

Final Report for HERC Funding for the 2018 Idaho Conference on Undergraduate Research (ICUR)
Submitted by Donna Llewellyn, Executive Director of the Boise State Institute for STEM and Diversity Initiatives

ICUR 2018 was held on July 25 and 26, 2018 at Boise State University. The total attendance was 296 (not counting some who only came to see the poster sessions), from 38 different institutions/organizations. This included 202 students with 164 poster presentations, and 94 faculty, industry, and governmental representatives. We are aware that this is a decline from the 2017 conference and we are looking at the data to try to understand where the reductions came from and to address these with our campus partners. We have also added a partner at College of Southern Idaho in order to include their students (and faculty) in the future.

There were two full days of workshops and presentations – see the following pages for the program schedule. More details are also available at <https://academics.boisestate.edu/icur/>
A pdf version of the printed program that was handed out at the event is available upon request.

A survey was been sent out to all of the attendees. The likert scale responses and an overview of the open-ended responses are attached. We intend to use these results to improve the conference next year.

The funding from HERC went to the following categories of expenditures:

Item	Amount
Catering	\$9643.31
Program Design and Printing	\$3016.60
Plenary Speaker Hotel	\$258.00
Facilities and Events	\$138.00
Materials and Supplies	\$233.52
Admin Support	\$1710.47
TOTAL	\$15,000

Other support for the conference came from a number of grant programs at Boise State University, the Institute for STEM and Diversity Initiatives, the University of Idaho, and Idaho State University.

ICUR 2018 PROGRAM

ALL SESSIONS ARE IN THE STUDENT UNION BUILDING UNLESS OTHERWISE NOTED

TIMES	WEDNESDAY, JULY 25	
8:00 AM	REGISTRATION: Simplot Ballroom Lobby POSTER SET-UP: Simplot Ballroom/Snacks	
9:00 - 9:25 AM	OPENING CEREMONY/CONTINENTAL BREAKFAST David Hill, Idaho State Board of Education Location: Jordan Ballroom D	
9:25 - 10:15 AM	PLENARY SPEAKER: Noël Bakhtian, Director, CAES TITLE: GLOBAL GRAND CHALLENGES: THE ENERGY-WATER NEXUS Location: Jordan D Ballroom	
10:15 - 10:30 AM	BREAK	
10:30 - 11:30 AM	NSF GRFP AND OTHER SCHOLARSHIPS Facilitator: Liljana Babinkostova, Boise State University Speakers: Student Panel Location: Bishop Barnwell	PROFESSIONAL NETWORKING: HOW TO DO IT Panelists: Adrean Cavener, Dutch Bros Jaime Lima, New York Life Insurance Co. Duree Westover, Experis Location: Lookout Room
11:45 AM - 1:45 PM	POSTER PRESENTATIONS AND BUFFET LUNCH LOCATION: Simplot Ballroom	
1:45 - 2:00 PM	BREAK	
2:00 - 3:30 PM	HOW TO be MENTORED Facilitator: Paul Rowley, University of Idaho Location: Bishop Barnwell	LIGHTNING TALKS Speakers: Brittany Brand, Boise State University Caroline Earley, Boise State University Elizabeth Gutting, Boise State University Ayokunle Hodonu, Northwest Nazarene University Eric Jankowski, Boise State University Peter Müllner, Boise State University Heidi Reeder, Boise State University Mac Test, Boise State University Location: Lookout Room
3:30 - 3:45 PM	BREAK	
3:45 - 5:15 PM	GRADUATE PANEL: GETTING INTO (AND THROUGH) GRADUATE SCHOOL Moderator: Sarah Ritter, Boise State University Speakers: Faculty Panel Location: Bishop Barnwell	DEVELOPING AN ONLINE PERSONA Speaker: Laura Chiuppi, Boise State University Location: Lookout Room
5:30 PM	DINNER ON YOUR OWN - CHECK OUT ALIVE AFTER FIVE ON THE GROVE (https://www.facebook.com/aliveafterfiveboise/)	
THURSDAY, JULY 26		
8:00 AM	REGISTRATION: Simplot Ballroom Lobby POSTER SET-UP: Simplot Ballroom/Snacks	
9:00 - 10:00 AM	CONTINENTAL BREAKFAST Plenary Speaker: Celia Gould, Director, Idaho Department of Agriculture TITLE: A LOOK INTO STATE GOVERNMENT, AGRICULTURE AND RESEARCH NEEDS Location: Jordan Ballroom D	
10:00 - 10:15 AM	BREAK	
10:15 - 11:30 AM	RESEARCH TALKS Speakers: Dr. John Dudgeon, Idaho State University Dr. Joel Green, Space Telescope Science Institute Dr. Julie Straight, Northwest Nazarene University Location: Bishop Barnwell	INDUSTRY PANEL: HOW TO FIND AND SUCCEED IN YOUR FIRST JOB Panelists: Michelle Rauer, Chobani Michelle Ross, St. Luke's Health System Location: Lookout Room
11:30 - 11:45 AM	BREAK	
11:45 AM - 1:45 PM	POSTER PRESENTATIONS AND BUFFET LUNCH LOCATION: Simplot Ballroom	
12:45 - 1:45 PM	*IDAHO DIVERSITY NETWORK MEETING Facilitator: Sarah Penney, Idaho NSF EPSCoR Location: *By invitation only	
1:45 - 2:00 PM	BREAK	
2:00 - 3:15 PM	GRADUATE SCHOOL — THE REAL STORY Moderator: Gregory Martinez, Boise State University Speakers: Student Panel Location: Bishop Barnwell	HOW TO TRANSLATE RESEARCH EXPERIENCE INTO JOB SKILLS Facilitators: Catherine Bates, Boise State University Dave Byers, J.R. Simplot Company Megan Boatman, Boise State University Location: Lookout Room
3:15 PM	CLOSING CEREMONY Speakers: Dr. William Hughes, Boise State University TITLE: THE MANY HATS OF SCIENCE Location: Jordan Ballroom D	
4:00 PM	PLANNING COMMITTEE BUSINESS MEETING Location: Foote Room	

