# 2017 Midwest Zebrafish Conference
# University of Cincinnati Kingsgate Conference Center
# June 16-18, 2017

## Friday June 16, 2017

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| 4:00 p.m. - 6:00 p.m. | Registration |
| | Poster and Exhibitor Setup |
| 6:00 p.m. - 6:10 p.m. | Welcoming Remarks |
| **6:10 p.m. – 7:10 p.m.** | **Keynote Lecture I: Stephen C. Ekker, Mayo Clinic "Modifying the power house of the cell"** |
| 7:15 p.m. - 9:30 p.m. | Reception |
| 7:30 p.m. - 9:30 p.m. | Poster Session I |

## Saturday, June 17, 2017

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| 7:30 a.m. - 8:30 a.m. | Registration |
| 7:30 a.m. - 8:30 a.m. | Continental Breakfast |
| **8:30 a.m. – 10:00 a.m.** | **Session 1: Morphogenesis I**<br>*Chair: Wilson Clements* |

8:30 Formation Of The Hematopoietic Stem Cell Specification Niche
Wilson Clements, *St. Jude Children's Research Hospital*

8:45 Histone Deacetylase 1 Repression Of Retinoic Acid-Responsive Genes Promotes Second Heart Field Development
Charlie Song, *Cincinnati Children's Hospital*

9:00 Zebrafish Six Family Genes Are Essential For Muscle Migration And Growth
Jared Talbot, *Ohio State University*

9:15 The Vitamin A Derivative Retinoic Acid Regulates Enteric Neural Crest Migration Along The Developing Gut In A Temporally Defined Manner
Rosa Uribe, *California Institute of Technology*

9:30 Tfap2a Is A Novel Regulator Of Renal Progenitor Fate During Kidney Ontogeny
Brooke Chambers, *University of Notre Dame*

9:45 The Transcription Factor Nfatc1 Promotes Early Steps Of Heart Valve Formation In Zebrafish
Jennifer Schumacher, *Cincinnati Children's Hospital*

10:00 a.m. - 10:20 a.m. Morning Break Refreshment

**10:20 a.m. - 11:50 p.m. Session 2: Morphogenesis II**
*Chair: Chunyue Yin*

10:20 Neural Crest Cells Contribute To The Hematopoietic Stem Cell Specification Niche
Erich Damm, *St. Jude Children's Research Hospital*

10:35 Pnrc2 Regulates 3'UTR-Mediated Decay Of Cyclic Transcripts During Somitogenesis
Kiel Tietz, *Ohio State University*

10:50 Chemical Genetic Screen Reveals Novel Role For PPAR Signaling In Renal Progenitor Development
Joseph Chambers, *University of Notre Dame*

11:05 Nfe2 Is Dispensable For Early, But Required For Adult Thrombocyte Formation And Function In Zebrafish
Megan Rost, *University of Michigan*

11:20 Siah E3 Ubiquitin Ligases Regulate Optic Fissure Closure During Zebrafish Development By A Potential Control Of Nlz2 Stability
Warlen Piedade, *University of Kentucky*

11:35 Exploring The Gpr124 Independent CNS Angiogenesis Pathway
Annette Dean, *University of Wisconsin*

12:00 p.m. – 1:00 p.m. Lunch

Poster viewing and exhibitor tables open – 12:00 p.m. – 1:00 p.m.

1:00 p.m. – 3:00 p.m. Poster Session II

**3:00 p.m. – 4:15 p.m.** **Session 3: Neural development**
*Chair: Sarah Petersen*

3:00 Investigating Functional Development Of Neural Circuits Specified By The Genetic Screen Homeobox Transcription Factors
Sadie Bergeron, *West Virginia University*

3:15 A Distinct Population Of Sensory Nerve-Associated Oligodendrocytes Are Non-Myelinating
Lauren Green, *University of Notre Dame*

