

**Final Report for HERC Funding for the 2022 Idaho Conference on Undergraduate Research (ICUR)**  
*Submitted by Donna Llewellyn, Executive Director of the Boise State Institute for Inclusive and Transformative Scholarship*

ICUR 2022 was held on July 20 and 21, 2022. Due to uncertainties related to COVID-19, the conference was an online event with optional closing receptions at each of the three research universities. We used the Fourwaves platform for the display of student posters and a synchronous poster fair and Zoom for synchronous talks and workshops. In terms of attendance, the participation was robust, although a small bit lower than last year. We utilized the funding from HERC to allow each research university to reserve space and technology along with catering to host a local optional closing reception. Note that due to the timing of the invoices for these events, that we ended up using IFITS' local funds to pay for these events so that those expenses do not show up in the budget below after all. In addition, once again, we purchased a license to use the Fourwaves site and we needed a much greater amount of staff time to get the conference designed, planned, and implemented. We are grateful for the HERC funding that allowed us to hold ICUR this year in spite of the uncertainty that existed during our planning process around large in person events at Boise State.

There were 481 people who registered for the conference this year, with 344 participating in the Zoom sessions. This included people from over 30 different institutions/organizations. There were 194 poster presentations with a total of 553 project collaborators including 249 undergraduate students, 84 graduate students and 161 faculty (plus some postdoctoral fellows, high school students, and other community members). Our planning committee of representatives from the different colleges and universities across the state really worked hard to encourage and facilitate participation.

There were two days of workshops and presentations – see the following pages for the program schedule. More details are also available at <https://www.boisestate.edu/icur/>. Note that Boise State has disallowed the use of pdf programs due to accessibility issues so all materials for the conference were posted at the [event google site](#).

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, as we learn from our virtual conferences about what aspects of this event are best suited to a virtual setting and which parts really suffer from a lack of in-person interaction.

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

Item	Amount
Online platform for poster displays and synchronous poster fair (will use this throughout the year)	15000.00
Other expenses related to online conference	675
Materials and Supplies	258
Admin, Evaluation, and Director Support	22,281.23
<b>TOTAL</b>	<b>\$38214.23</b>

# ICUR 2022 Schedule At-A-Glance

Access links to all virtual sessions will be available by visiting the schedule page of the Fourwaves ICUR 2022 site (update with link when it is live). *Note: You must be logged into Fourwaves and registered for ICUR 2022 in order to view the virtual session links.*

<b>Day 1</b>	<b>Wednesday, July 20</b>
10:00 a.m. MT	<b>Opening Session</b>
10:45 a.m. MT	Break
11:00 a.m. MT	<b>Undergraduate Lightning Talks</b>
12:15 p.m. MT	Lunch
1:30 p.m. MT	<b>Networking: Meet a Professor</b>
3:00 p.m. MT	Break
3:15 p.m. MT	<b>Panel Discussions</b> Panel Room 1: The Grad School Journey - grad students talk about their pathway to grad school and how to prepare and what to expect  Panel Room 2: Recent grads who are working in industry - how did their UG research experience feed into their jobs
4:15 p.m. MT	<b>Closing Session</b> (including prize drawing)

<b>Day 2</b>	<b>Thursday, July 21</b>
09:30 a.m. MT	<b>Paired Research Talks</b>
11:00 a.m. MT	<b>Research Conversations</b> <i>Zoom Breakout Rooms with all attendees assigned at random</i>
12:00 p.m. MT	Lunch
01:00 p.m. MT	<p><b>Zoom Gathering for Instructions and Introduction</b></p> <p><b>Live Poster Sessions A and B</b></p> <p><i>Virtual Walk-Up Poster Session using Fourwaves Platform</i></p> <p>A: Group A posters are presented <i>1:00 p.m. MDT to 2:00 p.m. MDT</i></p> <p>B: Group B posters are presented <i>2:00 p.m. to 3:00 p.m. MDT</i></p> <p>&lt;insert link of which posters are in which groups when that is set&gt;</p>
03:15 p.m. MT	<b>ICUR Closing Session</b>