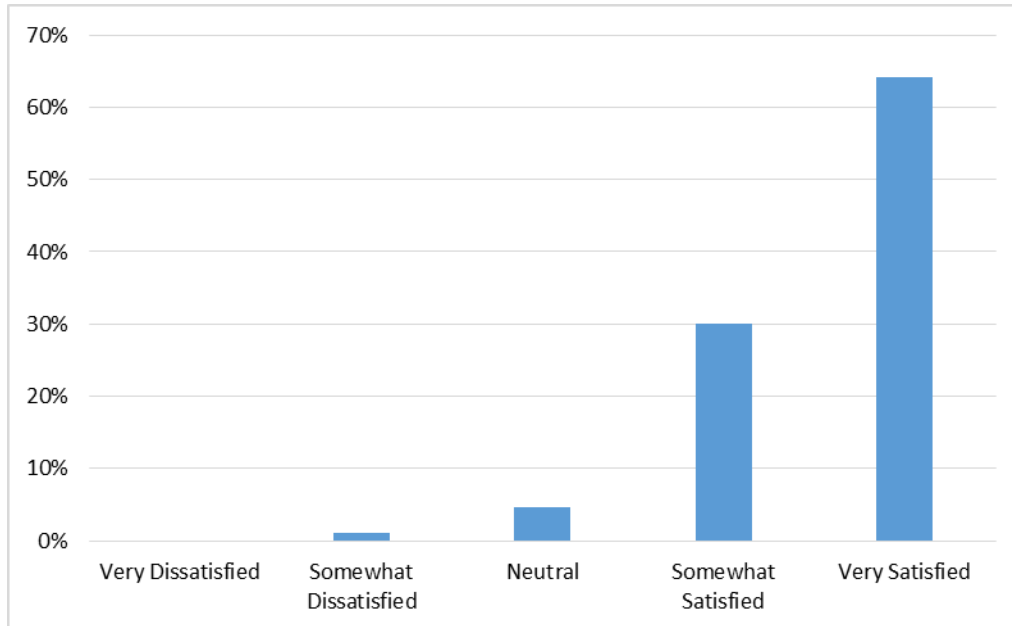
Idaho Conference on Undergraduate Research 2018

Survey Results

RESPONSE RATE: 57.4%

- 296 attendees
- 170 recorded responses
 - 159 completed surveys
 - 11 incomplete responses: All of these answered questions through, "Please select your role."

