpenter

P53 in vivo CRISPR screening for biologically important mir-35 targeting sites in *C. elegans*
Bing Yang, Matthew Schwartz

P54 ATPase function of SMC proteins in chromosome-wide gene regulation
Bahaar Chawla, Suchi Jatia, Dillon Sloan, Gyorgyi Csankovszki

P55 Mitochondria play a role in nuclear envelope breakdown and chromosome positioning during mitosis
Yu-Zen Chen, Stefanie Redemann

P56 The role of the insulin signaling pathway in *C. elegans* germline stem cell mitosis
Eric Cheng, Abigail R. Gerhold

P57 Identifying the regulation and function of microexon alternative splicing in *C. elegans*
Bikash Choudhary, Rebekah N. Jameson, Adam D. Norris

P58 The RNA binding protein RBM-26 regulates neuronal development and maintenance in *c. elegans*
Tamjid Chowdhury, Dorian Farache, Amy Lee, Christopher Quinn

P59 Identification of a new gene required for homeostatic regulation of germline stem cell proliferation
Alexandre Clouet, Matthieu Valet, Benjamin Dufour, Alexane Murray, Patrick Narbonne

P60 DAF-12 regulates oleic acid dependent reproductive outcomes in postdauer animals
Frances V. Compere, Alexandra M. Nichitean, Sarah E. Hall

P61 Functional interactions between the apoptosis pathway and cell size are coordinated by the *ced-3* caspase – *ect-2* RhoGEF axis
Barbara Conradt, Aditya Sethi, Hai Wei, Ioannis Segos, Eric J. Lambie, Esther Zanin

P62 A cilia-independent function of BBSome mediated by DLK MAPK signaling in *C. elegans* photosensation
Xinxing Zhang, Jinzhi Liu, Tong Pan, Jianfeng Liu, Shawn Xu

P63 FBF binding elements in the gld-1 3'UTR and their role in germline regulation
Sarah Crittenden, Hezouwe Walada, Ann Seliger, Jennifer Woodworth, Peggy Kroll-Conner, Jane Selegue, Marvin Wickens, Judith Kimble

P64 Transgenerational repressive chromatin and healthspan in longevity mutants

Jaime Croft, Teresa W. Lee

P65 Integrated system for automated surveillance of *C. elegans* brood size and major motor programs.
Matthieu Valet, Patrick Narbonne

P66 Characterization of the insulin signaling pathway in the parasitic nematode *Brugia malayi*
Kirsten Crossgrove, Cole Lindwall, Morgan Sabol, Alexandra Kestol, India Fleming, Connor Hodgson, Iris Slotten, William Morgan, Lori Trimble

P67 The E3/E4 ubiquitin ligase UFD-2 mediates negative feedback on Raf protein stability
Claire de la Cova, Robert Townley, Augustin Deniaud, Kennedy Stacy, Claudia Rodriguez Torres, Fatemeh Cheraghi

P68 Sexually dimorphic Argonaute protein organization within P-granules affects *C. elegans* fertility
Acadia L. DiNardo, Madison M. Studer, Diana E. Libuda

P69 LST-1 has dual regulatory roles in *C. elegans* germline stem cells.
Stephany Dos Santos, Ahlan Ferdous, Tina Lynch, Deep Kapadia, Marvin Wickens, Judith Kimble

P70 Tracking protein stability in *Caenorhabditis elegans*
Christopher Borchers, Kara Osburn Osburn, Hyun Cheol Roh, Scott T. Aoki

P71 SPR-5; MET-2 maternal reprogramming cooperates with the Dream Complex to regulate developmental cell fates
Jazmin Dozier, Brandon Carpenter

P72 Distinct phases within large RNP granules of *C. elegans* oocytes are associated with differential stress responses of RNA binding proteins
Mohamed Elaswad, Brooklynne Watkins, Chloe Munderloh, Katherine Sharp, Elizabeth Breton, Jennifer Schisa

P73 Extracellular signal-regulated Kinase (ERK) inhibits condensation of RNA binding proteins in oocytes
Mohamed Elaswad, Neeké Busette, Ashley D'Amour, Jennifer Schisa

P74 Analysis of the roles of mitochondria-associated membranes in compartmentalized cell elimination
Aladin Elkhalil, Rashna Sharmin, Karen Juanez, Ginger Clark, Piya Ghose

