

**Final Report for HERC Funding for the 2020 Idaho Conference on Undergraduate Research (ICUR)**  
*Submitted by Donna Llewellyn, Executive Director of the Boise State Institute for Inclusive and Transformative Scholarship*

ICUR 2020 was held on July 23 and 24, 2020. Due to restrictions caused by COVID-19, the conference was moved to be an online event. We used the ForagerOne Symposium platform for the display of student posters and Zoom for the synchronous talks and workshops. The pandemic and this pivot to an online event caused some major changes from past years' conferences – fewer students across the state were participating in research this summer, and the conference expenses were of a very different nature. In terms of attendance, we were pleased that participation was still robust, perhaps due to the ability to log in and participate from anywhere in the world. And for the expenses, while we didn't incur any catering, facilities, or printing charges from Boise State (usually our largest expenses), we did purchase a license to use the Symposium site and we utilized 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 move to all remote events at Boise State.

The total attendance was 291, from 26 different institutions/organizations. This included 189 students with 150 poster presentations, and 102 faculty, industry, governmental, and community representatives. As mentioned above, each of the campuses across the state saw a decrease in undergraduate research this summer, so we were pleased with this attendance and participation. Note that none of our campuses hosted their usual REU programs with students visiting from other campuses this summer. 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 A pdf version of the program is available at this website.

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, especially since we currently expect that we will once again be holding a virtual conference due to COVID-19.

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

Item	Amount
Program Design	\$1586.00
Online platform for poster displays	4000.00
Other expenses related to online conference	302.50
Materials and Supplies	788.64
Admin, Evaluation, and Director Support	\$25229.76
<b>TOTAL</b>	<b>\$31,906.90</b>

# ICUR 2020 PROGRAM

TIMES	THURSDAY, JULY 23
9 A.M.	<p><b>OPENING SESSION:</b> Donna Llewellyn, Boise State University TJ Bliss, Idaho State Board of Education Michal Temkin Martinez, Boise State University</p> <p><b>Location:</b> Zoom Main Room</p>
10 – 10:30 A.M.	BREAK
10:30 – 11:30 A.M.	<p><b>HOW AND WHY TO GET INVOLVED IN RESEARCH WHILE AN UNDERGRADUATE</b></p> <p><b>Moderator:</b> Marion Scheepers, Boise State University</p> <p><b>Panel Discussion:</b> Liljana Babinkostova, Boise State University Cynthia Campbell, Boise State University Thomas Klein, Idaho State University Krishna Pakala, Boise State University Dusty Perkins, College of Western Idaho David Pfeiffer, University of Idaho Michal Temkin Martinez, Boise State University</p> <p><b>Location:</b> Zoom Breakout Room 1</p> <p><b>GRADUATE SCHOOL – THE REAL STORY</b></p> <p><b>Moderator:</b> Cecelia Staggs, University of Oregon</p> <p><b>Panel Discussion:</b> Jonathan Barnes, University of Idaho Averi McFarland, Idaho State University Carson MacPherson-Krutsky, Boise State University Cecelia Staggs, University of Oregon</p> <p><b>Location:</b> Zoom Breakout Room 2</p>
11:30 A.M. – 1 P.M.	BREAK
1 – 2 P.M.	<p><b>STUDENT LIGHTNING TALKS</b></p> <p><b>Moderator:</b> Keegan Schmidt, Lewis-Clark State College</p> <p><b>Speakers:</b> Emma Archey, College of Western Idaho Reagan Badger, Idaho State University Lance Fredericks, University of Idaho Mikayla Manzi, Northwest Nazarene University Dylan Miller, Lewis-Clark State College Allen Skirvin, Boise State University</p> <p><b>Location:</b> Zoom Main Room</p>
2 – 2:30 P.M.	BREAK
2:30 – 3:30 P.M.	<p><b>STRATEGIES FOR A SUCCESSFUL RESEARCH EXPERIENCE</b></p> <p><b>Facilitator/Presenter:</b> Jillana Finnegan, Boise State University</p> <p><b>Location:</b> Zoom Main Room</p>
3:30 P.M.	ADJOURN FOR THE DAY

# ICUR 2020 PROGRAM

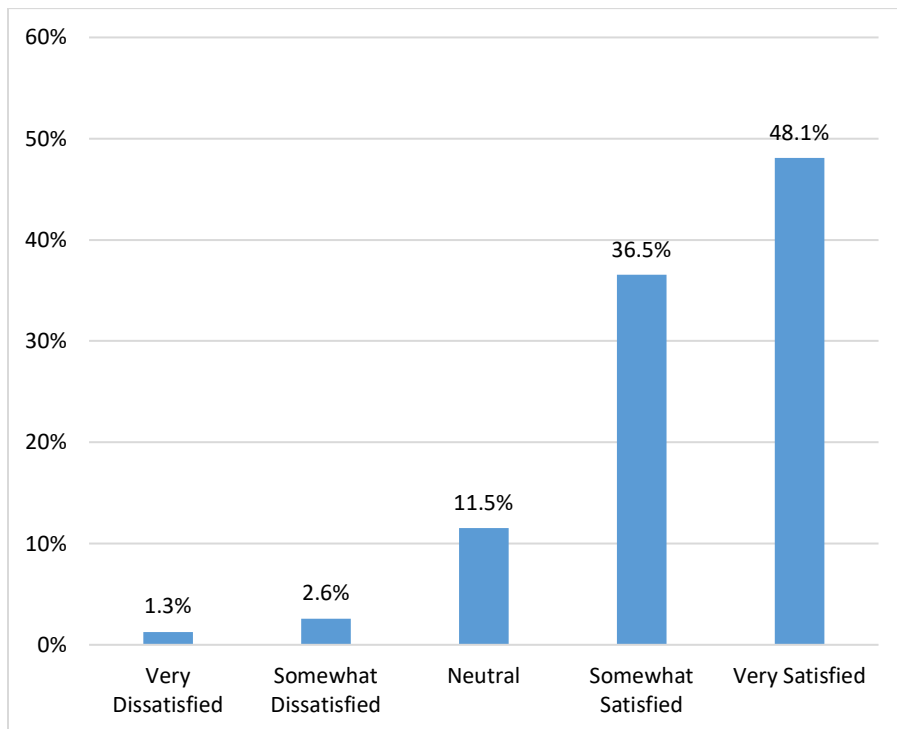
<b>TIMES</b>	<b>FRIDAY, JULY 24</b>
<b>8:45 A.M.</b>	<b>PAIRED RESEARCH TALKS</b> <b>Moderator:</b> <b>Tracy Yarnell</b> , Boise State University, Biomolecular Research Center <b>Speakers:</b> <b>David Estrada</b> , Faculty, Boise State University <b>Lynn Karriem</b> , Student, Boise State University <b>Devaleena Pradhan</b> , Faculty, Idaho State University <b>Melissa Rivas</b> , Student, Idaho State University <b>Location:</b> Zoom Main Room
<b>10 - 10:15 A.M.</b>	<b>BREAK</b>
<b>10:15 - 10:45 A.M.</b>	<b>POSTER SESSION - PART 1</b> <b>Location:</b> Zoom Breakout Rooms
<b>10:45 - 10:50 A.M.</b>	<b>BREAK</b>
<b>10:50 - 11:20 A.M.</b>	<b>POSTER SESSION - PART 2</b> <b>Location:</b> Zoom Breakout Rooms
<b>11:20 A.M. - 11:30 P.M.</b>	<b>BREAK</b>
<b>11:30 A.M. - NOON</b>	<b>POSTER SESSION - PART 3</b> <b>Location:</b> Zoom Breakout Rooms
<b>NOON - 12:05 P.M.</b>	<b>BREAK</b>
<b>12:05 - 12:35 P.M.</b>	<b>POSTER SESSION - PART 4</b> <b>Location:</b> Zoom Breakout Rooms
<b>12:35 - 1 P.M.</b>	<b>CLOSING SESSION</b> <b>Moderator:</b> <b>Donna Llewellyn</b> , Boise State University <b>Speaker:</b> <b>Will Hughes</b> , Boise State University
<b>2 P.M.</b>	<b>INBRE SESSION</b> <b>Moderator:</b> <b>Dan Nogales</b> , Northwest Nazarene University <b>Location:</b> Zoom Main Room