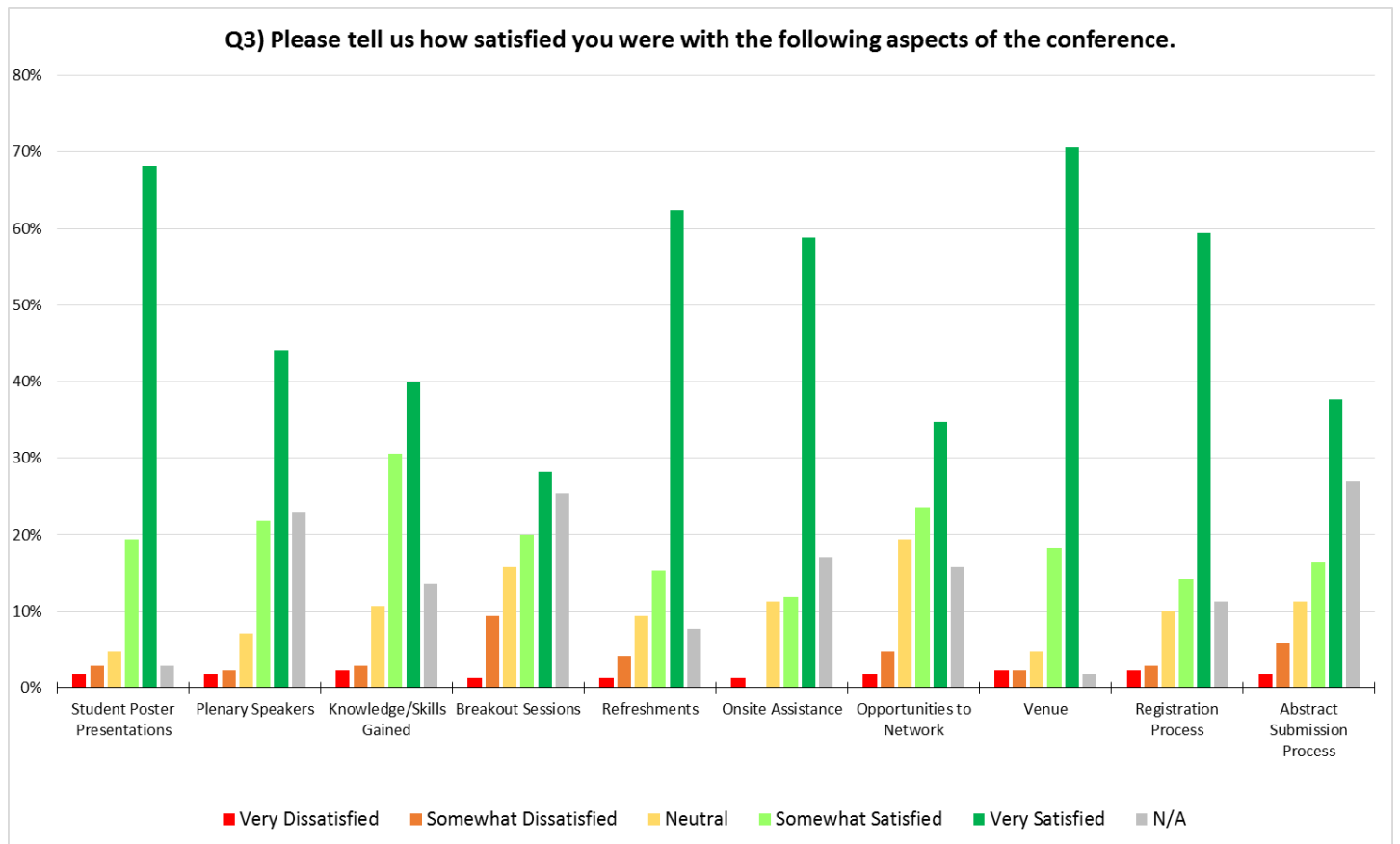
Q2) Please indicate your overall satisfaction with the 2018 Idaho Conference on Undergraduate Research.