Access links to all virtual sessions are available by visiting the schedule page of the Fourwaves ICUR 2022 site (update with link when it is live). *Note: You must be logged into Fourwaves and registered for ICUR 2022 in order to view the virtual session links.*

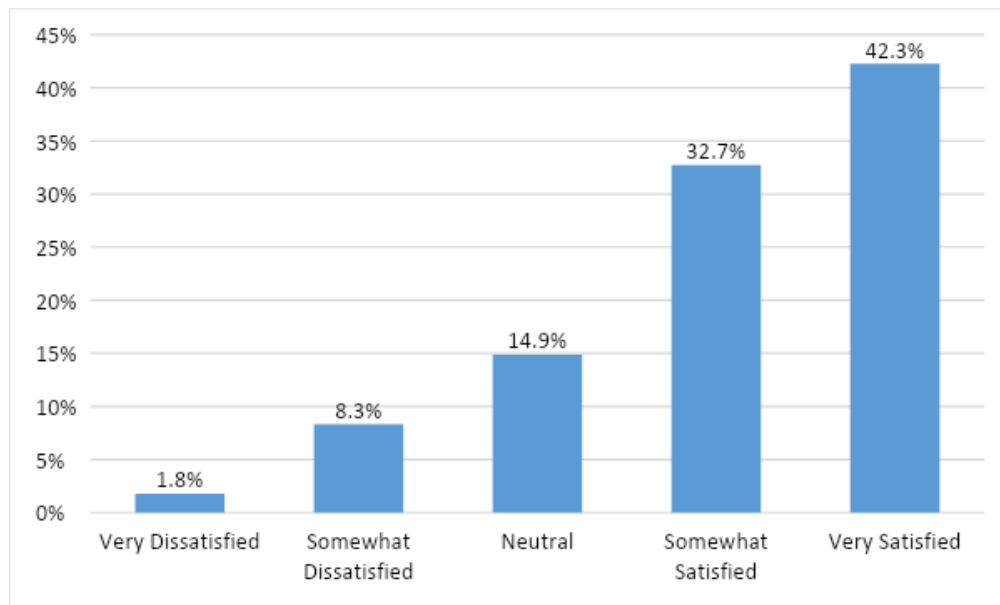
## Idaho Conference on Undergraduate Research 2022

### Survey Results

#### RESPONSE RATE: 35.3%

- 476 survey recipients (excludes 4 IFITS staff who did not receive the survey)
  - o 304 (63.9%) students
  - o 172 (36.1%) faculty/staff/other
- 165 recorded responses; 6 of these are incomplete responses
  - o 3 of the incomplete responses answered no questions and are therefore EXCLUDED from analysis.

