

Report for GSCN Travel Award

6th European Summer School on Microfluidics, Technical University of Denmark, Copenhagen, Denmark, **13th to 17th October 2025**

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Thanks to the generous support from GSCN, I had the opportunity to participate in the 6th European Summer School on Microfluidics, held at the Technical University of Denmark (DTU), Lyngby campus, in 2025. The program was an extensive, week-long course covering a broad range of topics related to microfluidics and its applications in medical and biotechnological research.

The summer school was highly interactive, with more than 50% of the time dedicated to hands-on laboratory modules. Each lab session was thoughtfully designed to stimulate curiosity while imparting practical skills. The laboratory training was complemented by lectures delivered by leading experts in the field, who ensured that we understood both the fundamental principles and the real-world applications of microfluidic technologies.

Throughout the course, I gained valuable insights into the fundamentals of microfluidics, as well as various methods for culturing, screening, and visualizing cells within microfluidic devices. It was particularly fascinating to learn how microfluidic chips are designed and fabricated and to experience the fabrication process myself during the lab sessions. Together, the lectures and practical modules helped me better understand and optimize the microfluidic systems used in my PhD project, which focuses on developing vascularized lung organoids-on-chip.

The sessions led by Prof. Perozziello (University of Catanzaro, Italy) and Prof. Constantinou (Technical University of Braunschweig, Germany) were especially relevant to my ongoing research. Both work extensively on organ- and organoid-on-chip models, and it was inspiring to explore the similarities and differences between their approaches and my own work.

The poster sessions held over two days were another highlight, providing an excellent opportunity to network and learn about the research of other participants. Engaging with peers and experts about my work was an enriching experience, and I was able to establish meaningful connections with fellow PhD students and researchers across Europe, opening doors for future collaborations.

On both a personal and professional level, it was deeply rewarding to be part of such an inspiring community of microfluidics researchers. The diversity of participants, from early-career PhDs to senior professors, fostered an open, collaborative atmosphere that encouraged learning and exchange.

I am sincerely grateful to GSCN for their financial support and to the European Summer School on Microfluidics for organizing this outstanding event. My special thanks go to Prof. Ulrich Krühne and his team at DTU for their exceptional coordination and dedication. I highly recommend this summer school to anyone working in or aspiring to enter the field of microfluidics.

Sincerely,
Niharika Patlolla