Answer	%	Count
Very Dissatisfied	0.0%	0
Somewhat Dissatisfied	1.2%	2
Neutral	4.7%	8
Somewhat Satisfied	30.0%	51
Very Satisfied	64.1%	109
Total	100.0%	170

Q3) Please tell us how satisfied you were with the following aspects of the conference.

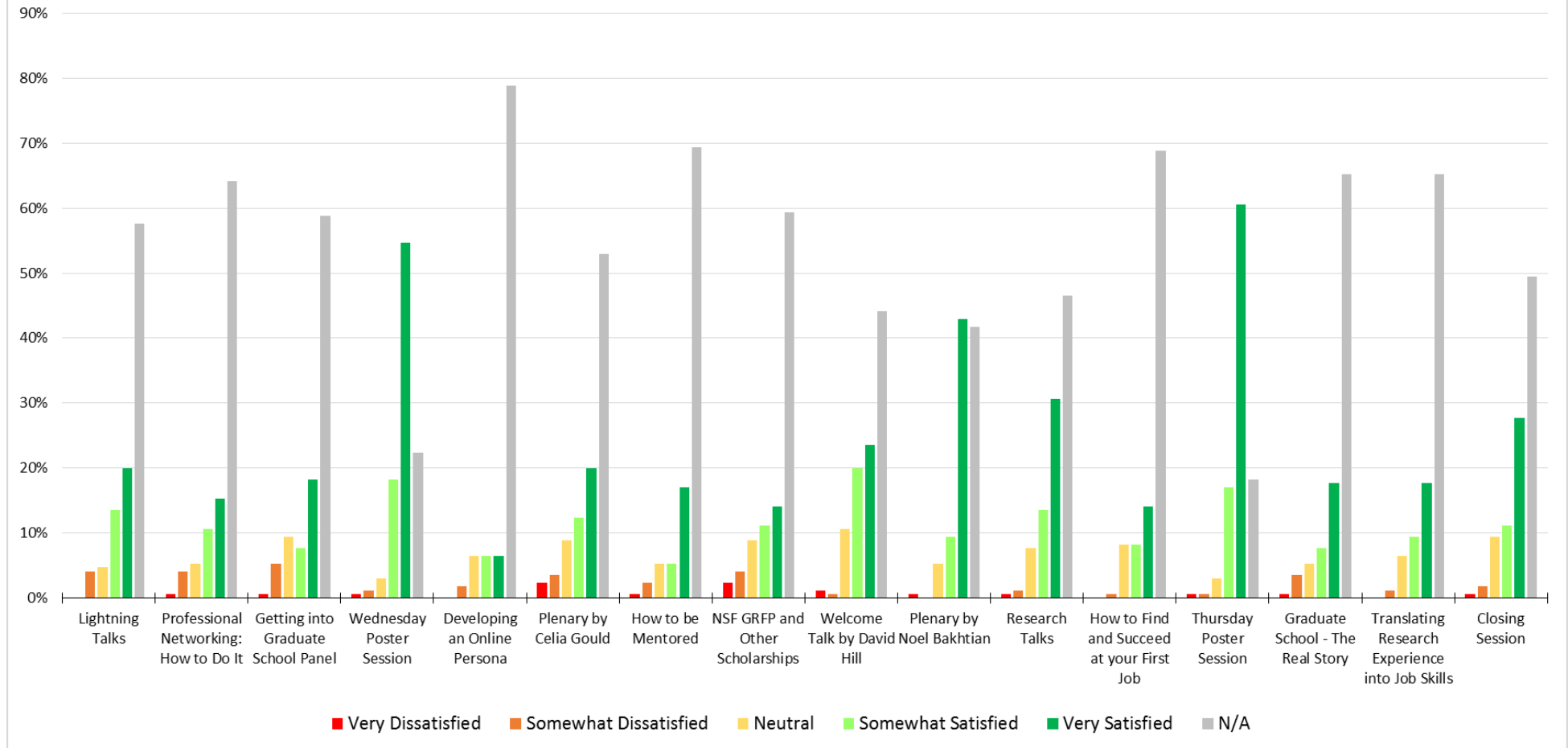
Aspect	Very Dissatisfied		Somewhat Dissatisfied		Neutral		Somewhat Satisfied		Very Satisfied		N/A		Total	
	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count
Student Poster Presentations	2%	3	3%	5	5%	8	19%	33	68%	116	3%	5	100%	170
Plenary Speaker	2%	3	2%	4	7%	12	22%	37	44%	75	23%	39	100%	170
Knowledge/Skills Gained	2%	4	3%	5	11%	18	31%	52	40%	68	14%	23	100%	170
Breakout Sessions	1%	2	9%	16	16%	27	20%	34	28%	48	25%	43	100%	170
Refreshments	1%	2	4%	7	9%	16	15%	26	62%	106	8%	13	100%	170
Onsite Assistance	1%	2	0%	0	11%	19	12%	20	59%	100	17%	29	100%	170
Opportunities to Network	2%	3	5%	8	19%	33	24%	40	35%	59	16%	27	100%	170
Venue	2%	4	2%	4	5%	8	18%	31	71%	120	2%	3	100%	170
Registration Process	2%	4	3%	5	10%	17	14%	24	59%	101	11%	19	100%	170
Abstract Submission Process	2%	3	6%	10	11%	19	16%	28	38%	64	27%	46	100%	170



