



# Science Community Interface

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# Overview

The Science Community Interface Team is the major point of engagement to the Scientific community. The Community Interface team has under its purview numerous tasks and responsibilities including:

- ALMA Community Day Events
  - Data reduction and proposal preparation events
- ALMA Ambassadors (postdoc training and research grant program)
- ALMA Helpdesk management and oversight
- Contact Scientist support and oversight
- Science Web and ALMA Science Portal Improvements, enhancement and content review
- End user documentation including CASAguides
- Face-to-face visitor support
  - Data reduction visitors (both as individuals and for hosted workshops)
  - Visiting scientists
  - Sabbatical visits
- ALMA science workshop and conference planning
- Coordination with ODI and diversity initiatives and broadening participation
- Coordination with EPO and Science Communication offices
- Student Support Programs

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# Major Initiatives/Recent Results

- **ALMA Ambassadors**

- ALMA Ambassadors Postdoctoral Program is our flagship “Train the trainer” program.
- Postdocs visit Charlottesville for a training workshop to:
  - learn more about the topics covered at ALMA Community Day Events
  - prepare to host an ALMA Community Day Event at their home institution
  - meet and collaborate with the other ALMA Ambassadors – introduced to using “Slack” as a collaborative tool.
  - practice public speaking skills
  - give presentations/present posters on their own research at the NAASC
- ALMA Ambassadors host Community Day Events around the world; this year included Chile and Australia
- Postdocs are awarded a \$10k research and/or travel grant



# 2018 ALMA Ambassadors

## 2018 ALMA Ambassadors (left to right)

Rochester Institute of Technology - Dary Ruiz-Rodriguez  
Stanford University - Ian Czekala  
Universidad Diego Portales - Loreto Barcos  
University of Arizona - Nick Ballering  
University of Arizona - Steve Ertel  
University of Oklahoma - Patrick Sheehan  
Johns Hopkins University - Kate Rowlands  
Australian National University - Katie Jameson  
Northwestern University - Deanne Coppejans  
Carnegie DTM - Meredith McGregor  
University of Arizona - Irene Shivaiei,  
Columbia University - Statia Cook  
University of Iowa - Rui Xue (Not Pictured)



# Major Initiatives/Recent Results

- End User Documentation (CASA Guides)

- NA contributes heavily each year to the development and deployment of the end user documentation
  - New Demographics collection page was deployed off the ALMA Science portal
  - Still riding a delicate balance between too much/too little information/documentation (see ARC Manager Charges)
- For the Cycle 6 call – 1839 proposals were submitted:
  - EU - 785 - 42%
  - NA - 525 - 28%
  - EA - 367 - 20%
  - CL - 106 - 6%
  - OTHER - 56 - 3%

# Major Initiatives/Recent Results

- **End User Documentation (CASA Guides)**
  - CASA Guides underwent a major overhaul this year, especially in preparation for the SISS. These updates included:
    - The main ALMA CASAGuide page was revamped for easier navigation
    - A set of ALMA guides have been identified for ongoing updating with upcoming CASA releases, and currently work in CASA 5.1.1-5
      - these guides span a range of ALMA use cases, from basic calibration/imaging to mosaics, spectral line and polarization guides
    - The CASA simulation guides have also been updated to CASA 5.1.1-5 (by Bjorn Emonts)
    - A new guide on automasking (available in tclean) is being developed and should be added in the next few months
  - All the ALMA guides now use tclean rather than clean.
  - An new “CASA Guide” for the ALMA OT was created for the summer school: [https://casaguides.nrao.edu/index.php/OT\\_tutorial\\_SISS\\_2018](https://casaguides.nrao.edu/index.php/OT_tutorial_SISS_2018)



# Major Initiatives/Recent Results

- **ALMA science workshop and conference planning**
- **Co-Sponsored Two Science workshops:**
  - Magnetic Fields or Turbulence: February 6-9, 2018; National Tsing Hua University, Hsinchu, Taiwan
  - SPF2: Star and Planet Formation in the Southwest: March 12-16, 2018; Oracle, Arizona

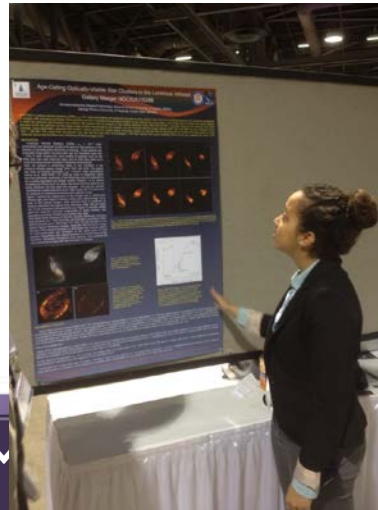


- Upcoming
  - 2019 New Horizons
    - NRC Presentation
  - 2020/2021 - Help?