P75 Investigating the role of Rab GTPases in extracellular vesicle biogenesis and glial uptake
Malek Elsayyid, Jessica Tanis

P76 Regulation of programmed cell death during *C. elegans* development
Chloe Emerson, Alison Kochersberger, Marc Hammarlund

P77 Investigating the role of ADARs and A-to-I RNA editing in germline RNA regulation
Emily Erdmann, Heather Hundley

P78 The RAP-2 Small GTPase and MIG-15 MAP4 kinase promote tertiary fate in *C. elegans* VPC Patterning
Razan Fakieh, David J. Reiner

P79 More than one way to skin a worm: unexpected insights into the molting process
David Fay, Shaonil Binti, Braveen Joseph, Rosa Melinda, Philip Edeen

P80 Membrane-anchored UNC-6/netrin reveals roles of both close- and long-range interactions in regulating VD growth cone dorsal outgrowth
Kelsey Ferguson, Snehal Mahadik, Erik Lundquist

P81 Withdrawn

P82 Elucidating the Mechanism of Regulation of the mir-35 family in *C. elegans*
Acadia Grimme, Bridget F. Donnelly, Bing Yang, Karl-Frédéric Vieux, Chen-Yu Liu, Katherine McJunkin

P83 Characterizing the genetic and physical interaction of the DBL-1/BMP signaling pathway with BLMP-1/BLIMP1 transcription regulator in *Caenorhabditis elegans*
Tina Gumienny, Mohammed Farhan Lakdawala

P84 Characterization of as46 as a Spe mutant
Anushree Gurjar, Amber Krauchunas

P85 Screening bacterial isolates for potential therapeutics: a CURE approach
Emily Washeleski, Christian Holmstrom, Paul Goetsch

P86 A *C. elegans* srGAP is a novel α-Catenin M domain-binding protein that strengthens cadherin-dependent adhesion during morphogenesis
Joel Serre, Bethany Lucas, Sterling Martin, Xiangqiang Shao, Jeff Hardin

P87 SRGP-1/srGAP and AFD-1/Afadin Modulate HMP-1/α-catenin-Dependent Rosette Formation and Sealing of Neuroblasts Following Cell Ingression during Ventral Cleft Closure in the *C. elegans* Embryo
Jeff Hardin, Joel Serre

P88 The CCT chaperonin regulates phase transitions of RNA Bbinding proteins during oogenesis
Corrin Hays, Mingze Gao, Cora Zoet, Chloe Pestrue, Jennifer Schisa

P89 Histone regulation of intestinal cell division in *Caenorhabditis elegans*
Carmen Herrera Sandoval, Scott Aoki

P90 Single molecule conformations of the *C. elegans* X-chromosome during the process of dosage compensation
Aude Andriollo, Ahilya Sawh, Silvia Gutnik, Susan Mango

P91 Inhibition of MMP-dependent proteolysis is required for heat stress survival in *C. elegans*.
Brian Hiester, Anneke Knauss, Julia Schulte

P92 Examining the developmental role of the HSP110/70/40 chaperone complex in *C. elegans*
Emily Hirsch, Amy Clemens, Bryan T. Phillips

P93 Neuronal type specification by OTX homeodomain transcription factors
Ray Hong, Dylan Castro, Heather Carstensen

P94 Muscle-specific expression of dominant negative UNC-82/NUAK kinase in *C. elegans* induces organismal wasting without disrupting muscle cell structure
Pamela Hoppe, Mohamed Abohajar, Sarah Almuhanna, Matthew Kornas, Wenceslao Martinez

P95 The EBAX-type Cullin-RING E3 ligase promotes Linker Cell-type Death, a conserved non-apoptotic developmental cell death program.
Lauren B. Horowitz, Shai Shaham

P96 A novel connection of the Ras-RalGEF-Ral signal to the YAP transcription factor in *C. elegans*
Linh Huynh, Razan Fakieh, David Reiner

P97 CWN-1 acts in a non-canonical Wnt pathway to control posterior QL descendant migrations downstream of MAB-5/Hox
David J. Ingham, Vitoria K. Paolillo, Matthew E. Ochs, Erik A. Lundquist

P98 Genetic screens to identify genes acting downstream of Mab-5/Hox in the posterior migration of QL neuroblast in *Caenorhabditis elegans*
Vedant Jain, Erik Lundquist

P99 Determining endosomal pathway specificity for the TBC-2 family of Rab GAPs
Ananya Jana

