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Organizing a Student Led Virtual Research Conference Focused on Addressing Disparities in a Rural Community

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ABSTRACT

The purpose of this study was to describe the implementation of a virtual student-led research conference at a medical school in a rural area that focused on addressing disparities in medical education opportunities and ways to address disparities in an underserved medical community. The ability to host virtual conferences in light of an evolving digital presence in medical education is both cost-effective and allows greater dissemination of research to those who may not have been able to attend an in-person conference. Two virtual research symposiums were hosted on Zoom in 2020 and 2021 with the help of faculty and students. Submissions were allowed from any student and could have any mentor affiliation involved. Abstracts were organized into sessions based on common themes, such as orthopaedics, cardiology, and translational sciences, then analyzed according to various categories such as social determinants of health, mental health, and healthcare for marginalized groups. Those who attended the conferences were asked to complete a digital evaluation form in the weeks following the conference, and the average ratings of the responses were analyzed. In total, 425 individuals attended both events, with the majority being students (64%) from the College of Medicine, Pharmacy, and Graduate Studies. Eighty-four percent of the 211 presenters were from the College of Medicine. Forty-three percent of research presentations addressed rural disparities, with a 12% rise in presentations focused on these areas (36% to 48%) from 2020 to 2021. Eighty-eight percent of all participants who completed an evaluation form were agreeable to attending a virtual event again. Based on these results, the implementation of virtual conferences led by medical students presents an effective solution to increase research opportunities for students located in rural settings. Increased opportunities to present their research at their school encouraged students to identify and address disparities in their local community.

Keywords: medical education, virtual conference, disparities, healthcare, rural

INTRODUCTION

Involvement in research encourages medical students to think critically, explore specialties of interest, and transform into leaders of discovery and innovation. Many centers face multiple barriers, including distance, and access to adequate resources to conduct research. This can be challenging for students logistically to commit to a laboratory to conduct research that is simply too far to drive to daily. During the COVID-19 pandemic, virtual platforms for medical education, clinical experiences, and research were established and proved to reduce economic burden, increase flexibility, and allow participants to focus on research beneficial to the local community.[1-3] Since students studying at rural medical schools are also more likely to practice medicine in a similar area and there has been more emphasis in recruiting rural providers,[4,5] it is beneficial to encourage students in these

areas to identify and pursue areas of research and innovation that directly impact the health outcomes of the local community.

There is a growing body of medical literature on social determinants of health (SDH), diversity, mental health, and the health of marginalized populations like refugees and the elderly.[6-11] These issues disproportionately affect areas with lower socioeconomic status, where innovative methods to buttress research are paramount in addressing healthcare disparities.[12] Additionally, the Higher Learning Commission (HLC) and the Association of American Medical Colleges (AAMC) emphasize the importance of co-curricular education in medical school curriculum. By increasing research opportunities for students who affect these marginalized populations, there is a direct influence on their lives for the better. Program directors and the residency match charting outcomes have increasingly emphasized the importance of leadership, community service, and research presentations and publications.[13-16] From the 2019 to 2022 resident match, the average number of abstracts, presentations, and publications for matched applicants rose by 25.9% (4.3 in 2019 to 5.8 in 2022) for internal medicine, 32.3% for general surgery (9.6 to 18.4), and 47.1% (20.4 to 30) for neurological surgery according to the AAMC.[17] Across all specialties, it is evident that research is becoming more prominent, which does not have a direct affiliation with rural, suburban, or urban residencies.

A research symposium led by medical students aimed to promote research in a rural county in Ohio.[18,19] Although all areas of research, including basic, translational, clinical science, and quality improvement, were encouraged, an emphasis was placed on projects addressing disparities in healthcare. This was done by including sections during the symposium that specifically addressed these important topics in medicine. We aim to discuss the implementation of a student-led virtual research conference and outline the benefits to medical students and the community in a predominantly rural setting during the height of the COVID-19 pandemic. Increases in rural student participation in research were shown due to the successful implementation of a student-led virtual research conference.

METHODS

Careful planning of the symposium was taken into consideration when twelve representatives from each of the three colleges (medicine, pharmacy, and graduate studies) assisted and implemented the symposium. Preparation began three months before the conference date, and committee meetings were focused on three stages of organization: conference design and preparation, event rehearsal and execution, and post-conference evaluation. These stages were deemed by the representatives as the structure of planning a symposium. A date that did not interfere with examinations from any of the three schools was then carefully selected. The video teleconferencing platform Zoom (Version 5.4.2) was implemented and allowed for student presenters to submit pre-recorded, timed presentations in advance. The overarching goals of the student research conference were to increase awareness of healthcare disparities seen in our rural community and to preserve social distancing measures.

