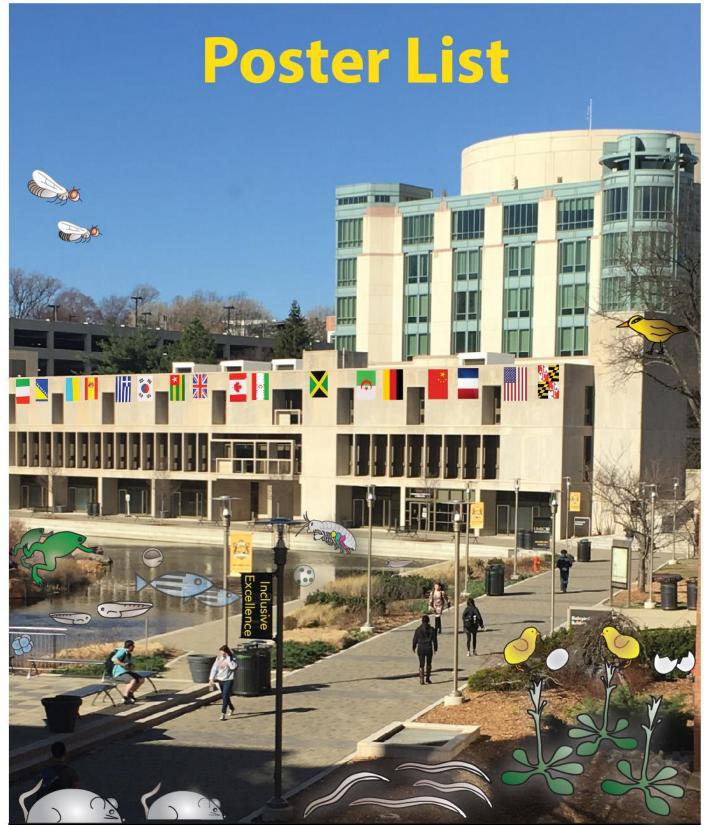


Society for Developmental Biology Mid-Atlantic Regional Meeting 2017



University of Maryland Baltimore CountyMay 19-20, 2017

Poster Instructions

There will be two poster sessions, one on each day. Session assignments (even or odd poster number) can be found in the abstract book and the list below. Poster boards will be vertical (portrait) in orientation.

The maximum poster dimensions are:

Width: 3.5 feet Height: 4 feet

Odd-numbered posters will be presented Friday evening (9:30-11 pm). Even-numbered posters will be presented Saturday afternoon (1:30-3 pm).

Friday presenters may set up their posters any time after arrival, and should take them down no later than 8 am Saturday. Saturday presenters may set up their posters any time after 8 am Saturday (or whenever their board is available), and should take them down by 5 pm.

Push pins will be available at the poster boards.

First author	Poster Title	Poster number	Presentation room
Martin	The Wnt beneath my wings: exploring butterfly pattern formation in the CRISPR era	30	UC 312
Pan	Differential Growth Triggers Mechanical Feedback that Elevates Hippo Signaling	31	UC 312
Xiang	Investigating pair-rule gene orthologs in an intermediate germ beetle, Dermestes maculatus	32	UC 312
Schiffmacher	Cadherin-6B proteolytic N-terminal fragments promote chick cranial neural crest cell delamination	33	UC 312
Boylan	The Fgf8 subfamily is required for abdominal ventral wall closure in the mouse embryo	34	UC 312
Smith	Characterizing the Role of an RNA-Binding Protein in Cell Migration	35	UC 312
Herath	A Continuous Mathematical Framework for Biological Shapes Formation	36	UC 312