**Please indicate your overall satisfaction with the 2022 Idaho Conference on Undergraduate Research.**

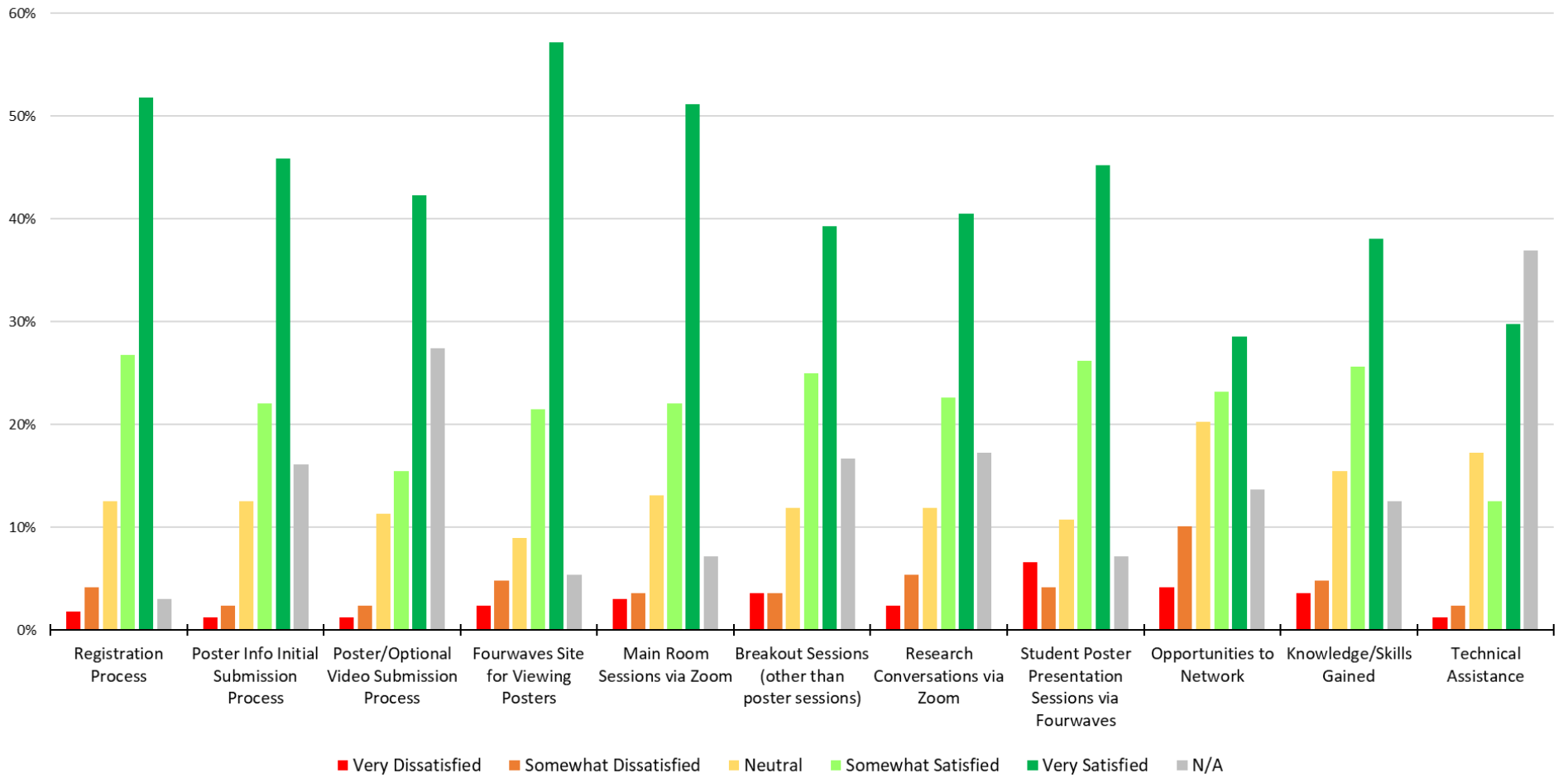


Answer	%	Count
Very Dissatisfied	1.8%	3
Somewhat Dissatisfied	8.3%	14
Neutral	14.9%	25
Somewhat Satisfied	32.7%	55
Very Satisfied	42.3%	71
Total	100.0%	168

