# Hanry Yu, Ph.D.

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## EDUCATION

- Certificate in 3D microscopy of living cell (1998) University of British Columbia, Vancouver, B.C., Canada
- Ph.D. in Cell Biology (1990–1994) Duke University, Durham, North Carolina, U.S.A.
- Certificate in Analytical and Quantitative Light Microscopy (1992) Marine Biological Laboratories, Woods Hole, Massachusetts, U.S.A.
- M.S. in Molecular Biology and Biochemistry (1988–1990) Washington University Medical Center, St. Louis, Missouri, U.S.A.
- B.S. in Biochemistry with High Honor (Honors college, 1984–1987) Michigan State University, E. Lansing, Michigan, U.S.A.

## CURRENT POSITIONS

- Tenured Professor (1 July 2008-) Department of Physiology, Yong Loo Lin School of Medicine, National University Health System
- Professor (1 January 2018-) University Scholars Programme, National University of Singapore
- Principal Investigator (2009-), Mechanobiology Institute, Singapore (http://mbi.nus.edu.sg/)
- Director, NUHS Research Core Facilities, Confocal Microscopy Unit & Flow Cytometry Laboratory (2011-28 February 2025), National University Health System
- Co-Lead Principal Investigator (2019-), Critical Analytics for Manufacturing Personalized-Medicine (CAMP), Singapore-MIT Alliance for Research and Technology (SMART)
- Faculty Member (2003-) NUS Graduate School of Integrative Sciences and Engineering (NGS: http://www.nus.edu.sg/ngs/)
- Faculty Member (2003-) A*STAR Graduate Academy
- Faculty Fellow (2010 -) Singapore-MIT Alliance for Research and Technology

## PREVIOUS POSITIONS

- Senior Principal Investigator (2003-30 September 2023) Institute of Bioengineering and Bioimaging (IBB), A*STAR, Singapore (https://www.a-star.edu.sg/ibb/home)
- Visiting Professor (07/2016-06/2019), Gastroenterology department, Southern Medical University, China

- Faculty, NHG Clinician-Scientist Preparatory Programme (CSPP) (2016) National Healthcare Group, Singapore
- **Visiting Professor (20/6/2011-30/8/2014) Department of Biological Engineering, Massachusetts Institute of Technology (MIT), USA**
- Clinical Leadership in Research Teaching Faculty Member (2007-03/2016) National Healthcare Group, Singapore
- Visiting Professor (5/2009-4/2010) Department of Mechanical Engineering, Massachusetts Institute of Technology (MIT), USA
- Principal Investigator, Founding Chair of Academic Affairs Working Committee & Founding Chair of the Graduate Committee (2009-2014), MBI Senior Management Committee (2011-), Mechanobiology Institute, Singapore (MBI)
- Head, Confocal Microscopy & Flow Cytometry Units (2000-2010) National University Medical Institutes (NUMI), National University Health System
- Visiting Associate Professor (5/2008-4/2009) Department of Mechanical Engineering, Massachusetts Institute of Technology (MIT), USA
- **SMA Faculty Fellow, Deputy Program Co-Chair, & Graduate Committee Chair (2005-2010) Computational and Systems Biology Program, Singapore-MIT Alliance (SMA); Acting Program Co-Chair (1st April – 31st Dec, 2008)**
- Associate Professor (2001-, tenured 2004-2008) Department of Physiology, Yong Loo Lin School of Medicine, National University of Singapore
- **Founding Co-Chairman (2001-2005) Graduate Program in Bioengineering (GPBE) National University of Singapore (http://gpbe.nus.edu.sg)**
- Adjunct National University Hospital Scientist (2006-2008) National Healthcare Group, Singapore
- Program Coordinator (2001-2005) Liver Tissue Engineering and Regeneration Research Program (LTER), Faculty of Medicine, National University of Singapore
- Officer-In-Charge, (2004-2008) Confocal Microscopy Facility, Biopolis Shared Facility, A*STAR
- Associate Principle Fellow (2001-2003) Institute of Materials Research & Engineering (IMRE), Singapore (http://www.imre.a-star.edu.sg)
- Program Coordinator in Tissue Engineering (2000-2001) Biomaterials program, Institute of Materials Research & Engineering, Singapore
- Senior Fellow (1997–2000) Biomaterials program, Institute of Materials Research & Engineering, Singapore
- Research Scientist (1997–2000) National University Medical Institutes, Singapore
- Board Director (1996–1997), Chinese Academic Link, Inc., USA
- **Human Frontier Science Program (HFSP, http://www.hfsp.org) Long-Term Research Fellow (1995–1997) at the European Molecular Biology Laboratory (EMBL), Heidelberg, Germany (http://www.embl-heidelberg.de)**
- Research Associate (1994–1995) Dept. of Cell Biology, Duke Univ. Med. Center, Durham, NC, USA
- Teaching assistant – Genetics (1988–1988) Dept. of Biology, Washington University, St. Louis, MO, USA
- Research Technician (1987) Laboratory of Drosophila Learning/memory, MSU, E. Lansing, Michigan, USA

## INVITED, PLENARY & KEYNOTE LECTURES

1. "Lipid-loaded Kupffer cells and immunosuppression in metabolic dysfunction-associated steatotic liver disease-related hepatocellular carcinoma", 2024 Southern Forum on GI Disease & Endoscopy, Guangzhou, China, 12-14 July 2024
2. "3.5D Organoid Engineering strategy", 4th Conference on Micro Flow and Interfacial Phenomena (μFIP), Hong Kong, 21-24 June 2024 (**Keynote**)
3. "Engineering a simple and robust organoid on chip to recapitulate full NASH function," 12th World Biomaterials Congress (WBC 2024), Daegu, Korea, 26-31 May 2024
4. "Engineering a simple and robust EMULSION liver-chip to recapitulate full NASH functions," 15th Annual Symposium of SCSS, Singapore, 29 November – 1 December 2023
5. "Engineering simple and robust in vitro cell models for studying NASH," NUS-Tsinghua Biomedical Engineering Joint Workshop 2023, Singapore, 2-3 October 2023
6. "The Cell as a Machine approach to Mechanobiology studies and applications," MBI Conference 2023: Mechanobiology in Health and Disease, Singapore, 26-29 September 2023
7. "EMULSION Liver Chip to model non-alcoholic steato-hepatitis," ISoOR 2023 Annual Meeting, Singapore, 7-8 August 2023
8. "Critical Analytics in Manufacturing Personalized Medicine (CAMP)," ISCT Conference, 3 August 2023
9. "Imaging and diagnostic algorithms for wearable imaging platform (III)," SMART WITEC Planning Workshop: Wearable Imaging for Transforming Elderly Care, Singapore, 28 October 2022
10. "Detection and quantification: AI and imaging," APASL STC 2022 GUANGZHOU, Guangzhou, China, 21 – 23 October 2022
11. "Engineering Mechanochemical Niche for Cell-based Models," Monash INITIATE 2021: Inspiring Innovation via Multidisciplinary Collaboration, Malaysia, 27-28 September 2022 (**Plenary**)
12. "Engineered and functional food strategies for sustainable products," Medicine Meets Science, Singapore, online, 17 August 2022
13. "The AI in telepathology or Developing a simple NASH progression model in vitro," 2022 Southern Forum on GI Disease & Endoscopy, Guangzhou, China, 8-9 July 2022
14. "Engineering in vitro Cellular and Tissue Models for Future Food", Alternative Protein Seminar, online, 7 July 2022
15. "Simplifying complex cell-based models for mechanobiological studies and screening application," Online Lecture at the University of Tokyo, online, 6 June 2022
16. "Mechanochemical control of tissue microenvironment for biomedical and sustainability applications," 10th Asia-Pacific Conference of Transducers and

Micro-Nano Technology 2022 (APCOT 2022), Shanghai, China, online, 29 May – 1 June 2022 (**Plenary**)

17. "Design For Simplicity in Complex Cell-Based Models," The "Second Annual BESCO Vitruvian" Conference, online, 7 May 2022
18. "Developing 3D-printed whole-cut meat substitutes," A*STAR-Wageningen University and Research Webinar on "Innovations in Food: Exploration of novel technologies", Singapore, 9 February 2022
19. "Engineering 3D Cellular Niche for Applications," Guangdong-Hong Kong-Macao (GHM) Greater Bay Area International Conference on Translational Medicine and the 4th Macao Stem Cell Symposium, China, 15 January 2022
20. "Seeing is believing: stories of connecting the dots", Medicine meets Science: Bioimaging, Singapore, 17 November 2021
21. "Engineering the third dimension of organoids", 2021 AFOB Virtual Conference, 1-4 November 2021 (**Keynote**)
22. "Engineering 3D Cellular Niche for Applications", SCSS Lunchtime Seminar Series, Singapore, 26 October 2021
23. "*In vitro* morphogenesis model for intra-hepatic bile duct development", 17th Royan International Virtual Congress on Stem Cell Biology & Technology, Iran, 4-5 September 2021
24. "Biomaterials to constrain >2.5D organoids for high content analysis", Asia Pacific Society for Materials Research 2021 Annual Meeting (APSMR 2021 Annual Meeting), Hong Kong, 20-22 August 2021
25. "Meat-like Scaffold for Cell-based Meat Cuts", Food Science & Technology Global 2021, 27-28 April 2021 (**Keynote**)
26. "Title to be announced", MRS Joint session SM01 with SM05, 18-23 April 2021
27. "Artificial Intelligence as a Novel Imaging of Liver Fibrosis", 30$^{th}$ Annual Conference Asian Pacific Association for The Study of The Liver (APASL 2021), Virtual Meeting, 4-6 February 2020
28. "Artificial Intelligence in enabling tele-pathology of liver fibrosis staging", Visiting Professor Lecture, Indonesia, Universitas Indonesia Fakultas Kedokteran, 1 December 2020 (**Keynote**)
29. "Use-Inspired Cell-based Models", MBI Friday Scientific meeting, Singapore, 20 November 2020
30. "Extracellular Intelligence in Liver Function", Visiting Professor Lecture, Indonesia, Universitas Indonesia Fakultas Kedokteran, 20 November 2020 (**Keynote**)
31. "title to be announced", MBI Student and Postdoc Seminar Series (SPSS), Singapore, 22 September 2020
32. "Interdisciplinary Translation Leadership: What to Control and Not to Control?", CKC-USP Summer Seminar, Singapore, 14-16 July 2019
33. "Bile Canaliculi as a contracting machine", 2020 Southern Forum on GI Diseases & Endoscopy, Guangzhou, 10-11 July 2020
34. "title to be announced", 4th CIRP Conference on BioManufacturing, Hong Kong and Guangzhou, 11-15 December 2019 (**Plenary Speaker**)
35. "Modeling critical steps in function and disease", ICoPUST, Pyongyang, DPR Korea, 3-4 October 2019

36. "Scaffold – Biomaterials guiding tissue growth and regeneration", Evonik Meets Science, Singapore, 25-26 September 2019
37. "Causation & correlation in modeling complex function and disease", 9thWACBE World Congress on Biomedical Engineering (WACBE 2019), Taipei, Taiwan, 16-19 August 2019 (**Keynote**)
38. "3D Cell-based Models for Different Applications", Merck Advances in 3D Cell Culture Technologies, Singapore, 22 August 2019
39. "Interdisciplinary Translation Leadership: What to Control and Not to Control?", CKC-USP Summer Seminar, Singapore, 22-27 July 2019
40. "The Cell as a Machine - Causation and Correlation", DBS Summer Workshop "Chemistry of Life", Singapore, 15 July – 2 August 2019
41. "Causation and correlation in complex function and diseases", Marius Sudol's Retirement Research Symposium, Singapore, 24 June 2019
42. "Translational Mechanobiology of Liver Diseases", MBI Weekly Seminar, Singapore, 5 April 2019
43. "Developing a robust digital pathology approach for liver fibrosis classification", 5th Digital Pathology & AI Congress Asia 2019, Tokyo, Japan, 2-3 April 2019
44. "In vitro mechanobiology models on key steps in function and disease", Seminar at University of Tokyo, 1 April 2019
45. "Translational Mechanobiology of Liver Diseases", Joint Zhejiang University-MBI-DBS joint conference: Mechanobiology in Biomedical Science, Zhejiang, China, 24-28 March 2019
46. "Microphysiological systems for modeling biological functions and diseases", Nature Conference on In vitro diagnostic, Nanchang, China, 22-23 March 2019
47. "Heterogeneity in 3D *in vitro* toxicity testing models", Nanotechnology Toxicology Awareness Workshop, Singapore, 8 January 2019
48. "Biomaterials Engineering of Organoid Models", Frontiers in Cancer Science (FCS) 2018, Singapore, 12-14 November 2018
49. "How to prepare for industry PhD jobs", Mechanobiology International Graduate Student Congress, Singapore, 12 November 2018 (**Keynote**)
50. "Developmental and reproductive toxicity" and "In vitro micropatterned human pluripotent stem cell test for morphometric-based teratogen screening", IFCS SAB, Singapore, 31 October 2018
51. "Complementary partnership to build together", BioSyM-10 Celebration, Singapore, 23 October 2018 (**Keynote**)
52. "Heterogeneity and solutions in cell-based models for in vitro toxicity testing applications", Toxicological Alternatives and Translational Toxicology Conference, Guangzhou, China, 10-11 October 2018 (**Plenary**)
53. "Development of macroporous hydrogel sponges for soft tissue organoid culture and applications", The 21st International Conference of Molecular Engineering of Polymers (MEP-2 or MEP2018), Shanghai, China, 21-23 September 2018 (**Keynote**)
54. "Translational Journey in Tissue Engineering and Regenerative Medicine (TERM)", NTU-NDC Monthly Seminar, Singapore, 27 July 2018
55. "Data analytics in biomedical applications", BIGHEART Symposium 2018, Singapore, 23-24 July 2018

56. "Development and Commercialisation of Cell-based Products and Services", CTeD's Bio-entrepreneur Talk at Duke-NUS Medical School, Singapore, 13 June 2018
57. "Investigating dynamics of bile canaliculi in physiological conditions and obstructive cholestasis", MBI Scientific Meeting, Singapore, 6 July 2018
58. Panel contributor, Conference on Definitions in Biomaterials 2018, Chengdu, China, 11-12 June 2018 (https://www.biomaterials.org/publications/news/%E2%80%9Cdefinitions-biomaterials%E2%80%9D-conference-attracts-world-experts-chengdu-china)
59. "Process Analytics for Tissue Engineering and Regenerative Medicine", IISc Bioengineering Symposium, India, 24-25 January 2018 (**Keynote**)
60. "Mesoscale Mechanobiology of liver homeostatic regeneration", 2nd International Workshop on Molecular, Cell, Tissue Mechanobiology, Shanghai Jiatong University, China, 6-7 November 2017
61. "Challenges and progress in process analytics for regenerative medicine", AI in the Life Sciences workshop, Singapore, 25 October 2017
62. "Process Analytics for Tissue Engineering and Regenerative Medicine", Distinguished Lecture in The Chinese University of Hong Kong, Hong Kong, 27 September 2017
63. "Process Analytics for Tissue Engineering and Regenerative Medicine", BME Distinguished Lecture Series, Southern University of Science and Technology, China, 25 September 2017
64. "Commericalization of Cell-based Products and Services", Distinguished Lecture in The Chinese University of Hong Kong, Hong Kong, 27 September 2017.
65. "Local cytoskeleton dynamics in liver homeostasis and regeneration", TERMIS-AP 2017, Nantong, China, 21-24 September 2017 (**Keynote**)
66. "How different is the graduate training for biomedical academic and industry jobs?" MBI roadshow in The University of Hong Kong, 26 September 2017
67. "Imaging modalities and analysis for mechanobiology, the emerging "tissueomics"", MBI roadshow and scientific talk, Zhejiang University, China, 19-20 September 2017
68. "Generation of Stem Cell-Derived Kupffer Cells for Human *in vitro* Inflammatory Liver Model," 2017 International Symposium of Materials on Regenerative Medicine (2017 ISOMRM), Taoyuan, Taiwan, 23-26 August 2017 (**Keynote**)
69. "sqFibrosis: a fully quantitative classification method of facilitate fibrosis scoring using collagen stains," 2017 International Symposium of Materials on Regenerative Medicine (2017 ISOMRM), Taoyuan, Taiwan, 23-26 August 2017
70. "sqFibrosis: A Fully Quantitative Classification Method to Facilitate Fibrosis Scoring Using Collagen Stains," Graduate Institute of Biomedical Engineering (NTUST), special talk in our seminar class and meeting with our graduate students for sharing research experience, Taoyuan, Taiwan, 25 August 2017 (**Keynote**)
71. "Chips and systems for more complex drug testing applications", 7th International Multidisciplinary Conference on Optofluidics (Optofluidics 2017), Singapore, 25-28 July 2017 (**Keynote**)