# Major Initiatives/Recent Results

- Coordination with ODI and diversity initiatives and broadening participation – **NAC Initiative**
- The ODI NAC program had its roots in the NAASC, where the staff continue to be enthusiastically engaged. Staff activities include:
  - The NAC Project Scientist – Aaron Evans (NAASC/UVa staff) who handles most of the summer program development including organizing the weekly meetings and activities
  - Mentors - Dana Balser, Aaron Evans, Jackie Villadsen,
    - (UVA - Phil Arras, Shane Davis, Nitya Kallivayalil, Paul Zivick)



# Major Initiatives/Recent Results

- **Coordination with ODI and diversity initiatives and broadening participation – Practices implemented in hiring and supporting family circumstances**
  - NAASC management strongly encourage and motivate the staff to participate in ODI sponsored events and/or to seek out their individual Broader Impact or community involvement without needing authorization from direct line management.
  - All NAASC hiring committee members are **REQUIRED** to attend ODI sponsored training sessions before serving on any committee – specifically unconscious bias.
  - All NAASC leadership are encouraged to attend all ODI sponsored events and workshops and to seek out additional training.
  - NAASC management has taking leading roles in accommodating any and all family circumstances both within the office or in some cases arranging for remote work or telecommuting.
  - All NAASC staff are encouraged to participate in sponsored events as part of the NRAO wellness or Charlottesville Recreation Association either within the office or in local communities.

# Major Initiatives/Recent Results

- **Coordination with ODI and diversity initiatives and broadening participation – Opportunities for feedback and in supporting safe space areas**
  - NAASC management and leadership all have “open door” policies especially when it comes to personnel issues.
  - Many NAASC staff member offices are designated “safe space”.
    - The NAASC is a major corporate sponsor of the International Symposium on Molecular Spectroscopy and sponsors new initiatives including the LGBTQIA+ reception.
  - One member of the NAASC staff is a designated Ombuds for the Observatory





# Major Initiatives/Recent Results

- **Coordination with ODI and diversity initiatives and broadening participation – Implementation of the Nashville Recommendation in the NAASC**
- The NAASC made a significant contribution at the VIALV conference held in June 2017 in Austin.
- We are working toward the following key take-away messages from the conference including:
  - professional conduct is paramount
  - define, clarify and advertise reporting system
  - encourage a feedback-rich environment
  - putting in place mentoring
  - avoiding over-relying on persons from underrepresented groups for informal requests / emotional work / mentoring
  - pay attention to under representation in leadership groups and committees
  - self-education about barriers and hardship, within and outside the workplace
  - value inclusion work as professional service



# Major Initiatives/Recent Results

- NAASC Participation and Initiatives in ODI - Summary
- Role of the NAASC in the NAC/LSAMP Programs
  - A good start but will continue to get more staff involved in these initiatives.
- Practices implemented in hiring and supporting family circumstances
  - We are always continuing to improve our practices and are committed to serving our staff in the best way possible.
- Opportunities for feedback and in supporting safe space areas
  - The NAASC is committed to ensuring that we are a safe space, and that we are up for the difficult conversations that may need to be had surrounding diversity issues.
- Implementation of the Nashville Recommendation in the NAASC.
  - Just started... although many of the policies and guidelines we have in place now closely align with the Nashville Recommendations.

# User-Facing Issues

- Publication rate of North American PI.
  - There is still some concern about the rate/volume that NA are publishing ALMA data. There are a lot of possible causes for this and we welcome any/all recommendations.
- Goals of the ALMA Community Day events
  - The ALMA Ambassador program is very strong and is in high demand. However, what is the next, long term goal for community events? That is, should we continue to target a community that is not proposing? Again, recommendations are welcome.