A call for abstracts with specific guidelines was sent out two months prior to the conference date, as shown in Appendix A. Submissions were reviewed by the committee, which provided specific feedback for students whose abstracts did not meet the guidelines for acceptance. Students had the opportunity to revise and resubmit their abstracts. After abstracts were accepted, students received instructions on how to prepare and submit a three-minute video oral presentation with a maximum of four PowerPoint slides, as shown in Appendix B. Students were required to utilize Zoom software to pre-record their presentations for formatting consistency. Three-minute recorded presentations, along with a published abstract in a program guide, were determined by the representatives to accommodate the greatest number of student presentations due to timing constraints and to simplify conference organization.

Due to the number of presentations that fell into each of these categories, presentations were organized by topics such as neurodegenerative disorders, SDH, cardiovascular and metabolic diseases, and foundational orthopedics. Breakout rooms were then created from these topics, and an overall conference schedule was established. Following the conclusion of all presentations during each session, a five-minute question-and-answer period promoted live video and chat dialogue between presenters and the audience.

Student presenters were instructed to enter their assigned breakout room, where their presentation videos would be streamed. Multiple sessions ran concurrently while presenters and audience members could move between sessions in other breakout rooms as needed. Student session moderators managed session timing, ensured smooth flow of the event, and facilitated live question and answer discussions between presenters and audience members. These moderators had a pre-conference meeting to go over roles and responsibilities for the event. The moderator guidelines are shown in Appendix C.

After each session, moderators reminded the audience members and presenters to complete the evaluation form after the completion of the conference. IRB review or oversight was not required for this study, as it involved only the collection of survey data without any individual patient information. The evaluation form assessed satisfaction with the event and potential areas for improvement, shown in Appendix D. The mean

evaluations for the questions based on a rating system were calculated. The abstracts addressing healthcare disparities were further analyzed to understand which issues relevant to the local community were investigated.

RESULTS

Four hundred and twenty-five individuals attended the conference in 2020 and 2021. Students submitted 213 abstracts, and of those, 15 initially failed to meet requirements, which were specifically outlined in Appendix A. 13 students elected to revise and submit their abstracts. In total, 211 abstracts were presented, 87 abstracts in 2020 and 124 in 2021. Most presenters were female, 129 (61.1%), and 82 (83.9%) were from the College of Medicine. More than two-thirds (145 [66.7%]) of students presented clinical research projects and (96 [31.3%]) presented their discoveries in the basic sciences (Table 1).

Number at each session	2020	2021	Combined
Attendants			425
Opening session	38	28	66
Session 1	39	31	70
Session 2	32	29	61
Session 3	34	29	63
Session 4	32	24	56
Session 5	24	13	37
	2020	**2021**	**Combined**
Presenters	87 (41.23%)	124 (58.77%)	211
Gender			
Male	42 (48.3%)	40 (32.3%)	82 (38.9%)
Female	45 (51.7%)	84 (67.7%)	129 (61.1%)
College at Neomed			
Medicine	72 (82.8%)	105 (84.7%)	177 (83.9%)
Pharmacy	4 (4.6%)	12 (9.7%)	16 (7.6%)
Graduate Studies	11 (12.6%)	7 (5.6%)	12 (8.5%)
Type of Presentation			
Basic Science	26 (29.9%)	40 (32.3%)	66 (31.3%)
Clinical	61 (70.1%)	84 (67.7%)	145 (68.7%)

Table 1. Participants and presenters at the virtual research conference.

Of the 145 clinical research projects, 91/145 (62.76%) were related to SDH, diversity, mental health, and marginalized populations. From 2020 to 2021, there was a 12% (36% to 48%) rise in projects that investigated these themes. In particular, projects identifying disparities in SDH saw a steep rise (7 to 17 presentations), followed by rural topics (5 to 11 presentations), diversity (5 to 10 presentations), and mental health (5 to 10 presentations). Studies that addressed marginalized populations increased from 7 to 14 scientific inquiries (Table 2). There were 10 projects dedicated to quality improvement and expansion of services at the Student Run Free Clinic. 21 of all clinical research projects were based on populations in Northeast Ohio, rising from 6 in 2020 to 15 presentations in 2021.

