DEPARTMENT OF DEVELOPMENTAL BIOLOGY
University of Pittsburgh School of Medicine

1st Annual Retreat
at
Pymatuning State Park, PA
October 7-8, 2011
How to get to Pymatuning from Pittsburgh \textit{(allow 2 hrs)}

Take Interstate 79 north to Exit 147b, Route 6 (Meadville). Merge onto U.S. Route 6 West. Take Route 6 for 14 miles to Linesville, PA.

From Linesville to the Housing Site (housing, dining hall) - At the only traffic light in Linesville on Route 6, turn south onto Mercer Road. Drive 2.3 miles and then turn right onto Fries Road. Drive .5 miles and the housing site will be on the right.

From the Housing Site to the Sanctuary Lake Site (talks) - At the end of the driveway, turn left onto Fries Road. Drive .5 miles and then turn left onto Mercer Road. Drive 2 miles and the Sanctuary Lake Site will be on your right.

From the Sanctuary Lake Site to the Housing Site - At the end of the driveway, turn left onto Mercer Road. Drive 2 miles and then turn right onto Fries Road. Drive .5 miles; the PLE Housing Site will be on your right.

If you have GPS, here are the addresses:

Housing Site: 11700 Pitt Drive, Linesville, PA 16424
Sanctuary Site: 13142 Hartstown Road, Linesville, PA 16424
Suggested routes

1. 98.7 mi, 1 hour 47 mins
   - I-79 N

2. 98.4 mi, 1 hour 58 mins
   - US-19 N/Perry Hwy

3. 112 mi, 2 hours 8 mins
   - I-376 W and PA-18 N

Driving directions to Linesville, PA

**Pittsburgh, PA**

1. Head **northeast** on Grant St toward Sixth Avenue

2. Turn right onto Seventh Avenue

3. Take the Bigelow Boulevard ramp to Pennsylvania 380 E/Veterans Bridge/Interstate 579 N

4. Merge onto Bigelow Blvd

5. Take the ramp on the left onto I-579 N/Veterans Bridge

6. Keep left at the fork, follow signs for I-279 N and merge onto I-279 N

7. Merge onto I-79 N

8. Take exit 141 for PA-285 toward Geneva/Cochranton

9. Turn left onto PA-285 W

10. Turn left onto US-6 W/Grand Army of the Republic Hwy/Water St
    Continue to follow US-6 W/Grand Army of the Republic Hwy

11. Turn left to stay on US-6 W/Grand Army of the Republic Hwy

**Linesville, PA**
To Housing/Talks and Meals from Linesville, PA

Suggested routes
1. 3.4 mi, 6 mins
   Hartstown Rd

Driving directions to 11700 Pitt Dr, Linesville, PA 16424

Linesville, PA

1. Head south on S Mercer St toward Beech Dr/Phoenix Alley
   0.7 mi

2. Continue onto Hartstown Rd
   2.2 mi

3. Turn right onto Fries Rd
   0.5 mi

4. Turn right onto Pitt Dr
   Destination will be on the left
   10 ft

11700 Pitt Dr
Linesville, PA 16424
Housing site
Friday, October 7

7:00pm  
Dinner

8:15pm  
Keynote Lecture:

**Developmental versus Regenerative Skeletogenesis:**  
Role of Stem Cells, Matrix and Biofactors

*Dr. Rocky S. Tuan, Ph.D*

Director of the Center for Cellular and Molecular Engineering and Executive Vice Chairman for Orthopaedic Research  
Department of Orthopaedic Surgery  
University of Pittsburgh School of Medicine

9:30pm  
Social

Saturday, October 8

7:30am – 8:30am  
Breakfast

8:30am - 9:45am  
Next Gen Workshop  
*Ashok Srinivasan*  
*Dennis Kostka*  
*Michael Barmada*

9:45am – 10:00am  
Break

10:00am - 11:50am  
**Morning Speaker Session**

10:00  
*Donghun Shin*: The molecular and cellular mechanisms by which Wnt signaling regulates early liver development

10:30  
*Richard Francis*: Motile cilia function and the regulation of NO production

10:50  
*Maria Missinato*: A proteomic analysis of cardiac regeneration in zebrafish

11:10  
*Cheng Cui*: Mutation in cilia gene *Wdpcp* causes Meckel-Gruber syndrome via defects in Shh and Wnt signaling

11:30pm - 2:30pm  
Lunch and Free Time
2:30pm – 3:30pm

Poster Presentations

Bo Lin: High purity enrichment of functional cardiac lineage cells from human iPS cells

Lauren Brilli: Modeling Acute Kidney Injury in Zebrafish to Study Therapies to Enhance Regeneration

Obi Onuoha: Knockdown of cilia related genes elicits laterality defects in zebrafish.

Manush SaydMohammed: Design and development of dual specificity phosphatase 6 knockout in zebrafish using zinc finger nucleases

Jason Tchao: Local Mechanical Strain Influences Cardiomyocyte Differentiation in Skeletal Muscle Stem Cell within 3-Dimensional Collagen Gel Bioreactor

Shane Anderton: Large scale mouse mutagenesis screen using fetal echocardiography for recovery of mutations causing congenital heart disease

Juhoon So: Downstream target genes of Wnt signaling regulate embryonic liver development

Lisa Antoszewski: Optimization of a novel histone deacetylase inhibitor to enhance kidney regeneration

Hisato Yagi: Transcriptome Analysis of Left-Right Patterning in the Early Mouse Embryo

Andy Kim: Identification of novel cardiomyopathy mutants with quantitation of ventricular dimensions in neonatal mice using micro-computed tomography

You Li: Systematic interrogation for mutations in nearly 1000 cilia related genes in patients with primary cilia dyskinesia using targeted sequence-capture and massively parallel sequencing

3:30pm – 5:55pm

Afternoon Speaker Session

3:30

Lei Yang: Cardiovascular differentiation from human ES and iPS cells

4:00

Elane Fishilevich: Take it to the grave: efferocytosis in Drosophila model system

4:20

Maria Cirio: Lhx1, a competence factor required for kidney field specification

4:40

Kimi Tobita: Skeletal muscle stem cell derived cardiomyocyte or cardiac repair

5:00

Xiaoqin Liu: Large scale mouse mutagenesis screen using fetal echocardiography indicates genetic contribution to hypoplastic left heart syndrome and wide spectrum of other congenital heart defects

5:20pm – 6:00pm

Break

6:00pm

Dinner and Award Presentation- Best Talk/Best Poster