72. “sqFibrosis: A Fully Quantitative Classification Method to Facilitate Fibrosis Scoring Using Collagen Stains,” 2017 Southern Digestive Disease and Endoscopy Forum, Guangzhou, China, 7-9 July 2017
73. “Controlled migration and differentiation of human pluripotent stem cells and application”, MBI Weekly Seminar, 21 April 2017
74. “Promotion and Tenure Presentation”, NUSMed P&T Roadshow, Singapore, 7 April 2017
75. “The nuts & bolts of Peer Review,” Elsevier Publishing Campus Webinar, 7 March 2017
76. “sqFibrosis: A Fully Quantitative Classification Method to Facilitate Fibrosis Scoring Using Collagen Stains,” The 26th Conference of Asian Pacific Association for the Study of the Liver: APASL Annual Meeting 2017, Shanghai, China, 15-19 February 2017
77. “Biomimetic in vitro cell models and assays for compound ranking in drug discovery and development,” 2nd DIA China for Drug Discovery Innovation Conference, Suzhou, China, 24-26 October 2016
78. “Organoids on chips for drug testing applications,” Talk at Fudan University, China, 25 October 2016
79. “Organoids on chips for drug testing applications,” “Organs-on-Chips” Workshop, Hong Kong, 3 October 2016
80. “Developing In vitro liver cell models,” 11th International Particle Toxicology Conference, Singapore, 26 – 30 September 2016
81. “Materiomic Screening of Topographical Cues That Bias Migration and Differentiation of Liver Progenitor Cells,” 2016 Tissue Engineering and Regenerative Medicine International Society- Asia Pacific Meeting (TERMIS-AP 2016), Taipei, Taiwan, 3-6 September 2016 (**Keynote**)
82. “Alternating flow co-culture system for drug metabolism study,” SIMTech EAC Annual Conference 2016, Singapore, 25 August 2016
83. “Imaging liver regeneration and diseases,” Next Generation Confocal Microscope for Advanced Bio-Imaging!, Singapore, 2 August 2016
84. “Mechanobiology perspective of obstructive cholestasis: opens the black box of intrahepatic bile canaliculi dynamics,” 2016 Southern Digestive Disease And Endoscopy Forum, Guangzhou, China, 8-10 July 2016
85. “Mechanobiology opens the black boxes of cell responses to biomaterials,” Talk at Xiamen University, China, 6 July 2016
86. “Imaging liver regeneration and diseases,” Talk at Fujian Normal University, China, 1 July 2016
87. “Cell Shape Models,” University of Helsinki Doctoral Thesis Opponent Invited Talk, Helsinki, Finland, 26 May 2016
88. “Mechanobiology opens the black boxes of cell responses to biomaterials,” 10th World Biomaterials Congress, Montreal, Canada, 17-22 May 2016 (**Keynote**)
89. “In vitro screening assay development”, Meeting with DuPont, Singapore, 20 April 2016
90. “Preamble to Chronic Tox (framing the challenge),” Workshop on Chronic Tox for Paul Carmichael’s visit, Singapore, 6 April 2016

91. "Liver Models," Short Talks by Scientist for Paul Carmichael's visit, Singapore, 4 April 2016
92. "Acute and Sub-Acute Hepatotoxicity Testing in vitro Models," Symposium on Non-animal Approaches to Safety & Efficacy Testing, Singapore, 25 January 2016 "Engineering in vitro liver models for drug safety testing applications," Khalifa University external examiner invited seminar, Abu Dhabi, UAE, 12 November 2015
93. "Mechanobiology studies of the tissue dynamics for engineering long bile canaliculi," 7th Models of Physiology and Disease - Physiology Symposium 2015, Singapore, 21-22 September 2015
94. "Mechanobiology studies of the tissue dynamics for engineering long bile canaliculi," The 8th Asian-Pacific Conference on Biomechanics (AP Biomech 2015), Sapporo, Japan, 16-19 September 2015
95. "Challenges and innovations for compound safety testing applications with scalable perfusion-based cell-culture devices," Microfluidics and Diagnostics – Moving Microfluidic Applications from Lab to Market: Challenges & Solutions, Singapore, 14 July 2015
96. "Spatial and temporal morphological markers for liver regeneration and chronic liver diseases," 7th WACBE World Congress on Bioengineering (WACBE2015), Singapore, 6-8 July 2015
97. "Progress in identifying image-based markers of liver cancer derived from non-alcoholic fatty liver diseases", SMART BioSyM Workshop – Workshop on Metastatic Cancer, Singapore, 25 June 2015
98. "Seeing is believing: imaging the dynamic processes in liver regeneration", MBI Weekly Meeting, Singapore, 24 June 2015
99. "Cleavable cellulosic sponge for 3D culture and harvest of liver cells," The 5th Asian Biomaterials Congress (ABMC5), Taipei, Taiwan, 6-9 May 2015. (**Keynote**)
100. "Tissue engineered in vitro liver models for testing of drugs, pathogens, and prospects for testing food, TCM drugs, environmental toxins and cosmetics," NUS Research Institute in Soochow Industry Park for industry audiences, Shanghai, China, 9 April 2015
101. "Controlling cell-cell and cell matrix interaction for engineering *in vitro* toxicity testing models and bioartificial liver support system," Chinese Academic of Science, Institute of Biochemistry and Cell Biology, Shanghai, China, 8 April 2015
102. "Reconstitution of cell dynamics or biomolecular networks in vitro/in silico", the A*STAR-JST Joint Workshop on "Development of fundamental technology for biodevices enabling dynamic analysis and control of cells", Singapore, 12-13 January 2015
103. "Mechanobiology study of bile excretion enables innovative strategy for engineering bile collection device for drug testing applications", The 1st International Workshop on Multiscale Mechanobiology (IWMM 2014), Hong Kong, 15-18 May 2014
104. "Interface structures and functions for Organs-on-Chip", Lab-on-a-Chip Asia, Singapore, 12-13 November 2013 (**Keynote**)

105. “大学与科技创新” Chinese Studies in Chinese Enrichment Lecture (中国通识深广讲堂), Hwa Chong Institution, Singapore, 15 August 2013
106. “Academic-Industry Partnership to Support Drug Development”, Temasek Polytechnic Annual Industry Networking Event Seminar, Partners-in-Science: Achieving Commercial Success through Better Quality, Safety & Efficacy, Singapore, 23 July 2013
107. “Organ-on-Chip: a biologist's perspective,” SIMTech Microfluidics Seminar 2013, Singapore, 6 March 2013
108. “Translating fundamental liver biology and pathology into applications”, International Conference Cellular & Molecular Bioengineering (ICCMB3), Singapore, 10-12 December 2012 (**Keynote**)
109. “Tissue Informatics on Liver Fibrosis”, The 1st Singapore-Korea Joint Workshop for Innovative Biomedicine, Singapore, 22 June 2012
110. “Nanomedicine roadmap”, West China Medical School of Sichuan University, Sichuan, China, 8 June 2012
111. “Trend Analysis for Modern Higher Education (In Chinese)”, Tsinghua University, Beijing, China, 30 May 2012
112. “Mechanobiology in Liver Tissue Engineering.” International Workshop on Tissue Engineering 2012, Tsinghua University, Beijing, China 30 May 2012
113. “Novel Technique of Liver Biopsy – Surface Quantification.” 5th FuRui Liver Fibrosis Forum, Guangzhou, China, 25-26 May 2012
114. Public Lectures on “Analysis of the 21st Century University Trends” & “Innovations, Science and Technology”. City & Culture Research Centre, Kuala Lumpur, Malaysia 11-12 May 2012
115. “Mechanobiology PhD Program, a training to integrate biochemical signals with mechanical phenotypes to understand biological functions and translate into biomedical applications.” HKUST BME Seminar, Hong Kong, 12-13 March 2012
116. “Trends in Liver Tissue Engineering for complex tissue regeneration applications.” Fourth International Conference on the Development of Biomedical Engineering - Regenerative Medicine Conference, Ho Chi Minh City, Vietnam, 8-10 January 2012
117. “Advances in Biomedical Engineering – Liver.” Testicular Toxicology in vitro models, Baltimore, USA, 26-27 October 2011
118. “Engineering Tissue Niche to Develop Innovative In Vitro Toxicity Screening Platforms.” Seminar at University of Liverpool, Liverpool, 4 July 2011
119. “Mechanobiology to study and engineer cell and tissue as a machine”, Seminar at the Hong Kong University of Science and Technology, Hong Kong, 1 June 2011
120. “Mechanobiology approach to biomaterials and tissue engineering”, Seminar at University of Hong Kong, Hong Kong, 27 May 2011
121. “Research Budgeting- A Perspective from the Investigator.” Research Preparatory Workshop, Singapore, 28 April 2011
122. “TGFb signaling in liver fibrosis and regression.” 2nd Mini-Symposium on "Cell Fate Signaling" in Health and Disease, CeLS, NUS, Singapore, 3 March 2011

123. "Systems approach to study liver injury." BioComplexity Symposium/Workshop, Singapore, 14-15 February 2011
124. "Controlling Extracellular Environmental Cues for Cell Shape and Functions for Applications." The Second Conference on Advances in Microfluidics and Nanofluidics (AMN 2011) and Asian-Pacific International Symposium on Lab on Chip (APLOC 2011), Singapore 5-7 January 2011
125. "Human Embryonic Stem (hES) Cells and Induced Pluripotent Stem (iPS) Cells: a Tissue Engineer's Perspective." 9th Asian Congress on Oral and Maxillofacial Surgery, Kuala Lumpur, Malaysia, 25-28 November 2010
126. "Hepatotoxicity testing platforms for *in vitro* screening of xenobiotics." Chinano Forum, Suzhou, China, 13-15 November 2010
127. "Biomaterials & Imaging Technologies in Liver Tissue Engineering." Seminar at John Hopkins University, Baltimore, United States, 27 October 2010
128. "Microscale engineering of in vitro hepatocyte-based models." Seminar and Round Table at Roche, Nutley, United States, 26 October 2010
129. "Adapting micro-engineered 3D hepatocyte models for drug testing applications." Seminar at Johnson & Johnson, Raritan, United States, 25 October 2010
130. "Liver models for hepatotoxicity testing of drugs and fibrosis studies." Physiology Symposium – " Models in Physiology and Disease", National University of Singapore, Singapore, 3 August 2010
131. "Impact of Substrate-mediated Cell Shape Control on Liver Cell Functions and Applications." RCE Symposium on Mechanobiology at World Congress on Biomechanics 2010, Singapore Suntec Convention Centre, Singapore, 2 August 2010
132. "Liver Tissue Engineering: Basic Research and their Translation into the Therapies of the Future." The 20th Conference of the APASL, Beijing, China, 27 March 2010 (**state of the art plenary**)
133. "Microfabricated perfusion cell-based drug testing platforms." 1st International Conference on MedTech Manufacturing Technologies (MedTech 2010). Session 2: Advanced and emerging technologies, cost-effective manufacturing processes, and testing and reliability of medical devices. Suntec Singapore, Singapore, 18-19 March 2010
134. "Quantitative Control of Polarized Epithelial Cell Phenotypes via Extra-Cellular Cues." DBS Seminar, NUS, 18 December 2009
135. "Validation of Novel Cell-based Models for In Vitro Hepatotoxicity Testing of Compounds." Johnson and Johnson Mini-Symposium, Raritan, United States, 18 November 2009
136. "CSB of Liver Fibrosis Regression Mechanisms and Therapy." SMA-CSB Bootcamp Mini Research Symposium, Singapore, 28 July 2009
137. "Liver fibrosis/image informatics/potential projects." SMA-CSB Bootcamp lecture, Singapore, 29 June 2009
138. "Engineering *in vitro* drug platforms." ICMAT Symposium A - Advanced Biomaterials and Regenerative Medicine (In Conjunction with 2nd Asian Biomaterials Congress), Singapore, 28 June – 3 July 2009

139. "Biomaterials to Facilitate Controls of Cell-Matrix and Cell-Cell Interactions in Soft Tissue Construction." 2nd Asian Biomaterials Congress (ABMC), Singapore, 26 – 27 June 2009
140. "Engineering *in vitro* cell-based drug testing platforms", Department of Engineering Science, Oxford University, Oxford, United Kingdom, 17 June 2009
141. "Biomaterials in tissue engineering", Lecturing at VI Tissue Engineering Symposium, Tampere, Finland, 4 June 2009
142. "Engineering in vitro drug testing platforms". Biomedical Engineering Forum, The University of Hong Kong (HKU), 9 April 2009
143. "A multidisciplinary approach to study function process: an example of TGFβ1 regulation in liver fibrosis regression". Physiology Seminar, NUS, 13 March 2009
144. "Computation & Systems Biology and Mechanobiology Programs". SMA Roadshow and recruitment trip in Tsinghua University, Peking University, Beijing Normal University, University of Science and Technology, National Centre of Nanoscience and Technology, Nankai University, Tianjin University. China, 26 February – 3 March 2009
145. "Computation & Systems Biology and Mechanobiology Programs". SMA Roadshow and recruitment trip in Xiamen University, Wuhan University, Zhejiang University, Fudan University, and Shanghai Jiaotong University. China, 16-21 February 2009
146. "Precision engineering of complex internal organs: design parameters for biomaterials and device developments". A*STAR CCO Workshop on Biomaterials: Materials in Biology and Medicine, Breakthrough and Discovery Theatrettes, Biopolis, Singapore, 15 December 2008
147. "Functional Systems Biology and Engineering: a process-centered on approach to the solutions for liver diseases". GPBE-Tohoku Graduate Student Conference in Bioengineering 2008, Centre for Life Sciences (CeLS) NUS, 9-10 December 2008
148. "Cross-scale imaging opportunities and challenges in Singapore". Session 2: Bioimaging. Second Mechanobiology Workshop 2008, Centre of Life Sciences NUS, Singapore, 3-6 November 2008
149. "Functional systems biology: examples in liver research". Department of Gastroenterology, 1st Military Medical University, Southern Hospital, Guangzhou, China, 31 October 2008.
150. "Functional Systems Biology: a process-centered approach to the study of liver fibrosis regression". Seminar for SMA in Tsinghua University, Beijing Normal University and Nan Kai University, Beijing, China, 20-21 October 2008
151. "3D Cellular Models for Hepatotoxicity". Session 8: The 3D Cell Models and Supporting Technologies for Hepatotoxicity Testing of Drugs. BIT's 6th Annual Congress of International Drug Discovery Science and Technology (IDDST), Beijing, China, 18-22 October 2008
152. Guest Lecturer, "Functional Systems Biology", CS6280 Computational Systems Biology, COM1, NUS, 7 October 2008