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
Registration Process	2%	3	4%	7	13%	21	27%	45	52%	87	3%	5	100%	168
Poster Info Initial Submission Process	1%	2	2%	4	13%	21	22%	37	46%	77	16%	27	100%	168
Poster/Optional Video Submission Process	1%	2	2%	4	11%	19	15%	26	42%	71	27%	46	100%	168
Fourwaves Site for Viewing Posters	2%	4	5%	8	9%	15	21%	36	57%	96	5%	9	100%	168
Main Room Sessions via Zoom	3%	5	4%	6	13%	22	22%	37	51%	86	7%	12	100%	168
Breakout Sessions (other than poster sessions)	4%	6	4%	6	12%	20	25%	42	39%	66	17%	28	100%	168
Research Conversations via Zoom	2%	4	5%	9	12%	20	23%	38	40%	68	17%	29	100%	168
Student Poster Presentation Sessions via Fourwaves	7%	11	4%	7	11%	18	26%	44	45%	76	7%	12	100%	168
Opportunities to Network	4%	7	10%	17	20%	34	23%	39	29%	48	14%	23	100%	168
Knowledge/Skills Gained	4%	6	5%	8	15%	26	26%	43	38%	64	13%	21	100%	168
Technical Assistance	1%	2	2%	4	17%	29	13%	21	30%	50	37%	62	100%	168

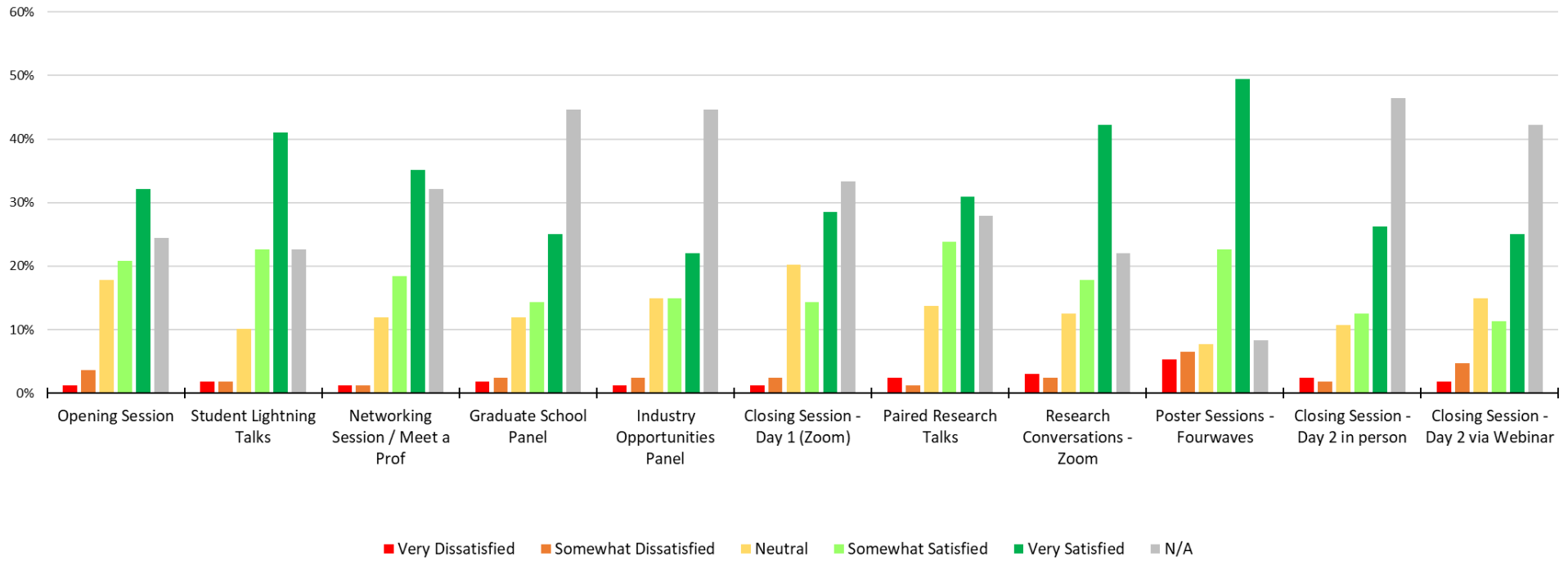
Please tell us how satisfied you were with the following aspects of the conference.



