Responsible Conduct of Research 2023 Mini-Conference Evaluation Report

Shannon Johnson & Jess Kirby

Description of 2023 Mini-Conference Process

The first annual RCR Mini-Conference was held at UCCS on August 14th, 2023. The conference was planned and organized by the RCR co-Fellows Jess Kirby and Shannon Johnson, with collaboration throughout the summer with the Office of Research and campus research stakeholders to include Jessi Smith, Lindsay Coppa, Jen Poe, Grant Clayton, Mike Sanderson, Kylee Popp, and Kelli Klebe. An initial planning meeting happened in June to get the new cofellows up to speed. During July, the co-fellows collaborated to finalize 4 conference sessions topics, secure and confirm paired speakers for each topic, and collaborate to create and approve marketing materials. Event marketing emails with online registration link were distributed on 08/01/23 by the Office of Research and subsequently shared to key groups such as the URA participants, grant funding recipients, and college deans.



The event was well attended with 81 participants. Attendees were randomly assigned to one of four groups by distributing colored dots (red, blue, green, yellow) for name tags at checkin. After a brief group welcome in which the QR code for the pre-survey was shared, groups rotated together to each of the 4 sessions every 40 minutes, with a 10-minute break between sessions. Room volunteers helped remind speakers of time left in each session and traveled with each group from room to room. Sessions ran on schedule and participants demonstrated active engagement during sessions highlighting the benefit of small group sessions. The conference ended with a large group debrief and attendees were asked to complete the post-survey via QR code provided on screen. Light snacks and beverages from Costco were provided to participants using the \$75 allocated budget.

Overall, the event ran smoothly and remained on schedule through the afternoon. Site factors out of our control reduced the enjoyment of some participants to include the water fountain being out of order, no A/C making rooms quite hot and stuffy and limited bathroom stalls on the 3rd floor of the UC. We hope to find a better campus location for next year, but largely retain the same program format.

Evaluative Results

Assessment Data

A total of 68 respondents completed the RCE conference pre-assessment survey, which was designed to assess participants' level of interest in, knowledge about, and comfort with various topics pertaining to RCR, prior to conference participation. 59 respondents completed the post-survey, which mostly posed the same questions from the pre-survey in order to allow for assessment of changes in participants' comfort and knowledge levels.

Sample

Most respondents to the pre-survey were UCCS students (84%, n=57). Faculty comprised roughly 10% of attendees (n=7, with 4 tenure-track and 3 IRC), and staff accounted for roughly 6% (n=4). Among students, 61.4% were graduate students (n=35), and 38.6% were undergraduate (n=22).

Interest in RCR. Most respondents came to the conference with an interest in RCR, with 43% characterizing themselves as very interested or passionate about RCR at the pre-survey. 32% identified themselves as moderately interested in RCR at the start of the conference, while 25% reported only a slight interest or no interest at all. By the end of the conference, interest in RCR had increased. Only 7% maintained that they had only a slight interest in RCR or no interest at all, whereas 26% noted that they were now moderately interested, and 67% identified as very interested in or passionate about RCR.

Prior Training and Knowledge. Roughly 70% of respondents reported having little to no RCR training before the event, whereas roughly 30% came into the training with moderate or substantial prior training. Self-ratings of knowledge about RCR pre-conference mirror these numbers, with 63% rating themselves as only slightly knowledgeable or not knowledgeable at all prior to conference attendance, and 37% considering themselves moderately to very knowledgeable. At the post survey, only 10% of respondents still felt they were only slightly knowledgeable about RCR. 60% had achieved a sense of being moderately knowledgeable by the end of the conference, and 29% felt that they were now very or extremely knowledgeable about RCR.

Sessions

The RCR training consisted of four educational sessions, each exploring different facets of research-related knowledge and ethical considerations.

• Collaborative research and ethical determination of authorship. Respondents' self-ratings indicated that 74% were not at all or only slightly knowledgeable about this bucket at the start of the conference. 17% reported that they were moderately knowledgeable, and 9% very knowledgeable in this area. By the end of the conference, only 14% considered themselves not at all or only slightly knowledgeable about this bucket. 55% reported that they were moderately knowledgeable, and 31% very knowledgeable in this area.

- *Inclusivity and the advancement of equity through research.* 67% reported being not at all or only slightly knowledgeable about this topic coming in. 27% self-rated as moderately knowledgeable, and 6% as very knowledgeable. By the end of the conference, only 14% considered themselves not at all or only slightly knowledgeable about this bucket. 54% reported that they were moderately knowledgeable, and 32% very knowledgeable in this area.
- Ethical considerations in the use of Artificial Intelligence and bots. 41% of respondents reported being somewhat or very uncomfortable with the area at the start of the conference. Only 14% remained somewhat uncomfortable in the end. Whereas only 25% of respondents came to the conference feeling somewhat or very comfortable with AI in research, this figure had increased to 62% at the post-survey.
- *Navigating mentor relationships.* 44% reported feeling somewhat comfortable with or neutral about this topic at the start of the conference. This figure dropped to 17% in the post survey. 34% were already somewhat comfortable with this topic at the start of the conference, while 18% characterized themselves as very comfortable with the topic. By the end of the conference, these figures increased to 54% and 29% respectively.