**Idaho Conference on Undergraduate Research 2020  
Survey Results**

**RESPONSE RATE: 54.9%**

- 284 attendees (includes 6 IFITS staff who did not receive the survey)
  - 185 students
  - 93 faculty/staff/other
  
- 156 recorded responses

**Q2) Please indicate your overall satisfaction with the 2020 Idaho Conference on Undergraduate Research.**

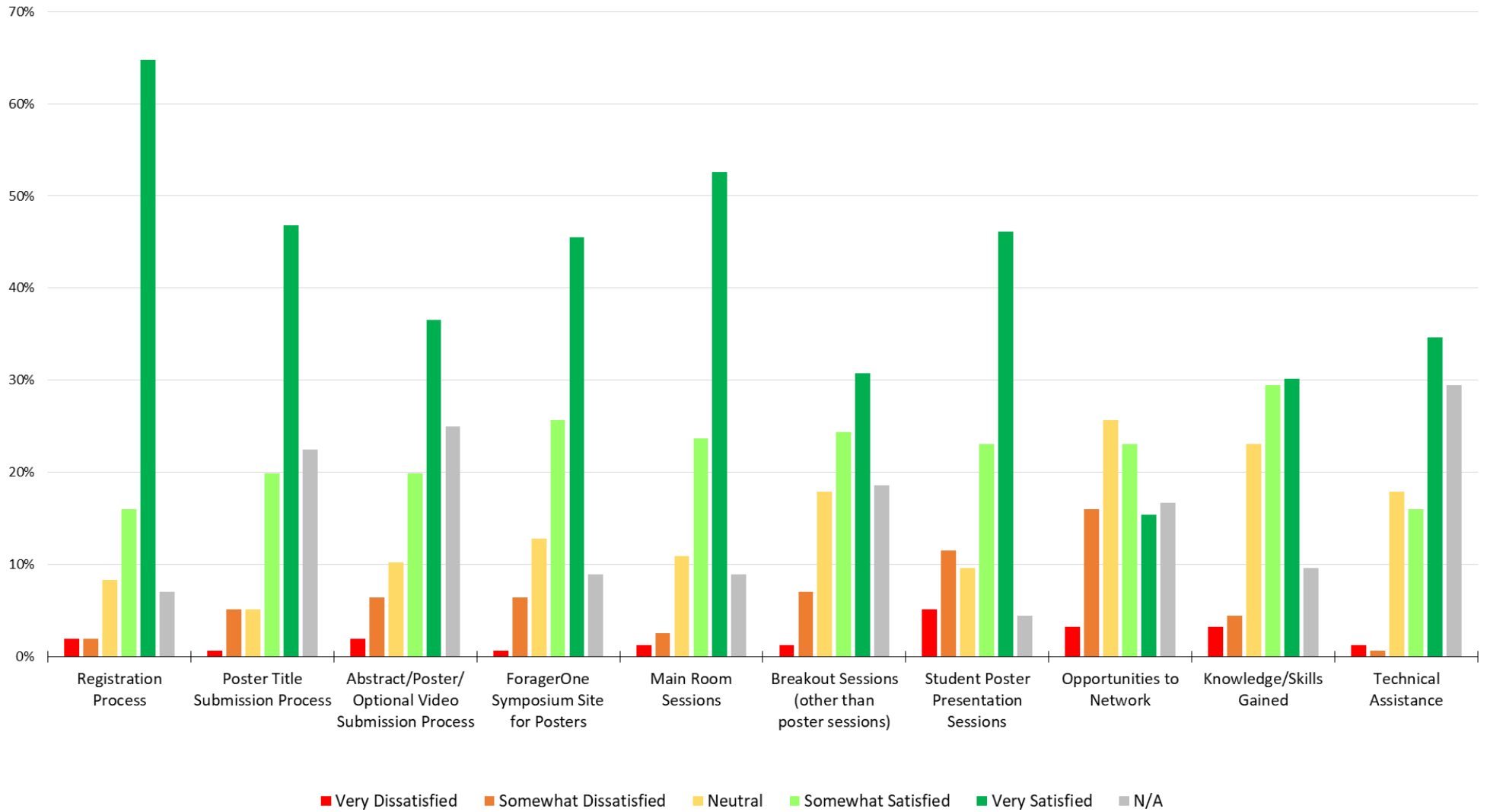


Answer	%	Count
Very Dissatisfied	1.3%	2
Somewhat Dissatisfied	2.6%	4
Neutral	11.5%	18
Somewhat Satisfied	36.5%	57
Very Satisfied	48.1%	75
<b>Total</b>	<b>100.0%</b>	<b>156</b>