3:30 Knockdown Or Knockout: Potential Roles For The Cell Adhesion Molecule Contactin2 In The Development And Function Of Neural Circuits In Zebrafish
Suman Gurung, *University of Missouri*

3:45 Papp-aa Regulates Photoreceptor Synaptogenesis To Mediate Dark Elicited Behavior
Andrew Miller, *University of Wisconsin*

4:00 Characterization Of Nadph Oxidase Mutant Zebrafish Generated By CRISPR/Cas9 Genome Editing
Ashilan Terzi, *Purdue University*

4:15 p.m. – 4:30 pm Afternoon Break Refreshments

**4:30 p.m. – 5:45 pm** **Session 4: New Technologies**
*Chair: Wenbiao Chen*

4:30 CRISPR Mutagenesis In Zebrafish For Candidate Testing And Hypothesis Generation
Linlin Yin, *Vanderbilt University School of Medicine*

4:45 Reverse Choreography Of Organogenesis: Quantitative Analysis Of Neural Crest And Placode Contributions
Ankur Saxena, *University of Illinois*

5:00 The ZTAG Toolkit: Using Short Regions Of Homology For Precise DNA Integration In Zebrafish
Jeffrey Essner, *Iowa State University*

5:15 Tailored Light Sheet Microscopy For Zebrafish Cardiac Imaging
Anjalie Schlaeppi, *University of Wisconsin / Max Planck Institute of Molecular Cell Biology and Genetics*

5:21 Genetic Code Expansion In Zebrafish: Optical Control Of Cell Signaling
Jihe Liu, *University of Pittsburgh*

5:27 Selective Induction Of Microhomology-Mediated End Joining For Rapid Phenotypic Assessment In F0 Zebrafish
Steve Ekker, *Mayo Clinic*

5:33 Unexpected Phenotypes: Insights From A Crispr Knockout Screen
Talbot Jared, *Ohio State University*

5:39 Minicircle Mediated Knock-In Design
Junsu Kang, *Duke University Medical Center*

5:45 p.m. - 6:15 p.m. Transfer to Evening Banquet at the Cincinnati Zoo

6:15 p.m. – 10:00 p.m. Evening Banquet at the Cincinnati Zoo

**8:00 p.m. Dinner Speaker: S. Steven Potter, Professor, Cincinnati Children's Hospital**
**"Single Cell Study Of Organogenesis"**

## Sunday, June 18, 2017

8:15 a.m. - 9:00 a.m. Continental Breakfast

**9:00 a.m. – 10:00 a.m. Keynote Lecture II: Lilianna Solnica-Krezel, Washington University (St. Louis)**
**"Dachsous1b atypical cadherin regulates embryonic cleavages and microtubule dynamics through interaction with Ttc28"**

10:10 a.m. - 10:30 a.m. Morning Break Refreshment

10:30 a.m. – 12:00 p.m. **Session 5: Zebrafish as a Disease Model**
Chair: Jordan Shavit

10:30 High Throughput Sequencing Identifies Modifier Loci Of Thrombosis In Danio rerio
Steve Grzegorski, *University of Michigan*

10:45 Pregnancy-Associated Plasma Protein-Aa (Pappaa) Promotes Neuronal Protection
Mroj Al-Assaf, *University of Wisconsin*

11:00 Zebrafish Abcb11b Mutant Reveals Novel Strategies To Restore Bile Excretion In Bile Salt Export Pump-Deficient Hepatocytes
Chunyue Yin, *Cincinnati Children's Hospital*

11:15 Mutations In Collagen Col22a1 Cause Intracranial Aneurysms
Quynh Ton, *Cincinnati Children's Hospital*

11:30 Gain-Of-Function Mutation In Cmklr1 Leads To Hepatic Inflammation And Fibrosis In Zebrafish
Takuya Sakaguchi, *Cleveland Clinic*

11:45 Prl3 Enhances Onset And Progression Of T-Cell Acute Lymphoblastic Leukemia
Rachel Sieg, *University of Kentucky*

12:00 p.m. Conference Ends