

Empowering the Research Future of Medical Students: Reflections on the Third Edition of the IJMS World Conference of Medical Student Research (WCMSR), 2024

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Introduction

Conferences have an impact on many axes, such as enhancing the exchange of medical knowledge, continuing education, and providing opportunities for networking and building relationships, which makes conferences a vital role in developing the medical community.¹ The conferences act as a venue for showcasing the newest research, innovative clinical practices, discussing clinical progress, and fostering new collaborations. They feature workshops, symposia, and interactive discussions that play a vital role in turning theoretical knowledge into practical applications, aiding physicians in enhancing their diagnostic abilities and treatment approaches.² The conferences are of good value for education and clinical practice. Being integral to continuing medical education (CME), they enhance participant engagement and create opportunities to practice skills that improve professional practices and healthcare outcomes.^{3,4} Conferences offer excellent networking opportunities, and the connections established at these events can foster collaboration across disciplines and institutions. Medical professionals have the chance to engage with peers, learn about the latest research, and participate in practical sessions during these gatherings. These meetings are crucial for connecting with leading experts in the field and staying informed about recent advancements.^{5,6}

Medical students worldwide face significant challenges when it comes to participating in international conferences. Financial barriers, travel costs, limited access to publishing opportunities, and the intimidating nature of it all can make it difficult to present their valuable work.^{7,8}

Limited access to guidance in preparing and presenting research further compounds the challenge, leaving many students feeling unprepared or overwhelmed by the competitive nature of these events.^{4,9} Moreover, a lack of accessible platforms to showcase their work can result in valuable contributions being overlooked or unrecognized.¹⁰ Medical student involvement in conferences

can enhance their confidence in their academic and clinical abilities, and their understanding of the medical profession.¹¹ Also Giving students the opportunity to publish before graduation will increase their chances of continuing to publish research after graduation by three times compared to other students.¹²

At its core, the **World Conference of Medical Student Research** organized by the **International Journal of Medical Students (IJMS)**, is a celebration of hard work, ambition and innovation. This event is designed to empower medical students from all around the globe to come together, share knowledge and contribute to the advancement of medical science. Students present their findings through oral presentations in front of accomplished researchers and clinicians, who provide valuable feedback on their work, to help refine their skills and grow. Beyond its academic benefits, the Congress creates a sense of global community, and offers a setting for fostering important relationships, whether with fellow colleagues interested in the same topic, or potential mentors offering new possibilities.

One of IJMS's most important missions is to make these conferences accessible. With a participation fee of just \$10, the Congress ensures that students from diverse socioeconomic backgrounds can have their voices heard and their work recognized.

The IJMS hosted its third annual World Conference of Medical Student Research (WCMSR) on October 26, 2024 from 8:00 am to 17:00 pm EST. The event was broadcasted globally via YouTube live where 35 authors from 19 different countries shared their abstracts. The live audience was over 1,000 viewers over the course of the conference with 1,008 votes cast in the category for the most liked abstract by the public.

The IJMS WCMSR 2024 was made possible due to the great team effort of the conference organizing committee whose

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contributions to the success of the conference are detailed here. The warm introduction to the conference was given by the editor-in-chief, Dr. Francisco Javier Escobar-Bonilla and the Master of Ceremonies, Sajjad Ahmed Khan. Our Director of the Conference, Omar Aljbour, oversaw the coordination of the conference vision and timeline. Sajjad Ahmed Khan hosted the conference and announced the award winners with the Director of Logistics, Chloe Carrington. Chloe Carrington coordinated communications between the presenters, judges, and directors, hosted the Streamyard platform tutorial, scouted the judges, and analyzed the scores. The abstract review process was directed by the team of Abstract Managers who included Marsha Zacharia, Sebesi Hanna, Faisal Nageyle, and Sajjad Ahmed Khan. The panel of judges that scored each presentation included Dr. Ruchi Kothari, Mr. Malik Olatunde Oduoye, Dr. Sharjeel Chaudhry, Professor Morenike Ukpong, Dr. Sanskriti Chapagain, Dr. Ashish Gupta, and Dr. Maneeth Mylavarapu. Technical support and logistics were carried out by Camilo Agamez who directed the live streaming of the conference. We also want to send a special thanks to all of the student editors who reviewed the abstracts and the audience who attended the conference.

In the months leading up to the conference date, an open call for abstract submissions was announced on the IJMS website and in its newsletter. The application fee for each abstract submission was kept at \$10 to limit the financial barrier for early career researchers to enter. From there, global abstract submissions were collected, reviewed, and graded. These reviews were coordinated by the abstract managing team who distributed the submissions among the student editors to grade. Entries were analyzed by the editor-in-chief, Dr. Francisco Javier Escobar Bonilla, who made the selection of which abstracts would be presented at the conference. 68 original research and 19 case report abstracts were submitted to be considered for presentation of these 30 original research and 10 case reports abstracts were selected for presentation. 5 of the abstracts selected did not go on to present during the conference.

Once the abstracts featured were selected, the participants were contacted to coordinate the submission of presentation materials and presentation time slot. Presenters created a slideshow and pre-recorded video presentation to fit a quick 7-minute discussion of their abstract.