153. "Trends in Liver Tissue Engineering" Focus Group Meeting of NUS Tissue Engineering Program (NUSTEP), Hippocrates seminar room, DSO building, Singapore, 16 September 2008
154. "Engineered liver cell/tissue constructs, possible in vitro models for infectious agents" SMART Infectious Disease Retreat, Bintan Lagoon Resort, Lagoi, Riau, Indonesia, 3-5 August 2008
155. "3D Cellular Models for Hepatotoxicity" BIT Life Sciences' 1st Annual World Congress of ibio2008, Hangzhou, China: New Starting Line for Decision Makers in Bio-economy Era, 18-22 May 2008
156. "Cell responses to micro- and nano- featured environments." Engineered Surfaces for Regulating Cell Behaviour. Thursday, Biopolis, Singapore, 28 February 2008
157. "Confocal microscopy and its applications." Science and Technology Fest 2008, Biopolis, Singapore, 31 January 2008
158. "New Development in Multi-Modal Imaging for Evaluation of Cells in 3D Bioresorbable Scaffolds", the International Conference on Advances in Bioresorbable Biomaterials for Tissue Engineering - from Research to Clinical Applications. Marina Mandarin Hotel, Singapore, 5-6 January 2008
159. "Endoplasmic Reticulum Dynamics in Cell Migration" National Taiwan University, Taipei, Taiwan, 14 November 2007
160. "Micro-/Nano-Scale Tissue Engineering in Regenerative Medicine", National Taiwan University, Taipei, Taiwan, 12 November 2007
161. "ER dynamics in Cell Motility and Engineering Extra-Cellular Micro-environmental Cues" The 1st Mechanobiology Workshop, National University of Singapore, Singapore, 16-18 October 2007
162. "Nanotechnology and Tissue Engineering", keynote address, Graduate Program in Bioengineering Graduate Student Conference (GPBE) National University of Singapore, Singapore, 14 September 2007
163. "Multi-dimensional live tissue constructs imaging", The 3rd Asian and Pacific Rim Symposium on Biophotonics (APBP) in conjunction with Biophotonics Downunder II, Cairns, Australia, 10 July 2007
164. "Introduction to Cell Biology", the 2nd Global Enterprise for Micro-Mechanics and Molecular Medicine ($GEM^4$, http://www.gem4.org) Summer School, Singapore, 26 June 2007
165. "Endoplasmic Reticulum Dynamics and Liver Fibrosis Resolution", The Centre for Reproduction, Development and Growth, University of Hong Kong, Hong Kong, 10 April 2007
166. "Challenges in Micro-/Nano-Scale Tissue Engineering in Regenerative Medicine", Department of Mechanical Engineering, University of Hong Kong, Hong Kong, 3 April 2007
167. "Engineering and probing extra-cellular microenvironment in tissue engineering", IV Tampere Tissue Engineering symposium, Institute for Regenerative Medicine University of Tampere, Finland, 12-14 March 2007
168. "Engineering and imaging extra-cellular environments", Nanobio-Tokyo, University of Tokyo, Japan, 4-7 December 2006

169. “Imaging Cellular Niche”, 9th International Conference on Optics Within Life Science (OWLS9), National Yang-Ming University, Taipei, Taiwan, 26-29 November 2006
170. “Engineering Extra-Cellular (EC) Environments”, EWHA Woman University, Division of Nano Science & Department of Life Science, Seoul, Korea, 24 August 2006
171. “Immediate- Overlay Sandwich Perfusion Sustains Hepatocyte Polarity and Functions”, ASBM 7, JeJu Island, Korea, 20 August 2006
172. “Cell and Tissue Imaging Using Ultra-short Lasers”, IEICE Ultra-fast Photonics Meeting, Sophia University, Tokyo, Japan, 17 March 2006
173. "Liver cell and tissue engineering: systematic approaches to applications". NUS Tissue Engineering Program (NUSTEP) workshop on Regenerative Medicine and Tissue Engineering, Singapore, 5-6 December 2005
174. “Applications of Fluorescence Microscopy in Biomedical Research”, Biophysical Technology and Methods Frontiers Forum and 4th Chinese Biophysical Technologies Symposium. Tsing Hua University, China. 24 November 2005
175. “Nanotechnologies in biomedical applications”. Macau Biotechnology Research Institute, Macau, China, 22 November 2005
176. “Some applications in Multi-dimensional Microscopy”, 3rd Olympus Laser Confocal Microscope’s User Club Meeting, Shanghai, P.R. China, 19-20 September 2005
177. “Challenges in Liver Tissue Engineering?”, Symposium on "New Trends in Biomaterials-Tissue Engineering", Pan Pacific Hotel, Singapore, 9 July 2005
178. “Perfusion Culture of Liver Tissue Constructs”, ICMAT – ICAM 2005, Suntec Singapore International Convention and Exhibition Centre, Singapore, 4-8 July 2005
179. Focus on Microscopy 2005, Jena, Germany, 20-23 March 2005
180. “Engineering In Vitro Models for Metabolism Analysis of Drug Candidates”, Weekly Seminar for Division of Bioengineering, Nanyang Technological University, Singapore, 17 March 2005
181. “3-D Microscopy”, BMRC-EMBO Practical Course on Advanced Optical Methods in Cell and Developmental Biology, Biopolis, Singapore, 17-28 January 2005
182. “Overview of Stem Cell-Tissue Flagship programme”, SMA Symposium: Technical Parallel session for Computation and Systems Biology, Orchard Hotel, Singapore, 19-20 January 2005
183. “Tissue Engineering”, IBN Workshop for Science Teachers, Biopolis, Singapore, 3 December 2004
184. “Multidimensional Imaging Applications in Complex Tissue Engineering”, The Third International Conference on Structural Biology and Functional Genomics, National University of Singapore, Singapore, 2-4 December 2004
185. “In vitro Liver Tissue Models”, Medical Year 1 Foundation In Research Skills (FRS) AY2004/05, National University of Singapore, Singapore, 1-13 December 2004

186. “Development of Innovative Cell Technologies through engineering EC Microenvironment”, 2nd Shenzhen Forum in Biomedicine, Shenzhen, P.R. China, 3-7 November 2004
187. "Multidimensional Imaging Applications in Complex Tissue Engineering", Bioimaging Symposium: Emerging Technologies and Novel Techniques in Bioimaging, National University of Singapore, Singapore, 11 October 2004
188. "Tissue Engineering: An overview", Invitation lecture to graduate students in NUS, Faculty of Science (BL5204), Singapore, 7 October 2004
189. “Building Liver Tissue Structure and Functions from Scratch?” The First International SBE Conference on Bioengineering and Nanotechnology (ICBN), Biopolis, Singapore, 27-29 September 2004
190. “Precision engineering of Liver tissue Micro –Architecture AND Functions: Enabling Technologies”, Seminar at SBS-NTU, School of Biological Sciences, Nanyang Technological University, Singapore, 25 August 2004
191. “Precision engineering of Liver tissue Micro –Architecture AND Functions: Enabling Technologies”, 1st Nanoengineering and Nanoscience Congress, Singapore, 7-9 July 2004
192. BMRC Bioimaging Workshop, Biopolis, Singapore, 16 April 2004
193. “Re-look at Support for Heaptocytes Functions Ex Vivo”, Joint India-U.S. workshop on "Tissue Engineering and Stem Cell Technology", Trivandrum, India, 2-4 February 2004
194. Tissue Engineering Society International Annual Meeting, Orlando, Florida, USA, 10-13 December 2003
195. “Microenvironment for hepatocyte culture”, 2nd BMRC Symposium on Liver Research, Biopolis, Singapore, 28 November 2003
196. “Multidimensional Imaging of Cellular Dynamics in Engineered Microenvironment”, #217 XiangShan Forum: Bio- and Molecular Optical Imaging, HUST, Wuhan, P.R. China, 3-7 November 2003
197. “Confocal microscopy applications” AND “Live Imaging”, 2nd Olympus Laser Confocal Microscope’s User Club Meeting, Shanghai, P.R. China, 3-4 November 2003
198. “Kinectin functions: graduate students’ contributions”, The Graduate Students’ Society- Faculty of Medicine (GSS-FOM) 3rd Annual Scientific Conference “A Look Into The Future”, Singapore, April 2003
199. “Regenerative Medicine in Singapore” and “Liver Tissue Engineering”, kTi workshop and the second meeting of the Japanese Society of Regenerative Medicine”, Kobe, Japan, 10-12 March 2003
200. Beckman Coulter Cytomics Seminar, 21 February 2003, NUMI, NUS, Singapore.
201. “Multi-Disciplinary and Systematic Approaches to Reparative Medicine: Some Experiences From Liver Tissue Engineering”, Life Sciences in Singapore: Integrating Multidimensional Perspectives (4th Combined Scientific Meeting), Singapore, January 2003

202. "Liver Tissue Engineering" and "Nerve Tissue Engineering", NUS-GTEC Pre-Conference Workshop on Engineering of Living Tissues, International Congress on Biological and Medical Engineering, Singapore , December 2002
203. "Liver and nerve tissue engineering", ICBME 2002. Singapore: BMES. (Keynote paper) Suntec City, Singapore, 6-8 December 2002
204. "Issues and technologies leading to a new bio-artificial liver with micro-encapsulated hepatocytes", Third Smith & Nephew International Symposium: Translating tissue engineering into products, Atlanta, USA, 13-16 October 2002
205. "Design, Implementation, & Analysis of Biological Experiments with High Resolution BioImaging Methods" & "Live Specimen Imaging Using Fluorescent Proteins, Quantum Dots, and Other Fluorescence Probes", Summer School, Hsinghua University, China, 2002
206. "Environmental Control of Cellular Functions: A perspective in Liver Tissue Engineering". Karolinska Institutet – NUS symposium on Tissue Engineering, Singapore, 2002
207. "Overview of the Mesenchymal and Adult Stem Cells". Stem Cell Symposium plenary lecture, Singapore 2002
208. Singapore Society for Biochemistry & Molecular Biology: "Basic Science and Translational Research", Singapore, 2002
209. "Career in Life Sciences", Raffles Girl School, Singapore, 2002 & 2003
210. "Our God and Life Sciences", Singapore Bible College, Singapore, February 2003
211. "Cell Biology and Technologies in Tissue Engineering", Biology Department, Hong Kong University of Science and Technology, Hong Kong, December 2001
212. "Live Specimen Microenvironment for Multidimensional Imaging", plenary lecture in Multidimensional Microscopy Conference (MDM2001), Melbourne, Australia, 25-28 November 2001
213. Confocal Microscopy and Digital Imaging Workshop, Fudan University, Department of Physiology, School of Life Sciences, Shanghai, China, 5-6 November 2001
214. Confocal Microscopy and Digital Imaging Workshop, Chinese Academy of Sciences, Institute of Genetics, Beijing, China, 1-2 November 2001
215. "Non-disruptive 3D cell culture and imaging for tissue engineering", Symposium On Biomaterials & Tissue Engineering, International Conference on Materials For Advanced Technologies, Singapore, July 2001
216. "3D Microenvironment for Cellular Studies, Therapy and Tissue Engineering", Pratt School of Engineering, Duke University, USA, February 2001
217. 34$^{th}$ Singapore-Malaysia Congress of Medicine/Combined Hospitals Medical & Dental Scientific Meeting: "Integrated approach to tissue regeneration", Singapore, August 2000
218. Nanyang Technological University, Materials Engineering Academic Conference, plenary lecture, 2000: "Tissue Engineering: A multi-disciplinary endeavor, opportunities for engineers" Singapore, 2000
219. "Tissue Engineering Initiative in Singapore", Biomedical Engineering Center, Industrial Technology Research Institute (ITRI), Hsinchu, Taiwan, 2000

220. "Liver Tissue Engineering With A Novel Cell Encapsulation System", Institute of Biomedical Sciences, Academia Sinica, Nankang, Taipei, Taiwan, 2000
221. "Live Specimen Imaging: An Environmental Control", Focus on Multidimensional Microscopy, KaoHsiung, Taiwan, 2000
222. "Tissue Engineering in Singapore", Asian Society For Tissue Engineering Inaugural Meeting, Hiroshima, Japan, 2000
223. "Live Cell Imaging", First Asia-Pacific Symposium on Confocal Microscopy & Related Technologies (SCMRT), Singapore, 1999
224. "Liver Tissue Engineering" Tissue Engineering Symposium, National University Hospital, 3rd Annual Scientific Meeting, Singapore, 1999
225. Microcopy Society of Singapore: "Confocal Microscopy: An Update", Singapore, 1999

## AWARDS, GRANTS, FELLOWSHIP & MEMBERSHIP

- National Day Awards 2022 – Long Service Medal, 9 August 2022
- Yong Loo Lin School of Medicine Researcher of the Year Award – AY2019/2020, 18 May 2021
- Editorial Board Member, In Vitro Models, Springer Nature (April 2021 - )
- IPOS Award for IP Champions, WIPO-IPOS IP Awards 2017, for Invitrocue Pte Ltd, 29 August 2017
- Editorial Advisory Board, Microphysiological Systems (February 2017 - )
- **Scientist-Entrepreneur Award: Prof Hanry Yu, InvitroCue Pte Ltd, A*STAR Awards 2016, 13 April 2016**
- **A*STAR Scientist-Entrepreneur Award 2013, Team Leader for team HistoIndex Pte Ltd, 10 April 2013**
- **Young Researcher Award 2002, National University of Singapore (http://www.nus.edu.sg/uawards/home.htm)**
- **Faculty Research Excellence Award AY2007/2008, National University Health System, 11 July 2009**
- **Handling Editor, Biomaterials (July 2015 – December 2017)**
- Associate Editorial Board of Biomaterials, (January 2015 – July 2022)
- International Editorial Board member, Biomaterials, (March 2008 - )
- Editorial Board Member, NAM Journal (2024 - )
- Editorial Board Member, The Open Nanomedicine Journal (July 2011 - )
- Member, Marquis Who's Who's, Who's Who in Medicine and Healthcare, USA, 2009-2012. Biography selected for inclusion in 2009-2012 ($7^{th}$, $8^{th}$) Edition of Who's Who in Medicine and Healthcare.
- Member, Marquis Who's Who's, Who's Who in the World, USA, 2009-. Biography selected for inclusion in 2010- ($27^{th}$, $30^{th}$) Edition of Who's Who in the World.
- Life Member, World Association for Chinese Biomedical Engineering, 2010-
- Member, International Society for Hepatic Sinusoidal Research (http://ishsr.org), 10 March 2009 -

- Human Frontier Science Program long-term research fellowship 1995-1997
- Alexander von Humboldt research scholarship offer 1995 (not accepted)
- Division of Biomedical Sciences pre-doctoral fellowship, Washington University School of Medicine 1987-1990
- Member of the American Society for Biochemistry and Molecular Biology (ASBMB) 2003-
- Member of the Materials Research Society (Singapore) 1997-
- Member of the American Society for Cell Biology 1990–
- Member of the Microscopy Society of Singapore 1997–
- Member of the International Society of Analytical Cytometry 1997–
- Graduated with High Honor, Honors College, Michigan State University 1987
- Member of the Phi Kappa Phi national honors society & the Golden Key national honors society 1987-

Research Grants secured so far (including 4 international grants; total grants amount to **>US$22 Million** direct cost).

## PUBLICATIONS

### Refereed International Journal Articles

1. Ma, Y., Li, Z., Luo, Y., Chen, Y., Le, M., Liu, X., Xiao, J., Huang, M., Li, Y., Jiang, H., Wang. M., Wang, X., Li, J., Kong, J., Shi, P., Yu, H., Jiang, X., and Guo, Q. (2024) Biodegradable Microembolics with Nanografted Polyanions Enable High-Efficiency Drug Loading and Sustained Deep-Tumor Drug Penetration for Locoregional Chemoembolization Treatment. *ACS Nanos*, 30 June 2024; 18(28): 18211-18229.
2. Jiang, X., Wu, Y., Cheng, J. Qi, J., Hang, C., Dong, R., Low, B.C., and Yu, H. (2024) Three-dimensional liquid metal-based neuro-interfaces for human hippocampal organoids. *Nature Communications*, 15 May 2024; 15: 4047.
3. Fang, M., Wang, Y., Yang, T., Zhang, J., Yu, H., Luo, Z., Su, B., and Lin, X. (2024) Nucleic Acid Plate Culture: Label-Free and Naked-Eye-Based Digital Loop-Mediated Isothermal Amplification in Hydrogel with Machine Learning. *ACS Sensors*, 11 April 2024; 9(4): 2010–2019.
4. Luo, X., Wang, J., Tan, C., Dou, Q., Han, Z., Wang, Z., Tasnim, F., Wang, X., Zhan, Q., Li, X., Zhou, Q., Cheng, J., Liao, F., Yip, H.C., Jiang, J., Tan, R.T., Liu, S., and **Yu, H.** (2024) Rapid Endoscopic Diagnosis of Benign Ulcerative Colorectal Diseases with an Artificial Intelligence Contextual Framework. *Gastroenterology*, 4 April 2024; S0016-5085(24)00365-2.
5. Makhija, E., Zheng, Y., Wang, J., Leong, H.R., Othman, R.B., Ng, E.X., Lee, E.H., Kellogg, L.T., Lee, Y.H., Yu, H., Poon, Z., Vliet, K.J.V. (2024) Topological defects in self-assembled patterns of mesenchymal stromal cells in vitro are predictive attributes of condensation and chondrogenesis. *PLOS One*, 28 March 2024; 19(3): e0297769.