**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
Registration Process	2%	3	2%	3	8%	13	16%	25	65%	101	7%	11	100%	156
Poster Title Submission Process	1%	1	5%	8	5%	8	20%	31	47%	73	22%	35	100%	156
Abstract/Poster/Optional Video Submission Process	2%	3	6%	10	10%	16	20%	31	37%	57	25%	39	100%	156
ForagerOne Symposium Site for Posters	1%	1	6%	10	13%	20	26%	40	46%	71	9%	14	100%	156
Main Room Sessions	1%	2	3%	4	11%	17	24%	37	53%	82	9%	14	100%	156
Breakout Sessions (other than poster sessions)	1%	2	7%	11	18%	28	24%	38	31%	48	19%	29	100%	156
Student Poster Presentation Sessions	5%	8	12%	18	10%	15	23%	36	46%	72	4%	7	100%	156
Opportunities to Network	3%	5	16%	25	26%	40	23%	36	15%	24	17%	26	100%	156
Knowledge/Skills Gained	3%	5	4%	7	23%	36	29%	46	30%	47	10%	15	100%	156
Technical Assistance	1%	2	1%	1	18%	28	16%	25	35%	54	29%	46	100%	156

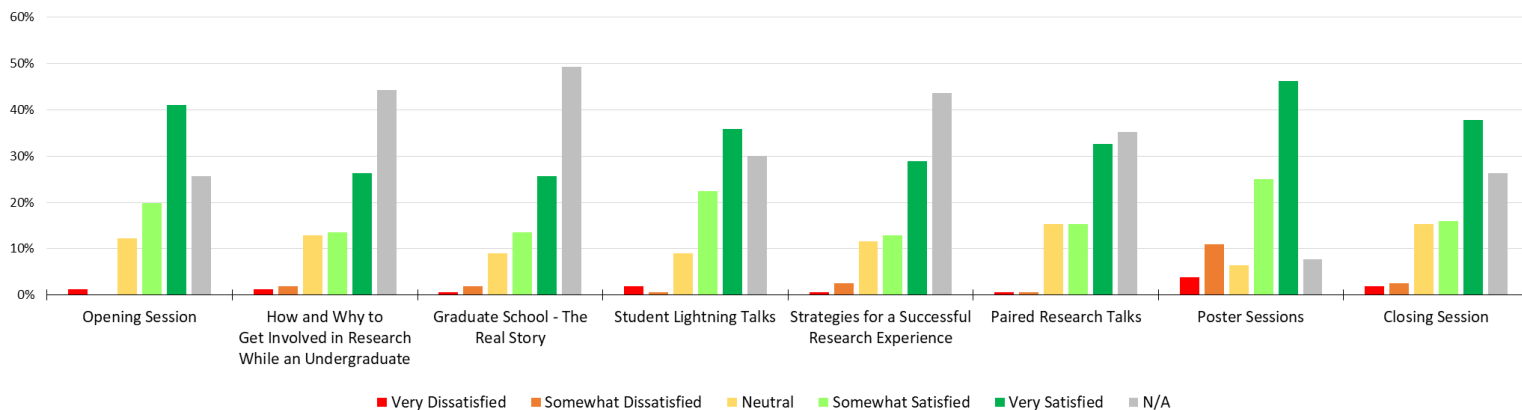
**Q3) Please tell us how satisfied you were with the following aspects of the conference.**



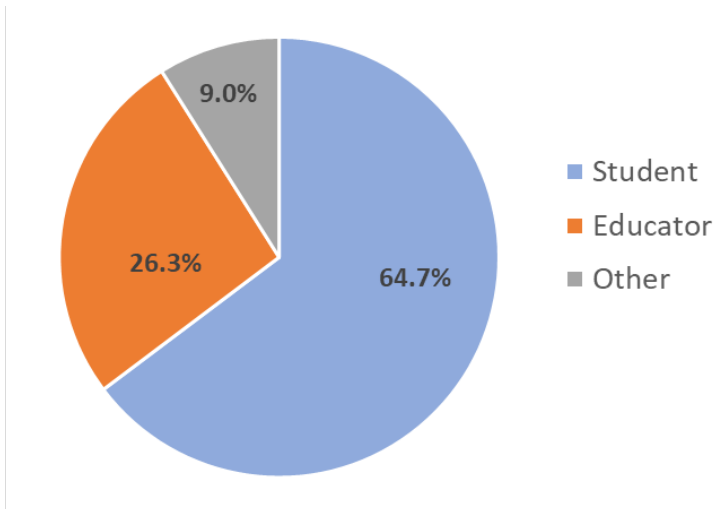
**Q4) For each session that you attended, please let us know how satisfied you were with that session.**

Session	Very Dissatisfied		Somewhat Dissatisfied		Neutral		Somewhat Satisfied		Very Satisfied		N/A		Total	
	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count
Opening Session	1%	2	0%	0	12%	19	20%	31	41%	64	26%	40	100%	156
How and Why to Get Involved in Research While an Undergraduate	1%	2	2%	3	13%	20	13%	21	26%	41	44%	69	100%	156
Graduate School - The Real Story	1%	1	2%	3	9%	14	13%	21	26%	40	49%	77	100%	156
Student Lightning Talks	2%	3	1%	1	9%	14	22%	35	36%	56	30%	47	100%	156
Strategies for a Successful Research Experience	1%	1	3%	4	12%	18	13%	20	29%	45	44%	68	100%	156
Paired Research Talks	1%	1	1%	1	15%	24	15%	24	33%	51	35%	55	100%	156
Poster Sessions	4%	6	11%	17	6%	10	25%	39	46%	72	8%	12	100%	156
Closing Session	2%	3	3%	4	15%	24	16%	25	38%	59	26%	41	100%	156

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



**Q5) Please select your role.**

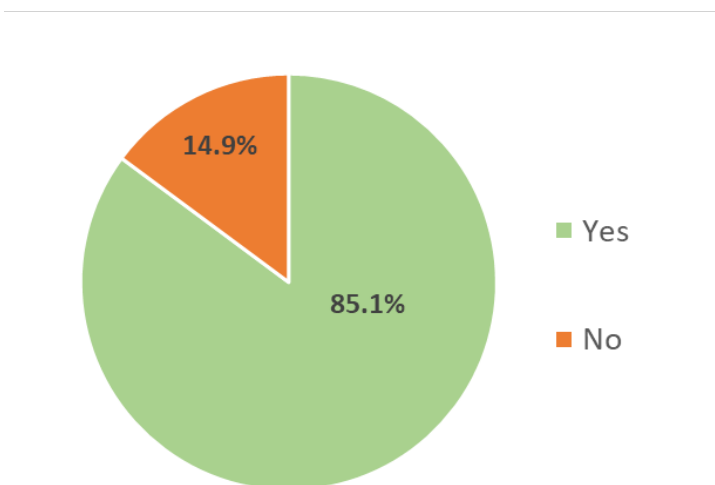


Answer	%	Count
Student	64.7%	101
Educator	26.3%	41
Other	9.0%	14
Total	100.0%	156

