



BioMolecular Science Gateway Student Orientation 2017

***Biochemistry & Molecular Biology; Cell & Molecular Biology Program
Genetics Program; Microbiology & Molecular Genetics
Pharmacology & Toxicology; Physiology***

Monday, August 21

- 9:30 – 9:45 a.m.** **BMS Orientation, 1425 Biomedical Physical Sciences Building**
- 9:45 – 10:00** **Department and Program Introductions – Dr. John LaPres**
10:00 – 10:10 **Biochemistry and Molecular Biology – Dr. Jon Kaguni**
10:10 – 10:20 **Cell and Molecular Biology – Dr. Susan Conrad**
10:20 – 10:30 **Genetics Program – Dr. Cathy Ernst**
10:30 – 10:40 **Microbiology and Molecular Biology – Dr. Donna Koslowsky**
10:40 – 10:50 **Pharmacology and Toxicology – Dr. Anne Dorrance**
10:50 – 11:00 **Physiology – Dr. Susanne Mohr**
- 11:00 – 11:15 a.m.** **Break**
- 11:15 – 11:30** ***Overviews in 1425 Biomedical Physical Sciences:***
Dr. Susan Kendall, Library Resources (MSU Libraries)
11:30 – 11:45 **Dr. John LaPres, Institute for Integrative Toxicology Program**
11:45 – 12:00 noon **Dr. Michael Garavito, Quantitative Biology Program**
- 12:00 p.m.** **Lunch by PotBelly for all new BMS Students, Atrium/1425
Biomedical Physical Sciences building**
- 1:00 p.m.** **Student Panel Discussion, 1425 BPS – How to Select Rotations
Kevin Baker, Megan Shiroda, Ryan Corbett, Kate Wierenga**

Monday, August 21, Afternoon

Monday August 21	1425 Biomedical Physical Sciences & Atrium Student Moderator: Kevin Baker	
Quantitative/Systems Biology and Genomics		
Drug Discovery and Toxicology		
Disease		
1:30	Dr. Rupali Das	Immunology
1:45	Dr. Wen Huang	Genetics of Complex Quantitative Traits
2:00	Dr. Jason Bazil	Computational Physiology: The Experimental/Modeling Cycle
2:15	Dr. Lee Kroos	Signaling and Gene Regulatory Mechanisms in Bacteria
2:30	BREAK	<i>Solar Eclipse</i>
2:45	BREAK	<i>Solar Eclipse</i>
3:00	Dr. Kin Sing Stephen Lee	Drug Discovery
3:15	Dr. Christopher Waters	Cyclic Di-Nucleotides: From Bacterial Biofilms to Cancer Immunotherapy
3:30	Dr. Min-Hao Kuo	Drug Discovery and Risk Factor Identification for Alzheimer's Disease
3:45	Dr. Masamitsu Kanada	Microvesicle-Mediated Gene Delivery for Cancer Therapy
4:00	Dr. Jonathan Hardy	Whole Animal Imaging of Bacterial Infection
4:15	Dr. Rob Abramovitch	Chemical Biology of <i>Mycobacterium tuberculosis</i> Pathogenesis
4:30	Dr. Michael Bachmann	Cancer Biology
4:45	Dr. Adam Lauver	Pharmacological Interventions for Cardiovascular and Renal Diseases

Tuesday, August 22, Morning

Tuesday August 22		1425 Biomedical Physical Sciences & Atrium Student Moderator: Kibrom Alula
Molecular Basis of Disease		
8:45	Dr. Brian Gulbransen	Studying Cellular Communication With Next-Generation Imaging and Genetic Tools to Understand the Mechanisms of Neuroinflammation
9:00	Dr. Michelle Mazei-Robison	Role of the Ventral Tegmental Area in Drug Addiction and Depression
9:15	Dr. Andrea Doseff	Regulatory Mechanisms of Cell Death: Targeting Cancer and Inflammatory Diseases
9:30	Dr. Norbert Kaminski	Molecular Mechanisms of Immune Modulation by Drugs and Chemicals
9:45	Dr. Julia Ganz	Using Zebrafish to Study Enteric Nervous System Development, Disease, and Function
10:00	Dr. Julia Busik	Dyslipidemia and Diabetic Retinopathy: a Lipocentric Approach to a Glucocentric Problem
10:15	BREAK	
10:30	Dr. Laura McCabe	Gut Targeted Therapies to Treat Osteoporosis: The Role of the Microbiome
10:45	Dr. Nara Parameswaran	Gut Targeted Therapies to Treat Gut and Bone Diseases: The Role of Inflammatory Pathways
11:00	Dr. John LaPres	The Role of HIFs in Modulating Lung Development and Innate Immunity
11:15	Dr. Anne Dorrance	Vascular Dementia in Obesity
11:30	Dr. Kathleen Gallo/Sean Misek	Targeting Cancer Invasion

11:45 am – 1:00 pm.: Lunch Provided by McAlister’s Deli for New Students and Student Mentors, 1425 BPS & Atrium