Judges were scouted by reaching out to those who served at our previous conferences and from an open call for volunteer judges via the IJMS newsletter. The judges received the abstracts they would be grading the week of the conference for optional preview. On the morning of the conference, the judges received a score form that they submitted after each presentation. Each judge prepared one question to be asked after each presentation with the response to be considered in the score.

During the week prior to the conference, a webinar was held and a video recorded to instruct presenters on how to use the broadcast software, StreamYard®. On the day of the conference, all communications were conducted between the participants,

judges, and directors on Whatsapp™. All participants were notified 15 minutes prior to their presentation time to log on and prepare to begin their talks. Participants that were available presented live while those who could not attend live had their presentations displayed via pre-recorded video.

After each presentation and Q&A following, the audience was given about 1 minute to scan a QR code, which displayed a voting form for the audience to vote for their favorite abstract presentation. At the end of the conference, the scores of the abstracts were analyzed, the award winners were announced, and the closing remarks were given.

Awards were given based on the following categories: most liked by the public, special mention to a basic science study, highest score during abstract revision process for case reports and for original research, as well as best case report and best original research presentation based on the judges' scores. The award winners are listed below:

Most-liked Research Presentation Awarded by the public:

- [When Immunodeficiency Meets Neurosurgery: Brain Abscess in a Wiskott-Aldrich Syndrome Patient.](#) Kalhara and Pathirana NPNB. Sri Lanka.

Special mention to the basic science study titled:

- [Aortic Aneurysm Inflammatory Cell Detection with Deep Learning methods.](#) Kristóf-Gergő Nagy, Csaba Szferle, and Attila Fintha. Hungary.

Highest score during the abstract revision process for Original Research:

- *1st place:* [Effects of a Low-Dose Cardiac Rehabilitation Program on Cardiovascular Conditioning Parameters in Patients with Heart Disease.](#) Pablo Reyes, Quirino, José Onan, José Solís, Fernando Tienda, and Ramiro Flores Ramírez. Mexico.
- *2nd place:* [Factors Associated with Greater In-hospital Functional Recovery After Acute Ischemic Stroke with a Social Service Program in Physical Rehabilitation.](#) Fernando Tienda-López, Ricardo López-Soto, Ana Gabriela Cruz-Ramírez, Diego Alemán-Torres, Andrea De Koster-Gámez, Diego Alejandro Ortega-Moreno, Pablo Emilio Reyes-Guzmán, Óscar Alejandro Cavazos-de Luna, Mónica Adriana Medellín-Gómez, Elizabeth Rojas-Márquez, and Fernando Góngora-Rivera. Mexico.
- *3rd place:* [M.A.R.V.E.L.S. "Medical Students Advancing Research, Visibility, Education, Leadership, and Support." A Student-Driven Initiative.](#) Molly Mehta. United States of America.

Highest score during the abstract revision process for Case Reports:

- *1st place:* [Anti-NMDA Encephalitis Associated with a Mature Ovarian Teratoma: A Compelling Case Report.](#) Antonio Medina Luna, Octavio César Augusto Caamal Torres, Ramón Adrián Magaña Dávalos, and Carlos Esteban Vidal Valderrama. Mexico.

- *2nd place:* [Benefits of Pulmonary Lobectomy in Infection by Actinomyces](#). Mauricio Alejandro Saldaña-Ruiz, Jaime Eugenio Espinosa-Mora, Mauricio Linnery Rendón-Saldívar, Federico Ortiz-Alonso, and Leopoldo David Trujillo-García. Mexico.

Award for best Case Report presentation at the WCMSR based on judge scores:

- *1st place:* [Fox – Fordyce Disease: a case report](#). Monika Rimdeikaite. Lithuania.
- *2nd place:* [Vertebral artery Dissection secondary to Malignant hypertension precipitating a posterior circulation stroke](#). Avi Singh Gandh Gandh, Shruti Vadali, Jivtesh Singh, and Sanwal Singh Mehta. India.

Award for best Research Presentation at the WCMSR Original Research based on judge scores:

- *1st place:* [Pain Severity Ratings Among Patients with Comorbid Chronic Pain and PTSD](#). Lily Charron and Eduardo Espiridion. United States of America.
- *2nd place:* [Understanding the Role of Inflammation in ALS-FTSD: A systematic Review and Meta-analysis](#)

[Investigating the Relationship](#). Scott Purdie, William Daley, Fergal Waldron, and Jenna Gregory. United Kingdom.

- *3rd place:* [Psychiatric Outcomes in Patients with Trigeminal Neuralgia Treated with Anticonvulsants with or without Antidepressants: A Retrospective Cohort Study Using TriNetX](#). Ashley Deng and Eduardo Espiridion. United States of America.

This conference is held to achieve the vision and goals of the IJMS in encouraging and enabling medical students to conduct, publish, and present scientific research, and provides a great opportunity to exchange experiences between medical students from different countries

It also aims to facilitate all the barriers that medical students face in participating in medical conferences, making it the only one of its kind that has this goal and provides these opportunities to junior researchers.

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