P100 Exploring the roles of transcription factor SEX-1 in *C. elegans* sex determination and dosage compensation
Eshna Jash, Dalia Kaufman, Halle Esher, Gyorgyi Csankovszki

P101 Lipid kinase PPK-1/PIP5K1A regulates microRNA biogenesis through interacting with nuclear export protein XPO-1/XPO5
Chun Li, Frank Slack

P102 ER network stability promotes organized microtubule disassembly during compartmentalized cell elimination
Karen Juanez, Madison Jones, Rashna Sharmin, Piya Ghose

P103 Sex pheromone sensation and habituation in *C. elegans* males require SRD-1 and insulin signaling components
Harini Kannan, King Lau CHOW

P104 Centralspindlin promotes *C. elegans* vulval development by regulating somatic gonadal cell division
Tatsuya Kato, Olga Skorobogata, Christian E. Rocheleau

P105 S-adenosylmethionine synthases specify distinct H3K4me3 populations and gene expression patterns during heat stress
Amy Walker, Adwait Godbole, Sneha Gopalan, Thomas Fazzio

P106 Ectopic transcription due to inappropriately inherited histone methylation may interfere with the ongoing function of terminally differentiated cells
David Katz, Juan Rodriguez

P107 The AP-1 clathrin adaptor complex differentially regulates LIN-12/Notch signaling in somatic gonad and the vulval precursor cells
Tatsuya Kato, Olga Skorobogata, Haojun Zhu, Edouarda Taguedong, Christian Rocheleau

P108 Microtubule dynamics during neurite outgrowth
Dane Kawano, Kang Shen

P109 Deep sequencing uncovers complex roles for poly(U) polymerases in regulating RNA abundance and early embryo development in *C. elegans*
Leanne Kelley, Ian Caldas, Yasir Ahmed-Braimah, Yini Li, Matthew Sullenberger, Eleanor Maine

P110 WormAtlas: new chapters, new data, new worms
Nathan Schroeder, Laura A. Herndon, Catherine A. Wolkow, Zeynep Altun, David H. Hall

P111 Modeling zellweger syndrome: the characterization of the deletion of prx-10 in the nematode *Caenorhabditis elegans*
Sydney Kelly, Xiaofei Bai, Andy Golden

P112 Polo-like kinase regulates the asymmetric distribution of RNA-binding protein MEX-1 in one-cell *C. elegans* embryo
Amelia J. Kim, Stephanie I. Miller, Erik E. Griffin

P113 Investigating the symmetry breaking cue and mechanism of polarity reestablishment in the *C. elegans* P1 cell
Laurel Koch, Lesilee Rose

P114 Determining the role of LC3-associated phagocytosis in polar body membrane breakdown
Shruti Kolli, Riley Harrison, Ann Wehman

P115 Immobilization of *C. elegans* on cultivation plates by thermoelectric cooling for high-throughput submicron-resolution imaging
Yao Wang, Erik Jaklitsch, Noa Grooms, Leilani Schulting, Samuel Chung

P116 Exploring the regulation and function of an ancient microRNA family in *C. elegans*
Kasuen Kotagama, Acadia Grimme, Katherine McJunkin

P117 Understanding the roles of sperm supplied SPE-11 and its novel oocyte partner, OOPS-1, in *C. elegans* egg activation
Ji Kent Kwah, Tatsuya Tsukamoto, David Greenstein, Andy Golden, Aimee Jaramillo-Lambert

P118 Role of *C. elegans* RAPGEF in Synapse Development at the Neuromuscular Junction
Reagan Lamb, Salvatore J. Cherra

P119 The establishment and regulation of secretory organelle abundance in neurons of differing size
Ruben Land, Richard Fetter, Kang Shen

P120 Homeostatic regulation of stem cells: in *C. elegans*, AMPK/AAK-1 kinase is required in the sheath cells to supress germline stem cells proliferation.
Xavier Lechasseur, Olivier Gagné, Ange Brou, Maria Lindsay-Naranjo, Pier-Olivier Martel, Patrick Narbonne

P121 *C. elegans* intergenerationally modulates learned timing behavior through a gonadal signal
Eugene L.Q. Lee, H. Robert Horvitz

P122 Chromodomain proteins CEC-3 and CEC-6 promote germ granule integrity and genome stability
Tammy L. Lee, Victor Lao, Reta Aram, Arneet L. Saltzman