**Q6) Other roles reported:**

- Administrator
- Staff
- Mentor
- Panelist
- PI
- Program Director

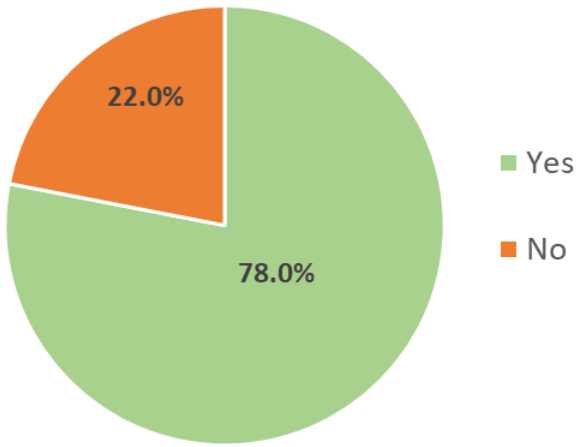
**Q7) Did you present a poster?** (This question presented only to the respondents who selected “Student” as their Role.)



Answer	%	Count
Yes	85.1%	86
No	14.9%	15
Total	100.0%	101

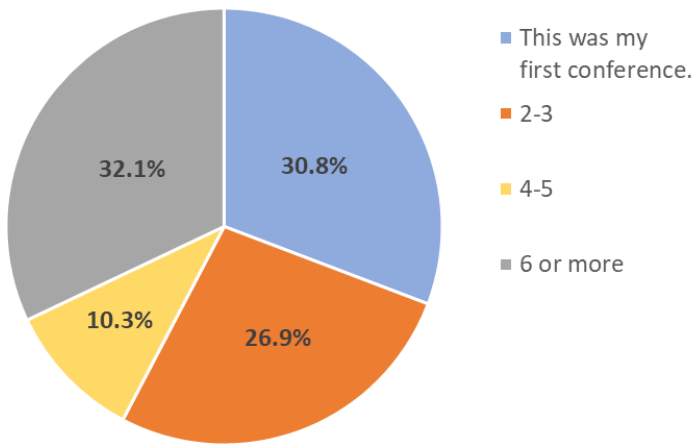


**Q8) Were you a mentor of a student researcher who presented a poster?** (This question presented only to the respondents who selected “Educator” as their Role.)



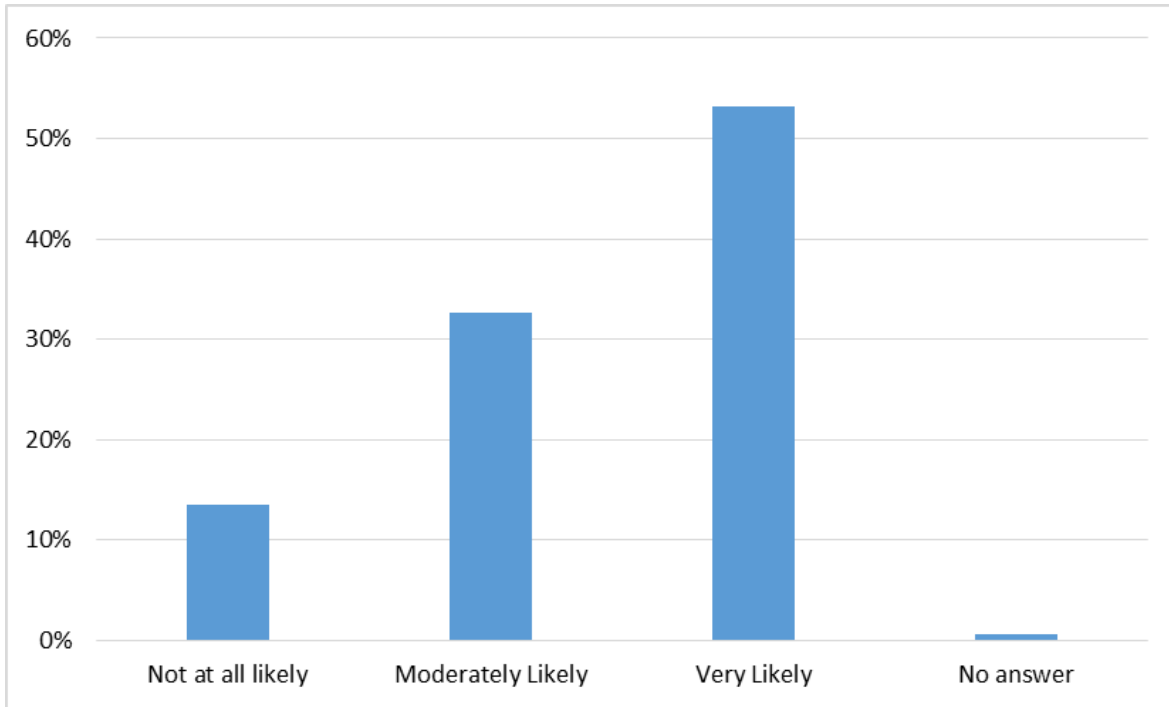
Answer	%	Count
Yes	78.0%	32
No	22.0%	9
Total	100.0%	41

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



Answer	%	Count
This was my first conference.	30.8%	48
2-3	26.9%	42
4-5	10.3%	16
6 or more	32.1%	50
Total	100.0%	156

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



Answer	%	Count
Not at all likely	13.5%	21
Moderately Likely	32.7%	51
Very Likely	53.2%	83
No answer	0.6%	1
Total	100.0%	156

### 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. 100 respondents answered to this question; some mentioned more than one take-away. The sum of the category counts is 139.

A criticism was received in response to this question and is indicated in red text.

