

VOLUME 5 QUARTER 3

# NANOGRAV-PIRE , NANOGRAV-PIRE



SMARTSTART EVALUATION NEWSLETTER

March 2015

# **PROJECT GOALS**

Goal 1: Knowledge

Goal 2: Education

UVirginia, 5

Arecibo. 1

NASA, 1

Goal 3: Partnerships

Goal 4: Institutional Capacity

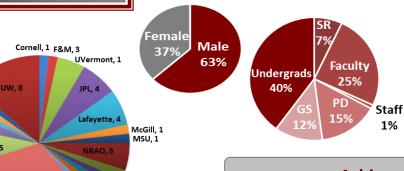
Goal 5: Workforce Development

WVU, 19

This newsletter presents findings from the Spring Science Meeting, Science Seminar Series, and the PIRE Project Sustainability Assessment.

#### 2015 NANOGrav-PIRE Spring Science Meeting

Sixty attendees participated in the Spring Science meeting held February 2-6, 2015, at the Arecibo Observatory in Puerto Rico.



UM, 1

Oberlin, 1

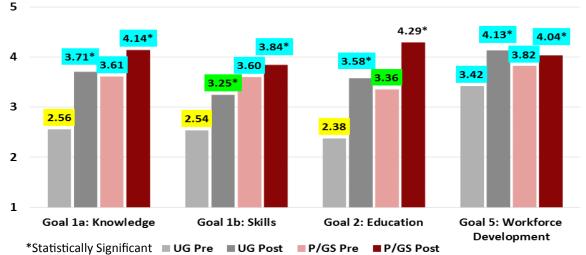
- Very to extremely satisfied with nearly all meeting logistics.
- Working group breakout sessions received the highest ratings.
- Suggestions include new topics (ISM, EM counterparts and radio telescope theory) and a larger venue.

### **Achievement of Project Goals**

Postdocs/graduate students (P/GS), and undergraduates (UG) made significant gains in all goal areas.

# "Really Good Meeting! One of the best we've had so far."





#### **Student Sessions (Feb 2-3)**

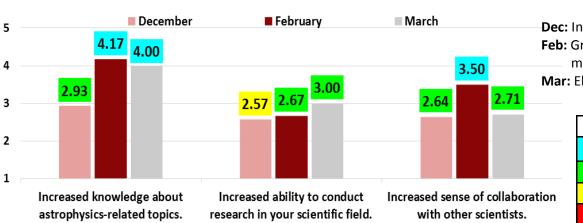
Student sessions took place during the two days preceding the full-group meeting.

- Telescope tour was the Highlight of the trip!
- Pulsar activities were interesting, but too difficult for students' level of knowledge.
- More introduction to difficult topics and smaller groups for telescope observing.
- Meeting primer & survival guide and pulsar timing workshop rated extremely useful.



#### Science Seminar Series (Dec 2014-Mar 2015)

Three science seminars occurred from December 2014 - March 2015. Participants rated knowledge of astrophysics-related topics, the highest across the three months. The February seminar was rated highest in two of the three areas.



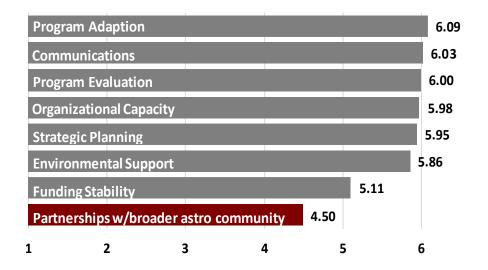
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Sem	ınar	I OD	ıcs
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Dec: Interstellar Medium & MSPs Feb: Gravitational self-force & modeling of binary inspirals Mar: Electromagnetic counterparts

A lot	4.21 - 5.00	
A good amount	3.41 – 4.20	
Somewhat	2.61 – 3.40	
A little	1.81 – 2.60	
None	1.00 - 1.80	

## **PIRE Project Sustainability Assessment**

As the PIRE project comes to a close, NANOGrav leaders (n=16) assessed the potential for sustainability by rating the NANOGrav-PIRE in eight domains. The overall score (5.69) suggests moderate capacity to sustain PIRE activities. Funding stability and partnerships with the broader astronomical community are the primary source of weakness.



"The collaboration is at a point where it needs to adjust to the growth it has seen, but it has not been able to do that as of yet. It seems to really lack an effective way of reaching the broader community."



#### **Evaluator's Recommendations**

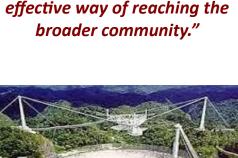


#### **NANOGrav Spring Science Meeting**

- Encourage more senior researchers and graduate students to attend.
- Include brief introductions on all panel presentations to help undergraduates grasp the topics.
- Provide strategies to stay connected after the science meeting.
- Select a larger venue for the Spring Science Meeting.

#### **Science Seminar Series**

- Encourage undergraduates to participate in science seminars.
- Incorporate "pulsar polarization," "algorithms dealing with timing noise," and "potential/expected galaxy formation/structure from GW astronomy" as future science seminar topics.



#### Upcoming Evaluation Activities

- Summative post-survey of project participants
- · Evaluation of science seminars
- Evaluation of IPTA Student Workshop and Science Meeting



