

**Evaluation of the California Institute of  
Technology (Caltech)  
Global Relay of Observatories Watching  
Transients Happen (GROWTH)  
Partnership for International Research and  
Education (PIRE)  
2018 Science Conference**

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Prepared by

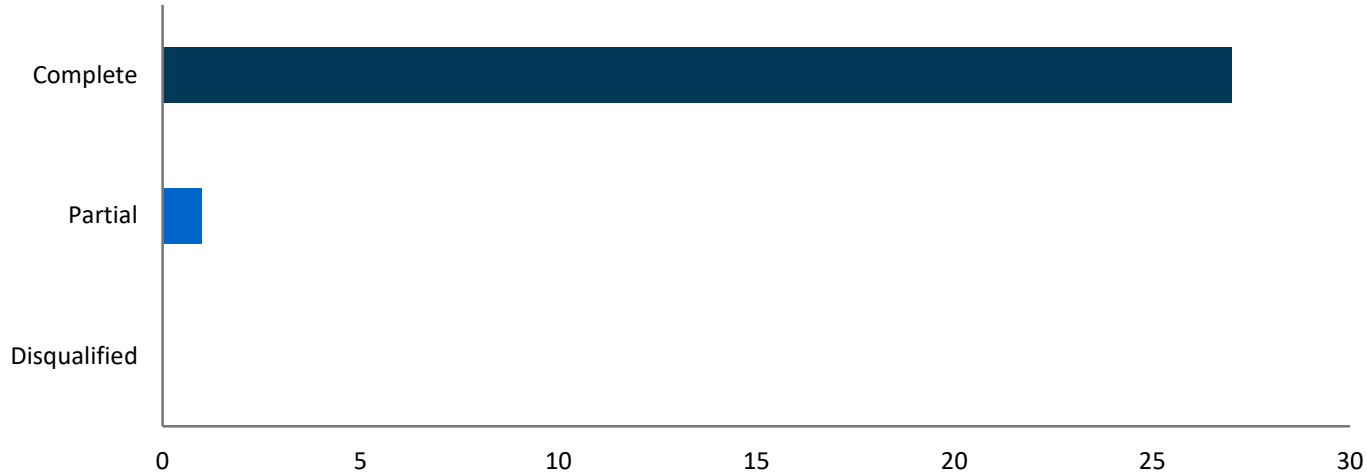
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# Response Statistics



	Count	Percent
Complete	27	96
Partial	1	4
Disqualified	0	0
Totals	28	

Note that, for open-ended questions, respondents might mention more than one theme, and evaluators coded their responses in multiple ways; therefore, the total number of responses for themes related to each question might exceed the total number of respondents.

Not all respondents answered the survey completely, therefore the number of respondents varies throughout.

# What is your role as it relates to the GROWTH PIRE Program?

Value		Percent	Count
Principal Investigator/Co-Principal Investigator		11%	3
Co-Investigators		18%	5
Faculty/Researcher (not a Co-Investigator)		18%	5
Postdoctoral Fellow		21%	6
Graduate Student		25%	7
Other, please specify:		7%	2
<b>Totals</b>			28

Other, please specify:	Count
project student	1
undergraduate student	1
Totals	2

Please rate the usefulness of the following sessions on a scale from not at all useful to extremely useful.

Day 1 Sessions	Not at all useful		Slightly useful		Somewhat useful		Very useful		Extremely useful		Did not attend		Responses
	Count	Row %	Count	Row %	Count	Row %	Count	Row %	Count	Row %	Count	Row %	Count
Session 1: Welcome [9:30-10:00] (Varun Bhalerao, Mansi Kasliwal)	0	0%	0	0%	1	4%	14	52%	10	37%	2	7%	27
Session 2: Telescope Network [10:00-13:00] (Shubham Srivastav, Atharva Patil, Harsh Kuman, Ryosuke Itoh, Chris Copperwheat, Takashi Horiuchi, Nobu Kawai, Yoichi Yatsu)	0	0%	0	0%	1	4%	12	43%	13	46%	2	7%	28
Session 3: EMGW [14:30-15:50] (Tomas Ahumada, Virginia Cunningham, Divita Saraogi, Srinath Reddy, Igor Andreoni)	0	0%	0	0%	1	4%	15	54%	10	36%	2	7%	28
Session 4: EMGW [16:20-17:40] (Poonam Chnadra, Leo Singer, Varun Bhalerao, Shreya Anand)	0	0%	0	0%	1	4%	11	39%	14	50%	2	7%	28

