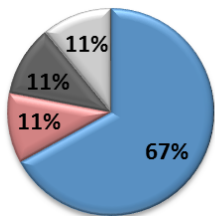## PROJECT COMPONENTS

- **Solar Energy-Water-Environment Nexus Research (Goal 1)**
- **Diversity (Goal 2)**
- **Workforce Development (Goal 3)**
- **External Engagement (Goal 4)**
- **Cyberinfrastructure Development**

Summer UROP is a paid opportunity for NSHE undergraduates at PUIs to gain research experience and receive mentoring during the summer.

### Objectives: Increase students'
- Ability to conceptualize scientific research
- Career-related and professional skills
- Career interests in STEM

**Students' interest in doing more undergraduate research**



- 67% Extremely likely
- 11% Very likely
- 11% Not likely
- 11% I would, however, I graduate soon

This newsletter presents results of Summer UROP, Bright Stars, and the UROP Application and CUR Workshops.

This scale is used throughout the newsletter to show whether means can be considered to trend towards positive or negative.

| | |
|---|---|
| **Excellent result** | 4.21 – 5.00 |
| **Very good result** | 3.41 – 4.20 |
| **Good result** | 2.61 – 3.40 |
| **Fair result** | 1.81 – 2.60 |
| **Poor result** | 1.00 – 1.80 |

## Summer Undergraduate Research Opportunity Program (UROP)

### Findings
- All sessions rated **extremely useful.**
- **Statistically significant gains** for 5/6 program objectives.
- **88**% **extremely** or **very likely** to do more research.

### Recommendations
- Recruit female and URM students.
- Require attendance at workshops.
- Increase the time students spend with a mentor and execute a research project.

### Student comments
- *"This experience was wonderful in that it greatly helped to improve my ability to conduct research and share the findings and results with a variety of people from different backgrounds."*

- *"I really enjoyed learning how to write peer reviewed papers."*

## Bright Stars September 10, 2014

The Bright Stars outreach program provides information to underrepresented minority and female students from primarily undergraduate institutions about STEM, scholarships, and research opportunities.
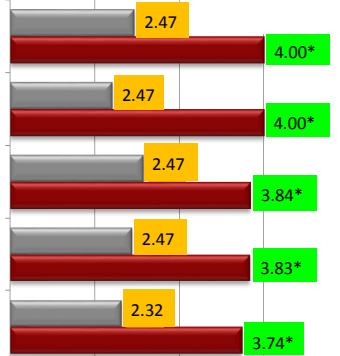


| | |
|---|---|
| Knowledge about EPSoR programs & opportunities | 2.47 / 4.00* |
| Understanding of who to contact with questions | 2.47 / 4.00* |
| Understanding of my fit within the program | 2.47 / 3.84* |
| Knowledge of undergraduate research opportunities | 2.47 / 3.83* |
| Understanding of the type of support provided by EPSCoR faculty and staff | 2.32 / 3.74* |

### Objectives
- Increase students' contacts with EPSCoR staff and faculty.
- Increase knowledge of available support.
- Increase engagement of undergraduate students in research opportunities.
- Increase students' knowledge of EPSCoR programs and opportunities.
- Increase students' understanding of how their interests fit within EPSCoR programs.

### Findings
- Sessions rated as **very** to **extremely useful**.
- Participants were **very** or **completely satisfied** with all logistical aspects.
- **Statistically significant gains** for all program and career objectives.

### Recommendations
- Increase research and scholarship advertisements.
- Reduce introductory presentations to focus on student research.
- Provide list of upcoming EPSCoR programs and contact information.

### Comments
- *"It's great for the students to present here!"*
- *"It was useful to hear about programs provided to students."*
- *"Learning about other science projects was enlightening."*
- *"All the information was valuable."*
- *"Overall, really good job!"*

NSHE's Sponsored Programs Office and EPSCoR held a workshop at UNLV and UNR over two days to assist potential Undergraduate Research Opportunity Program (UROP) applicants write their applications for the program.

**Objectives—To increase students' knowledge of**
- Nevada EPSCoR staff and faculty contacts
- EPSCoR programs and opportunities
- UROP/undergraduate research opportunities
- Proposal writing
- Application writing

| Activity | UNLV (n=7) | UNR (n=9) |
|---|---|---|
| Proposal Writing | 4.50 | 4.56 |
| (UROP) Information | 5.00 | 4.00 |
| Application Writing Tips | 4.71 | 4.67 |
| Additional Resources Available | 4.71 | 4.56 |

**Findings**
- Sessions rated **very** or **extremely useful.**
- **Statistically significant gains** for three of five program objectives at UNLV.

**Recommendations**
- Monitor full completion of evaluations.
- Recruit more URMs.
- Present more information on application writing.

**Comments on what was useful**
- *"Information was provided in a succinct and concise manner."*
- *"The PowerPoint and interactions were really interesting."*
- *"Found the presentation very helpful. Nice to get peer feedback."*

**Comments on overall learning**
- *"Understanding more precisely what is expected in the application and where I can get more information."*
- *"Knowledge on research basics and proposal writings."*

## Council for Undergraduate Research (CUR) Workshop September 25-27, 2014

A joint workshop program of NSHE and the Council for Undergraduate Research (CUR) held in Reno, Nevada to focus on growing and supporting undergraduate research programs at NSHE institutions.

**Goals**
- **Goal 1**: Highlight successful undergraduate research programs and models
- **Goal 2**: Increase participation and funding for undergraduate research
- **Goal 3**: Develop a campus/state/consortia culture that supports undergraduate research
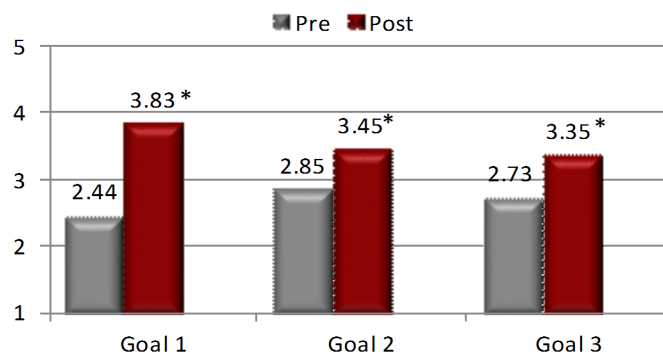
**CUR Workshop Recommendations**
- Recruit URMs for available NSHE positions connected to undergraduate research.
- Ensure CUR tailors their presentations to NSHE institutions and eliminates repetitive elements.

**Findings**
- Sessions rated **slightly** to **very useful.**
- **Statistically significant gains** for all three goals.

**Impacts**

Pre / Post

Goal 1: Pre 2.44, Post 3.83 *
Goal 2: Pre 2.85, Post 3.45 *
Goal 3: Pre 2.73, Post 3.35 *

Overall ratings of all statements

### OVERALL EPSCoR PROJECT RECOMMENDATIONS
- Increasing project diversity should be a priority for all project members.
- Teams should work together to increase project activity participation.
- Ensure participants complete all evaluation sections.
- Require attendance at all UROP workshops.
- Delineate presentation time and stay on schedule.
- Plan and coordinate program agendas to reduce redundancy in presentations.

### UPCOMING EVALUATION ACTIVITIES
- Reflective pre/post evaluation of NERDS (Nevada Educators Really Doing Solar)
- Evaluation of GEAR UP (Gaining Early Awareness and Readiness for Undergraduate Programs) Peer Mentoring
- Analyze PSAT (Program Sustainability Assessment Tool) results
- Evaluate IWGs (Innovation Working Groups)

## SMARTSTART
EVALUATION AND RESEARCH