P123 Investigating the interplay between CSR-1b and WAGO-4 in small RNA pathways in *C. elegans*
Yuk Wa Lee, Amanda G. Charlesworth, Uri Seroussi, Adam Sundby, Karen Yuen, Julie M. Claycomb

P124 DAF-16/FOXO functions to both promote and oppose adult cell fate during dauer-interrupted development
Matthew Wirick, Benjamin S. Olson, Isaac T. Smith, Amelia F. Alessi, Himani Galagali, John K. Kim, Xantha Karp

P125 Chromodomain proteins regulate heterochromatin and small RNA pathways
Chengyin Li, Phoebe A.W. Bhagoutie, Victor Lao, Arneet L. Saltzman

P126 An FBF-2 point mutation changes its mRNA binding landscape and separates its distinct germline functions
MaryGrace Linsley, Brian Carrick, Fan Chen, Sarah Crittenden, Peggy Kroll-Conner, Sunduz Keles, Marvin Wickens, Judith Kimble

P127 om92, a *glp-1* enhancer mutation, is an allele of *ekl-1*
James Lissemore, Samantha Stein, Olivia Zucaro, Harold Smith, Kevin O'Connell, Jill Spoerke, Eleanor Maine

P128 Developing methodology to identify regulators of early CEPsh glia development
Simin Liu, Shai Shaham

P129 Characterization of the localization and dynamics of SPE-36 in *C. elegans* sperm
A'Maya Looper, Amber R. Krauchunas, Andrew Singson, Matthew R. Marcello
P130 Using AlphaFold2 and CRISPR to characterize a cytoskeletal complex required for neuron maturation
Matthew Rich, Erik Jorgensen

P131 Genome-wide profiling reveals a dual role for histone H2A monoubiquitylation at polycomb-repressed and enhancer chromatin
Kailynn M. MacGillivray, Daniel D. Fusca, Luomeng Tan, Reta A. Aram, Arneet L. Saltzman

P132 Mechanisms mediating FBF clearance upon meiotic differentiation
Gabriella E. Weiss, Ekaterina Voronina

P133 The role of capping protein in the organization of cortical F-Actin networks in the *C. elegans* zygote
Sarah E Yde, Rachel S Kadzik, Ed Munro, David Kovar

P134 A new forward genetic screen with balancer chromosomes to identify genes and molecules required for fertilization in *C. elegans*
Katherine Maniates, Kendall Flanagan, Andrew Singson

P135 A novel crosstalk between autophagosomes and phagosomes facilitates the degradation of apoptotic cells
Zheng Zhou, Omar Pena-Ramos, Lucia Chiao, Xianghua Liu, Xiaomeng Yu, Tianyou Yao, Henry He

P136 Collagen IV deposition in the ECM at the interface between the niche and the germline stem cells influences GLP-1 cleavage in *C. elegans*
Pier-olivier Martel, Julia Degrémont, Eden Dologuele, Lucie Beaulieu, Sarah Turmel-Couture, Patrick Narbonne

P137 Investigating the function of tissue-specific alternative splicing in *Caenorhabditis elegans*
Charlotte Martin, John Calarco

P138 Determining the mechanism of Kinesin-1 dependent translocation of the meiotic spindle to the cortex
Alma Martinez Peraza, Francis J. McNally

P139 Transcription factors regulating the fate and developmental potential of a multipotent progenitor.
Laura Mathies, Evan Soukup, Jill Bettinger

P140 Roles for autophagy and antioxidant resistance in a tripartite developmental cell elimination program
Yasmeen Mohamed, Aladin Elkhalil, Piya Ghose

P141 IP-MS identified interactors of EGO-1 required for RNAi and 22G siRNA biogenesis
Farees ud din Mufti, Shouhong Guang

P142 EPIC proteins are candidate components of the epicuticle
Pooranachithra Murugesan, Erin Jyo, Andrew Chisholm

P143 Investigating centrosome inactivation during cellular differentiation
Rachel K. Ng, Jeremy Magescas, Jessica L. Feldman

P144 The caudal transcription factor PAL-1 is involved in ventral nerve cord assembly
Nathaniel Noblett, Tony Roenspies, Stephane Flibotte, Antonio Colavita

P145 Investigating contributions of β-tubulin isotype composition, microtubule motors, and motor-associated proteins during *C. elegans* oocyte meiosis
Emmanuel T. Nsamba, Chantal C. Akerib, Rayka Yokoo, Anne M. Villeneuve