6. Wu, X., Lou, X., Zhou, H., Raymond, J.J., Kwang, L.G., Ong, F.Y.T., Springs, S.L., and **Yu, H.** (2024) Detection and absolute quantification biosensing tools for food authentication: CRISPR/Cas, digital CRISPR and beyond. *Trends in Food Science & Technology*, March 2024; 145: 104349.
7. Zhao, S., Zhang, L., Zhao, J., Tasnim, F., and **Yu, H.** (2024) Publication characteristics and visualized analysis of research about liver sinusoidal endothelial cells. *iLiver*, March 2024; 3(1): 100075.
8. Ogilvie, O.J., Bennie, R.Z., Trlin, H.J., Loo, L.S.W., Zhou, H.Z., Jin, A., Oh, J.K., Dobson, R.C.J., Yu, H.Y., and Domigan, L.J. (2024) Interdisciplinary methods for analysing food matrix structures of hybrid cell-based meats: A review. *Food Structure-Netherlands*, January 2024; 39: 100361.
9. Ang, J., Bennie, R.Z., Ogilvie, O.J., Trlin, H.J., Ng, S.K., Yu, H., and Domigan, L.J. (2023) Sculpting the Future of Meat: Biomaterial Approaches and Structural Engineering for Large-Scale Cell-Based Production. *Sustainable Food Proteins*, 21 December 2023; 2023: 1-18.
10. Pang, K.T., Loo, L.S.W., Chia, S., Ong, F.Y.T., Yu, H., and Walsh, I. (2023) Insight into muscle stem cell regeneration and mechanobiology. *Stem Cell Research & Therapy*, 21 May 2023; 14(1): 129.
11. Gao, Y., Xiao, J., Chen, Z., Ma, Y., Liu, X., Yang, D., Leo, H.L., Yu, H., Kong, J., and Guo, Q. (2023) Engineering orthotopic tumor spheroids with organ-specific vasculatures for local chemoembolization evaluation. *Biomaterials Science*, 14 March 2023; 11(6): 2115-2128.
12. Liu, X., Wang, X., Luo, Y., Wang, M., Chen, Z., Han, X., Zhou, S., Wang, J., Kong, J., Yu, H., Wang, X., Tang, X., and Guo, Q. (2023) A 3D tumor-mimicking in vitro drug release model of locoregional chemoembolization using deep learning-based quantitative analyses. *Advanced Science*, 15 February 2023; 2206195.
13. Yang, T. Li, D., Yan, Y.H., Ettoumi, F.E., Wu, R.A., Luo, Z.S., Yu, H.Y., Lin, X.Y. (2023) Ultrafast and absolute quantification of SARS-CoV-2 on food using hydrogel RT-LAMP without pre-lysis. *Journal of Hazardous Materials*, 15 January 2023; 442: 130050.
14. Zhao, Z.X., Chen, X.Y., Dowbaj, A.M., Sljukic, A., Bratlie, K., Lin, L.D., Fong, E.L., Balachander, G.M., Chen, Z.W., Soragni, A., Huch, M., Zeng, Y.A., Wang, Q., Yu, H. (2022) Organoids. *Nature Reviews Methods Primers*, 1 December 2022; 2(1): 94.
15. Chia, S., Teo, G., Tay, S.J., Loo, L.S.W., Wan, C., Sim, L.C., Yu, H., Walsh, I., Pang, K.T. (2022) An integrative glycomic approach for quantitative meat species profiling. *Foods*, 30 June 2022; 11(3): 1952.
16. Kong, Y., Ong, S., Liu, M.H., Yu, H., and Huang, D. (2022) Functional composite microbeads for cell-based meat culture: effect of animal gelatin coating on cell proliferation and differentiation. *Journal of Physics D: Applied Physics*, 55: 345401.
17. Wu, X., Chan, C., Springs, S.L., Lee, Y.H., Lu, T.K., and **Yu, H.** (2022) A warm-start digital CRISPR/Cas-based method for the quantitative detection of nucleic acids. *Analytica Chimica Acta*, 1 March 2022; 1196: 339494.

18. Yang, Y.-A., Nguyen, E., Narayana, G.H.N.S., Heuze, M., Fu, C., Yu, H., Mege, R.-M., Ladoux, B., and Sheetz, M.P. (2022) Local contractions regulate E-cadherin rigidity sensing. *Science Advances*, 28 January 2022; 8(4): eabk0387.
19. Li, Z., Chen, Z., Gao, Y., Xing, Y., Zhou, Y., Luo, Y., Xu, W., Chen, Z., Gao, X., Gupta, K., Anbalakan, K., Chen, L., Liu, C., Kong, J., Leo, H.L., Hu, C., Yu, H., and Guo, Q. (2022) Shape memory micro-anchors with magnetic guidance for precision micro-vascular deployment. *Biomaterials*, February 2022; 283: 121426.
20. Luo, Y., Ma, Y., Chen, Z., Gao, Y., Zhou, Y., Liu, X., Liu, X., Gao, X., Li, Z., Liu, C., Leo, H.L., and Yu, H. (2022) Shape-Anisotropic Microembolics Generated by Microfluidic Synthesis for Transarterial Embolization Treatment. *Advanced Healthcare Materials*, February 2022; e2102281.
21. Gao, X., Chen, Z., Chen, Z., Liu, X., Luo, Y., Xiao, J., Gao, Y., Ma, Y., Liu, C., Leo, H.L., Yu, H., and Guo, Q. (2021) Visualization and Evaluation of Chemoembolization on a 3D Decellularized Organ Scaffold . *ACS Biomaterials Science & Engineering*, November 2021; 7(12): 5642–5653.
22. Ong, S., Loo, L., Pang, M., Tan, R., Teng, Y., Lou, X., Chin, S.Z., Naik, M.Y., and **Yu, H.** (2021) Decompartmentalisation as a simple color manipulation of plant-based marbling meat alternatives. *Biomaterials*, October 2021; 277: 121107.
23. Lee, F., Shah, I., Soong, Y.T., Xing, J., Ng, I.C., Tasnim, F., and **Yu, H.** (2021) Reproducibility and Robustness of High-Throughput S1500+ Transcriptomics on Primary Rat Hepatocytes for Chemical-Induced Hepatotoxicity Assessment. *Current Research in Toxicology*, 2: 282-295.
24. Luo, X., Wang, J., Han, Z., Yu, Y., Chen, Z., Huang, F., Xu, Y., Cai, J., Zhang, Q., Qiao, W., Ng, I.C., Tan, R.T., Liu, S., and **Yu, H.** (2021) Artificial intelligence−enhanced white-light colonoscopy with attention guidance predicts colorectal cancer invasion depth. *Gastrointestinal Endoscopy*, September 2021; 94(3): 627-638. [featured in A*STAR Research Highlights https://research.a-star.edu.sg/articles/highlights/cancer-diagnosis-gets-a-helping-hand/ ]
25. Tasnim, F., Huang, X., Lee, C.Z.W., Ginhoux, F., and **Yu, H.** (2021) Recent Advances in Models of Immune-Mediated Drug-Induced Liver Injury. *Frontiers in Toxicology*, 21 April 2021; 3: 6053892.
26. Teng, Y., Zhao, X., Tasnim, F., Huang, X., and **Yu, H.** (2021) A scalable and Sensitive Steatosis Chip with Long-Term Perfusion of in situ Differentiated HepaRG Organoids. *Biomaterials*, August 2021; 275: 0120904.
27. Zhu, L., Wang, Z.F., Xia, H.M., and **Yu, H.** (2021) Design and Fabrication of the Vertical-Flow Bioreactor for Compaction Hepatocyte Culture in Drug Testing Application. *Biosensors-Basel*, May 2021; 11(5): 160.
28. Toh, T.B., Liu, Z., Yu, H., and Fong, L.S.E. (2021) Three-Dimensional Macroporous Sponge for the Culture of Hepatocellular Carcinoma Patient-Derived Xenograft Organoids. *SLAS Technology*, 27 Mar 2021, 26(3):249-254.
29. Ng, I.C., Zhang, L., Shen, N.N.Y.Y., Soong, Y.T., Ng, C.W., Koh, P.K.S., Zhou, Y., and **Yu, H**. (2021) Isolation of Primary Rat Hepatocytes with Multiparameter Perfusion Control. *JoVE*, 05 Apr 2021; e62289.
30. Luo, X., Fong, L.S.E., Zhu, C., Lin. Q. X.X., Xiong, M., Li, A., Li, T., Benoukraf, T., Yu, H., and Liu, S. (2020) Hydrogel-Based Colorectal Cancer Organoid Co-

Culture Models. *Acta Biomaterialia*, 31 December 2020; S1742-7061(20)30751-0.
31. Wu, X., Tay, J.K., Goh, C.K., Chan, C., Lee, Y.H., Springs, S.L., Wang, D.Y., Loh, K.S., Lu, T.K., and **Yu, H.** (2021) A Digital CRISPR-based Method for the Rapid Detection and Absolute Quantification of Viral Nuclei Acids. *Biomaterials*, July 2021; 274: 120876. (featured in News-Medical.Net on 5 Nov 2020 https://www.news-medical.net/news/20201105/A-digital-CRISPR-based-method-for-quick-detection-and-absolute-quantification-of-SARS-CoV-2.aspx )
32. Gupta, K., Ng, I.C., Balachander, G.M., Nguyen, B.P., Tucker-Kellogg, L., Low, B.C., and **Yu, H.** (2020) Bile canaliculi contract autonomously by releasing calcium into hepatocytes via mechanosensitive calcium channel. *Biomaterials*, November 2020; 259: 120283.
33. Zhang, Y., De Mets, R., Monzel, C., Acharya, V., Toh, P., Chin, J.F.L., Van Hul, N., Ng, I.C., Yu, H., Ng, S.S., Rashid, S.T., and Viasnoff, V. (2020) Biomimetic niches reveal the minimal cues to trigger apical lumen formation in single hepatocytes. *Nature Materials*, September 2020; 19(9): 1026-1035.
34. Gao, Y.N., Li, Z.H., Hong, Y., Li, T.T., Hu, X.Y., Sun, L.Y., Chen, Z.C., Chen, Z.J., Luo, Z.H., Wang, X., Kong, J., Li, G.L., Wang, H.L., Leo, H.L., Yu, H., Xi, L., and Guo, Q.Y. (2020) Decellularized liver as a translucent ex vivo model for vascular embolization evaluation. *Biomaterials*, May 2020; 240: 119855.
35. Yu, F., Goh, Y.T., Li, H., Narmada, B.C., Ni, M., Xu, G.L., Hsieh, T.-M., Toh, Y.-C., Cheung, C., Iliescu, C., and **Yu, H.** (2020) A vascular-liver chip for sensitive detection of nutraceutical metabolites from human pluripotent stem cell derivatives. *Biomicrofluidics*. 27 May 2020; 14(3): 034108.
36. Sun, G., Teng, Y., Zhao, Z., Cheow, L.F., Yu, H., and Chen, C.-H. (2020) Functional Stem Cell Sorting via Integrative Droplet Synchronization. *Analytical Chemistry*, 7 May 2020; 92(11): 7915-7923.
37. Tasnim, F., Singh, N.H., Tan, E.K.F., Xing, J., Li, H., Hissette, S., Manesh, S., Fulwood, J., Gupta, K., Ng, C.W., Xu, S., Hill, J., and **Yu, H.** (2020) Tethered primary hepatocyte spheroids on polystyrene multi-well plates for high-throughput drug safety testing. *Scientific Reports*, 16 Mar 2020; 10: 4768.
38. Low, L.D., Lu, L., Chan, C.Y., Chen, J., Yang, H.H., Yu, H., Lee, C.G.L., Ng, K.H., and Yap, H.K. (2020) IL-13-driven alterations in hepatic cholesterol handling contributes to hypercholesterolemia in a rat model of minimal change disease. *Clinical science*, 31 January 2020; 134(2): 225-237.
39. Huang, X., Lee, F., Teng, Y., Lingam, C.B., Chen, Z., Sun, M., Song, Z., Balachander, G.M., Leo, H.L., Guo, Q., Shah, I., and **Yu, H.** (2019) Sequential Drug Delivery of Liver Diseases. *Advanced Drug Delivery Reviews*, September-October 2019; 149-150: 72-84.
40. Liu, Z., Tasnim, F., Ong, S., Shen, S., Huang, X.Z., Fong, E.L.S., and **Yu, H.** (2019) Cost-effective robust synthesis of methacrylic cellulosic sponge for organoid culture. *Cellulose*, 4 Oct 2019; 1-14.
41. Ni, M., Zhuo, S., Iliescu, C., So, P.T.C., Mehta, J. S., **Yu, H.**, and Hauser, C.A.E. (2019) Self-assembling amyloid-like peptides as exogenous second harmonic probes for bioimaging applications. *Journal of Biophotonics*, 04 June 2019; e201900065.

42. Singh, V.R., Yang, Y.A., Yu, H., Kamm, R.D., Yaqoob, Z., and So, P.T.C. (2019) Studying nuclei and plasma membrane mechanics of eukaryotic cells using confocal reflectance interferometric microscopy. *Nature Communications*, 13 August 2019; 10: 3652.
43. Chua, A.C.Y., Ananthanarayanan, A., Ong, J.J.Y., Wong, J.Y., Yip, A., Singh, N.H., Qu, Y., Dembele, L., McMillian, M., Ubalee, R., Davidson, S., Tungtaeng, A., Imerbsin, R., Gupta, K., Andolina, C., Lee, F., Tan, K.S.-W., Nosten, F., Russell, B., Lange, A., Diagana, T.T., Renia, L., Yeung, B.K.S., Yu, H., and Bifani, P. (2019) Hepatic spheroids used as an in vitro model to study malaria relapse. *Biomaterials*, September 2019; 216: 119221.
44. Sun, M., Wong, J.Y., Nugraha, B., Ananthanarayanan, A., Liu, Z., Lee, F., Gupta, K., Fong, L.S.E., Huang, X., and **Yu, H.** (2019) Cleavable cellulosic sponge for functional hepatic cell culture and retrieval. *Biomaterials*, May 2019; 201: 16-32.
45. Tasnim, F., Xing, J., Huang, X., Mo, S., Wei, X., Tan, M.-H. and **Yu, H.** (2019) Generation of Mature Kupffer Cells from Human Induced Pluripotent Stem Cells. *Biomaterials*, February 2019; 192: 337-391.
46. Yu, Y., Wang, J., Ng, C.W., Ma, Y., Mo, S., Fong, L.S.E., Xing, J., Song, Z., Xie, Y., Si, K., Wee, A., Welsch, R.E., So, P.T.C., and **Yu, H.** (2018) Deep learning enhances automated scoring of liver fibrosis stages. *Scientific Reports*, 30 October 2018; 8: 16016.
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48. Lee, F., Iliescu, C., Fang, Y., and **Yu, H.** (2018) Chapter 3 - Constrained spheroids/organoids in perfusion culture. *Methods in Cell Biology*, 146: 43-65.
49. Wang, L., Tang, Y., Shi, Y., Wang, J., Deng, S., Lu, G., Zhang, J., Ren, Y., Pawijit, P., Wu, Y., Wang, C., Bay, B.H., Yu, H., Lim, K.L., Liou, Y.C., Yap, C.T., and Shen, H.M. (2018) PTEN-L is a novel protein phosphatase for ubiquitin dephosphorylation to inhibit PINK1-Parkin-mediated mitophagy. *Cell Research*, 2018 August; 28(8): 787-802.
50. Wang, P., Lu, Y.C., Wang, J., Wang, L., Yu, H., Li, Y.F., Kong, A., Chan, J., and Lee, S.C. (2018) Type 2 diabetes promotes cell centrosome amplification via AKT-ROS-dependent signalling of ROCK1 and 14-3-3σ. *Cellular Physiology and Biochemistry*, 47(1): 356-367.
51. Yu Y., Ananthanarayanan A., Singh N.H., Hong X., Sakban R., Mittal, N., Luo, X., Robens J., Xia L., McMillian M., and **Yu H.** (2018) TGFβ1-mediated suppression of Cytochrome P450(CYP) induction responses in rat hepatocyte-fibroblast co-cultures . *Toxicology In Vitro*, August 2018; 50: 47-53.
52. Fong, L.S.E., Toh, T.B., Lin, Q.X.X., Liu, Z., Hooi, L., Mohd Abdul Rashid, M., Benoukraf, T., Chow, E.K.H., Huynh, T.H., and **Yu, H.** (2018) Datasets describing the growth and molecular features of hepatocellular carcinoma patient-derived xenograft cells grown in a three-dimensional macroporous hydrogel. *Data in Brief*, June 2018; 18: 594-606.

