

A Downstream Analysis of a Unique Experience

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The 2024 Clinical Genetics Meeting was hosted by the American Board of Clinical Medical Genetics and Genomics (ACMG) held in Toronto, Ontario for the first time. Healthcare professionals specialized in medical genetics and genomics, including companies and organizations came together to create a vast networking hub of new insights, case developments, and technology that are arising in the field. ACMG allowed exposure to various cutting-edge products essential for research investigations by connecting with researchers and industry partners.

Israa

Field of Interest: Patient Advocacy & Public Policy Research

Attending ACMG was an enriching experience that left me deeply inspired. As part of the mentoring sessions, I was able to connect with experienced professionals that gave me insight about their pathway into the field. A memorable mentor was the Editor-in-Chief of GeneReviews that gave me the floor to discuss how to make research more valuable to the healthcare community.

From genetic counselors to biomedical engineers, I met experienced professionals that work in various applications of the genetic and genomics field. This gave me a deeper insight on the wide variety of pathways for students. As a part of these conversations, I was able to discover how public policy and patient advocacy played a crucial role in advancing evidence-based medicine through medical research for optimizing care.

An impactful piece of information that I heard was “It’s a game of who wants to be a millionaire, you need to phone a friend at a certain point.” This inspired me to network with passionate professionals in different corners of the field which ensures a greater chance for strong patient advocacy and public policies for genetic disorders. An unforgettable session that I attended was on the rights of persons and ethics of disability, that gave me insights on the challenges that are faced, and what decision-making skills are needed. Additionally, at the End-of-Life workshop, I was able to ponder on certain genetic counseling cases and apply ethical principles towards providing patients with informed decision making.

Engaging with leaders in the field, receiving constructive feedback on my own research, and honing my networking skills were invaluable experiences that will undoubtedly shape my journey as a researcher. Overall, this was an experience that fueled my passion for public policy and patient advocacy in my field.

Rasneet

Field of Interest: Clinical Laboratory Genetic Testing & Interpretation

During one on one, mentoring sessions with highly specialized professionals in the field, gave me a clear path on how to pursue my career and interest in clinical laboratory genetic testing and interpretation. I appreciated all the advice given to me from the mentors I sat with. They were welcoming and open to all questions. All the mentors encouraged me to reach out to them for continued help and to keep them updated during my education and training.

I am passionate about laboratory genetic testing; speaking to different professionals in the field, I discovered that there are laboratory genetic counselors. This interested me in a possible area I could pursue as I do enjoy patient interaction along with laboratory testing.

The most impactful piece of information from this conference was from the group of panelists from the trainee forum panel. They discussed their personal struggles and feelings of “Do I belong here, am I doing enough?”, during the process of pursuing their goals. Every panelist, who is highly experienced, explained that even after all their years of training they sometimes still ask this to themselves. They told all of us that no matter how much you train, that you will feel like you could be doing more, and to take that as the motivation to keep pursuing and investigating our goals and fields of interest.

The student workshop was a great place to connect with other trainees, as well as with experienced professionals. The most meaningful part of this workshop was the breakout groups where you could speak with professionals about how trainees can get to their goals. For myself, I got the opportunity to ask questions to a Clinical Laboratory Geneticist who gave clear expectations of working in this position and pathways to reach there. I was truly grateful meeting so many professionals who I aspire to be one day.

Highlight: PMCC Visit

We had the opportunity to visit the Princess Margaret Cancer Centre (PMCC) with our professor, Christopher Arlidge. Witnessing the cutting-edge equipment for genomic sequencing, including 10x Genomics and Illumina NovaSeq, reignited our theoretical understanding, enriching our academic journey with practical insights. This visit expedited our awareness of how hands-on our field is and how day-to-day tasks are conducted.

Sheryl

Field of Interest: Cancer Research & Academia

The most anticipated event at ACMG that I was looking forward to was “Speed Mentoring”. The event provided me with invaluable guidance on navigating my field and aligning it to my professional aspirations. Networking with established professionals and fellow students exposed me to diverse career pathways, inspiring me to explore avenues that would enable me to contribute meaningfully and more to my field of interest. Additionally, I attended a series of platform presentations showcasing groundbreaking research, as well as emerging areas and future directions in medical and clinical research was very informative, emphasizing the imperative for continued innovation and advancement.