Day 2 Sessions	Not at all useful		Slightly useful		Somewhat useful		Very useful		Extremely useful		Did not attend		Responses
	Count	Row %	Count	Row %	Count	Row %	Count	Row %	Count	Row %	Count	Row %	Count
Session 5: Asteroids [9:00-9:40] (Tom Prince, Ashish Mahabal)	0	0%	2	7%	9	32%	13	46%	4	14%	0	0%	28
Session 6: Supernovae [9:40-12:00] (Kishalay De, Christopher Fremling, Avinash Singh, Robert Quimby, Gadiyara Anupama, Brajesh Kumar)	0	0%	0	0%	2	7%	13	46%	13	46%	0	0%	28
Session 7: Galactic Science [12:00-13:00] (Rupak Roy, Chien-De Lee, Katsuhiro Murata)	0	0%	0	0%	10	37%	13	48%	4	15%	0	0%	27
Session 8: GROWTH SURF Presentations [14:30-15:00] (Alison Duck, Meghna Sitaram, Sherry Liang, Mark Poe)	1	4%	3	11%	12	43%	9	32%	2	7%	1	4%	28

## For sessions you rated as very useful or extremely useful, what made them effective?

**Matched personal research interest**

(6 respondents)

**Learning what other GROWTH members are doing**

(6 respondents)

**Presentations were of good quality/content**

(5 respondents)

**Exposure to other research topics**

(4 respondents)

**Young researchers given experience to present their work**

(2 respondents)

**Expand/further develop personal research**

(1 respondent)

**Networking opportunity with presenters**

(2 respondents)

**There was a variety of topics**

(1 respondent)

**Learned presentation skills by watching others present**

(1 respondent)

## For sessions you rated as lower than somewhat useful, what could be done to improve them?

**Improve audio and video quality of student presentations**



(4 respondents)

**Focus more on collaboration opportunities, not just the presenter's work**

(1 respondent)

One respondent did not provide a suggestion for improvement, but noted that the session content was not related to his/her research. Two additional respondents did not provide suggestions.

# Are you a graduate student or a postdoc who presented at the conference?

Value		Percent	Count
Yes		92%	11
No		8%	1
<b>Totals</b>			12

For graduate students and postdocs, in what ways was presenting during one of these sessions beneficial to you?

**Given the opportunity to share research with the scientific community and possible collaborators**

(4 respondents)

**Gained or refined presentation skills**

(3 respondents)

**Given the opportunity to share research results and gather feedback from GROWTH community**

(2 respondents)

Please identify the conference's effectiveness in achieving the following, from not at all effective to extremely effective.



	Not at all effective		Slightly effective		Somewhat effective		Very effective		Extremely effective		Responses
	Count	Row %	Count	Row %	Count	Row %	Count	Row %	Count	Row %	Count
Sharing research findings and outcomes across the GROWTH network	0	0%	0	0%	2	7%	17	63%	8	30%	27
Providing a platform for GROWTH students and postdocs to present	0	0%	0	0%	3	11%	10	37%	14	52%	27
Stimulating new collaborations and discussions	0	0%	0	0%	6	22%	14	52%	7	26%	27
Planning for upcoming GROWTH activities	0	0%	0	0%	6	22%	15	56%	6	22%	27
Sharing education outcomes and ideas	0	0%	2	7%	6	22%	16	59%	3	11%	27



Please rate your satisfaction with the logistical aspects of this meeting from very unsatisfied to very satisfied.