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**Patents and Invention Disclosures**

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11. Khong, Y.M., Zhang, J., Zhou, S., Cheung, C., Doberstein, K., Samper, V., and **Yu, H**. (2010) Novel Intra-Tissue Perfusion System for Culturing Thick Liver Tissue. In Johnson, P.C., and Mikos, A.G. (editors), *Advances in Tissue Engineering Volume 1 – Angiogenesis*, (Chapter 28); New York: Mary Ann Liebert, Inc. publishers, ISBN13 978-1-934854-16-7.
12. **Yu, H**., Cheng, P.C., Kao, F.J., Lin, P.C. (Editors). (2005). *Multi-modality microscopy*. Singapore: Hackensack, N.J.: World Scientific Publishing, ISBN# 981-256-533-7.
13. Zhu, Y.J., Ng, S.S.S., Khong, Y.M., He, L.J., Toh, Y.C., Pan, X.T., Chia, S.M., Lin, P.C., Sun, W.X., **Yu, H**. (2005) Multi-dimensional imaging of cell- and tissue-engineered constructs. In Yu, H., Cheng, P.C., Kao, F.J., Lin, P.C. (editors), *Multi-modality Microscopy*, (Chapter 14); Singapore: Hackensack, N.J.: World Scientific Publishing, ISBN# 981-256-533-7.

**Conference Publications**

1. Zhao, Z., Cheng, Z., Yang, X., Ng, Z.Q., Wang, J., Yu, H., and Guan, C. (2024) "Dual Prototypical Self-Supervised Learning for One-Shot Medical Image Segmentation", 2024 46th Annual International Conference of the IEEE Engineering in Medicine & Biology Society, Orlando, Florida, USA, 15-19 July 2024

2. Yu, H. (2024) “3.5D Organoid Engineering strategy”, 4th Conference on Micro Flow and Interfacial Phenomena (μFIP), Hong Kong, 21-24 June 2024
3. Wang, J., Yu, Y., and Yu, H. (2024) “sqFibrosis: A Robust Liver Fibrosis Scoring System for Telepathology,” ISBI 2024, Athens, Greece, 27 – 30 May 2024
4. Balachander, G., Kota, V.G., Ng, I.C., Tasnim, F., Pai, R., Lim, Y., Song, Y., Zhao, J.J., Mitra, K., Septiana, W., Zheng, K., Xu, Y., Teng, Y., Lim, S.H., Quah, C.B., Kwok, R.P.S., Ng, H.K., and Yu, H. (2023) “Engineering a simple and robust EMULSION liver-chip to recapitulate full NASH functions,” 15th Annual Symposium of SCSS, Singapore, 29 November – 1 December 2023
5. Wu, X., Raymond, J., Chan, C., Liu, Y., Lee, Y.H., Lu, T., Springs, S., and Yu, H. (2023) “Accelerating biomanufacturing safety: rapid and accurate absolute quantification of adventitious agents using digital CRISPR approaches,” RAFT 15 – Recent Advances in Fermentation Technology, Naples, U.S.A., 29 October – 1 November 2023. (Invited talk by Wu Xiaolin)
6. Wu, X., Raymond, J., Liu, Y., Odermatt, A.J., Sin, W.-X., Teo, D., Ng, I.C., Birnbaum, M., Lu, T., Han, J., Springs, S., and Yu, H. (2023) “Multiplex Detection of Low Abundance Live Microorganisms Contamination in CAR-T cell manufacture using a Quantitative Digital Loop-mediated Isothermal Amplification Method,” BMES 2023 Annual Meeting, Seattle, USA, 11-14 October 2023.
7. Yu, Y., Wang, J., Kumar, A.J.S., Tan, B., Vanjavaka, N., Rahim, N.H., Koh, A., Low, S., Sitoh, Y.Y., Yu, H., Krishnaswarmy, P., and Mien, I.H. (2023) “A Multitask Framework for Label Refinement and Lesion Segmentation in Clinical Brain Imaging,” 26th International Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI 2023), Vancouver, Canada, 8-12 October 2023
8. Yu, H. (2023) “MILLanD 2023: 2nd Workshop on Medical Image Learning with noisy and Limited Data,” Vancouver, Canada, 8-12 October 8-12 2023
9. Wu, X., Tay, J.K., Goh, C.K., Chan, C., Lee, Y.H., Springs, S.L., Wang, D.Y., Loh, K.S., Lu, T.K. and Yu, H. (2022) A Rapid DIgital Crispr Approach (RADICA) for the detection and absolute quantification of nucleic acids. SPIE Photonics West PC11979, Frontiers in Biological Detection: From Nanosensors to Systems XIV, PC1197905.
10. Liu, Y., Raymond, J., Wu, X., Springs, S.L., Lu, T.K., Yu, H., Han, J. (2022) Electrostatic microfiltration enriches low-abundance bacteria and improves downstream detection. 26th International Conference on Miniaturized Systems for Chemistry and Life Sciences (microTAS 2022), paper number 0507, Hangzhou, China, 23-27 October 2022
11. Yu, H. (2022) “Engineering Mechanochemical Niche for Cell-based Models,” Monash INITIATE 2021: Inspiring Innovation via Multidisciplinary Collaboration, Malaysia, 27-28 September 2022 (**Plenary**)
12. Yu, H. (2022) “Engineered and functional food strategies for sustainable products,” Medicine Meets Science, Singapore, online, 17 August 2022
13. Yu, H. (2022) “The AI in telepathology or Developing a simple NASH progression model in vitro,” 2022 Southern Forum on GI Disease & Endoscopy, Guangzhou, China, 8-9 July 2022

14. Yu, H. (2022) “Engineering in vitro Cellular and Tissue Models for Future Food”, Alternative Protein Seminar, online, 7 July 2022
15. Yu, H. (2022) “Simplifying complex cell-based models for mechanobiological studies and screening application,” Online Lecture at the University of Tokyo, online, 6 June 2022
16. Yu, H. (2022) “Mechanochemical control of tissue microenvironment for biomedical and sustainability applications,” 10th Asia-Pacific Conference of Transducers and Micro-Nano Technology 2022 (APCOT 2022), Shanghai, China, online, 29 May – 1 June 2022 (**Plenary**)
17. Makhija, E., Zheng, Y., Wang, J., Leong, H., Tucker-Kellogg, L., Lee, Y.H., Yu, H., Poon, Z., Vilet, K.J.V. (2022) “A Novel morphology-based in-vitro assay for predicting chondrogenic potential of mesenchymal stromal cells. A*STAR Advances in Cell and Gene Therapy (A*CGT) Symposium, 11-12 May 2022
18. Yu, H. (2022) “Design For Simplicity in Complex Cell-Based Models,”,” The "Second Annual BESCO Vitruvian" Conference, online, 7 May 2022
19. Loo, W.S., and Yu, H. (2022) “Developing 3D-printed whole-cut meat substitutes,” A*STAR-Wageningen University and Research Webinar on "Innovations in Food: Exploration of novel technologies", Singapore, 9 February 2022
20. Teng, Y., Balachander, G.M., Tasnim, F., and Yu, H. (2021) “Engineering 3D Cellular Niche for Applications,” Guangdong-Hong Kong-Macao (GHM) Greater Bay Area International Conference on Translational Medicine and the 4th Macao Stem Cell Symposium, China, 15 January 2022
21. Lee, S.Y., and Yu, H. (2021) “Seeing is believing: stories of connecting the dots”, Medicine meets Science: Bioimaging, Singapore, 17 November 2021
22. Balachander, G.M., Shen, N., Leong, K.W., and Yu, H. (2021) “Engineering the third dimension of organoids”, 2021 AFOB Virtual Conference, 1-4 November 2021
23. Teng, Y., Balachander, G.M., Tasnim, F., and Yu, H. (2021) "Engineering 3D Cellular Niche for Applications", SCSS Lunchtime Seminar Series, Singapore, 26 October 2021
24. Balachander, G.M., and Yu, H. (2021) “*In vitro* morphogenesis model for intra-hepatic bile duct development”, 17th Royan International Virtual Congress on Stem Cell Biology & Technology, Iran, 4-5 September 2021 (*Invited talk*)
25. Tan, K.F.E., Tasnim, F., and Yu, H. (2021) “Biomaterials to constrain >2.5D organoids for high content analysis”, Asia Pacific Society for Materials Research 2021 Annual Meeting (APSMR 2021 Annual Meeting), Hong Kong, 20-22 August 2021
26. Ong, S., Loo, L., Pang, M., Tan, R., Teng, Y., Lou, X., Chin, S.K., Naik, M.Y., and Yu, H. (2021) “Meat-like Scaffold for Cell-based Meat Cuts”, Food Science & Technology Global 2021, 27-28 April 2021
27. Yu, H. (2021) “Artificial Intelligence as a Novel Imaging of Liver Fibrosis”, 30$^{th}$ Annual Conference Asian Pacific Association for The Study of The Liver (APASL 2021), Virtual Meeting, 4-6 February 2021
28. Yu, H. (2020) “Bile Canaliculi as a contracting machine”, 2020 Southern Forum on GI Diseases & Endoscopy, Guangzhou, 10-11 July 2020

29. Yu, H., and Karau, A. (2019) "Scaffold – Biomaterials guiding tissue growth and regeneration", Evonik Meets Science, Singapore, 25-26 September 2019
30. Yu, H. (2019) "Mechanobiology Framework for Translational Biomedical Research", 9thWACBE World Congress on Biomedical Engineering (WACBE 2019), Taipei, Taiwan, 16-19 August 2019
31. Fong, E., Toh, T.B., and Yu, H. (2019) "Development of Patient-Derived Hepatocellular Carcinoma Organoids with Incorporated Stroma for Personalized Drug Testing", Society For Biomaterials 2019 Annual Meeting and Exposition, Seattle, Washington, USA, 3-6 April 2019
32. Yu, H. (2019) "Developing a robust digital pathology approach for liver fibrosis classification", 5th Digital Pathology & AI Congress Asia 2019, Tokyo, Japan, 2-3 April 2019
33. Yu, H. (2019) "Microphysiological systems for modeling biological functions and diseases", Nature Conference on In vitro diagnostic, Nanchang, China, 22-23 March 2019
34. Gupta, K., Ng, I.C., Low, B.C., and Yu, H. (2019) Bile Canaliculi Contractility Is Regulated by Canalicular Pressure Sensing via PIEZO1. *Biophysical Journal*, 15 February 2019; 116(3 supplement 1): 376a-377a.
35. Yu, H. (2019) "Heterogeneity in 3D *in vitro* toxicity testing models", Nanotechnology Toxicology Awareness Workshop, Singapore, 8 January 2019
36. Yu, H. (2018) "Biomaterials Engineering of Organoid Models", Frontiers in Cancer Science (FCS) 2018, Singapore, 12-14 November 2018
37. Yu, H. (2018) "Heterogeneity and solutions in cell-based models for in vitro toxicity testing applications", Toxicological Alternatives and Translational Toxicology Conference, Guangzhou, China, 10-11 October 2018
38. Yu, H. (2018) "Development of macroporous hydrogel sponges for soft tissue organoid culture and applications", The 21st International Conference of Molecular Engineering of Polymers (MEP-2 or MEP2018), Shanghai, China, 21-23 September 2018
39. Yu, H. (2018) "Data analytics in biomedical applications", BIGHEART Symposium 2018, Singapore, 23-24 July 2018
40. Gupta, K., Li, Q., Song, Z., Fong, E.L.S., and Yu, H. (2018) "Regulation of bile canaliculi dynamics in physiological and cholestatic conditions", Mechanobiology in Health and Disease Symposium, Singapore, 31 May 2018
41. Ma, Y., Bhattacharya, D., Singh, V.R., Yu, H., and So, P. (2018) "Confocal Reflective Phase Microscope to Probe Microscope to Probe Membrane Dynamics", Focus on Microscopy Conference, Singapore, 25-28 March 2018
42. Yu, H. (2018) "Process Analytics for Tissue Engineering and Regenerative Medicine", IISc Bioengineering Symposium, India, 24-25 January 2018
43. Song, Z., Gupta, K., and Yu, H. (2017) "Mesoscale Mechanobiology of liver homeostatic regeneration", 2nd International Workshop on Molecular, Cell, Tissue Mechanobiology, Shanghai Jiatong University, China, 6-7 November 2017
44. Yu, H. (2017) "Local cytoskeleton dynamics in liver homeostasis and regeneration", TERMIS-AP 2017, Nantong, China, 21-24 September 2017.
45. Tasnim. F., Xing, J., Mo, S., and Yu, H. (2017) "Generation of Stem Cell-Derived Kupffer Cells for Human *in vitro* Inflammatory Liver Model," 2017 International

Symposium of Materials on Regenerative Medicine (2017 ISOMRM), Taoyuan, Taiwan, 23-26 August 2017

46. Yu, Y., Wang, J., Ng, C.W., Xu, S., Xing, J., Wee, A., Welsch, R., So, P.T.C., and Yu, H. (2017) "sqFibrosis: a fully quantitative classification method of facilitate fibrosis scoring using collagen stains," 2017 International Symposium of Materials on Regenerative Medicine (2017 ISOMRM), Taoyuan, Taiwan, 23-26 August 2017
47. Yu, H. (2017) "Porous scaffolds for in vitro organoid culture," 8th WACBE World Congress on Bioengineering, Hong Kong, 30 July – 2 August 2017
48. Yu, H. (2017) "Chips and systems for more complex drug testing applications," 7th International Multidisciplinary Conference on Optofluidics (Optofluidics 2017) , Singapore, 25-28 July 2017
49. Yu, H. (2017) "Porous scaffolds for in vitro organoid culture," 8th WACBE World Congress on Bioengineering, Hong Kong, 30 July – 2 August 2017
50. Hari Singh, N., McMillian, M., Qu, Y., Ng, C.W., Zhou, Y., Yu, H., and Ananthanarayanan, A. (2017) "Evaluating Reactive Acyl Glucuronides Formation from Diclofenac using a Resazurin/ Resorufin Assay with Primary Rat Hepatocytes," Society of Toxicology, Baltimore, Maryland, USA, 12-16 March 2017
51. Ananthanarayanan, A., Qu, Y., Singh, N.H., Nugraha, B., McMillian, M., and Yu, H. (2017) "Hepatocyte Spheroid Cultures in Galactosylated Cellulosic Sponge for Drug DMPK and Efficacy Testing," Society of Toxicology, Baltimore, Maryland, USA, 12-16 March 2017
52. Ong, L.J.Y., Chong, L.H., Jin, L., Yu, H., Ananthanarayanan, A., Leo. H.L., and Toh, Y.-C. (2017) "A Pump-Free Microfluidic 3D Perfusion Platform For The Efficient Differentiation Of Human Hepatocyte-Like Cells," The 26th Conference of Asian Pacific Association for the Study of the Liver: APASL Annual Meeting 2017, Shanghai, China, 15-19 February 2017
53. Yan, J., Yu, Y., Kang, J.W., Tam, Z.Y., Xu, S., Fong, E.L.S., Song, Z., Tucker Kellogg, L., So, P.T.C., and Yu, H. (2017) "A Classification Model for Non-alcoholic Steatohepatitis (NASH) Using Confocal Raman Micro-spectroscopy," The 26th Conference of Asian Pacific Association for the Study of the Liver: APASL Annual Meeting 2017, Shanghai, China, 15-19 February 2017
54. Yu, Y., Wang, J., Ng, C.W., Xu, S., Xing, J., Wee, A., Welsch, R.E., So, P.T.C., and Yu, H. (2017) "sqFibrosis: A Fully Quantitative Classification Method to Facilitate Fibrosis Scoring Using Collagen Stains," The 26th Conference of Asian Pacific Association for the Study of the Liver: APASL Annual Meeting 2017, Shanghai, China, 15-19 February 2017
55. Fong, E., Toh, T.B., Huynh, T.H., Chow, E., and Yu, H. (2017) "Development of an In Vitro Biobank of Patient-Derived Xenografts for Hepatocellular Carcinoma," The 26th Conference of Asian Pacific Association for the Study of the Liver: APASL Annual Meeting 2017, Shanghai, China, 15-19 February 2017
56. Song, Z., Fan, J., Teo, J., Yu, Y., Jie, Y., Ma, Y., Fang, Y., Mo, S., Tucker-Kellogg, L., So, P., and Yu, H. (2017) "Imaging the liver regeneration process in Lifeact-GFP mice," The 26th Conference of Asian Pacific Association for the