CATEGORIES OF COMMENTS	COUNT
Learn about students'/others' research	28
Diversity of research	19
Opportunity to present/practice presenting my research/poster	10
Zoom conferences can be successful	6
Research during COVID-19	6
Ability and potential of students	6
Networking opportunities	5

Praise: Poster sessions	5
Lightning talks	5
Networking/interpersonal skills	4
Closing session	4
Gained confidence to present/conduct research	4
How to be a better researcher/succeed with research	4
Ability to support students	4
Students' enthusiasm	3
Research opportunities	3
Value of research	3
Graduate school info	3
New ways to get involved in UG research	2
Students' positive response to poster presentation experience	2
How to present research/posters	2
Praise: ICUR in general	2
Learn about fields and types of research	1
How to make the most of time as an undergraduate	1
Criticism: Inability to attend desired poster presentations via Zoom breakout rooms	1
Feedback on my research	1
Perseverance in research	1
Praise: Students and faculty	1
Advice from faculty	1
ForagerOne platform	1
Praise: ICUR organization	1

Strong responses:

- STUDENT: *“The most impactful aspect of ICUR for me was the sheer variety and diversity of subject matter and method of research. Before attending this conference, I had a singular view of what research was and now I believe there is a place for everyone within this community regardless of their discipline.”*
- STUDENT: *“It felt nice to have people celebrate my accomplishments. I often down play my accomplishments and hearing the [encouraging] words from Dr. Tromp and other presidents made a world of a difference.”*
  - The above statement is from a student who indicated they heard about ICUR through the LSAMP program.
- EDUCATOR: *“As always, the students were eager to get involved and had great questions. Their research was phenomenal.”*
- STUDENT: *“I really liked the end of the first day session that discussed research during covid. I felt like that was a great thing to include and made me feel much better about the whole situation.”*
- STUDENT: *“It was really exciting to see how much the professors advocated for the students and really seemed to want the best for them and their research.”*

- STAFF MEMBER: *“Hearing about students who proceeded with research and remained flexible in how they approached their project was awesome. Any session where I could hear students share about their experiences was my favorite. Their resilience was inspiring!”*

The complete list of comments grouped by role follows, excluding “n/a” responses.

STUDENTS	
Student	All the research being done from students in many varying disciplines all over Idaho.
Student	Being able to freely talk to students about graduate school was really helpful and impactful for this point in my career. I also loved hearing from Dr. Bliss about what it takes to continue research and talking about how to make the most of our research experience.
Student	Being able to present
Student	Exposure to a wide range of research projects. It was heartening to see so many fields of study united under one "roof," even if just for one day.
Student	Finding new ways to get involved in undergraduate research.
Student	Getting to hear from the experienced people what they love most about research and learning about all the different kinds of research happening.
Student	Getting to see what other schools are working on, as well as building relationships within the scientific community.
Student	Having the opportunity to present my work to my peers of many different disciplines, as well as learn about other research from different disciplines.
Student	how diverse research can be
Student	Humans are extremely adaptable.
Student	I always enjoy the lightning talks and the diversity of the poster sessions. I definitely learn a lot from all of the presenters.
Student	I enjoyed seeing how diverse the research projects were and getting good feedback on my work (from people not in my discipline)!
Student	I feel like the range of research I now know about it extremely wide comparatively.
Student	I felt like I was more confident in myself and my research afterward.
Student	I found the breakout room that discussed how to succeed in undergraduate research very helpful. The tips for a successful research experience were my biggest takeaway from ICUR.
Student	I gained new information and I learned how other students conducted their research.
Student	I have gained more skills by talking to people that I do not know and who do not know anything about the subject of my research. Also, I liked the idea of exchanging the information between us it was something helpful for me.
Student	I learned that the lack of physical interaction makes presenting on Zoom less stressful, at least for me.
Student	I learned the existence of a research method course at Boise State that I am quite interested in attending!
Student	I liked the metaphor of a river being likened to research at the closing speech portion.
Student	I love research and we are all contributing pieces of a puzzle that will make this a better world
Student	I love the diversity in ideas and watching so many students researching exciting topics!
Student	I realized how important being able to present one's work is in the research community.
Student	I really enjoyed all the information about graduate school. Many of the questions I had were answered, as well as questions that I didn't know I had. I feel much more confident and informed about the entire process now.
Student	I really enjoyed networking and hearing about other student's research.
Student	I really enjoyed seeing what other research is done by undergraduate students.

Student	I really enjoyed the poster sessions and getting to hear about projects from a variety of fields that other student researchers were passionate about and to share my work.
Student	I really enjoyed the student lightning talks.
Student	I really liked listening to what undergraduates from disciplines other than my own were doing for their research.
Student	I really liked the end of the first day session that discussed research during covid. I felt like that was a great thing to include and made me feel much better about the whole situation.
Student	I was able to see what other students were working on during the summer from different fields.
Student	Importance of networking in the scientific community
Student	It felt nice to have people celebrate my accomplishments. I often down play my accomplishments and hearing the encoring words from Dr. Tromp and other presidents made a world of a difference.
Student	It helped me get a better feel for how to network and made me more convinced that I would like BioMedical research.
Student	It really helped me to see what kinds of specific research other undergrads were doing.
Student	It was great to see the variety of research projects that have been conducted in the state of Idaho. I was grateful to be apart of that group.
Student	It was really exciting to see how much the professors advocated for the students and really seemed to want the best for them and their research.
Student	Learned about various and interesting research outside my major
Student	Learning about other research being done.
Student	Learning about others research
Student	Learning about the research that others are doing.
Student	Learning about the variety of research that takes place in Idaho.
Student	Learning from other posters
Student	Learning from other students research and journeys
Student	Learning new things, experience presenting
Student	Listening to my Professor talk about research opportunities.
Student	Listening to other student's research was very eye-opening.
Student	Loved still being able to network with other researchers during these crazy times, and being reminded that we are all struggling with the impacts of this pandemic.
Student	Meeting new people
Student	My greatest take away was how significant it is to be able to effectively communicate research to an audience made up of individuals from a variety of fields.
Student	One of the most impactful parts of ICUR were being able to communicate and network using my research.
Student	presenting my lighting talk helped me learn how to succinctly communicate my research to a broad audience
Student	Research is not confined to just science.
Student	Research isn't just the super sciency stuff in a lab. It can also be art or music or film.
Student	Seeing research done in other fields and all the other options there are was eye opening.
Student	That doing research is never easy but should always be aimed for.
Student	That we all face challenges in our research and that is okay. Another take away is that I learned to just stay motivated and stay passionate because that could take me far.
Student	The ability to hear a person briefly present their research, and then review the poster at my leisure anytime during the conference.
Student	The entire process of preparing for the poster sessions was very helpful in building my presentation skills and confidence.