# Response to UC 2017

- The ANASAC Recommends that...
  - ...student Observing Support (SOS) PIs are surveyed to determine whether it would be beneficial to make the spending more flexible, perhaps allowing for funds to be spent on tuition. ANASAC also recommends that PIs are asked to submit brief reports on the outcome of the project once SOS funds are spent (Section 2.1.1).
    - Determining how the funds are allocated for more flexible spending is currently being investigated. Issues including how much overhead universities charge for the award are also always being negotiated because the money is supposed to be spent on student support and not paying university fees. As more flexibility arises, we will make that available to the PIs. Starting this year, awardees are required to submit reports on how the funds are allocated, what students and what projects were supported.
  - ...JAO gather better demographics on PIs. This could be done by reminding people to update their demographics profile the next time they log in. This is crucial to assess e.g. the origin of gender disparities in proposal outcomes (Section 2.1.2).
    - We thank the ANASAC for the recommendation. Currently a user is reminded yearly to update their demographic information. We are looking into making this a requirement before proposal submission. We are also looking to expanding the ALMA demographics information in order to include capturing more fields such as gender.

# Next 180 Days/Future

- Community Science Outreach
  - May – closeout of the ALMA Ambassador program
  - May – Synthesis Imaging Summer School – 16 – 23 May, Socorro, NM
  - Preparations for an ALMA Special Session at the 2019 Jan AAS
  - June – International Symposium on Molecular Spectroscopy (Corporate Sponsor)
  - July – Astrochemistry – Past, Present and Future – 10 – 13 July, Pasadena, CA
  - 05 Aug – 07 Sept – PI review of Phase 2 Scheduling Blocks; Bulk generation of SBs by P2G
  - 01 October – Start of Cycle 6
  - November - Cycle 7 documentation review and initial documentation preparation.

# Summary

- The Community Interface Team has several new initiatives and challenges facing it this year.
- Recent hires will help to solidify the near and long term strategic goals.
- Always looking for new and innovative ways to engage the scientific community
  - recently approached by JWST about our Ambassadors Program
- Feedback is always welcome on how to approach these issues and new initiatives. There remains a delicate balance between resource allocation and new programs.





[science.nrao.edu](http://science.nrao.edu)  
[public.nrao.edu](http://public.nrao.edu)  
[ngvla.nrao.edu](http://ngvla.nrao.edu)

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# Supplemental Slides

# SOS and Student Programs

- SOS program supports grad or undergrad students at their home universities working on accepted ALMA or VLA projects
- ALMA and VLA SOS programs operated separately
- Funding for ALMA SOS: \$350k per year
- Program currently supports about 12 ALMA students per year, providing up to \$35k for each award
- Cycle 5: We received 35 applications of exceptional quality; 12 funded
- In 2017 we completed a survey of recent SOS awardees including ALMA Cycle 4 and 5, to evaluate and improve the effectiveness of the program
  - PI's see the program as a critical component to building ALMA's future
  - Desire more freedom to allocate funds between stipend/travel

# NRAO Reber Predoctoral Program

- Reber program funds and supports grad students in the final stages of their Ph.D. thesis to work with an NRAO advisor in either CV or SO
- Appointments can be up to 2 years with opportunity for extensions in certain circumstances
- NRAO typically supports about 10 Reber Doctoral Fellows at any one time
- Currently there are 9 Rebers (5 are supported by the NAASC)
  - Five appointments are scheduled to conclude in 2018
- Three new appointments were accepted for September 2018 start
  - Internal committee reviews applications and determined that all 3 applications this cycle were worthy of the award