Study of the Liver: APASL Annual Meeting 2017, Shanghai, China, 15-19 February 2017

57. Pawijit, P., Zhou, Y., and Yu, H. (2017) "Involvement of kinectin in drug induced liver injury," The 26th Conference of Asian Pacific Association for the Study of the Liver: APASL Annual Meeting 2017, Shanghai, China, 15-19 February 2017
58. Gupta, K., Li, Q., Song, Z., Fong, E.L.S., and Yu, H. (2017) "Blebbing and budding: Early canalicular response to altered canalicular pressure in obstructive cholestasis," The 26th Conference of Asian Pacific Association for the Study of the Liver: APASL Annual Meeting 2017, Shanghai, China, 15-19 February 2017
59. Singh, N.H., Wong, J.Y., Yan, W.H., Mettu, V.S., Qu, Y., Ngo, Q., Koh, P., Zhou, Y., Yu, H., Ananthanarayanan, A., and McMillian, M.K. (2017) "A resazurin to resorufin assay for reactive acyl glucuronides reveals a bromfenac metabolite glucuronide," The 26th Conference of Asian Pacific Association for the Study of the Liver: APASL Annual Meeting 2017, Shanghai, China, 15-19 February 2017
60. Ngo, Q., Qu, Y., McMillian, M.K., Ananthanarayanan, A., Singh, N.H., Wong, J.Y., Ng, C.W., and Yu, H. (2017) "Inhibition of efferocytosis by mild hepatotoxicants," The 26th Conference of Asian Pacific Association for the Study of the Liver: APASL Annual Meeting 2017, Shanghai, China, 15-19 February 2017
61. Qi, X., Xu, S., Dong, J., Wang, L., Liu, C., Zhao, J., Liu, F., Li, G., Yu, H., Wee, A., and Hou, J. (2017) "Sampling variability of liver fibrosis for assessment of cirrhotic portal hypertension: A qFibrosis approach," The 26th Conference of Asian Pacific Association for the Study of the Liver: APASL Annual Meeting 2017, Shanghai, China, 15-19 February 2017
62. Singh, N.H., Wong, J.Y., Yan, W.H., Mettu, V.S., Qu, Y., Ngo, Q., Koh, P., Zhou, Y., Yu, H., Ananthanarayanan, A., and McMillian, M.K. (2017) "A resazurin to resorufin assay for reactive acyl glucuronides reveals a bromfenac metabolite glucuronide," The 26th Conference of Asian Pacific Association for the Study of the Liver: APASL Annual Meeting 2017, Shanghai, China, 15-19 February 2017
63. Yu, H. (2016) "Materiomic Screening of Topographical Cues That Bias Migration and Differentiation of Liver Progenitor Cells," 2016 Tissue Engineering and Regenerative Medicine International Society- Asia Pacific Meeting (TERMIS-AP 2016), Taipei, Taiwan, 3-6 September 2016
64. Yu, H., Fang, Y. (2016) "Alternating flow co-culture system for drug metabolism study," SIMTech EAC Annual Conference 2016, Singapore, 25 August 2016
65. Yu, H. (2016) "Imaging liver regeneration and diseases," Next Generation Confocal Microscope for Advanced Bio-Imaging!, Singapore, 2 August 2016
66. Yu, H. (2016) "Mechanobiology perspective of obstructive cholestasis: opens the black box of intrahepatic bile canaliculi dynamics," 2016 Southern Digestive Disease And Endoscopy Forum, Guangzhou, China, 8-10 July 2016
67. Yu, H., Gupta, K., Li, Q., Fong, L.S.E., Tang, H., Fan, J., Mo, S., Yu, Y., and Song, Z. (2016) "Mechanobiology opens the black boxes of cell responses to biomaterials," Talk at Xiamen University, China, 6 July 2016

68. Yu, H. (2016) “Imaging liver regeneration and diseases,” Talk at Fujian Normal University, China, 1 July 2016
69. Yu, H., Gupta, K., Li, Q., Fong, E.L.S., Tang, H., Fan, J., Mo, S., Yu, Y., and Song, Z. (2016) “Mechanobiology approach to understanding causative mechanism of cellular responses to biomaterials: an example of bile canaliculi dynamics in collagen sandwich culture of hepatocytes and in vivo,” 10th World Biomaterials Congress, Montreal, Canada, 17-22 May 2016
70. Yu, H. (2016) “Acute and Sub-Acute Hepatotoxicity Testing in vitro Models,” Symposium on Non-animal Approaches to Safety & Efficacy Testing, Singapore, 25 January 2016
71. Yu, H. (2015) “What Grant Reviewers Look Out for When Reviewing a Grant,” NHG’s Grant Preparatory Seminar, Singapore, 15 October 2015 (Postponed)
72. Ng, C.W., Yu, Y., Xia, L., and Yu, H. (2015) Predicting hepatic clearance of slow metabolized compound using hepatocyte sandwich perfusion system. Drug Metabolism Review, November 2015; 47(Supplement 1 Special Issue SI): 50-51. 19th North American Meeting of the International-Society-for-the-Study-of-Xenobiotics (ISSX) / 29th Meeting of the Japanese-Society-for-the-Study-of-Xenobiotics (JSSX), San Francisco, USA, 19-23 October 2014.
73. Yu, Y., Singh, N.H., Sakban, R.B., Xia, L., and Yu, H. (2015) Investigating drug-inflammation interaction of acetaminophen in hepatocytes and kupffer cells co-culture system for in vitro drug screening application. Drug Metabolism Review, November 2015; 47(Supplement 1 Special Issue SI): 154-155. 19th North American Meeting of the International-Society-for-the-Study-of-Xenobiotics (ISSX) / 29th Meeting of the Japanese-Society-for-the-Study-of-Xenobiotics (JSSX), San Francisco, USA, 19-23 October 2014.
74. Pawijit, P., Yu, Y., Zhou, Y., and Yu, H. (2015) Kinectin regulates GAP junction proteins in hepatocyte-implications in response to hepatotoxicity. Drug Metabolism Review, November 2015; 47(Supplement 1 Special Issue SI): 178-178. 19th North American Meeting of the International-Society-for-the-Study-of-Xenobiotics (ISSX) / 29th Meeting of the Japanese-Society-for-the-Study-of-Xenobiotics (JSSX), San Francisco, USA, 19-23 October 2014.
75. Iliescu, C., Yu, F., and Yu, H. (2015) “Microfluidic platforms for drug screening,” presented at 38th International Semiconductor Conference, Sinaia, Romania, 12-14 October 2015
76. Xing, X., Toh, Y.-C., Xu, S., and Yu, H. (2015) “Geometrically confined cell differentiation and migration model for human teratogen detection,” 19th European Congress on Alternatives to Animal Testing – Linz 2015, 16th Annual Congress of EUSAAT, Austria, 20-23 September 2015
77. Li, Q., Song, Z., Fan, J., Mo, S., Viasnoff, V., So, P., and Yu, H. (2015) “Mechanobiology studies of the tissue dynamics for engineering long bile canaliculi,” 7th Models of Physiology and Disease - Physiology Symposium 2015, Singapore, 21-22 September 2015
78. Li, Q., Song, Z., Fan, J., Mo, S., Viasnoff, V., So, P., and Yu, H. (2015) “Mechanobiology studies of the tissue dynamics for engineering long bile canaliculi,” The 8th Asian-Pacific Conference on Biomechanics (AP Biomech 2015), Sapporo, Japan, 16-19 September 2015

79. Yu, H. (2015) “Challenges and innovations for compound safety testing applications with scalable perfusion-based cell-culture devices,” Microfluidics and Diagnostics – Moving Microfluidic Applications from Lab to Market: Challenges & Solutions, Singapore, 14 July 2015
80. Yu, H. (2015) “Spatial and temporal morphological markers for liver regeneration and chronic liver diseases,” 7th WACBE World Congress on Bioengineering (WACBE2015), Singapore, 6-8 July 2015
81. Yu, H. (2015) “Progress in identifying image-based markers of liver cancer derived from non-alcoholic fatty liver diseases”, SMART BioSyM Workshop – Workshop on Metastatic Cancer, Singapore, 25 June 2015
82. Yu, H. (2015) “Seeing is believing: imaging the dynamic processes in liver regeneration”, MBI Weekly Meeting, Singapore, 24 June 2015
83. Ananthanarayanan, A., Nugraha, B., Qu, Y., and Yu, H. (2015) “Cleavable cellulosic sponge for 3D culture and harvest of liver cells,” The 5th Asian Biomaterials Congress (ABMC5), Taipei, Taiwan, 6-9 May 2015.
84. Yu, H. (2015) “Biomaterials and devices for controlling the mesoscale dynamics of cellular and intercellular tissue structures for biomedical applications,” Institute of Functional Nano and Soft Materials, Soochow University, Shanghai, China, 10 April 2015
85. Yu, H. (2015) “Tissue engineered in vitro liver models for testing of drugs, pathogens, and prospects for testing food, TCM drugs, environmental toxins and cosmetics,” NUS Research Institute in Soochow Industry Park for industry audiences, Shanghai, China, 9 April 2015
86. Yu, H. (2015) “Controlling cell-cell and cell matrix interaction for engineering in vitro toxicity testing models and bioartificial liver support system,” Chinese Academic of Science, Institute of Biochemistry and Cell Biology, Shanghai, China, 8 April 2015
87. Yu, H. (2015) “Reconstitution of cell dynamics or biomolecular networks in vitro/in silico”, the A*STAR-JST Joint Workshop on "Development of fundamental technology for biodevices enabling dynamic analysis and control of cells", Singapore, 12-13 January 2015
88. Low, L., Chan, C.Y., Chen, J., Yang, H., Lee, C., Yu, H., Wenk, M., and Yap, H.K. (2014) “IL13-induced hepatic cholesterol transport defect in rat model of minial change nephrotic syndrome (MCNS)”, The American Society of Nephrology (ASN) Kidney week 2014, Philadelphia, USA, 11-16 November 2014
89. Yu, H. (2014) “Mechanobiology study of bile excretion enables innovative strategy for engineering bile collection device for drug testing applications”, The 1st International Workshop on Multiscale Mechanobiology (IWMM 2014), Hong Kong, 15-18 May 2014
90. Yu, H. (2013) “Interface structures and functions for Organs-on-Chip”, Lab-on-a-Chip Asia, Singapore, 12-13 November 2013
91. Toh, Y.C., Xing, J., Xu, S., and Yu, H. (2013) “A micropatterned human embryonic stem cell model for in vitro human developmental toxicity testing”, MicroTAS 2013, Freiburg, Germany, 27-31 October 2013.

92. Yu, H. (2013) “大学与科技创新” Chinese Studies in Chinese Enrichment Lecture (中国通识深广讲堂), Hwa Chong Institution, Singapore, 15 August 2013
93. Yu, H. (2013) “Academic-Industry Partnership to Support Drug Development”, Temasek Polytechnic Annual Industry Networking Event Seminar, Partners-in-Science: Achieving Commercial Success through Better Quality, Safety & Efficacy, Singapore, 23 July 2013
94. Yu, H. (2013) “Optical detection of inflammation and disease”, Research Innovation in Infectious and Inflammatory Diseases, Singapore, 8-9 July 2013
95. Anene-Nzelu, C.G., Choudhury, D., Li, H., Toh, Y.-C., Ng, S.H., Leo, H.L., and Yu, H. (2013) “Gratings on a dish: a scalable cell alignment substrate on optical media”, ASME 2013 Summer Bioengineering Conference, Sunriver, Oregon, United States of America, 26-29 June 2013
96. Xu, S., Wee, A., and Yu, H. (2013) “qFibrosis – a New Tool for Quantitative Characterization of Liver Fibrosis or Tissue Regeneration”, TERMIS-EU, Istanbul, Turkey, 17-20 June 2013
97. Yu, H. (2013) “Quantitative Phenotypic Markers to Monitor Liver Regeneration Failure”, TERMIS-EU, Istanbul, Turkey, 17-20 June 2013.
98. Xu, S., and Yu, H. (2013) “Capsule Index: morphology and texture based quantification of liver fibrosis from the Glisson’s capsule”, 23rd Conference for Asian Pacific Association for the Study of the Liver (APSAL 2013), Singapore, 6-9 June 2013.
99. Xu, S., Wang, Y., Wee, A., Hou, J., and Yu, H. (2013) “Quantitative characterization of changes in collagen patterns for liver fibrosis assessment”, 23rd Conference for Asian Pacific Association for the Study of the Liver (APSAL 2013), Singapore, 6-9 June 2013.
100. Toh, Y.-C., Xing, J., and Yu, H. (2013) “Spatially-patterned human embryonic stem cell differentiation and migration for developmental toxicity testing”, AsiaCord 2013, Kobe, Japan, 19-20 April 2013
101. Yu, H. (2013) “Organ-on-Chip: a biologist's perspective,” SIMTech Microfluidics Seminar 2013, Singapore, 6 March 2013
102. Yu, H. (2012) “Translating fundamental liver biology and pathology into applications”, International Conference Cellular & Molecular Bioengineering (ICCMB3), 10-12 December 2012, Singapore
103. Chooi, K.F., Phang, G.S.S., Toh, A.H.H., Rashidah, S., Tai, D., Yu, H. (2012) “Assessment of Liver Fibrosis in the Rat”,63rd AALAS National Meeting, American Association of Lab Animal Science meeting, Minneapolis, USA, 4-8 November 2012
104. Yu, H. (2012) “Tissue Informatics on Liver Fibrosis.” The 1st Singapore-Korea Joint Workshop for Innovative Biomedicine, Singapore, 22 June 2012
105. Yu, H., and Sheetz, M. (2012) “Nanomedicine roadmap.” West China Medical School of Sichuan University, Sichuan, China, 8 June 2012