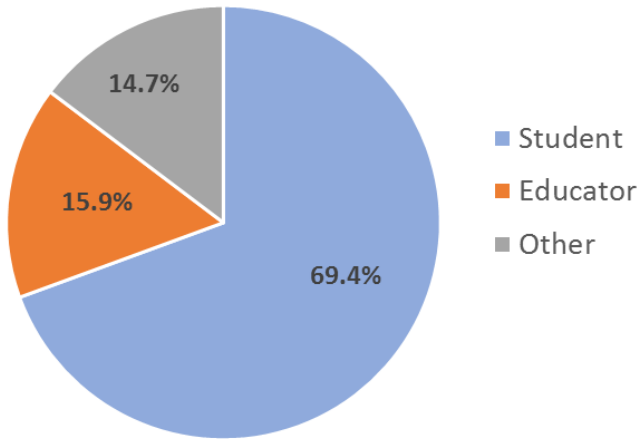
Q4) For each session that you attended, please let us know how satisfied you were with that session.

Session	Very Dissatisfied		Somewhat Dissatisfied		Neutral		Somewhat Satisfied		Very Satisfied		N/A		Total	
	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count
Lightning Talks	0%	0	4%	7	5%	8	14%	23	20%	34	58%	98	100%	170
Professional Networking: How to Do It	1%	1	4%	7	5%	9	11%	18	15%	26	64%	109	100%	170
Getting into Graduate School Panel	1%	1	5%	9	9%	16	8%	13	18%	31	59%	100	100%	170
Wednesday Poster Session	1%	1	1%	2	3%	5	18%	31	55%	93	22%	38	100%	170
Developing an Online Persona	0%	0	2%	3	6%	11	6%	11	6%	11	79%	134	100%	170
Plenary by Celia Gould	2%	4	4%	6	9%	15	12%	21	20%	34	53%	90	100%	170
How to be Mentored	1%	1	2%	4	5%	9	5%	9	17%	29	69%	118	100%	170
NSF GRFP and Other Scholarships	2%	4	4%	7	9%	15	11%	19	14%	24	59%	101	100%	170
Welcome Talk by David Hill	1%	2	1%	1	11%	18	20%	34	24%	40	44%	75	100%	170
Plenary by Noel Bakhtian	1%	1	0%	0	5%	9	9%	16	43%	73	42%	71	100%	170
Research Talks	1%	1	1%	2	8%	13	14%	23	31%	52	46%	79	100%	170
How to Find and Succeed at your First Job	0%	0	1%	1	8%	14	8%	14	14%	24	69%	117	100%	170
Thursday Poster Session	1%	1	1%	1	3%	5	17%	29	61%	103	18%	31	100%	170
Graduate School - The Real Story	1%	1	4%	6	5%	9	8%	13	18%	30	65%	111	100%	170
Translating Research Experience into Job Skills	0%	0	1%	2	6%	11	9%	16	18%	30	65%	111	100%	170
Closing Session	1%	1	2%	3	9%	16	11%	19	28%	47	49%	84	100%	170

