

Inspiring students in research

Victoria Bak

Year 2, Medicine, University of Exeter

Email: wb355@exeter.ac.uk



Nada Dahan's comment:

"During my INSPIRE open day, I visited the Exeter Centre of Excellence for Diabetes Research (EXCEED) and was inspired by the passion and innovation of the team. Observing leading specialists in the field fuelled my interest in diabetes research and motivated me to undertake a summer project with Dr. Angus Jones and Julieanne Knupp. My overall finding was that early retained c-peptide is associated with markedly reduced hospital admissions and improvement in glycaemic control in adult-onset type 1 diabetes but does not impact quality of life measures.

"The project was a steep learning curve, from learning to code from scratch to presenting my findings to professionals, but it taught me invaluable skills in research, data analysis, and presentation. I am incredibly grateful to everyone involved in the INSPIRE scheme for this opportunity, which has strengthened my ambition to pursue a career as an aspiring clinical academic."

In addition to the oral presentations, there were also four Hackathon teams presenting their innovative solutions for improving the mental health and wellbeing of doctors working in healthcare.

Tragically, we learnt that approximately one doctor dies by suicide every three weeks. Clearly, this issue needs a truly effective solution. At one point, a member of the audience remarked, "Shouldn't doctors just be more resilient?" Whilst their tone was only used to provoke a discussion about potential dismissal of doctors mental health, this was a grounding statement, especially from the point of view of a medical student about to enter this profession in a few years' time.

The University of Exeter team proposed the use of AI to ease the administrative workload of NHS doctors. Below, Shloka Doshi, a year 3 medicine student from University of Exeter, describes her participation and journey through the Hackathon:

The Inspire conference took place on Saturday 23 November 2024 at the University of Plymouth.

In total, 185 medicine, dentistry and veterinary students from the University of Bristol, University of Exeter, University of Plymouth and Cardiff University came together to showcase their research projects and interests.

The morning began as expected, with students setting up poster presentations and enjoying coffee and treats—a much-loved feature for us students!

Following a warm welcome and introduction by the INSPIRE leads, Dr Becky Foster (Bristol), Dr William Davies (Cardiff), Dr Jane Smith (Exeter), Professor David Parkinson and Professor Vehid Salih (Plymouth), the short oral presentations commenced.

Throughout the day, several oral presentations were delivered, each covering diverse specialist areas and topics. The winning presentation, given by Nada Dahan (Cardiff University), focused on the management of patients with type 1 diabetes, titled 'Does retained endogenous insulin secretion, measured using c-peptide lead to improved quality of life and reduced healthcare utilisation in recently diagnosed type one diabetes?'



“Recently, I had the privilege of being a part of the University of Exeter Hackathon team, participating in the INSPIRE Research Conference 2024. This collaborative event brought together students and faculty from the University of Plymouth, Cardiff University, the University of Bristol, and the University of Exeter.

“Why I chose to participate in INSPIRE: coming into year 3 meant this September I began my clinical hospital placements— a milestone I approached with excitement and apprehension. Reflecting on my first term, I’ve come to appreciate the importance of time management and organisation to avoid burnout. Hence, coming across this year’s hackathon topic, ‘Offer practical interventions to tackling mental health and loss from medical, dental, and veterinary professions,’ resonated deeply.

“Choosing our idea: our hackathon journey began two weeks before the conference with an initial meeting in Exeter. The team comprised of students across different stages of medical school: Taiwo and Aaisha (Year 1), Ismail (Year 2), and Rose, Ethan, Jack, and myself (Year 3). This diversity was a distinct advantage, as it allowed us to approach the topic with varied perspectives and experiences.

“After brainstorming potential solutions, we identified a pressing issue which was the administrative burden contributing to burnout among clinical professionals. We decided to choose our topic, as currently 70% of a resident’s time is being spent completing administrative tasks. Artificial Intelligence (AI) is a technical and scientific field that has recently seen major advancements in medicine. Therefore, our solution offers leveraging Artificial Intelligence (AI) to aid in these tasks, thereby freeing up clinicians to focus on patient care. Each team member took responsibility for a specific area of research. My role involved explaining the value of artificial intelligence within healthcare systems, specifically focusing on how voice dictation and AI software to summarise patient records could significantly be used to reduce admin load. Over the next two weeks, we collaborated through virtual meetings to refine our ideas and create a cohesive presentation. I had the chance to work in a team with colleagues who were incredibly motivated in achieving a shared goal.

“The INSPIRE Conference Experience: the INSPIRE Conference took place on 23 November in Plymouth. As a presenter for the

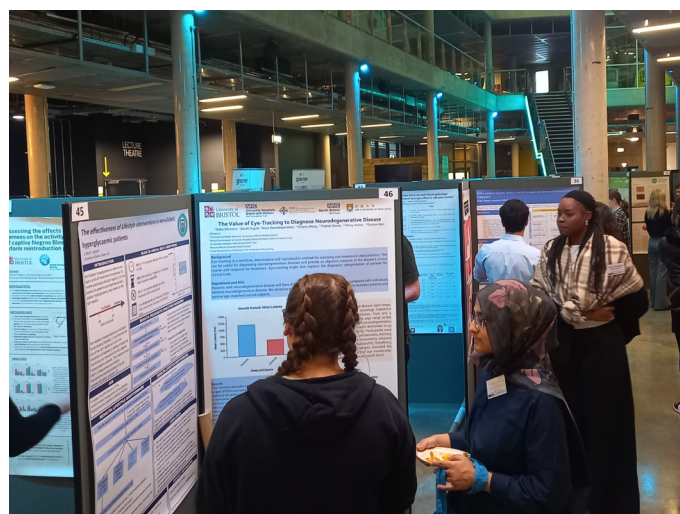
Hackathon team, I started the day filled with nerves but also excitement. The conference featured outstanding presentations by students from all four universities, showcasing a wide range of innovative ideas. This was followed by Hackathon presentations. Being able to successfully present our idea to future Doctors, Vets and Dentists, and Esteemed Faculty Members was a truly rewarding experience. Our idea was challenged with thoughtful questions and lots of support. The dedication and effort of everyone resulted in a presentation we were very proud to deliver.