**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
Opening Session	1%	2	4%	6	18%	30	21%	35	32%	54	24%	41	100%	168
Student Lightning Talks	2%	3	2%	3	10%	17	23%	38	41%	69	23%	38	100%	168
Networking Session / Meet a Prof	1%	2	1%	2	12%	20	18%	31	35%	59	32%	54	100%	168
Graduate School Panel	2%	3	2%	4	12%	20	14%	24	25%	42	45%	75	100%	168
Industry Opportunities Panel	1%	2	2%	4	15%	25	15%	25	22%	37	45%	75	100%	168
Closing Session - Day 1 (Zoom)	1%	2	2%	4	20%	34	14%	24	29%	48	33%	56	100%	168
Paired Research Talks	2%	4	1%	2	14%	23	24%	40	31%	52	28%	47	100%	168
Research Conversations - Zoom	3%	5	2%	4	13%	21	18%	30	42%	71	22%	37	100%	168
Poster Sessions - Fourwaves	5%	9	7%	11	8%	13	23%	38	49%	83	8%	14	100%	168
Closing Session - Day 2 in person	2%	4	2%	3	11%	18	13%	21	26%	44	46%	78	100%	168
Closing Session - Day 2 via Webinar	2%	3	5%	8	15%	25	11%	19	25%	42	42%	71	100%	168

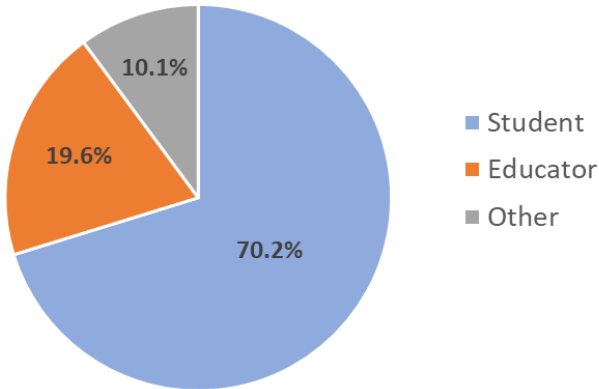
For each session that you attended, please let us know how satisfied you were with that session.





Answer	%	Count
Student	70.2%	118
Educator	19.6%	33
Other	10.1%	17
Total	100.0%	168

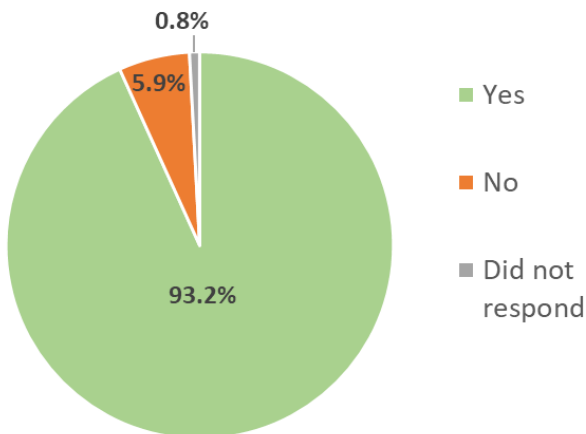
Please select your role.



Other roles reported:

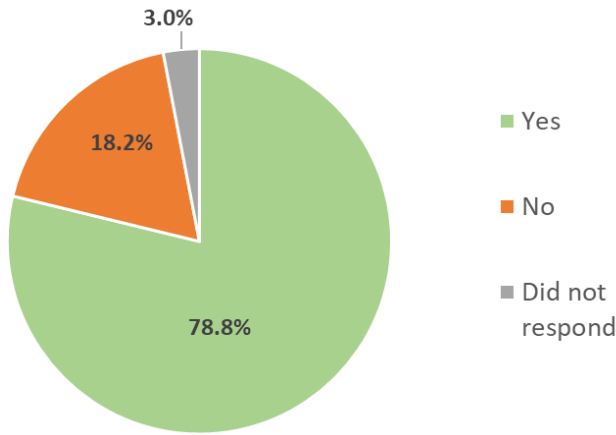
- Administrator
- Alumni
- Educator
- Family/friend
- Industry
- Postdoc
- Staff
- Student

