

Fall 2017 Schedule of IM and Multi-Program Orientation Activities: August 10-24

All new incoming students are invited to participate in the orientation activities beginning August 10. Attendance is encouraged, if your schedule allows. Registration is free; meals are included in some events when stated.

Note: Please arrive on time and stay for the complete course if you signed up for any activity. These activities are available for any new interdepartmental graduate student.

Thursday, August 10, 2017

- **Introduction to Engineering - Packing a Pringle** (limited to 15 students).
 - **Time:** 9:00 am to 12:00 pm
 - **Where:** Roy J. Carver Co Lab: 1st Floor Conference Room (located just to the right of the lobby)
 - **Presenter:** Ted Heindel, Bergles Professor of Thermal Science in the Department of Mechanical Engineering and coPI of the Predictive Plant Phenomics Program
 - This session will discuss the differences and similarities between the various engineering disciplines. Students will be asked to use engineering problem solving skills to safely package a Pringle chip. Note that no equations or computations are necessary in this session.
 - [REGISTER](#)

Friday, August 11, 2017

- **An Introduction to Statistical Reasoning** (limited to 30 participants)
 - **Time:** 9:00 am to 12:00 pm
 - **Where:** 3105 Snedecor Hall
 - **Presenter:** Dan Nettleton, Laurence H. Baker Endowed Chair and Distinguished Professor, Department of Statistics
 - This session will introduce students to the basics of statistical reasoning. Topics include experimental design, hypothesis testing, confidence intervals, prediction methods, and R statistical software.
 - [REGISTER](#)

Monday, August 14, 2017

- **IM Program Orientation: Attendance is REQUIRED**
 - **Time:** 9-10:30 am
 - **Where:** 221 Science I

Tuesday, August 15, 2017

- 9:00 a.m. throughout day: **"Introduction to Wet Lab"**
 - Wear long pants and solid shoes
 - If possible, complete lab safety training prior to this lab orientation
 - **Location:** 1320B Molecular Biology, all day (first floor, southeast corner)
- 9:00 a.m.: **"Introduction to PCR"**.
 - **Instructor:** Michael Baker, DNA Facility
- 9:00 a.m.: **Graduate Student Assistants:** Yang Yang (Bhattacharyya Lab), Blythe Schultz (Ross Lab), and Yosia Mugume (Bassham Lab).
- 9:30 a.m.: **"PCR Exercise"**
 - **Instructor:** Michael Baker, DNA Facility
- 11:00 a.m.: **"Pour gels"**
 - **Instructor:**
- Noon: **Lunch**
 - Provided for participants.
 - **Location:** 3034 Molecular Biology (take elevator to third floor, turn right out of the elevator and then turn right again) (lunch provided by Genetics and Genomics).
- 1:00 p.m.: **"Load gels, prep under buffer"**
 - **Instructor:** Jeff Essner, GDCB
- 1:00 p.m.: **Graduate Student Assistants:** Stacey Barnes (Baum Lab), Jordan Baumbach (Bhattacharyya Lab), and Liz Carino (Miller Lab).
- 1:30 p.m. to 3:30 p.m.: **"Good lab and lab notebook habits"**
 - Graduate students available to talk with you about the experiment you have been working on and help you brush up on techniques used so far.
- 4:00 p.m.: **"Review gels and discuss results"**
 - **Instructor:**

Wednesday, August 16, 2017 (access to 1420 Molecular Biology from 8:30 a.m. to 4:00 p.m. Event 2017-ABEEYZ)

- 9:00 a.m.: **"Introduction to Lab Culture"**
 - **Instructor:** Aileen Keating, Animal Science
 - **Location:** 1420 Molecular Biology,
 - **SIGN UP FOR THIS ACTIVITY:** email Linda Wild (lmwild@iastate.edu)
- 9:30 a.m. to noon: **"Introduction to Model Systems"**
 - **Location:** 1420 Molecular Biology,
 - Presentations about plant, animal, microbial model systems. Strengths, weaknesses, limitations
 - **Speakers:** Bai (*Drosophila*), Essner (Zebrafish), Tuggle (Swine), A Singh (soybeans), Salas-Fernandez (sorghum), Yandeau-Nelson (maize) and Kelly (*Arabidopsis*)

- Invitations are being extended to specific faculty representing large animal, zebra fish, maize, soybean, *Arabidopsis*, *Drosophila*, other
- Noon: **Lunch**
 - Provided for participants.
 - **Location:** 1102 Molecular Biology. (Sponsored by Toxicology)
- 1:00 to 1:45 pm:
 - **Speaker:** Heather Lewin, Science Librarian
- 2:00 p.m. to 2:45 p.m.: "**Typical Departmental Information Technology (IT) Resources.**"
 - **Speaker:** Jennifer Johnson, GDCB Department
- 3:00 p.m. to 3:45 p.m.: "**College/University Level IT Research Resources**"
 - **Speaker:** Levi Baber, Manager of LAS Bio-IT:

- 4:00 p.m.: **BBMB 404 test-out** in Computer Room, southeast corner of atrium, Molecular Biology. Students are to sign up by ____ at ____ for this activity.

Thursday, August 17, 2017

- Last day to complete [Environmental Health and Safety Lab Safety Training](#), if you have not done so already.
- **Seven Minutes of Science - Communication Training** (limited to 20 participants)
 - **Time:** 1:00 p.m. to 5:00 p.m.
 - **Where:** 308 Elings Hall (located by the elevator and central staircase on the lower level)
 - **Presenters:** Michelle Paulsen and Byron Stewart of the Research Communication Program at Northwestern University
 - Great research does not speak for itself. Conveying the scope and importance of one's research is the only way to generate significant impact. As researchers, we tend towards data-centered presentations told in the language of our expertise. But, this jargon tends to alienate those in the sciences outside our fields and can obscure the goals and progress of our work from a broader audience. Using a proven model, participants will learn specific theatre-based techniques to mentally and physically prepare for a talk in front of a non-peer or peer audience, decreasing nervousness and stage-fright. They will learn techniques for planning a talk that will help to focus on the details that improve the clarity of their message, and learn to better connect with their audience.

Friday, August 18, 2017 [All-day Faculty Research Presentations](#). Lunch provided.

AUGUST 21-22, 2017

- **Genomics Data Carpentry Workshop** (Enrollment is limited to the first 30 respondents)
 - **Location:** 1306 Elings Hall
 - **Time:** from 4:30 to 8:30 p.m for both dates.
 - Attendance required both dates if you want to attend

- This Data Carpentry workshops is for any graduate student researcher who will have data they want to analyze, and no prior computational experience is required
- The focus of this workshop will be on working with genomics data and data management and analysis for genomics research
- We will cover project setup, connecting to and using cloud computing, the command line for sequence quality control and bioinformatics workflows, and R for data analysis and visualization. We will not be teaching any particular bioinformatics tools, but the foundational skills that will allow you to conduct any analysis and analyze the output of a genomics pipeline
- Participants should bring their laptops and plan to participate actively
- By the end of the workshop, learners should be able to more effectively manage and analyze data and be able to apply the tools and approaches directly to their ongoing research
- Data Carpentry's aim is to teach researchers basic concepts, skills, and tools for working with data so that they can get more done in less time, and with less pain.
- Pre-registration required.

Thursday, August 24, 2017

- **Fall 2017 Orientation for New Graduate and Professional Students**
 - **Time: 5:30-7:30 p.m.**
 - **Alumni Center, 420 Beach Ave.**
 - **Registration:** <https://pd.grad-college.iastate.edu/event/view/277>.
 - **More Details:** <http://www.grad-college.iastate.edu/orientation/>.