



Prof Yeong Wai Yee

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### **PROFESSIONAL EXPERIENCE**

Start Year (YYYY)	End Year (YYYY)	Name of organisation	Position held
2022		NTU	Professor
2018	2022	NTU	Associate Prof Assistant Chair (Students)
2013	2018	NTU	Assistant Prof
2009	2013	CIBA VISION	Principal Engineer
2008	2009	NTU	Research Fellow

### **ACADEMIC QUALIFICATIONS**

Date Awarded (MM YYYY)	Qualification	Institution Attended and Country
06 2007	Ph.D.	Nanyang Technological University, Singapore
06 2003	B.Eng.	Nanyang Technological University, Singapore

### **RESEARCH AREA**

***3D Printing, Bioprinting, Metal printing, Electronics printing, Machine learning in 3D Printing.***

**H-index: 67, Citation: >16000 (Google Scholar) with 15 highly cited papers** in the fields of Engineering, Materials Science, Physics and Clinical Medicine.

### **AWARDS**

- **World's top 2% most-cited scientist 2021-2023** by Stanford study
- **Highly Cited Researchers 2022** by Clarivate
- **NRF Investigatorship Class of 2022**
- **Singapore 100 Women in Tech (SG100WIT) 2021**
- Inaugural **TCT Woman in 3D Printing Award 2019**, for her significant achievement in 3D printing.
- **Finalist for Lush Award 2018 (Science category)** for developing tissue models for animal-free testing.

### **ACADEMIC RECOGNITION & SERVICES**

- **Member of Council - Treasurer** of Tissue Engineering and Regenerative Medicine International Society Asia Pacific Chapter (**TERMIS-AP**)
- Member of the Steering Committee for **National STEM Championship (NSC) 2022**, a A\*STAR – Science Centre Singapore collaboration
- Serving as **Associate Editor** in international journals **Virtual and Physical Prototyping (VPP)** & **International Journal of Bioprinting (IJB)**, both Q1 journals in SCI Clarivate.

- Research featured on **media and news**, including Reuters Science News, Straits Times Channel News Asia and Channel 8.
- Given more than 20 **invited talks** at various platforms including academic conferences and industrial forum internationally (Singapore, China, Japan, USA, Belgium, Greece, Europe).
- Served as Panel Member for **European Research Council ERC- Advanced Grant 2019, 2021**.

### **SUPERVISION OF GRADUATE STUDENTS**

Graduated 10 PhD students, currently supervising 2 PhD students.

### **FUNDING AND COLLABORATIONS**

**Secured >US\$15million project funding** since 2013, on joint labs, academic research projects and industrial projects. Collaborations partners include academic, companies, hospitals across different schools and disciplines.

### **PATENTS**

- Filed 28 Technology Disclosure, 6 patents, 14 know-how

### **SELECTED PAPERS**

1. X Huang, WL Ng, WY Yeong (2023) Predicting the number of printed cells during inkjet-based bioprinting process based on droplet velocity profile using machine learning approaches Journal of Intelligent Manufacturing, 1-16
2. Goh, G. D., Lee, J. M., Goh, G. L., Huang, X., Lee, S., & Yeong, W. Y. (2023). Machine learning for bioelectronics on wearable and implantable devices: challenges and potential. Tissue Engineering Part A, 29(1-2), 20-46
3. Ma, W. C., Goh, G. L., Priyadarshini, B. M., & Yeong, W. Y. (2023). 3D printing and 3D-printed electronics: Applications and future trends in smart drug delivery devices. International Journal of Bioprinting, 9(4). <http://dx.doi.org/10.18063/ijb.725>
4. Goh, G. D., Goh, G. L., Lyu, Z., Ariffin, M. Z., Yeong, W. Y., Lum, G. Z., Campolo, D., Han, B. S., Wong, H. Y. A., 3D Printing of Robotic Soft Grippers: Toward Smart Actuation and Sensing. *Adv. Mater. Technol.* 2022, 7, 2101672. <https://doi.org/10.1002/admt.202101672>
5. S.L. Sing, S. Huang, G.D. Goh, G.L. Goh, C.F. Tey, J.H.K. Tan, W.Y. Yeong, (2021) Emerging metallic systems for additive manufacturing: In-situ alloying and multi-metal processing in laser powder bed fusion, Progress in Materials Science, Volume 119,100795 ( Impact factor 31.56)
6. J. M. Lee & W. Y. Yeong (2020), Engineering macroscale cell alignment through coordinated toolpath design using support-assisted 3D bioprinting, Journal of the Royal Society Interface 17(168), 20200294
7. Shairah Radzi, Heang Kuan Joel Tan, Gerald Jit Shen Tan, Wai Yee Yeong, Michael Alan Ferenczi, Naomi Low-Beer, and Sreenivasulu Reddy Mogali (2020), Development of a three-dimensional printed heart from computed tomography images of a plastinated specimen for learning anatomy, Anatomy & Cell Biology, 53(1). Published. DOI: 10.5115/acb.19.153
8. J. M. Lee, W. L. Ng & W. Y. Yeong (2019), Resolution and shape in bioprinting: strategizing towards complex tissue and organ printing, Applied Physics Reviews 6(1), 011307
9. W. L. Ng, Y. J. Tan, W. Y. Yeong & M. W. Naing (2018), Proof-of-concept: 3D bioprinting of pigmented human skin constructs, Biofabrication 10(2), 025005. doi: 10.1088/1758-5090/aa9e1e.
10. G. L. Goh, N. Saengchairat, S. Agarwala, W. Y. Yeong & T. Tran (2019), Sessile droplets containing carbon nanotubes: a study of evaporation dynamic and CNTs alignment for printed electronics, Nanoscale 11(22), 10603-10614 DOI: 10.1039/c9nr03261d.
11. S. Agarwala, J. M. Lee, W. L. Ng, M. Layani, W. Y. Yeong & S. Magdassi (2018), A novel 3D bioprinted flexible and biocompatible hydrogel bioelectronic platform, Biosensors and Bioelectronics 102, 365-371.