An impactful experience was “The Day of Caring” event. Kids affected by genetic disorders were invited and surprised with bikes! The event was a visual treat and deeply moving. It was a stark reminder of the profound need and impact that our work as future professionals can have on improving the lives of others.

I gained a deeper understanding of the interdisciplinary nature of medical genetics and its profound impact on cancer research through lectures and workshops. The student workshop was under the leadership of a distinguished panel which focused on academic achievement and professional development. Learning about strategies for securing funding, publishing peer-review articles, establishing collaboration, and achieving field-oriented careers provided practical insights. Furthermore, the panel facilitated breakout sessions grouping participants based on their specific areas of interest. These intimate exchanges provided not only inspiration and motivation but also tailored guidance to address student’s doubts and inquiries, fostering a deeper understanding of career trajectories. In essence, ACMG was a transformative experience.

Sireesha

Field of Interest: Genetic Counseling

The “Speed Mentoring” session were incredibly valuable in expanding my knowledge of the field. The mentors’ advice on career paths, suggested experiences, and project ideas that align with my goals was extremely helpful. Knowing that mentors are available for ongoing support, with their contact information shared, boosts my confidence in pursuing opportunities in the field.

The ACMG meeting introduced me to various career paths in medical genetics. Discovering the importance of cytogenetic technologists was eye opening, where I was introduced to careers like genetic counseling assistantship and other supporting roles. Engaging with industry leaders highlighted opportunities in startups, pharmaceuticals, and research that focused on personalized medicine. These insights expanded my understanding that aligns with my interests and skill set.

The most impactful aspect was the focus on teamwork in genetic research. Learning about current trends and challenges in the field broadened my perspective. As well as meeting experts collaborating to solve complex genetic disorders highlighting the power of interdisciplinary cooperation in advancing innovation and patient care. This motivated me to pursue collaborative opportunities and connect with professionals across disciplines to enhance my career and make a meaningful contribution.

The student workshop facilitated direct engagement between students and seasoned professionals in medical genetics. Panel discussion, led by program directors and board members, provided comprehensive insights into various career pathways. This event offered me invaluable networking opportunities and practical advice, fostering informed career decisions within the rapidly evolving field of genetic counseling.

Advice & Recommendations

- Explore all aspects of your field, you never know what you might find!
- Put yourself out there and make connections, networking is a great tool to expand your scope.
- Embrace curiosity, seek guidance when things seem unclear, and actively explore your academic journey.
- Be ready to commit to a lifetime of learning, growth and endless hard work.



2024 ACMG Clinical Genetics Meeting Photos :



Title: Israa Sinan (B.Sc, PG.Cert) Student in Functional Genomics and Clinical Consultation at Canadore College
Caption: Final day at ACMG conference, attending the closing panel and Final round of the Genius Challenge.



Title: Touring Princess Margaret Cancer Centre!

Caption: (L to R), Sheryl Bastian (M.Sc,PG.Cert), Ras Jaura (cMLA/T^MLPAO,PG.Cert), Israa Sinan (B.Sc, PG.Cert), Sireesha M (M.Sc,PGCert) touring PMCC at the MaRs Building in Toronto. .



Title: Panel on The Genetics of Disability Rights & Ethics.

Caption: (L to R) Andrea Schelhaas (GC), Stephanie Meredith (MSc), Kara Ayers (PhD), Kevin Mintz (PhD), Joseph Stramondo (PhD) conducting a panel on the genetics of disability rights and ethics.



