

EMBO WORKSHOP

Computational models of life: From molecular biology to digital twins

Interview with the PerMedCoE grant recipient Sai Bhavani Gottumukkala

Sai Bhavani Gottumukkala is a PhD candidate from National Institute of Technology Warangal, India, specialising in cancer systems biology research, particularly in developing comprehensive literature curated cancer maps and deciphering intricate molecular interactions.

What is your main professional interest?

My research work focuses on (i) developing cancer maps (ii) understanding the complex interactions between molecular components in cancer and (iii) exploring their role in cancer. Subsequently, utilising mathematical modelling, simulation and computational analysis approaches to the developed cancer maps and create predictive models of cancer signaling pathways. These models may assist in finding the general design principles of the prevailing network architecture and provide significant insights into the emergent properties governing cancer.

What were your expectations from the EMBO Workshop “Computational models of life: From molecular biology to digital twins”?

I was drawn to this workshop for three different reasons, (i) to gain insights into advanced modelling techniques from the pioneers in this interdisciplinary field, (ii) to share my work with peers, and (iii) to establish connections for potential collaborations.

Have these expectations been met?

Certainly, several of my expectations have been fulfilled. Engaging with experts in the community has provided valuable insights, contributing to the refinement of my ideas. These interactions are proving instrumental in enhancing the quality of my thesis, both in terms of content and its defense. I would like to add that this workshop has also been helpful in identifying different career paths for future.

What is your feedback regarding gender balance and equality in this workshop?

I extend my gratitude to the organizers for their unwavering support and encouragement, as well as for maintaining a commendable gender balance throughout the workshop. The talks from the speakers have been enlightening, providing insights into the current trends in the community. While the overall gender representation has been positive, there's an opportunity to enhance inclusivity by making the venue more accessible for individuals with disabilities. Additionally, implementing improved health precautions would contribute to the overall safety and well-being of all participants.

