

Bioengineering Symposium & 3D Biofabrication Workshop

The Bioengineering Symposium & Workshop will be held *February 22-23, 2024*, hosted by the Centre for Bioengineering & Nanomedicine (Dunedin Hub), Faculty of Dentistry, University of Otago and sponsored by Bio-Strategy, Ltd. The first-day meeting will focus on tissue engineering, molecular therapies, and medical device development. The latest research and applications will be highlighted with an exchange of ideas between students, researchers, and clinicians. The second day will feature introductory sessions on Biofabrication techniques and 3D printing in medicine projects, followed by 3D printing lab demonstrations in the afternoon.







<u>Where</u>: Hunter Centre, Seminar room 122/123, University of Otago, Dunedin campus (Symposium); 3D printing lab demos 3rd floor Dentistry Bioengineering laboratory & 8th floor Microbiology Building (Workshop).

Registration to the Symposium (All Day 1 & morning Day 2) is free. Registration for the Biofabrication workshop (afternoon Day 2) cost NZD \$50, Bioengineering postgraduate students will have preference if the demand is high as the course is limited to 20 people. *Please register using this link to secure a workshop booking*, Link: TBA. To register please email Assoc. Prof. Jaydee Cabral, email: jaydee.cabral@otago.ac.nz.

Registration closes 15 February. *Cancellations must be made no later than 19 February*. Any questions? Please contact Assoc. Prof. Jaydee Cabral, email: <u>jaydee.cabral@otago.ac.nz</u>

Any question/inquiries associated to Bioengineering @ Otago, please contact, Assoc./Prof Azam Ali; email: azam.ali@otago.ac.nz

Programme

TIME	Person/location	
9:00 am-9:10 am	Welcome & Introduction: A/P Jaydee Cabral	
9:10- 10:00 am	<u>Keynote Speaker</u> : Distinguished Prof. John Fisher, Chair, Fischell Dept of Bioengineering, Director of Complex Tissues, University of Maryland, USA	

10:00am- 10:30 am	A/P Azam Ali, Dept of Oral Rehabilitation, Faculty of Dentistry, Centre of Bioengineering & Nanomedicine <i>Medical device- a novel surgical suture</i>	
10:30 am- 11:00 am	Morning Tea	
11 am- 11:30 am	A/P Rajesh Katare, HOD, Dept of Physiology Molecular therapy for the treatment of diabetic ulcer	
11:30 am- 12 pm	Dr. Sarah Diermeier, Dept of Biochemistry, Long non-coding RNAs for cancer drug development	
12 pm-1pm	Lunch	
1pm-1:30pm	A/P Yusuf Cakmak, Dept of Anatomy Applied anatomy for MedTech: Wearables and mHealth	
1:30pm -2:00pm	Dr. Mohammed Sharafeldin, Dept of Chemistry <i>Multifunctional 3D printed microfluidics for</i> <i>protein biomarker detection</i>	
2:00 -3:00 pm (15 min)	ECR/PG Student talks	
3pm- 4:30pm	Afternoon tea/poster session	

Friday, 23 February 3D Biofabrication Symposium/ workshop (\$50 registration fee, link: TBA)

TIME	TOPIC	SPEAKER
9 am- 9:05 am	Welcome	A/P Jaydee Cabral
9:05 am- 9:35 am	Centre of Bioengineering & Nanomedicine & Bioengineering Programme	A/P Azam Ali
9:35am-10:35am	Intro to Biofabrication & Tissue engineering, 3D printing in medicine	A/P Jaydee Cabral
10:35am- 11 am	Morning tea	
11am- 11:30 am	Regenerative Medicine projects	Prof. Tim Woodfield
11:30am -11:50am	Medical device projects	A/P Azam Ali
11:50pm-12pm	Closing remarks	Jaydee/Azam
12pm-1pm	Lunch	
1:15pm - 2:15 pm Group A 1:15-1:25pm Group B 1:30 pm-1:40 pm Group C 1:45-1: 55 pm Group D 2:00- 2:10pm	3D printing/bioprinting demos 10 min time slots (max. 5 per group)/*CAD and 3D printing training in Dentistry Bioengineering laboratory 3 rd floor (2 groups rotating between) *3D bioscaffolder demo 8 th floor Microbiology building	
3-4pm	Afternoon tea Closing remarks/questions?	Jaydee/Azam