Werner	Re-evaluating the Conservation of Primary Neurulation in Teleosts	37	UC 312
Goss	Regenerative angiogenesis during axolotl tail regeneration	38	UC 312
Toossi	GTPBP10 is the Member of Obg Protein Family expressed in the Mesoderm of the	39	UC 312
	Xenopus laevis Embryo		
George	The Role of the Non-canonical Wnt Calcium Pathway in the Migration of Primary	40	UC 312
	Mesenchyme Cells		
Hwang	Protocadherin8-like (PCDH8L; PCNS) cooperates with ephrinB2 to play a role in	41	UC 312
	cranial neural crest migration		
Davenport	The Role of the Fas2 and Fas3 genes in Drosophila Border Cell Migration	42	UC 312
Kaltcheva	Interdigital BMP signaling regulates digit formation and skeletogenesis during mouse	43	UC 312
	limb development		
Singh	Van-Gogh-Like 2, Frizzled, And Knypek Control Distinct Aspects of Polarized Cellular	44	UC 312
	Migration During Neural Convergence		
Konrad	Determining the roles of folic acid metabolism genes during morphogenesis	45	UC 312
Bailey	Role of Microtubule-actin crosslinking factor (Macf1) functional domains in oocyte	46	UC 312
	polarity		
Elul	beta-catenin and myosin II differentially regulate optic axon pathfinding and growth	47	UC 312
	cone protrusions in the opitc tract		
Saadin	Activation of JAK/STAT signaling and cell motility require the vesicle fusion regulator	48	UC 312
	a-Snap		
Morrison	Podosome-associated proteins Fgd1 and Tks5 are necessary for proper heart	49	UC 312
	morphogenesis		
Tajer	Distinct Signaling Roles for Type I Receptors Bmpr1 and Acvr1I, and the Type II	50	UC 312
	Receptors Bmpr2 and Acvr2 within the BMP Receptor Complex		
Pillay	Characterizing the role of RHOA in regulating blood vessel development and integrity	51	UC 312
Brown	Proteolytic and transcriptional events promote cell polarity downstream of the	52	UC 312
	RGMa/Neogenin signaling axis during early neural tube morphogenesis in zebrafish		
Vital	The Role of the Neogenin Intracellular Domain (Neo-ICD) in Neurulation	53	UC 312
Owusu-Boaitey	Noggin-like gene 7 is required for regenerative patterning in the planarian Schmidtea	54	UC 312
	mediterranea		
Burkard	Functional role of catenin proteins in neural crest cells and placode cell-derived	55	UC 312
	neurons during early cranial ganglia formation		
Dougherty	Migration of trunk neural crest cells in Trachemys scripta	56	UC 312
Melo	Vangl1/2 function in neural tube convergent extension	57	UC 312
Bharathan	The role and regulation of desmoplakin during epidermal development in the embryo	58	UC 312

Dreier	Mitotic coordination of membrane trafficking in Ciona intestinalis heart development	59	UC 312
Christophers	A morphogenetic role for FGF signaling in zebrafish cardiac looping and ballooning	60	UC 312
Yoon	The newly identified ephrinB2 binding partner, TBC1d24, plays a role in neural crest cell migration	61	UC 312
Yun	Wnt5a controls ureterovesical junction formation through apoptosis by modulating Shh	62	UC 312
Greenspan	Rbf intrinsically regulates niche cell quiescence, identity and niche number in the adult Drosophila testis	63	UC 312
Ryan	Exploring the role of cis-regulatory Evolution in Caenorhabditis Germline Sex Determination	64	UC 312
Fernando	Potential non-canonical roles of the 26S proteasome system in C. elegans reproduction	65	UC 312
Fuchsman	Sex-specific specification of the follicle stem cells in the developing Drosophila ovary	66	UC 312
Anlage	Frequent egg removal stimulates oviposition in the self-fertile mangrove killifish Kryptolebias marmoratus	67	UC 312
Bhaskar	Germline Sexual Identity Controls Niche-Germline Stem Cell Communication	68	UC 312
Liao	The role of DEAD-box RNA helicase Bel in Drosophila female germline development and post-transcriptional gene regulation	69	UC 312
Jaramillo-	top-2 is required for proper chromosome segregation during male meiosis in C.	70	UC 312
Lambert	elegans		
Trivedi	Drosophila ovary cell fate specification and tissue landscape	71	UC 312
Rhoades	The role of Kainate Receptor Subunit, GLR-6, in C. elegans reproduction	72	UC 312
Simonet	Determining the function and regulation of polymers of nucleotide biosynthetic enzymes during Drosophila oogenesis	73	UC 312
Lin	Genetic dissection of TRA-1 function and its regulation within the sexdetermination pathway of Caenorhabditis briggsae	74	UC 312
Malki	Differential retrotransposon activity underlies fetal oocyte selection	75	UC 312
Rosu	Live-imaging analysis of germ cell proliferation in the C. elegans adult supports a stochastic model for stem cell proliferation	76	UC 312
Zhou	Sex-specific development of the germline stem cell niche is regulated by a novel doublesex - fruitless regulatory interaction	77	UC 312
Tharp	Two mechanisms of fetal oocyte attrition select against transposon activity and DNA damage in mice	78	UC 312
Wisnieski	Increasing zebrafish egg harvests with a massive embryo production system	79	UC 312
Cadavid	Transgenesis in Rhabditophanes sp. KR3021: a model for human parasitic nematodes	80	UC 312
Aloi	Using AngioTag fish to uncover novel vascular genes in the zebrafish	81	UC 312