Q4) For each session that you attended, please let us know how satisfied you were with that session.



Q5) Please select your role.

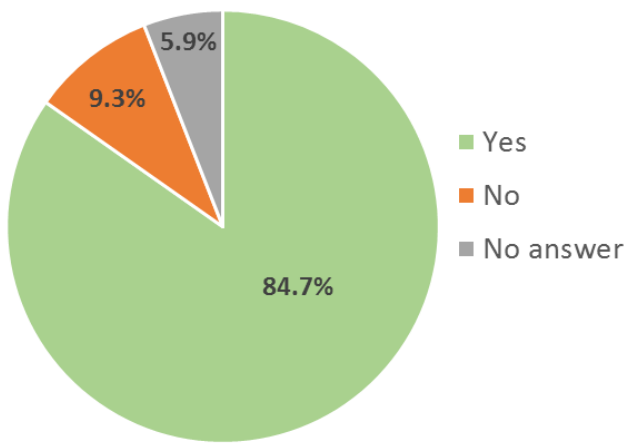


Answer	%	Count
Student	69.4%	118
Educator	15.9%	27
Other	14.7%	25
Total	100.0%	170

Q6) Other roles reported:

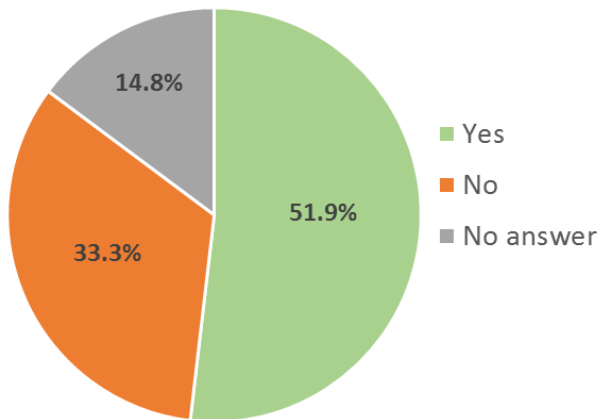
- Administrator
- Conference visitor
- Graduate mentor
- Graduate student
- ICUR committee member
- Invited speaker/panelist
- Mentor
- Parent
- Research funder
- Researcher
- Staff

Q7) Did you present a poster? (This question presented only to the 118 respondents who selected "Student" as their Role.)



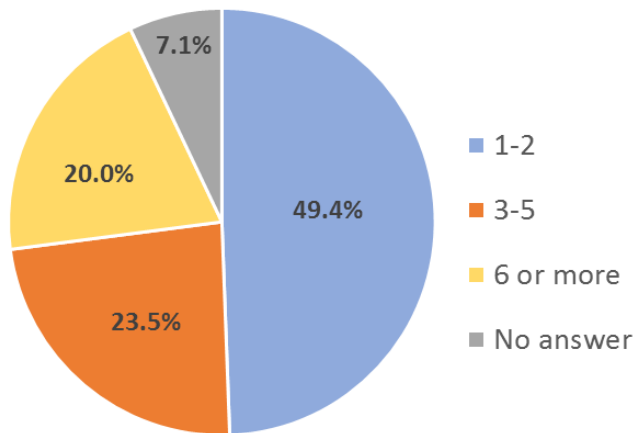
Answer	%	Count
Yes	84.7%	100
No	9.3%	11
No answer	5.9%	7
Total	100.0%	118

Q8) Were you a mentor of a student researcher who presented a poster? (This question presented only to the 27 respondents who selected “Educator” as their Role.)