P146 PP1/SDS-22 phosphatase is required for germ plasm segregation in the one-cell *C. elegans embryo*
Aparna Nurni Ravi, Bingjie Han, Amelia Kim, Stephanie Miller, Alison Araten, Erik Griffin

P147 Investigating the functional role of PERM-2 and PERM-4 amyloidogenic domains in eggshell vitelline layer assembly
Ysabella Alcaraz, Sara Olson

P148 A CURE for the teaching blues: a collectivist framework to move a research project from conception to manuscript in a single semester of an undergraduate laboratory course
Sara Olson, Louie Kulber, Julian Prieto

P149 The CRISPR in the classroom network: a support system for instructors to bring gene editing technology to the undergraduate classroom
Sara Olson, Donna Pattison, Michael Wolyniak, Tiffany Hoage, Anil Challa, Dawn Carter, Jay Pieczynski, Nicholas Ruppel, Maria Santisteban

P150 Localization of *erm-1* mRNA to the plasma membrane is translation-dependent in early *C. elegans* embryos
Lindsay P. Winkenbach, Nalysha Torres, Dylan M Parker, Robert TP Williams, Erin Osborne Nishimura

P151 The role of mRNA decay in embryonic cell fate specification
Felicia Peng, John Murray

P152 The role of NUC-1 in apoptotic cell corpse clearance
Jonathan Pickett, Lathan Lucas, Niccole Auld, Zheng Zhou

P153 The conserved kinase NEKL-4/NEK10 orchestrates ciliary microtubule integrity and mitochondrial dynamics to modulate hyperglutamylation-induced neurodegeneration
Kaiden Power, Jessica Shivas, Christopher Rongo, Maureen Barr

P154 Eggs and HOT-lncs. A role for long non-coding RNA's during *C. elegans* embryonic cell migration
Mary Frances Jarmusz, Ian Johnson, Yinan Hui, Caleb Lee, Yijun Xiong, Haonan Sun, Vida Praitis

P155 The ANC-1 (Nesprin-1/2) organelle-anchoring protein functions through mitochondria to polarize axon growth in response to SLT-1
Christopher C. Quinn, Nathan C. Fischer, Vladislav Friedman, Hongyan Hao, Tamjid A. Chowdhury, Daniel A. Starr

P156 Investigating the relation between the regulation of G protein and spermathecal contraction
Mustafi Raisa Amin, Erin Cram

P157 TBX-2 protein levels are negatively regulated by the uncharacterized factor C48B6.3
Akshaya Rajaraman, Mirna Vazquez, Taylor Cairns, Peter Okkema

P158 Regulation of neural development by a two-pore potassium channel
Neeraja Ramakrishnan, Jun Meng, Ben Mulcahy, Wesley Hung, Mei Zhen

P159 Examining the importance of ER network stability following stress
Nathan Rather, Karen Juanez, Piya Ghose

P160 Gluing the glia: how are glia-neuron interactions established in vivo?
Anay Reddy, Kang Shen

P161 Investigating mechanisms of ribosome transport in dendrites
Corbin Renken, Shaul Yogev

P162 C9orf72/SMCR-8 negatively regulates *C. elegans* EGFR signaling via the Arf6 GTPase
Christian Rocheleau, Ahmed Sabbir, Aida Sobhani, Stephanie Deng, Olga Skorobogata, Kimberley Gauthier

P163 Exploring distinct coupling mechanisms for FGFR signaling in the hypodermis
Claudia Rodriguez Torres, Melissa Garcia Montes de Oca, Te-Wen Lo, Cindy Voisine, Michael Stern, Claire de la Cova

P164 An RNAi screen to identify conserved kinase that enhances microRNA activity after dauer
Himal Roka Pun, Xantha Karp

P165 Characterizing the putative noncanonical *mir-1829* family in *C. elegans*
Rima Sakhawala, Katherine McJunkin

P166 Remodeling the microtubule cytoskeleton during mitosis in intestinal epithelia
Maria Sallee, Jessica L. Feldman

P167 The *C. elegans*-based "Pipeline CURE" provides benefits of apprentice-style research for under-represented biology students at a primarily undergraduate institution
Karen Schmeichel, Onur Birol, Teresa Lee, Brandon Carpenter, Juan Rodriguez, Sindy Chavez, Hala Zein-Sabbato, Lisa Hayes, David Katz

