

Professional Development Days Schedule for SuRP 2012

All teachers are welcome to attend the professional development series for National Jewish Health's Summer Research Program for High School Science Educators. Teachers may attend part of a session, an entire day or multiple days. Graduate-level relicensure credit is available through the Colorado School of Mines (contact Dr. Lukin for more information concerning this aspect). If you would like to attend any of the sessions, please contact Dr. Lukin in advance so that appropriate materials and space can be arranged: Dr. Kara Lukin (303) 398-1329, lukink@njhealth.org.

Monday June 11th (J107 – Molly Blank through lunch, K522 Goodman 1-3pm)

- 8:00 – **Welcome** and **Human Resources** paperwork (Meet at NJH information desk)
- 9:00 – 11:00am – **On-line work:** survey for SuRP, Citi animal training & IACUC paperwork, NIH's Office of Research Integrity "The Lab" (<http://ori.hhs.gov/TheLab/>) and post a comment on ORI's related blog.
- 11:00 – 12:00pm – **Program requirements and questions** (Kara Lukin)
- 12:00 – 1:30pm – Lunch (All mentors and lab members welcome)
- 1:45 – 2:15pm – **Action Plans (introducing your summer experience into your curriculum and spending your money)** (Kara Lukin)
- 2:15 – 3:00pm – **Peer Coaching - expectations, desires & concerns for SuRP** (Kara Lukin)
- 3:00 – 3:30pm – **Very basic tour of NJH** (Kara Lukin)
- 3:30 – 4:00pm – **Tea Time** – meet part of the immunology crowd (Goodman 5th Fl. Lobby)

Tuesday June 12th (J106 – Molly Blank 8.30-12.30, K522 Goodman 1.30-5pm)

- 9:00 – 10:00am – **What topic(s) do you need laboratory exercise(s) to help illustrate the content for your students? What labs are your favorites?** (Kara Lukin)
- 10:00 – 11:30pm – **Using pipets, centrifuges, etc and cell counting** (Kara Lukin, K516/504)
- 11:30 – 12:20pm – Lunch in the NJH cafeteria
- 12:30 – 1:30pm – **Tour of NJH facilities** (Amy Hoffman, meet at main information desk)
- 1:30 – 2:30pm – **Finish** NIH's Office of Research Integrity "The Lab" (<http://ori.hhs.gov/TheLab/>) and post a comment on ORI's related blog.
- 2:30 – 3:30pm – **Safety training** (Bernard Wolf, Eric Johnson)
- 3:45 – 5:00pm – The sanctity of **Lab notebooks & writing good protocols** (Kara Lukin)

Wednesday June 13th (J105 – Molly Blank 9-11.30)

- 9:00 – 9:45am – **What's in the journal Science for you and your students?** (Kara Lukin)
- 9:45 – 10:30am – **What supplies are available in the "lending library" and how you can use them in the classroom...** (Kara Lukin)
- 10:30 – 11:30pm – **How to give a lab meeting presentation** (Kara Lukin)
- 11:30 – 12:45pm – Lunch in the NJH cafeteria
- 1:00 – 5:00pm – **Get into your labs! Check with labs!!!**

Professional Development Days Schedule for SuRP 2012

Thursday June 14th (BRC 9-11pm, K522 Goodman 11-5pm)

- 9:00 – 11:00pm – **BRC (animal facility) orientation** (Julia Granowski, Neustadt, D103)
- 11:00 – 12:00pm – **Reading/Background on projects/answering questions** (Kara Lukin)
- 12:00 – 1:00pm – Lunch in Goodman K522
- 1:00 – 4:00pm – **Lab time**
- 4:00 – 5:00pm – **Responsible Conduct of Research** – When *shouldn't* data be released into the public domain and other questions of ethics ... (Terry Potter)

Friday June 15th (J103 – Molly Blank 8.30-12pm, K522 Goodman 12-5pm)

- 8:30 – 10:30am – **PCRs and how to make mice with manipulated genomes** (Matt Philips)
- 11:00 – 12:00pm – **AALAS website and other resources for animal use in research** (KL)
- 12:00 – 1:00pm – Lunch in Goodman K522
- 1:00 – 3:00pm – **Intro to Immunology** with hands-on activities (Kara Lukin)
- 3:00 – 4:30pm – **Finish PCR/gels** (Matt Philips) and while your gels run ...
Discussion: How are we doing after the first week? (Kara Lukin)

Friday, June 22th (J103 – Molly Blank 8.30-12, K522 Goodman 12-5pm)