Evaluation Forms	2020	2021	Combined
Total Response Rate	78 (60.5%)	51 (39.5%)	129 (32.71%)
Responders			
Faculty/Administration	20 (25.6%)	23 (45.1%)	43 (33.3%)
Students	55 (70.51%)	27 (52.94%)	92 (71.3%)
Total Medical Students	45 (81.8%)	18 (66.7%)	63 (68.5%)
MS1 and MS2	36 (80%)	14 (77.8%)	50 (79.4%)
MS3 and MS4	29 (20%)	4 (22.2%)	13 (20.6%)
Pharmacy students	2 (3.64%)	6 (22.2%)	8 (8.7%)
Graduate Students	8 (14.5%)	3 (11.1%)	11 (12.0%)
Other	3 (3.8%)	1 (2.0%)	4 (3.1%)
Responders' agreement with each statement			
The Zoom breakout rooms were easy to use.	4.81	4.51	4.66
All topics presented were relevant.	4.53	4.5	4.52
The virtual conference was well organized.	4.69	4.2	4.45
I was satisfied with the event.	4.65	4.22	4.44
I would be more likely to participate in a virtual event rather than in-person event in the future.	3.67	3.12	3.4
Number willing to attend again	63 (86.3%)	49 (96%)	112 (88%)

Table 2. Attendants who completed evaluation forms and mean evaluation scores.

Of the 425 attendees, 129 (30.35%) opted to complete the evaluation form (78 completing a form in 2021 vs. 51 in 2020). Sixty-four percent (82/129) of all attendees who submitted an evaluation form were student presenters, and 33.3% (43/129) were university faculty members or administrators. Over 77% (45/55) of students who completed an evaluation form were from the College of Medicine (Table 3). Overall, 88% of participants indicated they would be willing to attend a virtual event again. With the rating scale ranging from 1 being the least agreed with and 5 the most agreed with, the average evaluation for ease of using Zoom was 4.66, relevance of topics was 4.52, conference organization was 4.45, and satisfaction with the overall event was 4.44 (Table 3).

Categories	Number of posters in 2020	Number of posters in 2021	Increase in posters from 2020 to 2021
Social Determinants of Health	7 (8%)	17 (14%)	10 (7%)
Rural Health	5 (6%)	11 (9%)	6 (3%)
Diversity	5 (6%)	10 (8%)	5 (2%)
Elderly	4 (5%)	8 (6%)	4 (1%)
Mental Health	6 (7%)	8 (6%)	2 (-1%)
Refugee	1 (1%)	1 (1%)	0 (0%)

Table 3. Categories of poster presentations related to disparities.

DISCUSSION

Students in rural communities may have limited access to a vast number of research opportunities due to logistics, funding, or interest. A medical campus that is remote or located 15+ miles from an affiliated hospital system can provide a significant barrier in understanding

how to conduct scientific studies to improve the health of a patient population. A research symposium in a rural community encourages research investigations pertinent to local issues and increases awareness of solutions to local medical professionals. It also provides a platform to increase collaboration between faculty, affiliate hospitals, and students. Presenting at conferences encourages students to critically analyze their data, identify the significance of their results, discuss the application of their findings, and address shortcomings with experts in that field to further strengthen their work. Furthermore, in the residency match process, research has been increasingly important as an opportunity for students to demonstrate interest and commitment to their field of choice.[20-22] The skills required to successfully pursue research, such as time management, organization, determination, writing skills, and collaboration, are all features that can be seen as strengths to an applicant when residencies are selecting their future residents.

From 2020 to 2021, we observed a 42.5% rise in student presenters from 87 to 124 presenters. This could be explained by the successful first year of the virtual conference, and increasing class size among the different colleges, as well as increasing interest in research dissemination. There was a 12% rise in presentations focused on healthcare disparities between 2020 to 2021. Nearly half (48%) of all poster presentations investigated issues regarding healthcare disparities, as interest in these topics continues to rise each year. This rise can be explained by the expanding research opportunities that students want to pursue. Various presentations focused on social issues specific to the local community. This rise aligned with the goals of hosting a virtual conference, including impacting rural communities with a forum for anyone to attend. One project looked at how subjective social status (SSS) was more strongly associated with health outcomes like body mass index (BMI), systolic blood pressure, waist circumference, and physical health compared to commonly acknowledged socioeconomic status (SES). Another study looked at the availability of food pantries and soup kitchens across 15 counties in Eastern Appalachian Ohio. It studied the relationship between the percentage of children receiving free lunches, the number of residents on SNAP, and the number of food pantries in the respective counties. A third study showed how boosting posts on Facebook can reach a larger number of older adults in Northeast Ohio, which generated better response rates for community assessment data. Another study examined race and its impact on waiting times in the emergency department in a City in Ohio.