P168 Connecting vulva cell fate specification to apical extracellular matrix organization
Helen F. Schmidt, Meera V. Sundaram

P169 Interactions between heterochromatin modifiers in transgenerational longevity
Cassidy E. Schultz, Allison M. Sciarratta, Teresa W. Lee

P170 Independent regulation of mtDNA quantity and quality resets the mitochondrial genome in *C. elegans* primordial germ cells
Aaron Schwartz, Nikita Tsyba, Yusuff Abdu, Maulik Patel, Jeremy Nance

P171 In vivo genetic analysis of schizophrenia through a novel developmental cell death paradigm
Hannah Selvarathinam, Karen Juanez, Piya Ghose

P172 The dispatched related protein CHE-14 promotes unicellular tube growth and apical protein localization.
Nicholas Serra, Meera V. Sundaram

P173 Understanding the regulation and function of the CRISP protein LON-1
Maria Serrano, Lianzijun Wang, Dr Zhiyu Liu, Anthony Nzessi, Dr Myeongwoo Lee, Dr Jun Liu

P174 Phospholipid flippases regulate glial phagocytosis of a sensory neuron ending in *C. elegans*
Violet Sorrentino, Stephan Raiders, Aakanksha Singhvi

P175 Mechanisms of selective neuron-glia attachment
Leland Wexler, Maxwell Heiman

P176 Identification of a novel autoinhibitory domain of LIN-45/Raf
Kennedy Stacy, Robert Townley, Fatemeh Cheraghi, Claire de la Cova

P177 Bioeffects of therapeutic ultrasound in the nervous system of *C. elegans*
Louise M. Steele, Brandon Krall, Vivian Conrad, Paige Doremus

P178 Investigating meiotic variation in a new nematode genus
Liesl Strand, Sally Adams, Andre Pires-daSilva, Anne M Villeneuve

P179 Characterizing the egg-3(as40) phenotype to elucidate the role of EGG-3 during egg activation in *caenorhabditis elegans*
Ariel Strouse, Amber Krauchunas

P180 Multiple roles for the proprotein convertase BLI-4 in *C. elegans* apical extracellular matrix assembly
Meera Sundaram, Susanna Birnbaum, Jennifer Adams, Andrew Chisholm

P181 The role of SPE-21, a palmitoyltransferase in sperm activation.
Saai Suryanarayanan, Amber Krauchunas, Dawn Chen, Andrew Singson

P182 Cooperation of condensin, histone modifications, and nuclear architecture in dosage compensation
Jessica Trombley, Lillian Tushman, Professor Gyorgyi Csankovszki

P183 Elucidating function of MBD2 in *C. elegans*
Hok Ning Tsui, Wing Yee Yuen

P184 Investigating the pro-apoptotic function of the BCL-2 homolog ced-9.
Nolan T. Tucker, Bob Horvitz

P185 On the diffusion of small molecules injected in the *C. elegans* intestine and germline
Sarah Turmel-Couture, Lucie Beaulieu, Patrick Narbonne

P186 Investigating the regulation of separase during cell division
Christopher Turpin

P187 Beta-catenin centrosomal clearance regulates wnt-dependent cell fate and inheritance
Maria F. Valdes Michel, Bryan T. Phillips

P188 Screening by deep sequencing to identify mediators of RNA tailing in *C. elegans*
Karl-Frédéric Vieux, Katherine Prothro, Leanne Kelley, Cameron Palmer, Eleanor Maine, Isana Veksler-Lublinsky, Katherine McJunkin

P189 Defining characteristics and conservation of poorly annotated genes in *Caenorhabditis elegans* using WormCat 2.0
Amy Walker, Daniel Higgins, Dominique Lui

P190 NHR-23 activity is necessary in seam cells for developmental progression and apical extracellular matrix structure and function
John Clancy, Londen Johnson, Anthony Vo, Joseph Aguilera, Max Levenson, Chloe Wohlenberg, Andreas Rechtsteiner, James Matthew Ragle, Jordan Ward

P191 Experimental considerations for study of *C. elegans* lysosomal proteins
John Clancy, An Vo, Max Levenson, James Matthew Ragle, Jordan Ward

P192 CED-3 caspase modulates p38 MAP kinase signaling in non-apoptotic function to support tissue dynamics in development
Benjamin P. Weaver, Wang Yuan, Yi M. Weaver, Sveta Earnest, Clinton Taylor, Melanie H. Cobb