

## **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., Catalyst Fund, and Zenith Technology, Ltd. The first-day meeting will focus on tissue engineering 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 followed by 3D printing lab demonstrations, best poster award, and

Q&A session with Bioengineering postgraduate student panel.









Where: Hunter Centre, Seminar room 122/123, University of Otago, Dunedin campus

Registration to the Symposium (Day 1) is free. Registration for the Biofabrication workshop (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: https://www.otago.ac.nz/conferences/biofabrication/

Please email Assoc. Prof. Jaydee Cabral, email: jaydee.cabral@otago.ac.nz, to register.

Registration closes 15 February. Cancellations must be made no later than 19 February.

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

## **Programme**

## Thursday, 22 February 2024

TIME	Person/location
9:00 am-9:10 am	Welcome & Introduction: A/P Jaydee Cabral, Dept Microbiology & Immunology, Centre of Bioengineering & Nanomedicine
9:10- 10:00 am	Keynote Speaker: Distinguished Prof. John Fisher, Chair, Fischell Dept of Bioengineering, Uni Maryland, USA 3D printing for Engineering Gynecological Tissues

10:00am-10:30 am	A/P Azam Ali, Dept of Oral Rehabilitation, Faculty of Dentistry, Centre of Bioengineering & Nanomedicine  Medical device- a novel surgical suture		
10:30am- 11:00 am	Morning Tea		
11am- 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. Zohaib Rana, Project Manager, Amaroq Therapeutics, <i>Targeting</i>		
	the dark genome to treat cancer		
12pm-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		
	Multifunctional 3D printed microfluidics for protein biomarker		
	detection		
2:00-3:00 pm	PG Student talks (x4)		
3pm- 4:30pm	Afternoon tea/poster session		

## Friday, 23 February 2024 3D Biofabrication Symposium/Workshop

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 Dept of Microbiology & Immunology
10:35am- 11 am	Morning tea	
11am- 11:30 am	Regenerative Medicine projects	Prof. Tim Woodfield, Dept of Orthopaedic Surgery & Musculoskeletal Medicine
11:30am -11:50am	Medical device projects	A/P Azam Ali
11:50pm-12pm	Symposium 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	Workshop: 3D printing/bioprinting demos 10 min time slots (max. 5 per group)/CAD and 3D FDM printing training in Dentistry Bioengineering laboratory 4th floor (2 groups rotating between Dentistry and Microbiology) *3D bioscaffolder demo 8th floor Microbiology building	Maree (Dentistry)  *Quinn (Microbiology)
2:30pm – 3:30 pm	Afternoon tea/ Zentech Best Poster Award	Hunter Centre
3:30pm- 4pm	Bioengineering Student Q&A for prospective students General Questions?	Bioengineering student panel Jaydee/Azam