# NRAO/GBO Summer Student Program

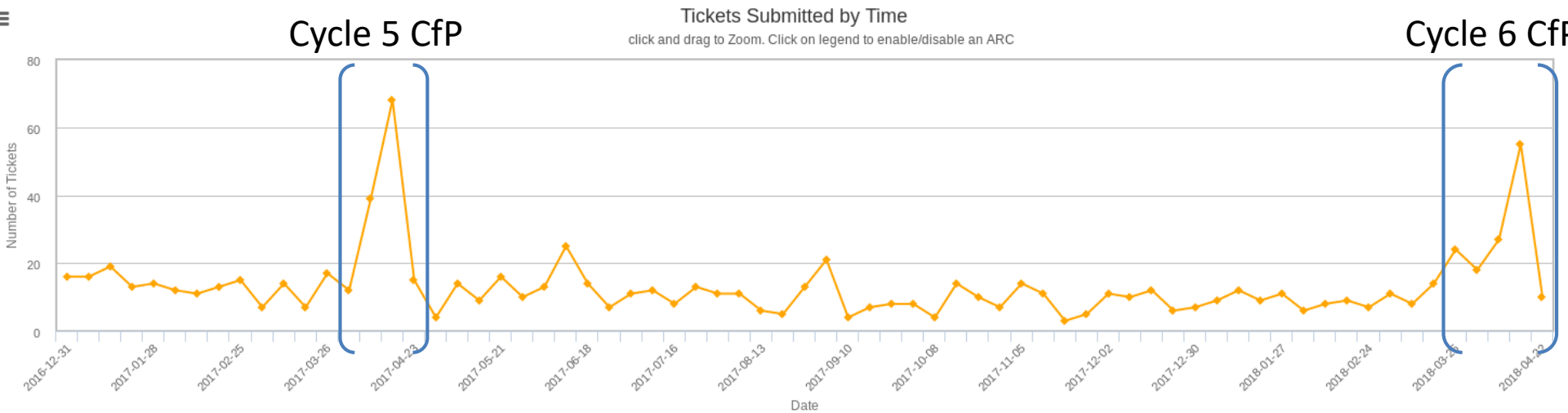
- NRAO/GBO received 231 applications for its 2018 summer programs
  - REU, NAC, PING, NRAO interns
- We will host 31 students across the 3 sites (CV-ER, SO, GB), plus 2 externally-funded LSAMP students at CDL
- Students work on research projects related to astronomy, engineering, or CS and get to participate in education and career-building activities throughout the summer
- Successful projects get an opportunity to present at winter AAS



# Helpdesk

## North American ALMA Helpdesk

- We received 670 tickets from October 2016 to October 2017
- From Jan 1 2016 to April 21, 2017 we had a total of 854 tickets, averaging 13 tickets a week
- The number of tickets peak the week of the Call for Proposals deadline
  - For cycle 5 the peak in NA was 68
  - For cycle 6 the peak in NA was 58
- The average first response time was within 24 hours



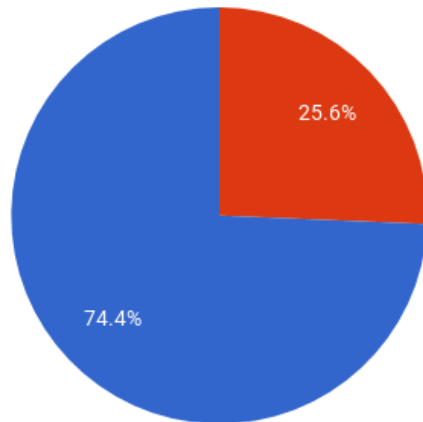
# Helpdesk

## North American ALMA Helpdesk

- 74.4% of (non-emergency) NA Helpdesk questions from January 2017 to April 2018 were answered by DAs.
- During the Cycle 6 Call for Proposals, March 20 to April 19, 2018, 67% of NA Helpdesk were answered by DAs

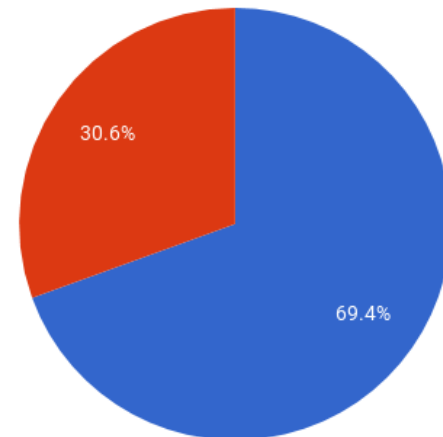
Percentage of Tickets Handeled by NA Staff  
Jan 2017 to April 2018

● Scientists  
● Data Analysts



Total Handeled by NA, all NA Dept+PSE March 20- April 19,18

● DAs  
● Scientists



# Face-to-face Visitor Program

- Data Reduction Visitors, or Face-2-Face visitors, are ALMA users coming to NAASC for a week or less for expert assistance with obtaining the optimum results from their data.
- This past year, starting May 2017, we have had 26 visitors.
- The most common requests during visits includes:
  - A walkthrough of how the pipeline calibrates the data
  - How to get the best images with CASA
  - Data combination
- CASA guides and the ALMA Helpdesk knowledge base are being updated to include some of the common questions that are answered during F2F visits.