- 8:30 – 10:30am – **B cells and the clonal selection theory** (Katja Aviszus)
- 10:30 – 11:00am – **What type of textbooks does Joy Hakim write?** (Kara Lukin)
- 11:00 – 12:00pm – **Media lecture alternatives & technology for the classroom** (Michael Edwards)
- 12:00 – 1:00pm – Lunch in Goodman K522
- 1:00 – 2:00pm – **Alumnae's action plans and optimization** (Julie Davis and Laura Zarlengo)
- 2:00 – 3:00pm – **Biofilms – How Do Bacteria Really Grow?** (Kara Lukin)
- 3:00 – 4:30pm – **Lab Demo & how it could translate to your classroom – the Japanese method of lesson development** (Kara Lukin)

Friday, June 29th (J103 – Molly Blank 8.30-12, K522 Goodman 12-5pm)

- 8:30 – 10:30am – **MHC molecules and types of T cells** (Kara Lukin)
- 10:30 – 12:00pm – **Workshop: Preparing scientific posters and talks for the Partners in Science conference.** Bring 1) a diagram/figure/sketch you can use for your introduction to the topic, &2) your notes on your research; bring your own computer/ask Kara to borrow a dept. laptop. (Kara Lukin)
- 12:00 – 1:00pm – Lunch in Goodman K522
- 1:00 – 2:00pm – **Science as Storytelling** (Joy Hakim)
- 2:00 – 3:00pm – **Action Plans** – Summarize your research topics and discuss your ideas for transferring the experience into the classroom (Kara Lukin)
- 3:15 – 4:30pm – **How does X-ray crystallography allow us to “see” the electron cloud of an atom and define structures of proteins?** (Matt Philips)

Professional Development Days Schedule for SuRP 2012

Friday, July 6th (J103 – Molly Blank 8.30-1, K522 Goodman 12-5pm)

- 8:30 – 10:00am – **Cell signaling: what is the signal & how do we detect it?** (Matt Philips)
- 10:15 – 11:00am – **How are we doing after the first month? What's your research and how does it relate to everyday life?** (Kara Lukin)
- 11:00 – 12:00pm – **Start your abstract for Partners in Science** (Kara Lukin)
- 12:00 – 1:00pm – Lunch Goodman K522
- 1:00 – 2:00 pm – **Epigenetics – gene regulation beyond DNA** (Brian O'Connor)
- 2:00 – 2:30 pm – **Responsible Conduct in Research Case Study** (Pippa Marrack)
- 2:30 – 4:30pm – **Action Plan preparation and discussion** (Kara Lukin)

Friday, July 13th (K522 Goodman 8.30-4.30pm)

- 8:30 – 10:30am – **Vaccines, immunologic memory and harnessing immunology to reduce the stray pet population** (Mike Munks)
- 10:30 – 11:00pm – **Responsible Conduct in Research Case Study** (Kara Lukin)
- 11:00 – 12:00pm – **Teaching science in a multicultural setting** (Bryan Wee)
- 12:00 – 1:00pm – Lunch
- 1:00 – 3:00pm – **Action Plan preparation** – Present a summary of your project, ideas on translating your research into the classroom. Access to lab. (Kara Lukin)
- 3:30 – 4:30pm – **Demo Lab & discussion: Japanese method of curriculum develop.** (KL)

Friday, July 20th (J103 – Molly Blank 8.30-12pm, K522 Goodman 12-4.30pm)

- 8:30 – 10:15am – **Self-tolerance verse autoimmune disease** (TBA)
- 10:30 – 11:00am – **Responsible Conduct in Research Case Study** (Kara Lukin)
- 11:00 – 12:00pm – **The hygiene hypothesis and old friends** (JJ Cohen)
- 12:00 – 1:00pm – Lunch
- 1:00 – 3:00pm – **Strength Finder 2.0 – Identifying and using your strengths** (Judy White)
- 3:00 – 4:30pm – **Poster/Talk Action Plan preparation** lab access if needed. (Kara Lukin)

Friday, July 27nd (J103 – Molly Blank 8.30-12pm, K522 Goodman 12-4.30pm)

- 8:30 – 11:00am – **Action Plans** (Kara Lukin)
- 11:00 – 12:00pm – **Open topic in immunology** (TBA)
- 11:30 – 1:30pm – Long Lunch (Location TBA)
- 1:30 – 4:30pm – **Poster/Talk preparation and Finalizing Action Plans**
(Kara Lukin, ask if you need a laptop)

Aug. 1st and 2nd - COLTT CONFERENCE – Colorado Learning and Teaching with Technology

Professional Development Days Schedule for SuRP 2012

Friday, Aug. 3rd (K522 Goodman all day)

8:30 – 10:30am – **Final presentation of Action Plans and experiments** (Kara Lukin)

11:00 – 12:00pm – **On-line survey** (Library)

12:00 – 1:00pm – Lunch

1:00 – 3:00pm – Summer Research Presentations:

Talk for Partners in Science (PIS) (Chantel)

Poster presentations for PIS (Jessica/Tamara)

3:00 – 4:30pm – **Participant feedback and Wrap up for the summer** (Kara Lukin)