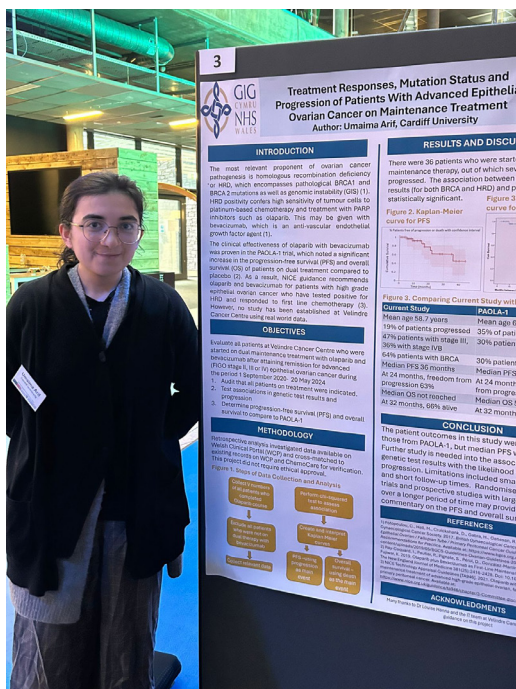
“Later, we had the opportunity to engage with poster presentations and network with other students. The depth and quality of research presented was truly inspiring. From neonatal neurodevelopment and deep brain stimulation, to tackling diversity in dermatology, the novel research of students from all universities was an eye-opening experience into medical, dental and veterinary research and its vast opportunities.

“Will I attend the INSPIRE Conference again? Most definitely. The INSPIRE conference is an opportunity to not only participate in but also learn about academic research conducted by students. It provides an insight into innovative ideas and new advancements within healthcare, dental and veterinary fields.”



Throughout the day, there were several poster presentations displayed for students to explore during the coffee breaks. Umaima Arif shared a reflection on her experience.





"I had the honour of attending the INSPIRE conference at Plymouth and presenting my poster on the research I conducted before the summer of my fourth year as a medical student. This research was an audit and evaluation of all patients at Velindre Cancer Centre who had been started on olaparib and bevacizumab for the maintenance therapy of advanced epithelial ovarian cancer between 1 September 2020 and 20 May 2024, including examining their progression-free survival and overall survival while comparing them to the original trial that confirmed the clinical effectiveness of this dual therapy on patients who had attained remission. I found the experience of attending the conference, sharing my research, and learning about other people's research both enlightening and enjoyable. During the period of oral poster presentations, students circulated around different posters and listened to 5–10-minute speeches about the aims, findings and future considerations of their projects. It was a wonderful opportunity for me to explore other areas of similar and different studies, including those of students who had studied oncology for their student-selected component projects as well. It was clear that all students had worked very hard to not only conduct interesting investigations into topics of their choice and ponder the implications of their work deeply, but to summarise and present it in a concise and coherent manner that engaged other students and professors. As systemic anti-cancer therapies and maintenance treatments are a rapidly growing field of research, I was excited to learn about students who had similar interests to me and further opportunities for networking were provided through a panel session that included an Oxford-educated clinical academic as well. Overall, I was grateful for this opportunity to present my research to an audience and learn from both the poster and oral presentations of others."

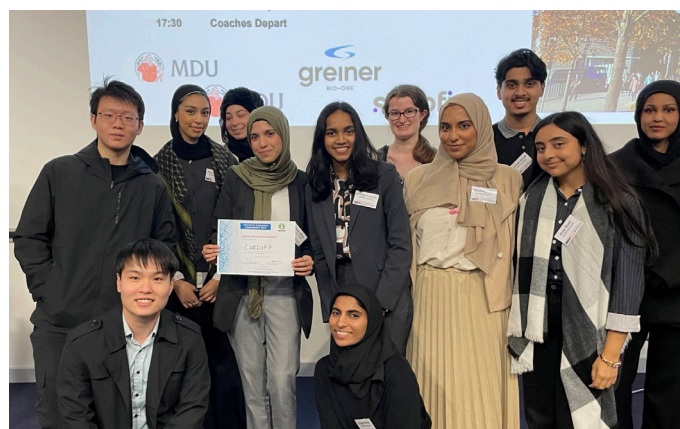
Finally, prior to the awards being handed out, a panel discussion took place where students had the opportunity to ask questions about academic careers for physicians. Speakers included Prof Helen McShane (Oxford), Dr Claire McIver (Cardiff) and Dr Victoria Haunton (Plymouth).



The day was an overall success, truly encouraging students to further actively engage in research.

Prizes for the best oral and poster presentations:

- 1st Place Oral: Nada Dahan, Cardiff University.
- 2nd Place Oral: Agung Bate, University of Exeter.
- 1st Place Poster: Fejiro Okagbare, Keele University.
- 2nd Place Poster: Mason Hook, University of Exeter.
- The Cardiff University Team won the Hackathon challenge.



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