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



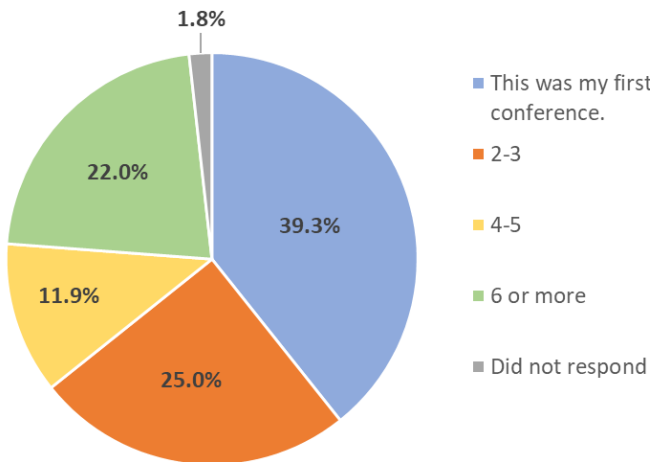
Answer	%	Count
Yes	93.2%	110
No	5.9%	7
<i>Did not respond</i>	0.8%	1
Total	100.0%	118

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



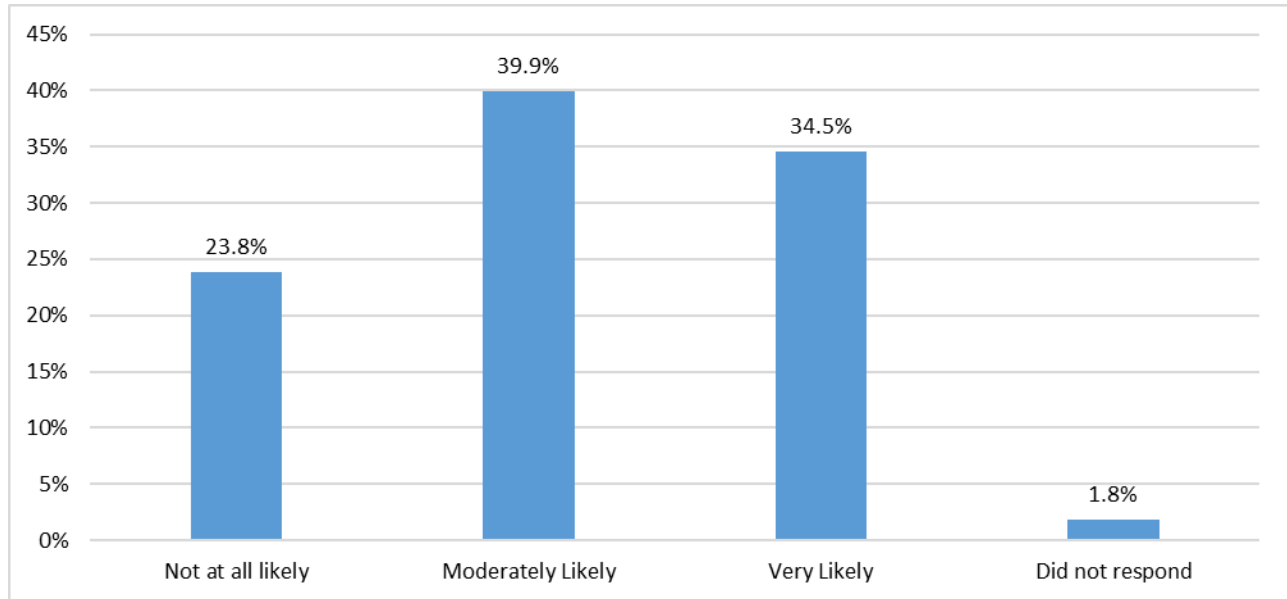
Answer	%	Count
Yes	78.8%	26
No	18.2%	6
Did not respond	3.0%	1
Total	100.0%	33