	Very unsatisfied		Unsatisfied		Neither unsatisfied/satisfied		Satisfied		Very satisfied		Responses
	Count	Row %	Count	Row %	Count	Row %	Count	Row %	Count	Row %	Count
Registration process (pre-conference information, ease of registration)	0	0%	2	7%	2	7%	9	32%	15	54%	28
Conference agenda (clear purpose, balanced, meaningful, useful)	0	0%	0	0%	1	4%	16	57%	11	39%	28
Conference session management (focused, well prepared)	0	0%	0	0%	2	7%	10	36%	16	57%	28
Atmosphere (friendly, supportive, promoted collaboration)	0	0%	0	0%	1	4%	6	21%	21	75%	28
Accommodations (physical comforts, facilities, safety, location)	0	0%	0	0%	5	18%	6	21%	17	61%	28
Food (quality, dietary needs, preferences, freshness)	0	0%	0	0%	2	7%	10	36%	16	57%	28
Organization (sessions started/ended on time, equipment was ready)	0	0%	0	0%	2	7%	15	54%	11	39%	28

# Do you support the idea of having different GROWTH partners host the annual meeting?

Value		Percent	Count
Yes		96%	26
No		4%	1
<b>Totals</b>			27

# Do you feel that the GROWTH conference is a successful forum for project members to communicate among each other?

All 27 respondents who provided feedback regarding this item shared that the GROWTH conference is a successful forum for project members to communicate with each other. In fact, one respondent shared, “There’s no better forum than a face-to-face annual meeting to discuss ideas, wrap up work, and start new projects. I’ve found each GROWTH conference highly useful!”

## Do you have suggestions as to how GROWTH leads can improve this communication?

**Include more open discussion sessions (e.g., town hall)**  
(3 respondents)

**More social media communication (did not specify further)**  
(1 respondent)

**Offer ways to keep in touch after the meeting**  
(1 respondent)

**Encourage more interaction among participants not considered close collaborators**  
(1 respondent)

**Holding interim meetings**  
(1 respondent)

**Local meeting with GROWTH countries (did not specify further)**  
(1 respondent)

**Include workshop or hands-on module**  
(1 respondent)

**Encourage more members to attend**  
(1 respondent)

- Seven respondents indicated they did not have suggestions, with one respondent sharing “everything was well managed.”

After this conference, do you feel like you want to increase your participation in the project? If yes, please describe how and what you would like to do.

**Yes, plan to increase participation (e.g., in new projects)**  
(7 respondents)

**Yes, will use different avenues to network/collaborate to expand work (e.g., contribute to obtaining data and papers more proactively, present work if at a partner institution for graduate studies)**  
(4 respondents)

**Yes, by participating more in observations**  
(2 respondents)

**Yes, with the India telescope**  
(2 respondents)

**Yes, by participating in internships**  
(2 respondents)

**Would like to, but have time constraints**  
(2 respondents)

**Do not plan to increase participation**  
(2 respondents)

**Content with current participation level**  
(2 respondents)

# Do you have any suggestions for how to further involve undergraduate and graduate students in the meeting?

## **More funding (travel)**

(4 respondents)

## **Highlight the advantages of networking**

(1 respondent)

## **Schedule the conference so it does not conflict with the school year**

(1 respondent)

## **Allow different universities to host the conference**

(1 respondent)

## **Remote tutoring/supervision for projects**

(1 respondent)

## **Already considerable amount of student participation**

(1 respondent)

## **Include GROWTH SURF students**

(1 respondent)

## **Include more student presentations**

(1 respondent)

## **Extra days/more talks**

(1 respondent)

## **Regular winter/summer school but with online participation**


(1 respondent)

## **Small interactive projects during the meeting**


(1 respondent)

- One respondent stated he/she liked the student sessions, while six respondents stated they do not have suggestions.