Several studies were very specific in identifying the impact of COVID-19 on the community. One study looked at the impact of COVID-19 community-wide precautions, including social distancing and mask-wearing. Due to low population density and rural cultural practices, the Ohio rural population was hypothesized not to be fully compliant with public health guidelines. The project aimed to identify potential gaps in knowledge related to COVID-19 control measures/infection within rural communities in Ohio. A series of studies implemented training modules for volunteers at the Student Run Free Clinic located in Rootstown, Ohio. The presentations discussed the evaluation of financial wellness training modules, emotional, intellectual, and spiritual wellness training, anti-racism training, and physical and social wellness training, as well as standardized video training in free clinic laboratory settings to improve the quality of and access to training.

Nearly a third of those who attended the events completed an evaluation form, although fewer attendees completed an evaluation form in 2021 compared to 2020 (78 vs. 51 evaluation forms). Interestingly, although we saw a rise in student presenters, we saw a decline in evaluation responses (81.8% to 66.7%). This could be influenced by participants leaving Zoom too early and not staying until the end, when the event organizers were discussing the evaluation form. Medical students who completed evaluation forms were mainly M1 and M2s, representing the composition of medical students in attendance and presenting at the event. Their overall satisfaction and willingness to attend an event over both years show positive data regarding future events. 88% of survey respondents said the virtual conference was beneficial and would attend a virtual event again. The mean evaluation scores for using Zoom, the relevance of topics, conference organization, and satisfaction with the overall event were positive. However, the likelihood of taking part in a virtual event compared to an in-person event in the future was given a mean evaluation of 3.4 (Scale 1: least agree with and 5: most agree with), which is consistent with Rubinger et al. and Spilker et al.[22,23] Thus, virtual events are unlikely to fully replace in-person conferences, however, hybrid models can be utilized to be more inclusive in rural communities.

Traditional in-person meetings can place a significant financial burden on attendees, while virtual conferences provide several economic advantages. Application fees, registration fees, poster printing, transportation, and accommodation, among other expenses, can range from several hundred to thousands of dollars for one conference.[25] For example, at our institution in 2022, the research conference was in-person as opposed to being virtual. The cost for the in-person conference was $2527.40 for hall booking, food, poster printing, and other expenses. These costs were mainly provided by the three colleges; however, poster printing specifically was expected to be paid for by the participants. Such costs disproportionately burden students, trainees, and junior researchers in the scientific community. As noted in this virtual conference, presenters incurred no expenses, reducing the barrier of cost to essentially nothing. With in-person and virtual conferences costing thousands in difference, students who may have fewer financial

resources may elect for a virtual conference if they have the option. Virtual conferences also reduce costs for conference organizers.[26] At our institution, we eliminated expenses related to rental space, presentation technology, refreshments, and conference pamphlets. Our institution had teleconferencing software and support staff already in place, which allowed for a smooth and low-cost transition to a virtual format.[27] As a result, opting for a virtual event provides more equitable opportunities and career advancement among participants from all socioeconomic backgrounds.[28]

In addition to student growth, time is a significant consideration for attendees and organizers. Attendance and travel to conferences require a time commitment that often requires researchers to place clinical duties, academic obligations, and personal responsibilities on hold. Through the course of the four-hour event, attendees spent no more than thirty-five minutes in each breakout room and had the flexibility to attend around the constraints of their schedules. In-person breakout rooms sometimes do not allow participants to leave as easily as the click of a button, which can lead to fewer presentations they may see. Students scheduled their presentations around their own schedules. Virtual events often require only hours, rather than days, of commitment.[29] Presenters attended the conference from the convenience of their homes, which eliminated the time required for travel. Additionally, transportation hurdles are often greater in rural communities, which were alleviated through the virtual format.