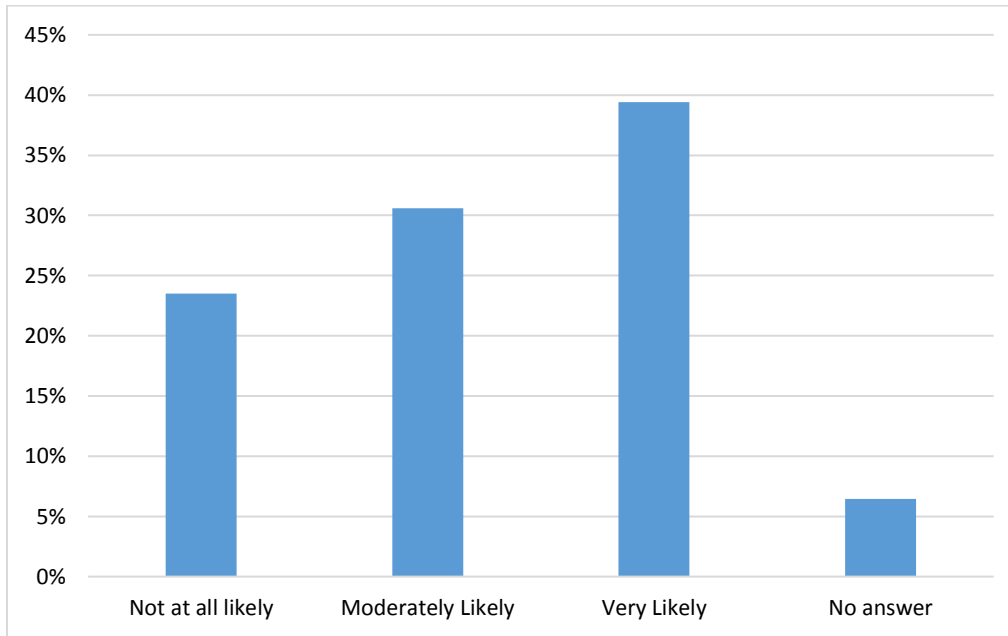
Answer	%	Count
Yes	51.9%	14
No	33.3%	9
No answer	14.8%	4
Total	100.0%	27

Q9) How many conferences (technical and professional conferences) have you attended including this one?



Answer	%	Count
1-2	49.4%	84
3-5	23.5%	40
6 or more	20.0%	34
No answer	7.1%	12
Total	100.0%	170

Q10) How likely are you to attend ICUR next year?



Answer	%	Count
Not at all likely	23.5%	40
Moderately Likely	30.6%	52
Very Likely	39.4%	67
<i>No answer</i>	6.5%	11
Total	100.0%	170

Q11) What were your greatest lessons or take-aways from the conference?

The following table summarizes categories mentioned in the open-ended responses to this question and the count of respondents who mentioned them. The summary is sorted by the greatest number of mentions to the lowest. 141 respondents answered to this question; some mentioned more than one take-away. The sum of the category counts is 164.

The most often cited take-aways are:

- 1) Networking/interpersonal skills
- 2) How to present research/posters
- 3) Learn about students' research
- 4) Graduation school info
- 5) Learn about fields and types of research

A few criticisms were received and are indicated in red text.

CATEGORIES OF COMMENTS	COUNT
Networking/interpersonal skills	26
How to present research/posters	23
Learn about students' research	15

Graduate school info	13
Learn about fields and types of research	13
Students' positive response to poster presentation experience	10
Career guidance	9
How to create a poster	5
Learn about educators' research	5
Learn about new opportunities	5
Not specified	4
Value of research	4
Common challenges	3
Learn about Idaho initiatives	3
Learn about research resources	3
Learn from industry professionals	3
Praise ICUR organization	3
Diversity of perspectives	2
Work hard/practice	2
Breakout sessions	1
Criticism: Choice of plenary speaker	1
Criticism: No take-aways	1
Criticism: Students engaged at poster sessions but not breakout sessions.	1
Criticism: Very little practical business solution research	1
How to better assist undergraduates with research	1
How to make the most of time as an undergraduate	1
Improving interview skills	1
Lightning talks	1
Need for greater faculty involvement	1
Need to consider demographics of attendees	1
Praise students and faculty	1
Time management	1

Q12) What changes in the ICUR would significantly improve the conference experience for you?