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



Answer	%	Count
This was my first conference.	39.3%	66
2-3	25.0%	42
4-5	11.9%	20
6 or more	22.0%	37
Did not respond	1.8%	3
Total	100.0%	168

## How likely are you to attend ICUR next year?



Answer	%	Count
Not at all likely	23.8%	40
Moderately Likely	39.9%	67
Very Likely	34.5%	58
<i>Did not respond</i>	1.8%	3
Total	100.0%	168

## How did you find out about ICUR?

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. 138 respondents answered to this question; 8 mentioned more than one take-away. The sum of the category counts is 146.

CATEGORIES OF COMMENTS	COUNT
Specific faculty or staff member	31
REU program	20
SARE	14
Student	8
Advisor	7
I have previously attended	7
Office of Undergraduate Research (not necessarily BSU)	7
Student research participation (not specified)	7
Email	5
From the university/school (no specifics given)	5
HERC	5
Grant (not specified)	4

Internship	3
McNair Scholars	3
Not specified	3
Project SEED	3
Website	3
B2B	2
INBRE	2
SRC	2
Announcements (not specified)	1
Friend/family	1
High school	1
ICUR committee	1
Research supervisor/mentor	1

## 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. 123 respondents answered this question; 30 mentioned more than one take-away. The sum of the category counts is 153.

A few criticisms were received in response to this question and are indicated in red text.

<b>CATEGORIES OF COMMENTS</b>	<b>COUNT</b>
Diversity of research	16
Learn about students'/others' research	14
Exposure to research conference experience	9
Graduate school info	9
Fourwaves poster session	8
Learn to communicate to a large audience/people outside my field	8
Gained confidence to present/conduct research	6
How to conduct research	6
Interacting with/meeting students	6
Opportunity to present/practice presenting my research/poster	6
Students' enthusiasm	6
How to be a better researcher/succeed with research	5
Value of research	5
Ability/potential/growth/empowerment of students	4
Meet the Prof session	4
Networking opportunities	4
Diversity of students doing research	3
Gained knowledge (not specified)	3
How to present research/posters	3
Closing session	2
Common challenges	2
<b>Criticism: Not in person</b>	<b>2</b>

Different paths to research/careers	2
Learn from industry professionals	2
Lightning talks	2
Ability to support students	1
Advice from faculty	1
Criticism: Desires only science/biology focus because it is difficult to present to people without a background on the topic	1
Criticism: Few or no attendees for student's individual poster	1
Criticism: No take-aways	1
Criticism: Poster presentation structure/platform	1
Criticism: Research is too political	1
Ethics of research	1
Feedback on my research	1
Funding opportunities	1
Imposter syndrome talk/issues	1
Interacting with/meeting faculty/professionals	1
Learn about fields and types of research	1
Praise: ICUR in general	1
Research is enjoyable	1
Students' positive response to ICUR experience	1
Diversity of research	16
Learn about students'/others' research	14
Exposure to research conference experience	9
Graduate school info	9
Fourwaves poster session	8
Learn to communicate to a large audience/people outside my field	8
Gained confidence to present/conduct research	6
How to conduct research	6
Interacting with/meeting students	6
Opportunity to present/practice presenting my research/poster	6
Students' enthusiasm	6
How to be a better researcher/succeed with research	5
Value of research	5
Ability/potential/growth/empowerment of students	4
Meet the Prof session	4

Strong responses:

- STUDENT: *“Attending ICUR enabled me to directly connect with students and faculty via discussions and LinkedIn. ICUR reinforced the fact that undergraduates are doing incredible things in Idaho and are solving problems!”*
- STUDENT: *“My biggest take-away is that I know what I am doing and I am chosen for the project for a reason. I should not let things like “Imposter Syndrome” get in the way because it only hinders what I am able to achieve.”*
- STUDENT: *“Hearing from the Grad students was extremely useful and gave me concrete advice that I’m going to implement (and would not have known about had it not been for them!)”*

