Northern Illinois University

2015

SRDP Faculty Mentor Orientation

Michaela Holtz, Lauren Boddy, Shannon Thomas, & Lauren Anglin
Office of Student Engagement & Experiential Learning
Northern Illinois University
Session Agenda

- Purpose of SROP
- SROP at a glance
- Other summer programs
- Calendar overview
- Program goals & outcomes
- Expectations
- Research Symposium
- Dates & deadlines
- Resources
Undergraduate Research and Key Cognitive Strategies

- Opportunity to put classroom knowledge into practice
- Chance for students to better understand their discipline
- Stimulation of creative & critical thinking
- Professional development opportunities
- Chance to participate in new discoveries
- Enhanced ability to understand the philosophy of life-long learning
- Ability to learn more independently
Purpose of SROP

- Created to promote access to undergraduate research during the summer months for NIU students
- Prior to SROP, no formal summer research at NIU
  - OSEEL mission to fill in gaps and create research pipeline
SROP at a Glance

- 9 students
- 4 colleges, 8 majors
  - CLAS
    - Chemistry
    - Biochemistry
    - Sociology
    - Psychology
  - CEET
    - Mechanical Engineering
  - COB
    - Business Administration
  - CVPA
    - Visual Communications/Photography
Continuum of Research Proposal Designs

Faculty-Initiated Project
- More developmental
- Stronger mentoring component

Faculty and Student Directed Project
- Mutual investment
- New inquiry

Student-Initiated Project
- Strong student development
- Demonstrated cognitive readiness
2014 Projects

Cristina Alvarez Moreno, Electrical Engineering
_Ultracapacitors and Energy Storage_

Shawn Horvatic, Computer Science
_Semi-Automatic Analysis of Neuronal Dynamic Recording_

Guadalupe Lopez, Psychology
_Psychological well-being and acculturation of undocumented college students_

Kyle Mondron, Chemistry
_Using engineered genetic fusions to modify green fluorescent protein’s biophysical properties_

Anthony Roberts, Electrical Engineering
_Structural Differentiation of Common Bacteria Using Impedance Spectroscopy_

Maria Senf, Psychology
_Judgment Bias in Evaluative situations_

Megan Sieg, Biology & Psychology
_An Elephant Never Forgets…but What About a Rat? An Examination of Memories Formed After Selective Cholinergic Lesions of the Hippocampus_

Sarah Trygstad, Community Leadership and Civic Engagement
_Bookshelves and Balance Sheets: An Analysis of Public Library Funding in Illinois_

Giulia Zanini, Psychology
_Cognitive and Affective Factors that Predict Obesity in 9-1-1 Telecommunicators_
• NIU Latino Oral History Project (Director: Kristin Huffine) – 4 students
• McKearn Fellows Program
  – Explores research and artistry, leadership, and civic, social and global engagement.
  – 10 students
• Honors Scholars Program
  – Full-time summer research for Honors capstone
  – $4,500 in funding
**SRQP Goals & Outcomes**

- Engage students in faculty-mentored research
- Provide a positive learning environment through hands-on experience
- Introduce students to the process of research in their field
  - Including proposal writing, literature reviews, reading and writing journal articles, and effective peer review
- Give students the opportunity to meet other driven and determined young people
- Have students present at the Summer Research Symposium
SROP Mentor Expectations

• Meet with student regularly and create plan to complete project
• Clearly communicate your expectations
• Assist student with identifying research articles and related resources
• Provide honest, encouraging feedback about progress
• Assist the student with preparation for presentation
• Attend the Summer Research Symposium on August 7
• Notify OSEEL staff of any problems
SROP Student Expectations

• Participate with faculty mentor to develop, understand, and complete a research or artistry project
• Spend 40+ hours per week working to complete project and SROP requirements
• Participate in all programming scheduled by OSEEL
• Notify faculty mentor, program coordinator AND OSEEL of any change in research focus
• Immediately address personal difficulties that arise during research experience with the OSEEL staff as problems arise
Summer Research Symposium

- All students will present at the Summer Research Symposium on Friday, August 7
- Oral or poster presentations (Can do both)
- Tentatively in Altgeld Hall
- 9:00AM to 2:00PM
# Calendar Overview

<table>
<thead>
<tr>
<th></th>
<th>Sunday</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Saturday</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:00am</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7:30am</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8:00am</td>
<td></td>
<td></td>
<td></td>
<td>Breakfast</td>
<td>Breakfast</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8:30am</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9:00am</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9:30am</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10:00am</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10:30am</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11:00am</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11:30am</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12:00pm</td>
<td></td>
<td></td>
<td></td>
<td>Lunch</td>
<td>Lunch</td>
<td>Lunch</td>
<td></td>
</tr>
<tr>
<td>12:30pm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1:00pm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1:30pm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2:00pm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2:30pm</td>
<td></td>
<td></td>
<td></td>
<td>Research</td>
<td>Research</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3:00pm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3:30pm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4:00pm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4:30pm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5:00pm</td>
<td>Dinner</td>
<td></td>
<td></td>
<td>Dinner</td>
<td>Dinner</td>
<td>Dinner</td>
<td></td>
</tr>
<tr>
<td>5:30pm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6:00pm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6:30pm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7:00pm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7:30pm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
WEEK 1 – Proposal Writing Boot Camp (June 15-19)

- June 14
  - Move in
  - Welcome dinner

- Topics to cover:
  - Orientation to SROP
  - Proposal writing workshop – Developing a question
  - Proposal writing workshop - Methods, justification, outcomes, and timeline
  - Library skills workshop
  - Source workshop
  - Residence Hall Program
  - RCR Workshop
  - One-on-one meetings

**Final Proposal Due by 4:30pm**

Geocaching challenge?

**Blog Post #1 due**
Other Summer Workshops

• Leadership Academy
• Ethics
• Interviewing skills
• Graduate school preparation
• Poster/oral presentation preparation
• Résumé/CV work
• Mock symposium
Other SROP Activities & Ideas

- KishHealth
- Field Museum/Fermilab
- Architecture tour/Arts club (NIU Alumni Association)
Responsible Conduct in Research Mentoring is an online training module for faculty engaged in research mentoring.
“Behind every successful person, there is one elementary truth: somewhere, somehow, someone cared about their growth and development. This person was their mentor”

Contact Information

Office of Student Engagement & Experiential Learning
Altgeld 100
815-753-8154
ugresearch@niu.edu
www.niu.edu/engagedlearning

Get involved in research and the avenues to discovery are endless!
Questions?