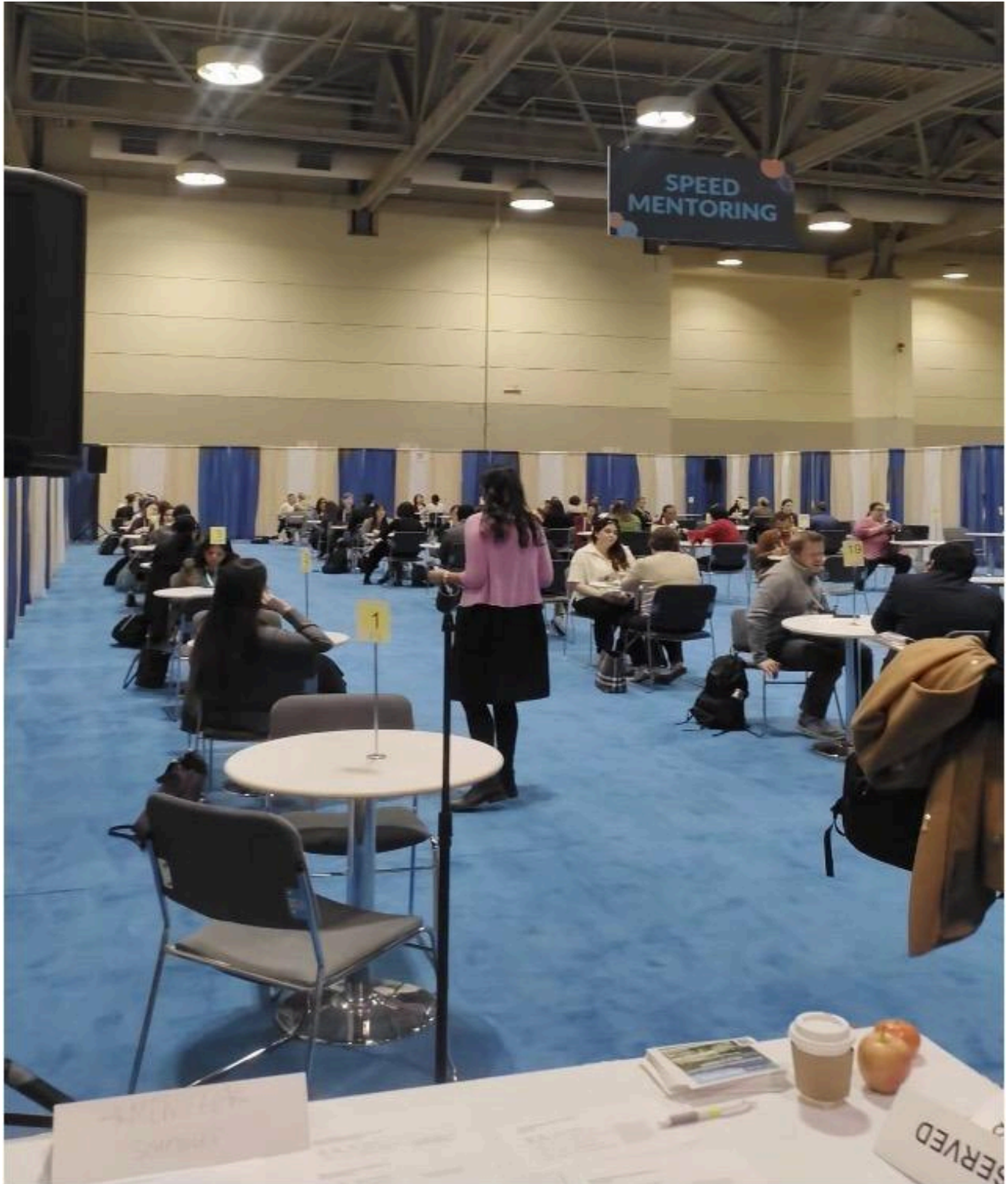
Title: Sheryl Marina Bastian (M.Sc , PG.Cert.) Student in Functional Genomics and Clinical Consultation at Canadore College.

Caption: Final day at ACMG conference, attending the closing panel and Final round of the Genius Challenge.



Title - Day of Caring

Caption - Attending the Day of Caring, where children affected with genetic disorders were gifted bikes!



Title - Speed Mentoring

Caption - A one on one session with our desired professionals discussing personal career pathways.



Title - Networking and making new friends!

Caption - (L to R) Ras Jaura (cMLA/T^MLPAO,PG.Cert), Julie Horsting (GC,FACMG), Sheryl Bastian (M.Sc,PG.Cert), Sireesha M (M.Sc,PG.Cert) Connecting with fellow genetic professionals at ACMG.



Title: Rasneet Jaura (cMLAT^MLPAO,PG-Cert.) Student in Functional Genomics and Clinical Consultation at Canadore College.

Caption: Final day at ACMG conference, attending the closing panel and Final round of the Genius Challenge.