Robnett	Extracurricular Research in BRAIN Club	82	UC 312
Wagner	Forays into guided group independent projects in an upper level developmental biology laboratory course	83	UC 312
Robnett	Introductory Biology Research in a High School Setting	84	UC 312
Tremblay	A Role of the FUZZY ONIONS LIKE Gene in Regulating Development and Defense in Arabidopsis	85	UC 310
Carter	Surviving low oxygen: exploring the role of AMP-activated Kinase in anoxiatolerance in Zebrafish	86	UC 310
Fabian	Elucidating the Role of the Flowering Activator FLK in Pathogen Defense in Arabidopsis thaliana	87	UC 310
Park	Role of Lactate-NDRG Signaling in Low Oxygen Tolerance	88	UC 310
Bonner	Evolution of the pea aphid photoperiod response	89	UC 310
Gabel	Understanding induction of suspended animation in Zebrafish	90	UC 310
Saoji	Studying the effects of human pathological mutations in Mitochondrial RNase P complex using in vivo Drosophila models	91	UC 310
Corsi	Modeling human craniofacial diseases in an organism with no bones, C. elegans	92	UC 310
Patterson	Zebrafish models of RASopathies: the impact of PTPN11 mutations on early embryogenesis	93	UC 310
Sen	Exploring the role of the ribonucleoprotein Clu in mitochondrial protein import	94	UC 310
Hansen	Modeling NGLY1 deficiency in Caenorhabditis elegans	95	UC 310
Singh, Nirmal	Limb Development is Linked to Maldaptive Behaviors in Cornelia deLange Syndrome	96	UC 310
Nebenfuehr	Modeling Rare Diseases in Caenorhabditis elegans	97	UC 310
Hoskins	EpCAM is a transcriptional target of Sox9 in pancreatic progenitors	98	UC 310
Martin	Multipotency of trunk neural crest cells in Trachemys scripta	99	UC 310
Sampilo	MicroRNA regulation of Dishevelled	100	UC 310
Jaiswal	The histone methyltransferase Set1 promotes gene-specific repression of middle sporulation genes in yeast	101	UC 310
Damuth	Characterizing Sox21-protein interactions and their subsequent functions in the coordination of neurogenesis in Xenopus laevis	102	UC 310
Correa-Mendez	Identifying factors that interact with PAX-3, a Paired-box protein involved in hypodermal cell fate specification in C. elegans	103	UC 310
Chalamalasetty	Dissecting the Wnt Gene Regulatory Network in Multipotent Neuro-mesodermal Progenitors (NMP)	104	UC 310
Al-Matrouk	Chemical exposure alters the gene expression of neurotrophins and their receptors in the main olfactory system differently between wild type and Skn-1a knockout mice	105	UC 310



Ortega	Investigation of Volvox carteri cell differentiation and its evolution through functional	106	UC 310
- · · · · · · · · · · · · · · · · · · ·	analysis of regA and regA homologues		
Tomins	Role of DNA methylation in cavefish eye specific gene repression	107	UC 310
Wu	Apontic may function as an epigenetic modulator in Drosophila border cells	108	UC 310
Wang	Deciphering the Spatial-Temporal Dynamics underlying Early Cardiopharyngeal	109	UC 310
	Specification by Single-cell RNA-seq: A Blueprint of Early Cardiogenesis		
Kori	Using CRISPR mutagenesis to investigate the roles of regA paralogs rlsB and rlsC in	110	UC 310
	Volvox carteri cell differentiation		
Racioppi	Chromatin accessibility underlying cardiac vs pharyngeal muscle specification in Ciona	111	UC 310
Hendrickson	The Role of Alternative Splicing in Plant Reproductive Development	112	UC 310
Geiman	Role of the Histone Demethylase Jarid1C in Differentiation	113	UC 310
Gore	Role of DNA methylation in cavefish eye specific gene repression	114	UC 310
Esmaeili	Regulation of Competence to Wnt signaling during development	115	UC 310
Tran	Regulation of Hub Cell Quiescence in the Drosophila Testis Stem Cell Niche	116	UC 310