Buckets

Participants were also surveyed about their proficiency within each of the RCR buckets. A summary of results within each bucket follows:

- *Human subjects.* 56% of respondents rated themselves as slightly knowledgeable or not knowledgeable at all in this bucket at the start of the conference, as compared to only 12% rating themselves as slightly knowledgeable at the end of the conference. Only 9% rated themselves as very or extremely knowledgeable pre-conference. By the end of the conference, 32% rated themselves in this category.
- *Publication/authorship/peer review*: 61% rated of respondents rated themselves as only slightly knowledgeable or not at all knowledgeable at the start of the conference, as compared to 15% rating themselves as slightly knowledgeable at the end of the conference. Only 14% considered themselves very or extremely knowledgeable coming in. By the end of the conference, this figure had increased to 35%.
- *Collaboration bucket:* 46% of respondents rated themselves as only slightly knowledgeable or not at all knowledgeable at the start of the conference, as compared to only 14% rating themselves as slightly knowledgeable at the end of the conference. 14% considered themselves already very or extremely knowledgeable coming into the conference. This figure had increased to 38% by the end of the conference.
- *Mentorship bucket*: 49% of respondents rated themselves as slightly knowledgeable or not knowledgeable at all at the start of the conference, as compared to only 11% rating themselves as slightly knowledgeable at the end of the conference. 16% considered themselves already very or extremely knowledgeable coming. This figure had increased to 48% by the end of the conference.

- *Creating a safe research environment*: 49% of respondents rated themselves as slightly knowledgeable or not knowledgeable at all in this bucket at the start of the conference, as compared to only 9% at the post-survey. Only 14% felt very or extremely knowledgeable about this bucket prior to the conference, as compared to 40% at the post-survey.
- *Conflicts of interest*: 46% of respondents rated themselves as slightly knowledgeable or not knowledgeable at all in this bucket at the start of the conference, as compared to 19% at the post-survey. Only 15% were very or extremely knowledgeable prior to the conference, as compared to 37% post-conference.
- *Social impacts*. 54% of respondents rated themselves as slightly knowledgeable or not knowledgeable at all at the start of the conference, as compared to 14% considering themselves slightly knowledgeable at the post-survey. Only 13% were very or extremely knowledgeable in this bucket pre-conference, as compared to 35% at the post-survey.
- *Research misconduct*. 55% of respondents rated themselves as slightly knowledgeable or not knowledgeable at all in this bucket at the start of the conference, as compared to 16% at the post-survey. Only 14% considered themselves very or extremely knowledgeable in the bucket before the conference, as compared to 31% at the post-test.
- *Data-sharing and management*. 55% of respondents rated themselves as slightly knowledgeable or not knowledgeable at all in this bucket at the start of the conference, as compared to 28% at the post-survey. Only 12% were very or extremely knowledgeable at the start of the conference, as compared to 22% at the post-test.

Qualitative Feedback

Participants expressed appreciation for individual sessions and expressed particular interest in the AI, mentorship, and anti-racism topics. They commended the presenters in all sessions and also valued the opportunity to collaborate with colleagues. Respondents appreciated the overall organization of the event and emphasized the benefit of having a timekeeper and transitioning between sessions within the same group. Participants also praised the hands-on and interactive approach adopted in many sessions.

Participants also suggested improvements to the event such as choosing a more air-conditioned space, allocating more time to each topic, and increasing the number of breaks to reduce a sense of rush. One person also requested that the organizing team make sure to pair mentors and mentees in small groups. One respondent did not enjoy social science-focused content, and another would have liked to see content tailored to additional disciplines. Additional suggestions were session-specific, with one comment suggesting incorporation of additional diversity markers in inclusivity discussions, and another expressing a desire for discipline-specific guidance on finding research mentors. One participant expressed a desire to move the timing of the event to follow the start of the semester.

Conclusion

In conclusion, the RCR conference successfully engaged 81 participants, primarily UCCS students, faculty, and staff, in exploring and enhancing their understanding of ethical conduct of research. The pre-assessment survey revealed a majority of attendees with little to no prior RCR training, reflecting the diverse knowledge levels at the start of the conference. Notably, participants exhibited a growing interest in RCR post-conference. The four educational sessions led to notable improvements in participants' self-ratings across RCR buckets. While feedback was primarily positive, suggestions include assessing the conference timing and environment and considering potential session-specific enhancements. Overall, the conference achieved its objectives in promoting RCR engagement and knowledge acquisition, as well as fostering a collaborative learning environment.