Virtual conferences in rural settings also have their limitations. Digital telecommunication is a clear barrier to organic interaction compared to the information interaction provided in-person events.[30] Our event was designed purposefully to drive engagement, given the constraints of an online and distanced event, by allowing time for questions and a discussion after each presentation. Additionally, there was a rise in presentations devoted to healthcare disparities in the community presented each year. Future considerations for virtual or in-person research symposiums must be investigated to see how students are affected in the long run, including residency success and continuation of research later in their careers. Therefore, future studies on the impact of the symposium on the health of the community will need to be conducted.

CONCLUSION

Virtual student-led research conferences presented at medical schools in rural areas that focused on addressing disparities in medical education opportunities can be organized to help share vital research being conducted in these areas. Increasing awareness of and implementing new programs in rural communities based on the dissemination of research findings is a crucial way to improve health outcomes and patient wellness. Virtual symposiums help decrease the cost to participants, allowing equity to distribute their findings with the local community more easily than in-person events. Universities should consider virtual options if requested by the faculty or students presenting. We present our experience developing a student-led virtual conference that addressed disparities in health applicable to the local rural community and increased opportunities for medical students amidst the COVID-19 pandemic.

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CONFLICTS OF INTEREST

All authors declare no conflicts of interest.

AUTHOR CONTRIBUTIONS

Conceptualization: GH, JA, SPS

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Formal analysis: MM, RB, ALA

Investigation: GH, MM, JN, GL, RB, ALA

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APPENDICES

Appendix A: Abstract detail guidelines

Abstract Submission Requirements

- Students must be currently enrolled at NEOMED's college of medicine, pharmacy, or graduate studies (including BMS students)
- Abstract may reflect recently *completed* or *ongoing* scholarly work. **Scholarly work can include research of any form (quantitative, qualitative, theoretical, community service).** For further questions, please contact [insert contact individual's information]26
- Abstracts must be submitted as a word document which includes the project title and contributing authors with their credentials. Abstract requirements are as follows:
    - 250-word limit (excluding Title and Authors), Arial font, size 12
    - A concise and comprehensive description of the research or project performed. This includes a purpose statement, description of methods or work performed, and conclusions.
    - Abstracts may be structured (with section titles such as Purpose, Methods, Results, Conclusion) if applicable or unstructured. Please see abstract examples attached.

Appendix B: Presentation Guidelines and Recommendations

Student Research Symposium
Presentation Guidelines and Recommendations
Your abstract has been accepted and now it is time to prepare your pre-recorded presentation. The following guidelines and recommendations aim to provide you with step-by-step details from the creation of your slides to the question-and-answer period at NEOMED's Student Research Symposium.

DEVELOPING YOUR PRE-RECORDED PRESENTATION

- You will be using PowerPoint to develop the following **FOUR SLIDES**
    - **SLIDE 1: Title Slide: Contains** the title of your research project, authors and their institutions, and your advisor's name/ institution if not one of the authors.
    - **SLIDE 2: Project Description and Methods (or Summary of the Literature):** The second slide contains a very brief project description and set of methods that were used to conduct your study.
    - **SLIDE 3: Results:** The third slide contains your findings; tables, charts, images, or written descriptions may be used.
    - **SLIDE 4: Discussion and Conclusion:** The fourth slide contains your interpretations of the results and your concluding thoughts.

The following are recommendations for presenting your results:

- If you have a very in-depth project, select one or two key sets of results to depict in your slide.
- Make your figures as self-explanatory as they can without extraneous explanations.
- When possible, use high quality graphics — avoid clip art.
- Don't use graphics to fill blank space, which can improve readability.

    - Avoid including too much information in your chart.
    - Be sure that all photos are clear and not pixelated.
    - Limit to 4-8 bars (bar graphs) or 4 -6 sections (pie charts) for clarity
- The content on the slides should be brief, succinct, and clear to the audience.
- You may have notes in the "notes section" of the power point sides (this is the space under each slide that you can write in notes to guide your oral recording).
- You should use the NEOMED format for PowerPoint slides, which can be found here: [insert template link here]. NOTE: You should have a white or light background with dark black font.
- Use sans serif fonts at approximately 32-point size (no less than 24-point font)
- Use no more than six lines of text per slide and no more than six words per line.