106. Wang, Y., Toh, Y.C., Li, Q., Zheng, B., Nugraha, B., and Yu, H. (2012) "Accelerated repolarization of hepatocytes population with mechanical compaction." The 9th World Biomaterials Congress, Chengdu, China, 1-5 June 2012
107. Ananthanarayanan, A., and Yu, H. (2012) "Spheroid model of liver cells for Hepatitis C infections." The 9th World Biomaterials Congress, Chengdu, China, 1-5 June 2012
108. Hemant, V.U., and Yu, H. (2012) "Braille for cells: deciphering topographic cues for cell behavior." The 9th World Biomaterials Congress, Chengdu, China, 1-5 June 2012
109. Xing, J., Toh, Y.C., Poh, J., and Yu, H. (2012) "Development of stem cell-based models for in vitro toxicity of xenobiotics." The 9th World Biomaterials Congress, Chengdu, China, 1-5 June 2012
110. Li, Q., Robens, J. M. and Yu, H. (2012) "Micro pillar array maintains primary hepatocyte's polarity through constraining cell spreading." The 9th World Biomaterials Congress, Chengdu, China, 1-5 June 2012
111. Nugraha, B., and Yu, H. (2012) "Cellulosic hydrogel Sponge for cell-dense 3D culture platform." The 9th World Biomaterials Congress, Chengdu, China, 1-5 June 2012
112. Ng, I.C., and Yu, H. (2012) "Kinectin facilitates chemotactic migration of mesenchymal-like cells by stabilizing leading protrusions." The 9th World Biomaterials Congress, Chengdu, China, 1-5 June 2012
113. Peng, Q., Kang, C.H., Cha, J.W., So, P.T.C., and Yu, H. (2012) "Integration of Multi-Focal Multi-Photon Microscope and Second Harmonic Generation for 3D High-Resolution Imaging of Liver Fibrosis." The 9th World Biomaterials Congress, Chengdu, China, 1-5 June 2012
114. Tee, Y.H., Heng, J.K., Zhang, X., Yeap, S.H., Ng, I.C., Shazib, M.A., and Yu, H. (2012) "Physical and chemical cues elicit a unified endoplasmic reticulum response to govern cell attachment." The 9th World Biomaterials Congress, Chengdu, China, 1-5 June 2012
115. Tong, W.H., Zhang, S., Iliescu, C., and Yu, H. (2012) "Mechanically Improved RoboTox – A Robust and high throughput hepatotoxicity drug testing platform with hepatocytes spheroids." The 9th World Biomaterials Congress, Chengdu, China, 1-5 June 2012
116. Venkatraman, L., Yu, H., Tucker-Kellogg, L. (2012) "Thrombospondin-1 induces sinusoidal endothelial cell defenestration." The 9th World Biomaterials Congress, Chengdu, China, 1-5 June 2012
117. Xia, L., Sakban, R. B., Hong, X., Qu, Y., and Yu, H. (2012) "3D in vitro hepatocyte model on RGD-galactose hybrid membrane for drug hepatotoxicity screening." The 9th World Biomaterials Congress, Chengdu, China, 1-5 June 2012
118. Xu, S., So, P., Rajapakse, J., and Yu, H. (2012) "Surface Quantification of Liver Fibrosis: From Microscopy to Endoscopy." The 9th World Biomaterials Congress, Chengdu, China, 1-5 June 2012
119. Zhang, W., Sakban, R., Nugraha, B., Hong, X., Jia, R., Xia, L., and Yu, H. (2012) "Modulation of cryochrome P450 enzyme function and expression by

piperine in cellulosic sponge system." The 9th World Biomaterials Congress, Chengdu, China, 1-5 June 2012

120. Zhu, L., Tong, W. H., Toh, Y. C., Choudhury, D., Wang, Z., Iliescu, C., and Yu, H. (2012) "Enhanced micro-feature on glass silicon microfluidic channel of 3D hepatocyte culture device." The 9th World Biomaterials Congress, Chengdu, China, 1-5 June 2012
121. Yu, H. (2012) "Trend Analysis for Modern Higher Education (In Chinese)." Tsinghua University, Beijing, China 30th May 2012
122. Yu, H. (2012) "Mechanobiology in Liver Tissue Engineering." International Workshop on Tissue Engineering 2012, Tsinghua University, Beijing, China 30th May 2012
123. Yu, H. (2012) "Novel Technique of Liver Biopsy – Surface Quantification." 5th FuRui Liver Fibrosis Forum, Guangzhou, China 25-26 May 2012
124. Wang, J., Tucker-Kellogg, L., Ng, I.C., Jia, R., Thiagarajan, P.S., White, J., and Yu, H. (2012) "The Self-Limiting Dynamics of TGF-β Signaling In Silico and In Vitro: A Novel Mechanism of PPM1A Feedback." 16th Annual International Conference on Research in Computational Molecular Biology RECOMB 2012, Barcelona, Spain, 21-24 April 2012
125. Venkatraman, L., Chia, S.M., Narmada, B.C., Poh, L.S., White, J.K., Bhowmick, S.S., Dewey, C.F., So, P.T., Yu, H., and Tucker-Kellogg, L. (2011) "Plasmin antagonizes positive feedback between TGF-β1 and TSP1: Steady states and dynamics." Biophysical Society The 56th Annual Meeting, San Diego, California, USA, 25-29 February 2012
126. Chua, H.E., Bhowmick, S.S., Tucker-Kellogg, L., Wang, Y., Dewey Jr., C.F., and Yu, H. (2012) "PANI: An Interactive Data-driven Tool for Target Prioritization in Signaling Networks." IHI 2012 : 2nd ACM SIGHIT International Health Informatics Symposium, Miami, USA, 28-30 January 2012. Proceedings of the 2nd ACM SIGHIT International Informatics Symposium, 2012:851-854.
127. Chua, H.E., Bhowmick, S.S., Tucker-Kellogg, L., Zhao, Q., Dewey Jr., C.F., and Yu, H. (2012) "In Silico Identification of Endo 16 Regulators in the Sea Urchin Endomesoderm Gene Regulatory Network." IHI 2012: 2nd ACM SIGHIT International Health Informatics Symposium, Miami, USA, 28-30 January 2012. Proceedings of the 2nd ACM SIGHIT International Informatics Symposium, 2012:131-140.
128. Seah, B.-S., Bhowmick, S.S., Dewey Jr. C.F., and Yu, H. (2012) "FUSE: A system for data-driven multi-level functional summarization of protein interaction networks." IHI 2012: 2nd ACM SIGHIT International Health Informatics Symposium, Miami, USA, 28-30 January 2012. Proceedings of the 2nd ACM SIGHIT International Informatics Symposium, 2012:847-850.
129. Lin, J., Lu, F., Zheng, W., Yu, H., Sheppard, C., and Huang, Z. (2012) "An integrated coherent anti-Stokes Raman scattering and multiphoton imaging technique for liver disease diagnosis." Multiphoton Microscopy in the Biomedical Sciences, San Francisco, USA, 22-24 January 2012. Published in Progress in Biomedical Optics and Imaging – Proceedings of SPIE, 8226:-, article number 822625.

130. Yu, H. (2012) "Trends in liver engineering for complex tissue regeneration applications." The 4th International Conference on The Development of Biomedical Engineering – Regenerative Medicine Conference, Ho Chi Minh City, Vietnam, 8-12 January 2012
131. Shazib, M.A., Tee, Y.H., and Yu, H. (2011) "Induction of endoplasmic reticulum response by bio-physical cues govern cell attachment." The 4th International Conference on The Development of Biomedical Engineering, Ho Chi Minh City, Vietnam, 8-12 January 2012
132. Venkatraman, L., Chia, S.M., Narmada, B., Poh, L., White, J., Bhowmick, S., Dewey, C., So, P., Yu, H., and Tucker-Kellogg, L. (2011) "Modeling the Interplay of Plasmin and Thrombospondin-1 in TGF-beta 1 Activation: A Bistable Switch in Silico and in Vitro." Annual Meeting of the American Society for Cell Biology (ASCB), 3-7 December 2011.
133. Yu, H. (2011) "Advances in Biomedical Engineering – Liver." Testicular Toxicology in vitro models, Baltimore, USA, 26-27 October 2011
134. Venkatraman, L., Bhowmick, S.S., Dewey, C.F., Yu, H., and Tucker-Kellogg, L. (2011) "Plasmin antagonizes positive feedback loop between TGF-β1 and TSP1: implications in liver fibrosis." EMBO – Structure and Dynamics of Protein Networks, Heidelberg, Germany, 13-16 October 2011
135. Toh, Y. C. (2011) "Differential Environmental Spatial Patterning (DESP) recreates proximal-distal axial patterns in embryonic stem cell colonies." MicoTAS 2011: The 15th International Conference on Miniaturized Systems for Chemistry and Life Sciences, Seattle, USA, 2-6 October 2011
136. Xu, S., Tai, D., Wee, A., Welsh, R., So, P., Yu, H., and Rajapakse, J. (2011) "Automated Scoring of Liver Fibrosis through Combined Features from Different Collagen Groups." 33rd Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC '11), Boston Marriott Copley Place Hotel, Boston, Massachusetts, USA, 30 August – 3 September 2011. Published in Conference proceedings: … Annual International Conference of the IEEE Engineering in Medicine and Biology Society. IEE Engineering in Medicine and Biology Society Conference, 2011: 4503-4506, article number 6091116.
137. Chua, H.E., Bhowmick, S.S., Tucker-Kellogg, L., Dewey, C.F.Jr., and Yu, H. (2011) "PANI: A Novel Algorithm for Fast Discovery of Putative Target Nodes in Signaling Networks." ACM Conference on Bioinformatics, Computational Biology and Biomedicine 2011 (ACM-BCB), Chicago, USA, 1-3 August 2011. Published in 2011 ACM Conference on Bioinformatics, Computational Biology and Biomedicine, BCB 2011, 2011:284-288.
138. Chua, H.E., Bhowmick, S.S., Tucker-Kellogg, L., Dewey, C.F.Jr., and Yu, H. (2011) "FUSE: Towards Multi-Level Functional Summarization of Protein Interaction Networks." ACM Conference on Bioinformatics, Computational Biology and Biomedicine 2011 (ACM-BCB), Chicago, USA, 1-3 August 2011. (awarded Best Paper Award). Published in 2011 ACM Conference on Bioinformatics, Computational Biology and Biomedicine, BCB 2011, 2011:2-11.
139. Seah, B.-S., Bhowmick, S.S., Dewey, C.F.Jr., and Yu, H. (2011) "FUSE: a profit maximization approach for functional summarization of biological

networks." ACM Conference on Bioinformatics, Computational Biology and Biomedicine 2011 (ACM-BCB), Chicago, USA, 1-3 August 2011. Published in BMC Informatics, 13(supplement 3):-, article number S10.

140. Nugraha, B., Yu, H. (2011) "Cellulosic Sponge Accelerates Hepatocyte Repolarization."TERMIS EU Meeting 2011, Granada, Spain, 7-10 June 2011.

141. Nugraha, B., Yu, H. (2011) "Galactosylated Cellulosic Sponge Accelerates Hepatocyte Repolarization." The 29th Annual Conference of the Canadian Biomaterials Society (CBS2011), Vancouver, Canada, 1-4 June 2011. Bramasta Nugraha was awarded CBS2011 Travel Award.

142. Yu, H. (2011) "TGFb signaling in liver fibrosis and regression." 2nd Mini-Symposium on "Cell Fate Signaling" in Health and Disease, CeLS, NUS, 3 March 2011

143. Yu, H. (2011) "Systems approach to study liver injury." BioComplexity Symposium/Workshop, Singapore, 14-15 February 2011

144. Lin, J., Lu, F., Zheng, W., Tai, D.C.S., Yu, H., Sheppard, C., and Huang, Z. (2011) "Multimodal nonlinear optical imaging of obesity-induced liver steatosis and fibrosis." Multiphoton Microscopy in the Biomedical Sciences, San Francisco, USA, 23-25 January 2011. Published in Progress in Biomedical Optics and Imaging – Proceedings of SPIE, 7903:-, article number 79031V.

145. Singh, V.R., Rajapakse, J.C., Yu, H., and So, P.T.C. (2011) "Intensity normalization of two-photon microscopy images for liver fibrosis analysis." Multiphoton Microscopy in the Biomedical Sciences, San Francisco, USA, 23-25 January 2011. Published in Progress in Biomedical Optics and Imaging – Proceedings of SPIE, 7903:-, article number 79030P.

146. Choudhury, D., van Noort, D., Iliescu, C., and Yu, H. (2011) "Fish on Chip: A Microfluidic Platform for *In Vivo* Drug Studies in Developing Fish Embryo." The Second Conference on Advances in Microfluidics and Nanofluidics & Asia-Pacific International Symposium on Lab on Chip, Singapore, 5-7 January 2011.

147. Yu, H. (2011) "Controlling Extracellular Environmental Cues for Cell Shape and Functions for Applications." The Second Conference on Advances in Microfluidics and Nanofluidics (AMN 2011) and Asian-Pacific International Symposium on Lab on Chip (APLOC 2011), Singapore, 5-7 January 2011.

148. Narmada, B.C., Venkatraman, L., Tucker-Kellogg, L., and Yu, H. (2011) "Multi-step regulation of transforming growth factor beta 1 in liver fibrosis by hepatocyte growth factor." Keystone Symposia on Molecular and Cell Biology - TGF-beta in Immune Response: From Bench to Beside (A2), Utah, USA, 5-12 January 2011

149. Choudhury, D., van Noort, D., Iliescu, C., and Yu, H. (2010) "Fish on Chip: A Microfluidic Platform for *In Vivo* Drug Studies in Developing Fish Embryo." 4th East Asian Pacific Student Workshop on Nano-Biomedical Engineering, Singapore, 15-16 December 2010

150. Mo, X., Tan, C.H., and Yu, H. (2010) "Rapid Construction of Mechanically-confined Multi-cellular Structures using Dendrimeric Intercellular Linker." TERMIS North America Meeting 2010, Orlando, USA, 5-8 December 2010

151. Nugraha, B., and Yu, H. (2010) "Macroporous Cellulosic Hydrogel Scaffold as 3D Hepatocyte Culture Platform." TERMIS North America Meeting 2010, Orlando, USA, 5-8 December 2010
152. Zheng, B.X., and Yu, H. (2010) "Liver fibrosis drug discovery using high content analysis", 4th Asian Young Researchers Conference on Computational and Omics Biology (AYRCOB 2010), Singapore, 1-3 December 2010
153. Nugraha, B., and Yu, H. (2010) "Macroporous Cellulosic Hydrogel Scaffold as 3D Hepatocyte Culture Platform." 32nd Meeting of Japanese Society for Biomaterials, Hiroshima, Japan, 29-30 November 2010
154. Shazib, M.A., and Yu, H. (2010) "Human Embryonic Stem (hES) Cells and Induced Pluripotent Stem (iPS) Cells: a Tissue Engineer's Perspective." 9th Asian Congress on Oral and Maxillofacial Surgery, Kuala Lumpur, Malaysia, 25-28 November 2010
155. Yu, H. (2010) "Hepatotoxicity testing platforms for *in vitro* screening of xenobiotics." Chinano Forum, Suzhou, China, 13-15 November 2010
156. Yu, H. (2010) "Biomaterials & Imaging Technologies in Liver Tissue Engineering." Seminar at John Hopkins University, Baltimore, United States, 27 October 2010
157. Yu, H. (2010) "Microscale engineering of in vitro hepatocyte-based models." Seminar and Round Table at Roche, Nutley, United States, 26 October 2010
158. Yu, H. (2010) "Adapting micro-engineered 3D hepatocyte models for drug testing applications." Seminar at Johnson & Johnson, Raritan, United States, 25 October 2010
159. Yu, H. (2010) "Liver models for hepatotoxicity testing of drugs and fibrosis studies." Physiology Symposium – "Models in Physiology and Disease", National University of Singapore, Singapore, 2-3 August 2010
160. Tee, Y.H., Li, Q., and Yu, H. (2010) "Impact of Substrate-mediated Cell Shape Control on Liver Cell Functions and Applications." RCE Symposium on Mechanobiology at World Congress on Biomechanics 2010, Singapore Suntec Convention Centre, Singapore, 1-6 August 2010
161. Nugraha, B., and Yu, H. (2010) "Macroporous Cellulosic Hydrogel Scaffold for Liver Tissue Engineering." 6th World Congress on Biomechanics, Singapore Suntec Convention Centre, Singapore, 1-6August 2010
162. Nugraha, B., and Yu, H. (2010) "Cellulosic Hydrogel Scaffold for Liver Tissue Engineering Application." The 5th SBE International Conference on Bioengineering and Nanotechnology, Biopolis, Singapore, 1-4 August 2010
163. Tee, Y.H., Zhang, X., Heng, J.K., and Yu, H. (2010) "Kinectin-mediated endoplasmic reticulum dynamics supports focal adhesion growth in the cellular lamella." Gordon Research Conferences, Davidson, United States, 11-16 July 2010
164. Ng, I.C., Teo, L.Y., Lee, S.Y., and Yu, H. (2010) "Upregulation of kinectin during epithelial-mesenchymal transition promotes cell migration and invasion." Gordon Research Conferences 'Signaling By Adhesion Receptors', Waterville, United States, 10-16 July 2010