Student	The importance of networking
Student	The main session talks about providing insight and tips on how to be a better researcher and succeed in your field.
Student	The most impactful aspect of ICUR for me was the sheer variety and diversity of subject matter and method of research. Before attending this conference, I had a singular view of what research was and now I believe there is a place for everyone within this community regardless of their discipline.
Student	The most impactful part of attending ICUR was seeing such a wide variety of research topics and learning about them from motivated students.
Student	The most impactful part was seeing all interest attend; including those outside of the STEM program.
Student	The overall experience.
Student	The poster sessions. I really enjoyed presenting my research to others.
Student	The practice of presenting a scientific poster at a professional event.
Student	The quality of research doesn't come out much in a one minute pitch, just the researchers excitement level.
Student	The student lightning sessions.
Student	The student presentations were fascinating and helped orient me to what I could expect for future research projects I may work on and present in conferences.
Student	There are many different areas of research that someone can go into
Student	We are all in this together.
Student	Will Hughes closing message really impacted me the most. Talk about a perfect message for wrapping up a 10 week rollercoaster of a research experience.
<b>EDUCATORS</b>	
Educator	As always, the students were eager to get involved and had great questions. Their research was phenomenal.
Educator	Being able to attend the conference successfully and support my students while not traveling. I wish that I had attended more sessions other than the poster sessions.
Educator	For ICUR 2020, that we can have attendance and participation from anywhere on the planet, and that students will participate if they knew and had opportunity. I think ICUR could advertise in a national or wider forum.
Educator	Frustration at not being able to select the poster presentations that I heard.
Educator	Great opportunity for students
Educator	I didn't realize how much great student research is taking place across the state! We should be very proud.
Educator	I loved getting some of the students who were sort of stuck in their own disciplines to answer much more basic questions by non-specialist audience members. In one case, the student struggled a bit, but then in round 2 of the poster breakouts, I ended up in the same room with him again and saw a much more audience-aware presentation the 2nd time! I also loved Will Hughes's moving, metaphorical comparison of students, scholarship, stages in a life, seasons, and rivers. Seriously brought tears to my eyes!
Educator	I missed the connections from the in person, but I really liked the breakout room as a way to try to replicate that.
Educator	I still enjoy the enthusiasm of the study students and the great breadth of research topics.
Educator	I was impressed with the students asking each other questions in the breakout sessions
Educator	I was very impressed at the polish the student lightning sessions.
Educator	Insight into the breadth and quality of undergrad research
Educator	My Students seemed to like the grad school panel.
Educator	Poster Sessions
Educator	Seeing students sharing what they've been working on all summer and gaining confidence.
Educator	student presentations.

Educator	Students learn from each other
Educator	Students presenting their research projects (poster sessions)
Educator	That our students are really doing great work!
Educator	The students managed to perform a great job during the pandemic.
Educator	To see so much support of undergraduate research, in ways I didn't receive when I was in college
<b>OTHER ROLES</b>	
Other	Diverse poster sessions and a fantastic keynote for the closing session.
Other	Hearing about students who proceeded with research and remained flexible in how they approached their project was awesome. Any session where I could hear students share about their experiences was my favorite. Their resilience was inspiring!
Other	learning that a zoom conference will work
Other	My greatest take-away is the value that research has on the student experience and how incredibly talented our staff and students are. Very impressive!
Other	Poster break-out sessions were great!
Other	This was an excellent substitute for an in-person meeting. Bravo to the organizers.

## 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. 84 respondents suggested a change; some made more than one suggestion. The total count of suggested changes/improvements is 100. 72 respondents either did not answer this question or indicated they had no suggestions for improvement.

CATEGORIES OF COMMENTS	COUNT
Poster sessions	55
Conference - general	27
Plenary/breakout/other talk sessions	8
Other logistics	6
Networking	3
Discipline focus	1

### Highlights:

- Poster sessions
  - 21 people requested being allowed to choose which session/room to attend
  - 12 people stated students needed more time to present
  - 7 people made structure redesign suggestions for the suggestions
  - 5 people recommended better randomization of the participants in each room
    - 4 of these said they were in poster sessions with the same people more than once
- Conference - general
  - 13 people requested resuming an in-person conference
  - 2 people suggested better communication of submission/registration process

- 2 people mentioned challenges using the ForagerOne site
- Plenary/breakout/other talk sessions
  - 2 people made session structure redesign suggestions
- Other logistics
  - 3 people requested longer/more breaks between sessions
- Networking
  - 3 people suggested better/more networking opportunities\*

*\*Repeat highlight from last year*

**Strong criticisms:**

- STUDENT: *“Better breakout room sessions with a longer break between session two and three. It would also be helpful if each room was conducted the same way. My favorite room had us each give our pitch and have 2 min of questions directly following my pitch. In The other rooms I didn’t get any questions about my poster.”*
- STUDENT: *“The only thing I can think of would be if there was some way we could choose which student presentations we listened to. I know we can leave comments on Foragerone, but its not the same as an "in person" interaction. Maybe even if there were just a few more poster sessions so you were more likely to see on of the presentations you were interested in. Or if one of the sessions was grouped by discipline so you could see other work in your field.”*
- STUDENT: *“Setting up break out rooms for presenter/mentor pairs ahead of time might be beneficial. I know that some mentors would have liked to see their student present, however were unable to due to the random grouping. Having student/mentor pairs for one session would provide an opportunity for mentors to observe their student present so that additional feedback could be given after the conference.”*
- STUDENT: *“I wish that we would get more time to present our posters. Actual poster presentations would actually be longer than 1-3 minutes. I feel that the short presentations don't prepare us to present at other conferences.”*
- STUDENT: *“I found the random nature of the breakout rooms for the poster presentations frustrating. There were many presenters whose pitch I wanted to hear but wasn’t able to. It felt inefficient and frustrating not to be able to hear from presenters I really wanted to while hearing from other presenters multiple times because we had been assigned to multiple breakout rooms together.*

*That said, I understand that hosting a conference online is difficult, and I really appreciate all the hard work that went into adapting the conference!”*

- EDUCATOR: *“I noticed that in one of the sessions, when we were about to go into breakout rooms, the number of attendees dropped pretty noticeably. Maybe tell people they have the option to stay in the main room if they aren’t in the mood to engage so that they don’t leave altogether? It can feel like a lot for the introverts sometimes, especially as the day goes on.”*

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

<b>CATEGORY &gt; SPECIFICS</b>	<b>COUNT</b>
<b><i>Poster sessions</i></b>	<b>55</b>
Allow choosing which session/room to attend	21
More time to present	12



Session structure redesign suggestion	7
Better randomization	5
Group by discipline	5
Preference for small, interactive sessions on Zoom instead of large, in-person room	1
Option to stay in main room	1
Not specified	1
Better/more communication of sessions and details before conference begins	1
More poster sessions	1
<b>Conference - general</b>	<b>27</b>
Resume in-person	13
Better communication of submission/registration process	2
ForagerOne challenges	2
Better/more communication of sessions and details before conference begins	1
Scheduling suggestion	1
Desires in-person / did not like virtual format	1
Session structure redesign suggestion	1
Technological fluency	1
Set a standard for projects to be included	1
Include graduate students	1
Too long	1
Intersect more visibly with federally-funded programs	1
More breakout groups	1
<b>Plenary/breakout/other talk sessions</b>	<b>8</b>
Session structure redesign suggestion	2
Not specified	1
Better talks/speakers - not specified	1
More interactive sessions	1
Option to stay in main room	1
More sessions for faculty/mentors	1
More time to present	1
<b>Other logistics</b>	<b>6</b>
Longer/more breaks between sessions	3
Not enough time for lunch	1
Better/more communication of sessions and details before conference begins	1
Extended deadline for submitting posters and abstracts	1
<b>Networking</b>	<b>3</b>
Better/more networking opportunities	3
<b>Discipline focus</b>	<b>1</b>
Include disciplines other than hard science	1

The complete list of comments grouped by role follows, excluding “n/a” and “none” responses that do not elaborate further.