RECORDING YOUR PRE-RECORDED PRESENTATION

- Your presentation will be 3-minutes in duration, and it is recommended that you have a script prepared before recording. Besides reading your title slide, aim for a 1-minute recording for each of the three remaining content slides.
- To record your presentation through Zoom:
    - Create a Zoom meeting and invite all presenters involved in presenting.
    - Click on the green "share screen" button to share your PowerPoint slides.
    - Once you are sharing your screen, hover over the toolbar at the top and click on "more" on the right side of the toolbar.
    - Click on "Record to the cloud" or push ALT + C.
    - Record your presentation.
    - Once done recording, click on "more" on the toolbar at the top and click on "stop recording" or push ALT + C to stop recording.
    - Once you end the Zoom meeting, Zoom will convert your recording to an .mp4.
    - To access the link for your recorded video, log in to neomed.zoom.us using your NEOMED credentials.
    - --> recordings on the left-hand side à click on "share" in the upper right à make sure passcode protection is off (grey) à click on the arrow next to "display detailed information" à copy the link under "meeting recording".
- Once you are satisfied with your 3-minute recording, review it one more time and make sure you have recorded everything you aimed to present.
- Projects that are over 3-minutes will be given back to students for revision.
- It is recommended that you share your presentation script or recorded presentation with your advisor/ mentor prior to uploading your presentation.

UPLOADING YOUR PRE-RECORDED PRESENTATION

Once you are satisfied with your recorded video, please complete this form which asks for you to cut and paste your video link.

We will be collecting all video links and organizing your videos based on your designated conference presentation time.

STUDENT RESEARCH SYMPOSIUM DAY

- Your presentation will be placed in a topic session (e.g., Evolutionary Biology) with other student presentations. You will be notified prior to the Symposium the time and topic block your presentation will be available to online audiences.
- Presentations will be shown to audiences in a designated session (e.g., 5 presentations will be shown) and student presenters will then have an opportunity to answer questions as a panel. Presentations are shown first, followed by a Q and A panel session so that audiences can ask students questions about their projects.
- The Q and A session is an opportunity for you to discuss your project beyond your 3-minute presentation or a way for you to clarify any content that is contained within your presentation.

CITING YOUR PRESENTATION

- Now that you successfully presented your study and engaged with audience questions and comments, you can now cite your presentation in your curriculum vitae.
- The following information should be provided in your citation:
    - Authors (and indicate presenter, i.e., your name, by using bold letters)
    - Title of Project
    - Northeast Ohio Medical University Student Research Symposium
    - Date (e.g., November 20, 2020)

Appendix C: Session Moderator Guidelines

Session Moderators are crucial to the success of the conference - they help to create an inclusive and equitable environment by modeling the behavior expectations and they ensure that the conference sessions run to schedule. The organizing committee member will be available, with NEOMED I.T., to assist the moderator in whatever way is most helpful.

PRE-SESSION PREP

Defining Terms

- SESSIONS are mostly grouped by theme.
- PRESENTATIONS are individual papers or projects.
- SESSION MODERATORS are the individuals that agreed to be responsible for the structure, flow, timing, and moderation of an entire session. They are responsible for clearly communicating expectations and logistical information about the session; NEOMED scholarship day, they facilitate Q&A moderation.

Session's Organizing Committee Member

The organizing committee member assigned to the session will contact the chair/moderator in advance of the conference to introduce themselves, and to coordinate any logistical details.

Communicate with Speakers

It is the responsibility of Session Moderators to communicate with speakers to make sure their session or panel runs smoothly.

- Organizing committee members will send each session moderator an email containing the list of speakers within their session. This list will include phone numbers and email addresses and the scheduled time for each presentation.
- **Session Chairs are asked to contact their speakers one week prior to the meeting, session moderators should contact speakers within their session and request copies of their slide presentation.** Session Moderators should have a copy of all session presentations as a backup.

Arrive Early, Prep the "Zoom Room"

Session Moderators are responsible for making sure that the virtual room is prepared for the session.

- Arrive 15 minutes before the session begins. Request that speakers arrive no later than 10 minutes prior to the beginning of the entire session. Given the short duration of each presentation, it is critical for all attendees to arrive in advance of the first presentation.
- Introduce themselves and test their session audio and video, practice advancing the slides in presenter view.
- Touch base with the organizing committee member assigned to the session.
- Assist the speakers with their presentation set-up, reach out to NEOMED I.T. if necessary.
- Remind presenters to have water and tissues nearby if needed during the presentation.

SESSION MODERATION RESPONSIBILITIES

Introduce the Theme and Speakers

Session Moderators are responsible for providing context to the audience. They should introduce themselves, give a brief statement about the theme of the sessions or topic of the panel, and introduce each of the speakers/presentations. They remind speakers of the time limit for each presentation, and let the audience know that Q&A will take place at the end of the session.