The following table summarizes categories mentioned in the open-ended responses to this question and the count of respondents who mentioned them. The summary is sorted by the greatest number of mentions to the lowest. 80 respondents suggested a change; some made more than one suggestion. The total count of suggested improvements is 95. 90 respondents either did not answer this question or indicated they had no suggestions for improvement.

CATEGORIES OF COMMENTS	COUNT
Breakout sessions	43
Other logistics	17
Poster sessions	16
Conference talks	5
Networking	5
Abstracts	3
Discipline focus	3
Not specified	3
Total	95

Highlights:

- Breakout sessions:
 - 8 people suggested “better” (not specified) or more interesting sessions
 - 6 people suggested shorter sessions
 - 3 requested suggested the sessions should have more of a research focus
 - 3 respondents indicated the sessions need more preparation
- Poster sessions:
 - 3 respondents felt the poster sessions were too tight on space
 - 3 respondents said the sessions should be shorter
- Conference talks:
 - 3 people were displeased with the content by specific speaker(s)
- Other logistics:
 - 4 respondents mentioned better food
 - 3 respondents felt there was not enough time for lunch
- Networking:
 - 3 people suggested better/more networking opportunities
 - 1 asked for more higher education people with whom to network
- Abstracts:
 - 2 people felt the submission process is confusing
 - 1 respondent suggested a better revision process

- Discipline focus—conflicting suggestions were received:
 - 1 respondent disciplines other than hard science; 1 suggested the conference should be more accessible to non-STEM majors.
 - 1 respondent suggested more science content.

Suggestions by Category (sorted by the greatest number of mentions to the lowest):

CATEGORY > SPECIFICS	COUNT
<i>Breakout sessions</i>	43
Shorter sessions	6
Better talks/speakers - not specified	6
More research focus	3
Better preparation	3
More interesting sessions	2
Sessions were repetitive/had the same info	2
Speaker did not follow guidelines	2
Too much focus on graduate school; not enough on other programs	2
More content that is not available online	1
Panel with mentors and mentees	1
More undergrad focus	1
More diversity of content	1
Have concurrent sessions for faculty/mentors	1
More diversity of speakers	1
More seats/different arrangement in breakout sessions	1
Better/more networking opportunities	1
Panel size too large	1
Did not appreciate content of specific speaker	1
Panels were not useful	1
Disorganized	1
Have more higher ed people available for networking	1
More options	1
Funding opportunities	1
More equity and inclusion issues content	1
More info about specific grad schools opportunities	1
<i>Other logistics</i>	17
Better food	4
Not enough time for lunch	3
Better communication of registration process	2
Market to public	1
Have concurrent sessions for faculty/mentors	1
Better online organization	1
More content that is not available online	1
Better signage	1
Send reminders of deadlines and conference dates	1
Better/more communication of sessions and details before conference begins	1
Change dates of conference	1

Poster sessions	16
Shorter sessions	3
Too tight on space	3
Better arrangement for visibility	2
Organize by subject	1
Better preparation	1
Organize so presenters have the opportunity to see other poster presentations from the same day	1
Too loud	1
Disorganized	1
Better/more networking opportunities	1
More faculty available for feedback	1
More time to present	1
Networking	5
Better/more networking opportunities	3
Have set time to talk to speakers	1
Have more higher ed people available for networking	1
Conference talks	5
Did not appreciate content of specific speaker	3
Speaker did not follow guidelines	1
Add high school focus	1
Not specified	3
More social science, less STEM	1
(blank)	1
Need for greater faculty involvement	1
Abstracts	3
Submission process is confusing	2
Better revision process	1
Discipline focus	3
Include disciplines other than hard science	1
More science content	1
Make accessible to non-STEM majors	1