STUDENTS	
Student	A better platform to be able to choose what posters you would want to see and listen to a presentation on. With it being on zoom we were not able to see talks on posters that we wanted to hear and on topics that we could more-so comprehend.
Student	Although this is dependent upon the audience itself, greater interaction between participants in the breakout sessions. Perhaps some sort of mediated "round table" discussion among the members might facilitate this?
Student	An extended deadline for abstracts and posters
Student	Aside from returning to an in-person conference, I would say workshopping the due dates.
Student	Being able to contact students I made connections with.
Student	Better breakout room sessions with a longer break between session two and three. It would also be helpful if each room was conducted the same way. My favorite room had us each give our pitch and have 2 min of questions directly following my pitch. In The other rooms I didn't get any questions about my poster.
Student	better more informative talks - learning about undergraduate research isn't helpful when we are already engaged in it; grad school info session was also pretty basic and not very informative
Student	For online conference: the ability to choose the topic of interest so that you have a chance to connect to the people from your field.
Student	Grouping poster sessions to more similar categories
Student	Have breakout rooms be based on subject matter.
Student	Having it in person.
Student	Having the conference on the weekend versus weekdays—we were still running experiments and could only attend sessions we were presenting in.
Student	Honestly, especially given the circumstances with Covid-19, I thought the organizers and participants did a fantastic job! The only complaint I had was the forager one poster presentation site. It was a little bit clunky to navigate. Being able to search specific meta data for a poster would have been very helpful (author, institution, etc). Not all posters had a poster number associated with them. It was difficult to easily display the poster in a full-screen manner so that you could read the small text.
Student	hopeful for an in person conference next year.
Student	I can't think of anything besides being able to be there in person which was out of anyone's control this year.
Student	I don't mean to be rude about this at all, but having attended the undergraduate research conference at BSU a couple of times, I know firsthand that having the thing in person works infinitely better. I understand that you guys were trying to put something on just so there could be a conference, and given the circumstances, I'd say you did about the best job you could, but I would've really preferred if we could've postponed until either the fall or next spring, whenever you could find a venue large enough to allow for an in-person conference.
Student	I don't necessarily have any recommendations besides meeting in person would be much more valuable than zoom. But circumstances were against us on that one.
Student	I felt like the poster breakout sessions need improvement, or going to in person.

Student	<p>I found the random nature of the breakout rooms for the poster presentations frustrating. There were many presenters whose pitch I wanted to hear but wasn't able to. It felt inefficient and frustrating not to be able to hear from presenters I really wanted to while hearing from other presenters multiple times because we had been assigned to multiple breakout rooms together.</p> <p>That said, I understand that hosting a conference online is difficult, and I really appreciate all the hard work that went into adapting the conference!</p>
Student	I just hope we have the opportunity to do it in person next year!
Student	I just miss impersonation interaction so much.
Student	I really liked the "roundtable" format from the small group poster sessions. I know the conference will likely not be virtual again but it was nice to have a small group to share our research with and ask questions rather than only poster presentations in a large room.
Student	I think getting to meet people in person would improve the experience hopefully for next year.
Student	I think taking more sessions for posters just because it was a really fun different way to present but I felt like I wanted to talk to more people and hear about more research.
Student	I wish that we would get more time to present our posters. Actual poster presentations would actually be longer than 1-3 minutes. I feel that the short presentations don't prepare us to present at other conferences.
Student	I would definitely recommend giving the student presenters more time in breakout rooms for presentations. Perhaps doing two rounds of break out rooms would make more sense so that there is more time. I also was disappointed that I did not get to see all of my peers present, but I know there were limitations to this Zoom conference.
Student	I would have liked the opportunity to see more of my peers research because I ended up in the same breakout groups as other student researchers several times.
Student	I would have liked to learn about research in my area or have had the ability for my mentor to sit in on one of my 1 minute talks. The conference primarily focused on biochem and although that is a part of STEM and research it isn't the only part.
Student	I would have the students have their posters ready and share their own screens, so the mediator doesn't have to waste time searching for the students' poster. I thought it was rude and ill prepared of students to ask the mediator to share their poster for them, because they were being lazy and reading a script from their own computer.
Student	I would like the ability to have my mentors watch my presentation. Although I understand there is great difficulty in setting up an online conference to accommodate the ability for a large group of people to choose their breakout rooms, I think finding a way to facilitate at least one poster session so this could happen would be great. That being said, I did like that the randomization of breakout rooms allowed me to listen to presentations that I might not have stopped at during an in-person conference.
Student	I would prefer to experience the conference in person it would have made it better for me.
Student	If ICUR were to continue on zoom I would encourage more attendee participation by using surveys and polls to interact with everyone.
Student	If this conference is held online next year, I would suggest changing the poster sessions. I was confused about how they were going to work right up until the very beginning of the first one. I feel that the 1 minute time limit for presenting the poster was slightly too short and most groups ended up giving people 3-5 minutes to talk which was much better. Overall, more information on how things were going to work would have made my experience much better.
Student	If using Zoom, create breakout rooms with more diverse topics. I found myself in rooms with people I was already conducting research with.