Keeping Time

Tracking time is one of the **Session Moderator's most important tasks.** Timing for individual presentations is crucial to the success of the conference.

- For any given presentation in their session, they should know exactly when the preceding presentation ends and exactly when the succeeding presentation is scheduled to begin.
- For their session, know exactly when the preceding session ends and exactly when the succeeding session is scheduled to begin.
- Give all presenters equal amounts of time to speak. Tell each presenter how much time they have, and then stick to it. Moderators may choose to mute a presenter if they are far exceeding their presentation time limit.
- Make sure that their session ends on time.
- Inform speakers about timing prompts - 1min remaining in the chat.
- Make sure to mute the microphone so any alarm (stopwatch, cell phone alarm, etc.) to minimize distractions during the session.
- Allow time for Q&A, for all presenters, after the final presenter in the session has concluded.

Session Moderation

Sessions are a series of presentations, so the Session Moderator is primarily responsible for introduction to the theme, speaker introductions, timing, and moderating audience Q&A. The greatest risk of sessions is the reduction of presentation time for the last paper. It is the moderator's responsibility to make sure that everyone presenting receives **equal time**. Audience Q&A is included in the total time allotted to each session. On NEOMED Scholarship Day, questions to all presenters will be asked at the end of the session. Audience members can post questions in the chat for Session Moderators to organize and read to the presenter (s). Session Moderators should have 1 question prepared for each presentation in case there are no audience questions. Moderators may consolidate similar questions or give multiple presenters the opportunity to respond to one question as appropriate.

Example outline of a session:

- Moderator Introduction:
    - Context/Theme Statement
    - Introduction of presentations/speakers in the session
    - Time limits for each presentation
    - Audience questions in the chat throughout presentations
    - Q&A at the close of the session
- First Presentation

- Second Presentation
- Third Presentation
- Other Presentations
- Q&A – *Moderator to ensure every presenter is given opportunity to respond to a question*

Concluding the Session

- Thank speakers, timekeeper, other volunteers, and the audience for engaging in the presentation.
- Tell the audience what is coming next (i.e., lunch break, next session in 15 minutes, etc.).
- Remind the audience how they can provide feedback for the session.
- Wait in the Zoom space until all transitional activity has concluded for subsequent sessions.

Appendix D: Evaluation Form

Thank you for attending or presenting today. Please fill out this evaluation form so that we can continue to develop our programs for students' research.

1. Please identify your role. (Check all that apply)
- Student Presenter
- Symposium Attendee
- Symposium Organizer
- Symposium Moderator

2. If you are a symposium attendee, please identify your status (check all that apply)
- Medical Student (M1 or M2)
- Medical Student (M3 or M4)
- Pharmacy Student (P1 or P2)
- Pharmacy Student (P3 or P4)
- NEOMED Graduate Student
- External Student
- NEOMED Administrator
- NEOMED Faculty
- NEOMED Staff
- Student Research Advisor
- External Administrator
- External Faculty
- Community Member

3. If you are an external attendee, please indicate your role/profession, organization and/or location

4. Which of the following did you attend today?
- Opening Remarks and Plenary
- Session 1
- Session 2
- Session 3
- Session 4
- Session 5
- Concluding Remarks

5. How the event was organized met my expectations. (Strongly Disagree =1; Neutral= 3; Strongly Agree =5)

6. I was satisfied with the ease of Zoom Breakout rooms. (Strongly Disagree =1; Neutral= 3; Strongly Agree =5)

7. I am more likely to participate in this type of virtual event than an in-person event (Strongly Disagree =1; Neutral= 3; Strongly Agree =5)

8.The speed of the event met my expectations. (Strongly Disagree =1; Neutral= 3; Strongly Agree =5)

9.The topics of the presentations were representative of the student body (Strongly Disagree =1; Neutral= 3; Strongly Agree =5)

10. Overall, I was satisfied with this event. (Strongly Disagree =1; Neutral= 3; Strongly Agree =5)

11. Did you have any technical difficulties today? If so, please explain.

12. Do you plan to attend this symposium in the future?
- Yes
- No
- Maybe

13. What time of day or period in the week would you like to attend the symposium?

14. Please let us know how we can improve for next year or any other thoughts you would like to share.