- STUDENT: *“I feel more confident as a researcher in my field. I know that there are many other people across many fields that are experiencing the same or similar struggles and victories.”*
- STUDENT: *“I think I was exposed to how a conference works without the pressure of a national conference. It helped me dip my toes into research and conferences.”*
- EDUCATOR: *“Listening to these students talk about their incredible research gives me such hope for the future. The students inspire me.”*
- OTHER ROLE: *“It seemed like an excellent opportunity for the students to get used to presenting technical information. I sat in on my mentee's poster session and her comfort level increased significantly through repetition.”*

## 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. 103 respondents suggested a change; some made more than one suggestion. The total count of suggested changes/improvements is 129. 59 respondents either did not answer this question or indicated they had no suggestions for improvement.

CATEGORIES OF COMMENTS	COUNT
Conference - general	64
Poster sessions	38
Other logistics	12
Plenary/breakout/other talk sessions	12
SRC	2
Discipline focus	1
No changes suggested	59

### Highlights:

- Conference - general
  - 46 people desire resuming an in-person conference and/or did not like the virtual format\*
  - 3 people suggested better/more communication of sessions and details before conference begins\*
  - 2 people gave session structure redesign suggestions\*
  - 2 people think ICUR should increase its focus on students
- Poster sessions
  - 17 people said the poster sessions are not long enough\*
  - 8 people said there were few or no attendees for a student's individual poster\*
  - 3 people did not like the Fourwaves platform for the poster sessions\*
- Plenary/breakout/other talk sessions
  - 3 people suggested better/more communication of sessions and details before conference begins\*
  - 2 people made session structure redesign suggestions\*
- Other logistics
  - 4 people did not like the Fourwaves platform\*
  - 2 people said the registration process was confusing

\*Repeat highlight from last year

Changes/Comments by Category (sorted by the greatest number of mentions to the lowest):

<b>CATEGORY &gt; SPECIFICS</b>	<b>COUNT</b>
<b><i>Conference - general</i></b>	<b>64</b>
Desires in-person / did not like virtual format	46
Positive comment / no changes suggested	4
Better/more communication of sessions and details before conference begins	3
Better/more networking opportunities	2
Session structure redesign suggestion	2
Increasing focus on students	2
Desires hybrid format	1
Not specified	1
Too political	1
Disorganized	1
Scheduling suggestion	1
<b><i>Poster sessions</i></b>	<b>38</b>
Not long enough	17
Few or no attendees for student's individual poster	8
Did not like Fourwaves	3
Desires in-person / did not like virtual format	2
Session structure redesign suggestion	2
Too long	2
Technological issue	1
Positive comment / no changes suggested	1
Boise State bias/focus/preference	1
Group by discipline	1
<b><i>Plenary/breakout/other talk sessions</i></b>	<b>12</b>
Better/more communication of sessions and details before conference begins	3
Session structure redesign suggestion	2
Positive comment / no changes suggested	1
Increasing focus on students	1
Too long	1
Less talk about mentoring	1
Too much focus on graduate school; not enough on other programs	1
Not long enough	1
Plenary/breakout/other talk sessions	1
<b><i>Other logistics</i></b>	<b>12</b>
Did not like Fourwaves	4
Registration process was confusing	2
Certificates	1
Other logistics	1
Schedule is confusing	1

Session structure redesign suggestion	1
Better communication during conference	1
Extended deadline for submitting posters and abstracts	1
<b><i>SRC</i></b>	<b>2</b>
Too long	1
Positive comment / no changes suggested	1
<b><i>Discipline focus</i></b>	<b>1</b>
More science content	1
<b><i>No changes suggested</i></b>	<b>59</b>