If a graduate student, did you feel comfortable participating in the meeting, such as sharing comments?

Value		Percent	Count
Yes		100%	7
<b>Totals</b>			7

If a graduate student, were you able to meet new research colleagues at this meeting?

Value		Percent	Count
Yes		100%	7
<b>Totals</b>			7

# Do you have any suggestions for how project leads could help to facilitate networking at future meetings?

## **Group discussion sessions regarding upcoming projects**

(2 respondents)

## **More open discussion sessions**

(1 respondent)

## **Project leads already do great job facilitating networking**

(2 respondents)

## **Upload talks before the meeting**

(1 respondent)

## **More online discussions**

(1 respondent)

- Eleven respondents stated they did not have suggestions and one respondent provided a positive comment.



# Do you have any suggestions for how to improve the conference for next year?

**Fix communication between participants and program organizers**

(1 respondent)

**Finalize and distribute the program/schedule earlier**

(1 respondent)

**Encourage more members to attend and speak**

(1 respondent)

**Provide more time for discussion other than the sessions**

(1 respondent)

**Include an ice-breaker session to encourage more communication**

(1 respondent)

**Use a different location, closer for US attendees**

(1 respondents)

**Hold the conference during the summer (not busy)**

(1 respondent)

**Use more advertising online and at the universities**

(1 respondent)

- Twelve respondents stated they did not have suggestions, with one respondent sharing he/she enjoyed the conference and gained a lot.

Is there anything else you would like to share with the project administration or coordinators of the conference?

**General positive comments**

(4 respondents)

**Access to presentation slides**

(1 respondent)

**Nothing else to share**

(13 respondents)

# Findings

Overall, all sessions were rated at least somewhat useful by most respondents. The sessions on Day 1 were rated as more useful than the Day 2 sessions. The GROWTH SURF session on Day 2 was rated as the least useful session. Respondents commented that this session could have been improved by increasing the quality of the audio recordings of the student presentations.

Most respondents felt that the conference was very or extremely effective in achieving all goals, especially providing graduate students and postdocs a platform to present. Of the 13 graduate students and postdocs who attended the conference, 11 presented during the conference. These respondents noted that presenting was beneficial because it allowed them to share their interests with the community and possible collaborators, share results and gather feedback, and gain presentation skills. Of the 7 graduate students, all felt comfortable participating during the meeting and were able to meet new research colleagues. Respondents were asked how GROWTH staff could increase the participation of the undergraduate students during the conference. Of the 14 respondents, four suggested that the undergraduate students be provided funding for travel to the conferences. The remaining 10 each had different suggestions for how to increase undergraduate participation.

Respondents felt that the conference was very effective in stimulating new collaborations and discussions. Twenty-seven respondents felt that the GROWTH conference is a successful forum for project members to communicate with each other. Respondents also noted that the communication could be improved by allowing for more opportunities to have discussions during the conference.

Of 23 respondents, 17 indicated that they planned to increase their participation in the project. For example, four noted that they planned to collaborate and network more with others to expand their work and research, and four planned to be more involved in working with the telescopes in the project, like the India telescope. Four respondents were not able to or did not want to increase their participation in the project.

# Recommendations

Consider including a student poster session where both undergraduate and graduate students can present their research. This will provide both groups of students the opportunity to receive feedback on their research and network with others. Additionally, this opportunity can be beneficial to the students in developing their presentation and communication skills.

Consider offering partial travel awards for students to attend conferences not located near their institutions, if budget allows. This can be done through a competitive process like submitting essays or through applications detailing why the student should be awarded the funding. This funding could be used to allow the SURF students to attend the conference and present on their research in person.

Consider sending a follow up email to conference participants to remind them that they can download the presentation slides from the GROWTH website.

Consider facilitating round-table sessions to provide participants with opportunities to discuss projects and to get to know each other better.