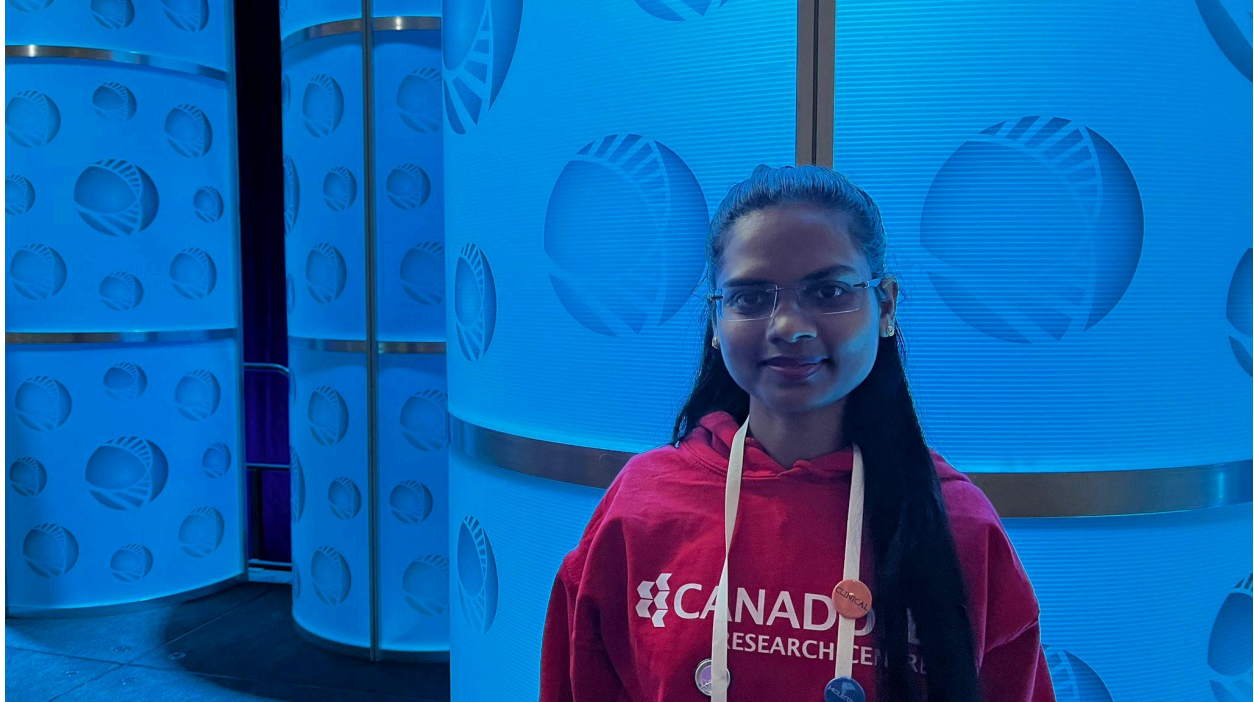
Title: Final Day at ACMG

Caption: Got the opportunity to meet and speak with Dr.Susan Klugman(MD) the President of ACMG, as well as the Chief Executive Officer of ACMG Melanie J. Wells(MPH, CAE). (L to R) Rasneet Jaura(cMLA/T^MLPAO,PG.Cert) Sireesha Muppalla(M.Sc, PG. Cert), Dr.Susan Klugman(MD), Melanie J. Wells(MPH, CAE) Sheryl Marina Bastian (MSc, PG. Cert), Israa Sinan (BSc, PG. Cert).



Title: ACMG Foundation for Genetics and Genomic Medicine Awards Ceremony.

Caption: Dr. Bruce Korf (MD,PhD, FACMG) recipient of the 2024 David L.Rimon Lifetime Achievement Award in Medical Genetics, giving a speech and one point being on Mentorship, he spoke that mentorship is a very important part to teach others and also be open to learning more, it's a team effort to succeed.



Title: Sireesha Muppalla(M.Sc, PG.Cert.) Student in Functional Genomics and Clinical Consultation at Canadore College.

Caption: Final day at ACMG conference, attending the closing panel and Final round of the Genius Challenge



Title: ACMG Conference 2024

Caption: (L to R) Sheryl Bastian (M.Sc, PG.Cert), Ras Jaura (cMLA/T^MLPAO, PG.Cert), Israa Sinan (B.Sc, PG.Cert), Sireesha Muppalla (M.Sc, PG.Cert), Empowering Genetics, Transforming Medicine.