Tuesday, August 22, Afternoon

**Tuesday
August 22**

**1455 A – BEACON Conference Room
Student Moderator: Ashley Severance**

Reproductive and Developmental Sciences Program

1:00	Dr. Colleen Hegg	What Do Marijuana, Vehicle Exhaust, and Alzheimer's Disease Have in Common?
1:15	Dr. Margaret Petroff	Immunology and the Female Reproductive System
1:30	Dr. Keith Latham	Nuclear-Cytoplasmic Interactions in Early Embryos
1:45	Dr. Amy Ralston	Stem Cell Models of Human Birth Defects
2:00	Dr. David Arnosti	Transcriptional Regulation of Genes in Development
2:15	Dr. Jason Knott	Transcriptional and Epigenetic Regulation of Early Embryogenesis: Implications for Reproductive Disorders
2:30	Dr. Kris Chan	Systems Biology and Metabolic Profiling
2.45	Dr. Aritro Sen	Steroid Actions in Normal Physiology and Diseases
3:00		

Wednesday, August 23

Wednesday August 23		1425 Biomedical Physical Sciences & Atrium
Mandatory		
Student Organizations		
Environmental Health & Safety Training		
Other University Information		
8:30	Liz Luna-Gagnon	Council of Graduate Students
8:45	Jordan Lindsey/Alex Kuhl	GEU Representative
9:00	Rebecca Ceru	Biological Safety Training
9:15	Joe Hattey	Environmental Health & Safety (EHS)
12:00	Lunch	Provided by Qdoba (Taco Bar)
1:00	Dr. Stephanie Watts	Responsible Conduct of Research
2:00	Julie Rojewski	BEST Broadening Experience in Scientific Training (BEST) program
2:30	Dr. Chris Adami	BEACON Center for the Study of Evolution in Action
3:00	Lynne Steele	Payroll Information
3:30	BMS Staff	Pictures of New Students

Thursday, August 24, Morning

Thursday August 24		1425 Biomedical Physical Sciences Student Moderator: Anastasiya Lavell
Plant Molecular Biology		
Macromolecular Structure, Function and Design		
8:30	Dr. Christoph Benning	MPS Overview
8:45	Dr. Eric Hegg	Enzymology to Save the Planet: Biofuels and Global Warming
9:00	Dr. Erich Grotewold	From Systems Biology to Plant Metabolic Engineering
9:15	Dr. Hideki Takahashi	Signaling Pathways Modulating Macronutrient Uptake in Plants
9:30	Dr. Jiming Jiang	Hunting Plant Enhancers
9:45	Dr. Susanne Hoffmann-Benning	Lipids on the Move: The Role of Plant Lipids in Signaling Stress and Development
10:00	BREAK	
10:15	Dr. Charles Hoogstraten	Dynamics and Function in RNA Catalysis: NMR Spectroscopy, Biophysics, and the Invention of Proteins
10:30	Dr. Bethany Huot/Dr. Sheng-Yang He	Molecular Genetics of Plant-Pathogen/Microbiome Interactions
10:45	Dr. Jianping Hu	Regulation of the Dynamics of Plant Energy Organelles
11:00	Dr. Robert Last	Evolution and The Single Cell In The Solanaceae
11:15	Ripla Arora	3D Organization of the Mammalian Uterus

11:30 – 1:15 Lunch on your own

Thursday, August 24, Afternoon

Thursday August 24		1425 Biomedical Physical Sciences Student Moderator: Huiqing Zheng
Microbial Metabolism and Physiology		
1:15	Dr. Danny Ducat	Engineering Synthetic, Light-Driven Microbial Consortia: Biotechnological Applications and Evolutionary Implications
1:30	Dr. Yann Dufour	Single-Cell Behavior During Infection
1:45	Dr. Michaela TerAvest	Metabolic Engineering With Electric Bacteria
2:00	Dr. Ingo Braasch	Fish Models for Vertebrate Evolution, Development and Disease
2:15	Dr. Neal Hammer	The Metabolism of Staphylococcus Aureus Disease
2:30	Dr. Matt Schrenk	Metagenomic Insights Into Extremophile Physiology and Metabolism
2:45	Dr. Gemma Reguera	Microbes, Metals and Nanowires
3:00	Dr. Rupali Das	Immunology

Friday, August 25

8:00 AM BMS Retreat at East Lansing Hannah Community Center - *REQUIRED*

4:00 PM BMS Picnic at Patriarche Park – *OPTIONAL*

Saturday, August 26

10:00 -12:00 MSU Graduate School Resource Fair, MSU Union Ballroom

12:00 – 3:00 pm MSU Graduate School Welcome Back Picnic – Benefactor Plaza



For New and Returning Graduate Students and Professional Students, Post Docs, Friends and Family

Lawn between Linton Hall and Beaumont Tower

Great Prizes and Giveaways! For more info visit:

www.cogs.msu.edu

Wednesday, August 30

Classes Begin!