Student	If you will be online again use a system where the posters are viewed free form and not in breakout rooms. Cut the zoom aspect entirely as this made it chaotic and hard to focus in on one poster you enjoy. The comment section below each poster is sufficient for discussion and it lets researchers focus on presenting their work in its entirety rather than having a small spotlight in a small room full of people who are disinterested.
Student	In the future, add individual zoom links to each poster during an allotted time so those interested may go to that students breakout room and hear about their research. Similarly to an in person poster session.
Student	It was fine, but I got tired after the first two poster sessions and needed a longer break for lunch. It just felt long-winded with barely any time for breaks if you are the presenter.
Student	It will be great if it can be a physical conference, but only God knows what the future holds.
Student	Longer poster breakout room sessions; 30 minutes just wasn't long enough. Possibly determine the poster breakout room's prior to Friday so we can have time to look at our co-presenters posters and have questions ready for them. It felt like a lot of our time for Q&A was just spent asking really generic questions or no questions at all.
Student	Longer poster sessions (10-15 more minutes) for more time to ask questions and/or answer them.
Student	Longer time for breakout sessions when presenting the posters and answering questions.
Student	Longer time to explain our research, or divide it in two days.
Student	Moderators for all breakout rooms
Student	More breakout groups
Student	More breaks between poster sessions. More consistency in the Poster sessions.
Student	More poster sessions/more time for students to actually interact with each other. I feel like a lot of the time we were talking at each other. Also the majority of the non-poster-session talks were hard to sit through.
Student	More time involved in smaller groups.
Student	Opportunity to network with similar disciplines. This would also provide opportunities to our field and building relationships.
Student	Perhaps having participants create a video presentation to attach to their posters in case you don't get put into the same breakout room as some that are most interesting.
Student	Setting up break out rooms for presenter/mentor pairs ahead of time might be beneficial. I know that some mentors would have liked to see their student present, however were unable to due to the random grouping. Having student/mentor pairs for one session would provide an opportunity for mentors to observe their student present so that additional feedback could be given after the conference.
Student	Submission for title submission wasn't advertised so I didn't know when or how to do it.
Student	Technological fluency in main sessions.
Student	The 30 second elevator pitch was difficult for my first time around. I realize it needs to be short, but I would have preferred for it to be longer.
Student	The online breakout room research pitch was interesting.. I ended up being put into the same breakout room twice and saw about 10% of the same researchers present. I don't know how randomization into room could have been better made, but there were some repeat moderators and poster presentations that I sat through.
Student	The only thing I can think of would be if there was some way we could choose which student presentations we listened to. I know we can leave comments on Foragerone, but its not the same as an "in person" interaction. Maybe even if there were just a few more poster sessions so you were more likely to see on of the presentations you were interested in. Or if one of the sessions was grouped by discipline so you could see other work in your field.

Student	The only thing I might consider is having the posters presented by topic. My research was difficult to explain in a short time so during my "elevator pitch" I found I was only able to explain very introductory aspects of the research. I think it might help to have presented to people who were doing similar research because that way I wouldn't have had to introduce the topics my research was based on and i would have more time to talk about my research fully.
Student	There should probably be a higher bar for some work to be included - there were a couple people who presented research that wasn't particularly enlightening.
<b>EDUCATORS</b>	
Educator	Allow participants to select the talks / sessions they want to attend. This can be accomplished using Zoom. I have attended a 3 day meeting with over 80 sessions where we could could the sessions we wanted to attend and even change sessions as we wished.
Educator	Being able to attend talks given by my students and also connect more with other students doing similar research as in my lab (more networking, but I am aware that it is extremely which hard to pull off in a virtual setting).
Educator	Being able to request a breakout room by the Poster Number. I arrived late and missed the first session, so there was a chance that I would not see my students. I had to have my students text me their breakout room numbers, so I could be moved.
Educator	Besides being randomly selected for the poster session, it would be useful to be able to select for attending at least my students' presentations.
Educator	Break out poster session should have each room directly linked to title of poster on website page. Should not be randomized as spectator into the rooms. So you can choose to visit a room, thereby giving more emphasis to speaker.
Educator	Have posters on Day 1 and an opportunity for poster Q&A or "office hrs" so there can be more interaction.
Educator	I noticed that in one of the sessions, when we were about to go into breakout rooms, the number of attendees dropped pretty noticeably. Maybe tell people they have the option to stay in the main room if they aren't in the mood to engage so that they don't leave altogether? It can feel like a lot for the introverts sometimes, especially as the day goes on.
Educator	I wish we had graduate students as well.
Educator	I would have liked to be able to choose which student poster presentations I attended, but I understand that would be logistically challenging over Zoom.
Educator	I'd love to have been able to choose which poster sessions to attend, since there were some that I wanted to know more about, in actual interaction with the presenter. But I also understand that this way was much fairer to distribute audience members evenly. Is there a way to have 2 or 3 rounds of random distribution, like we did, plus one round, like the coffee break table at an in-person conference, where we could interact more informally with student presenters that we seek out specifically? Maybe even have the introduce-yourself breakout rooms AFTER the poster sessions, so that we could potentially talk to people whose posters we hadn't heard about?
Educator	If it were run online again it might be better to have attendees browse the posters in ForagerOne during the poster session and then click on one to join a breakout room type thing with the presenter and any other interested attendees.
Educator	In person again if that is an option next year
Educator	It is not so much ICUR as my own schedule and commitments. I would have liked to be at more events, and to interact more with the participants. There was one event that I found a bit anomalous ... switching to breakout room and back to the main session every few minutes - the times in the breakout room were a little short to let people get to know each other.
Educator	Knowing when students are presenting
Educator	Maybe more for faculty mentors, but not essential. The conference is for undergrads after all.
Educator	More awareness for others to join in.

Educator	More choice in which posters to “visit”
Educator	Poster intros were much too short. The students barely had time to state the research and then abruptly ended. Give students at least 2-3 minutes. There was plenty of time at the end of all poster sessions.
Educator	Searching posters on the online platform wasn't uniform. It only searched the text in the poster which made it hard to find posters if the authors were in a graphic.
Educator	The coordination of the faculty presenters went pretty well. I felt there were perhaps too many emails and online documents, but I appreciated having the dress rehearsal for practice.
Educator	Themed poster sessions rather than the random assortment. This would vastly improve the potential for useful networking interactions, and increase the quality of the questioning and feedback for students.
Educator	virtual conference is not the way to go
<b>OTHER ROLES</b>	
Other	Back to in-person conference.
Other	Being virtual is always tough. On the one hand, randomizing attendees into breakout rooms allowed me to see diverse poster presentations I would not normally stop at. On the other hand, it would have been nice to see my students present. In all the poster sessions I attended, the moderators did a great job making sure everyone was asked a question. After talking to our SARE students, I think this experience was not consistent. One of my students reported that she was only asked one question across all four poster sessions, and was also locked with the same moderator for most sessions. Next time, better mixing with moderators would be helpful.
Other	Give general participants a choice of poster sessions (break room) to attend.
Other	Intersect more visibly with the large federally-funded programs that include undergraduate research/creative activity such as INRBE and EPSCor, and B2B.
Other	Two days was very long for me.