165. He, Y., Yu, H., So, P.T.C. (2010) "Non-linear optical microscopy in liver fibrosis surface assessment." 1$^{4th}$ International Conference "Laser Optics 2010", St. Petersburg, Russia, 28 June – 2 July 2010
166. He, Y., Yu, H., So, P. (2010) "Quantitative assessment of liver fibrosis using non-linear optical microscope across liver surface." 43$^{rd}$ Annual Meeting of the European Society for Paediatric Gastroenterology, Hepatology and Nutrition (ESPGHAN 2010), Istanbul, Turkey, 9-12 June 2010. Published in Journal of Pediatric Gastroenterology and Nutrition, 50(supplement 2): E151-E151.
167. Choudhury, D., Zhang, C., van Noort, D., and Yu, H. (2010) "Development of a predictive physiologically based pharmacokinectic (PBPK) microfluidics chip." International Symposium on Microchemistry and Microsystems (ISMM) 2010, Hong Kong, 28-30 May 2010.
168. Choudhury, D., van Noort, D., and Yu, H. (2010) "Fish on a chip: A microfluidic platform for in vitro drug studies in developing fish embryo." International Symposium on Microchemistry and Microsystems (ISMM) 2010, Hong Kong, 28-30 May 2010.
169. Chua, H.E., Bhowmick, S.S., Forbes, C.D., Yu, H., Tucker-Kellogg, L. (2010) "*In Silico* Approach for Identifying Sensitive Nodes in Biological Network." RECOMB 2010 Fourteenth International Conference on Research in Computational Molecular Biology, Lisbon, Portugal, 25-28 April 2010.
170. Yu, H., So, P., Tai, D., He, Y., Xu, S., Peng, Q., Yew, E., and Sheppard, C. (2010) "Liver fibrosis research with non-linear optics." Focus on Microscopy Conference, Shanghai, China, 28-31 March 2010.
171. Yu, H. (2010) "Liver Tissue Engineering: Basic Research and their Translation into the Therapies of the Future." The 20$^{th}$ Conference of the APASL, Beijing, China, 27 March 2010.
172. Yu, H. (2010) "Microfabricated perfusion cell-based drug testing platforms." 1st International Conference on MedTech Manufacturing Technologies (MedTech 2010), Singapore, 18-19 March 2010.
173. Ng, I.C., Teo, L.Y., Lee, S.Y., and Yu, H. (2010) "Upregulation of 160-kDa kinectin during epithelial-mesenchymal transition promotes cell migration and invasion." 2$^{nd}$ NGS Student Student Symposium, Singapore, 5 February 2010. Awarded Best Poster.
174. Nugraha, B., Yue, Z., and Yu, H. (2010) "Novel Cellulosic Hydrogel Scaffold for Liver Tissue Engineering", 2$^{nd}$ NGS Student Symposium, Singapore, 5 February 2010.
175. Lu, F., Zheng, W., Tai, D.C.S., Lin, J., Yu, H., and Huang, Z. (2010) "Assessment of fibrotic liver disease with multimodal nonlinear optical microscopy." Multiphoton Microscopy in the Biomedical Sciences, San Francisco, USA, 24-26 January 2010. Published in Progress in Biomedical Optics and Imaging – Proceedings of SPIE, 7569:-, article number 75691W.
176. Venkatraman, L., Yu, H., Bhowmick, S.S., Forbes, D.Jr., Tucker-Kellogg, L. (2010) "The steady states and dynamics of urokinase mediated plasmin activation." Pacific Symposium on Biocomputing 2010, The Big Island of Hawaii, 4-8 January 2010

177. Mo, X., Nugraha, B., Zhang, C., Toh, Y.C., Tan, C.H., Wang, Y., Yu, H. (2009) "Micro-Fabrication Factory of Complex Tissues." 3rd East-Asian Pacific Student Workshop on Nano-Biomedical Engineering, Singapore, 21-22 December 2009.
178. Nugraha, B., Yue, Z., Yu, H. (2009) "Novel Cellulosic Hydrogel Scaffold for Liver Tissue Engineering", 3rd East Asian Pacific Student Workshop on Nano-biomedical Engineering, Singapore, 21-22 December 2009. 2nd winner for Oral Presentation Award
179. Nugraha, B., Yue, Z., Yu, H. (2009) "3D Cellulosic Gel for Hepatotoxicity Screening." 31st Annual Meeting of Japanese Society for Biomaterials, Kyoto, Japan, 16-17 November 2009
180. Van Noort, D., Yu, H. (2009) "*In vivo* drug testing in microfluidics on Medaka fish embryo." uTAS 2009, ICC Jeju, Jeju, Korea, 1-5 November 2009
181. Tai, D.C.S., Tan, N., Kang, C.H., Cheng, C.L., Chia, S.M., Xiao, G.F., Sun, W.X., Wee, A., Yu, H. (2009) "Fibro-C-index – A standardized quantification of liver fibrosis using second harmonic generation and two-photon microscopy." The Liver Meeting, Boston, 30 October – 3 November 2009. Published in Hepatology, 50(4 supplement S):815A-816A.
182. Dan, Y.Y, Amer, L. Zhang, S.F., Yu, H., Wong, P.C., Lim, S.G. (2009) "Fetal Liver Progenitor Niche." The 60th Annual Meeting of the American Association for the Study of Liver Diseases 2009, Hynes Convention Center, Boston, USA, 29 October – 3 November 2009. Published in Hepatology, 50(4 supplement S):900A-900A.
183. Chua, H.E., Bhowmick, S.S., Yu, H., Forbes Jr., C.F. (2009) "*In silico* approach to identify sensitive molecules as potential drug targets." BMES 2009 Annual Fall Scientific Meeting, Pittsburgh, United States, 7-10 October 2009.
184. Abdul Rahim, N.A., Iliescu, C., Kamm, R., Yu, H. (2009) "Microfluidic device captures correlation between human mesenchymal stem cell differentiation capacity and migration activity." 2009 World Stem Cell Summit, Baltimore, Maryland, USA, 21-23 September 2009.
185. Yu, H. (2009) "Engineering in vitro drug testing platforms." ICMAT Symposium A - Advanced Biomaterials and Regenerative Medicine (In Conjunction with 2nd Asian Biomaterials Congress), Singapore, 28 June – 3 July 2009
186. Yue, Z., Mo, X., Nugraha, B., Tan, C.H., Yu, H. (2009) "Biomaterials to Facilitate Controls of Cell-Matrix and Cell-Cell Interactions in Soft Tissue Construction." 2nd Asian Biomaterials Congress (ABMC), Singapore, 26 - 27 June 2009
187. Xia, L., Leo, H.L., Yu, H. (2009) "Development of a novel hepatocyte sandwich culture based bioreactor for bioartificial liver assist device." Advances in Synthetic Biology, London, England, 28-29 April 2009
188. Abdul Rahim, N. A., D Kamm, R., Yu, H. (2009) "Effects of rigidity sensing on fibrotic cellular activity." Biomaterials Asia 2009, Hong Kong, 5-8 April 2009
189. Zhang, C., Chia, S.M., Ong, S.M., Zhang, S., van Noort, D., Yu, H. (2009) "Incorporation of TGF-β1 in a microfluidic device to enhance primary heptocyte

functions," The 5th International Conference on Microtechnologies in Medicine and Biology, Quebec City, Canada, 1-3 April 2009

190. Tai, D.C.S., Tan, N., Kang, C.H., Cheng, C.L., Chia, S.M., Xiao, G.F., Sun, W.X., Wee, A., Yu, H. (2009) "Fibro-Index: Automated, 1-step system to assess liver fibrosis stage." Biomedical Asia 2009, Singapore, 16-19 March 2009

191. van Noort, D., Toh, Y.C., Yu, H. (2009) "A Microfludics Device for Cellular Drug Screening". IEEE International Conference on Micro Electro Mechanical Systems (MEMS) 2009, Hilton Sorrento Palace, Sorrento, Italy, 25-29 January 2009

192. Yu, H (2008) "Precision engineering of complex internal organs: design parameters for biomaterials and device developments". A*STAR CCO Workshop on Biomaterials: Materials in Biology and Medicine, Breakthrough and Discovery Theatrettes, Biopolis, Singapore, 15 December 2008

193. Yu, H. (2008) "Functional Systems Biology and Engineering: a process-centered approach to the solutions for liver diseases". GPBE-Tohoku Graduate Student Conference in Bioengineering, Centre for Life Sciences (CeLS), NUS, Singapore, 9-10 December 2008

194. Nugraha, B., Yue, Z., Yu, H. (2008) "Cellulosic Scaffold for 3D Hepatocyte Culture". NUS-Tohoku Graduate Student Conference in Bioengineering, Centre for Life Sciences (CeLS), Singapore, 9-10 December 2008

195. Tai, D.C.S., Tan, N., Chia, S.M., Xu, S.Y., Kang, A.C.H., Yu, H. (2008) "Automated Algorithm for Standard Quantification on Liver Fibrosis using Second Harmonic Generation Microscopy". IEEE PhotonicsGlobal@Singapore 2008, SMU Conference Centre, Singapore, 8-11 December 2008. Published in 2008 IEEE PhotonicsGlobal at Singapore, IPGC 2008, 2008:312-315, article number 4781383.

196. Zhang, S., Xia, L., Leo, H.L., Yu, H. (2008) "Primary sandwich perfusion culture based on microfabricated silicon nitride membranes." The TERMIS North America 2008 Annual Conference and Exposition, Hyatt Regency La Jolla, San Diego, California, USA, 7-10 December 2008

197. Zhou, J., Bi, C., Liu, S.C., Chng, W.J., Tay, K.G., Yu, H., Glaser, K.B., Albert, D.H., Davidsen, S.K., Chen, C.S. (2008) "Identification of core gene signature associated with synergism between ABT-869, a FLT3 inhibitor and SAHA, a HDAC inhibitor in AML with FLT3-ITD mutation." 50th Annual Meeting of American Society of Hematology (ASH), Moscone Centre, San Francisco, CA, 6-9 December 2008. Published in Blood, 112(11):572-572.

198. Leo, H.L., Xia, L., Zhang, S., Cheng, T., Xiao, G., Tuo, X., Yu, H. (2008) "Computational fluid dynamics investigation of the effect of the fluid-induced shear stress on hepatocyte sandwich perfusion culture." The 13th International Conference on Biomedical Engineering (ICBME 2008), Suntec Singapore International Convention and Exhibition Centre, Singapore, 3-6 December 2008. Published in 13th International Conference on Biomedical Engineering, volumes 1-3, 23(1-3):1405-1408.

199. Zheng, B.X., Chia, S.M., Tai, D.C.S., Yu, H. (2008) Image-based multi-dimensional and multi-variate profiling system of anti-fibrotic compounds. High

Content Cellular Screening Workshop. Genome Institute of Singapore. Human Genome Organization, Singapore, 12-14 November 2008

200. Yu, H. (2008) "Cross-scale imaging opportunities and challenges in Singapore." 2nd Mechanobiology Workshop 2008, Centre of Life Sciences, Auditorium 1, National University of Singapore, Singapore, 3-6 November 2008

201. Xu, S.Y, He, Y.T., Tai, D.C.S., Chang, S., Rajapakse, J.C., Yu, H. (2008) "Quantification of liver fibrosis from liver surface with second harmonic generation". 2nd Mechanobiology Workshop 2008, Centre of Life Sciences, Singapore, 3-5 November 2008

202. Raja, A.M., Sun, W., Tai, D.C.S., Chen, C.S., Yu, H. (2008) "Collagen visualized using Second Harmonic Generation Microscopy as a Breast Cancer Staging tool." 2nd Mechanobiology Workshop, Centre of Life Sciences, Singapore, 3-5 November 2008

203. Tai, D., Xu, S., Kang, C.H., Tan, N., Chia, S.M., Cheng, C.L., Yu, H. (2008) "Standardized Quantification for Liver Fibrosis Assessment Using Second Harmonic Generation Microscopy." 2008 Frontiers in Optics (FiO)/Laser Science XXIV (LS) Conference, Rochester Riverside Convention Centre, Rochester, New York, USA, 19-23 October 2008

204. Yu, H. (2008) "3D Cellular Models for Hepatotoxicity" BIT's 6th Annual Congress of International Drug Discovery Science and Technology (IDDST), Loong Palace Hotel & Resort, Beijing, China, 18-22 October 2008

205. Chua, E.H., Koo, A.J.A., Bhowmick, S.S., Yu, H., Dewey, C.F.Jr. (2008) "Quantitative modeling of ischemia/reperfusion injury in heart and liver". Biomedical Engineering Society (BMES), St. Louis, USA, 2-4 October 2008

206. van Noort, D., Toh, Y.C., Lim, T.C., Yu, H. (2008) "3D cell cultures in multi-channel microfluidics for drug screening." SBE's 4th International Conference on Bioengineering and Nanotechnology, University College Dublin, Ireland, 22-24 August 2008

207. Chia, S.M., Kuan, F.Y., Tan, N., Teo, S.T., Venkatraman, L., Bhowmick, S., Yu, H. (2008) "TGFß1 Homeostasis is Important for Liver Fibrosis Resolution." World Congress of Pediatric Gastroenterology, Hepatology and Nutrition, Iguassu Falls, Brazil, 16-20 August 2008

208. Tan, N., Chia, S.M., Teo, S.T., Tai, D.C.S., Kang, A.C.H., Cheng, C.L., Chiang, L.W., Xiao, G.F., Yu, H. (2008) "Effects of Phytosomal Silybin (Siliphos) on Bile Duct Ligation-Induced Liver Fibrosis in Rats – Is Cirrhosis Really Reversible?" World Congress of Pediatric Gastroenterology, Hepatology and Nutrition, Iguassu Falls, Brazil, 16-20 August 2008

209. Tai, D.C.S., Tan, N., Chia, S.M., Xiao, G.F., Kang, C.H., Sun, W.X., Yu, H. (2008) "Quantification of Liver Fibrosis using Second Harmonic Generation Laser Microscopy." World Congress of Pediatric Gastroenterology, Hepatology and Nutrition, Iguassu Falls, Brazil, 16-20 August 2008

210. Nugraha, B., Yue, Z., and Yu, H. (2008) "Mitochondrial Drug Delivery System for Cancer Treatment: A Preliminary Study." Tohoku-NUS Student Joint Symposium, Tokyo & Sendai, Japan, 10-12 May 2008

211. Xia, L., Du, Y., Leo, H.L., Yu, H. (2008) "Maintenance of hepatocyte polarity in synthetic sandwich culture." 5th Tampere Tissue Engineering Symposium, Tampere, Finland, 23-25 April 2008
212. Tai, D.C.S., Tan, N., Chen, C.L., Chia, S.M., Xiao, G.F., Sun, W.X., Yu, H. (2008) "Standardized quantification on liver fibrosis using second harmonic generation and two-photon microscopy." Focus on Microscopy, Osaka-Awaji, Japan, 13-16 April 2008
213. Kang, C.H., Tai, D.C.S., Xu, S., Tan, N., Chia, S.M., and Yu, H. (2008) "Quantification of collagen in second harmonic imaging of liver fibrosis". Focus on Microscopy, Osaka, Japan, 13-16 April 2008
214. Leo, H.L., Lim, A.L.W., Yi, D.A.M., Lei, X., Arooz, T., Yue, Z., Yu, H. (2008) "Perfusion based 3D culture for in vitro drug testing." 3rd Materials Research Society of Singapore Conference on Advanced Materials (ICAM), Singapore, 18-21 February 2008
215. Yue, Z., Der, A.T.E., Yu, H. (2008) "Therapeutic nanocarriers for controlled intracellular drug release." 3rd Materials Research Society of Singapore Conference on Advanced Materials (ICAM), Singapore, 18-21 February 2008
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Yu, H. (2007) “Novel intra-tissue perfusion system for culturing thick liver tissue.” International Conference on Bioengineering and Nanotechnology (ICBN), Biopolis, Singapore, 12-15 August 2007

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Conference on Materials for Advanced Technologies (ICMAT), Singapore, 1-6 July 2007

246. Yu, H. (2007) "Introduction to cell biology." The 2nd Global Enterprise for Micro-Mechanics and Molecular Medicine (GEM4, http://www.gem4.org) Summer School, Singapore, 26 June 2007

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A*STAR Graduate Academy student symposium (Best Poster Award), Singapore, 11 October 2006

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261. Du, Y.N., Han, R.B., Ng, S.S., Chia, S.M., Yu, H. (2006) "Identification and stabilization of a novel 3D hepatocyte monolayer configuration for hepatocyte-based applications." CHI conference on "Tissue Models for Therapeutic Development", Boston, USA, 14-17 August 2006
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263. Pan, X., Yu, H., Wohland, T. (2006) "Flow profile measurements in microchannels using scanning fluorescence correlation spectroscopy." Asia Pacific Workshop on biological Physics, NUS, Singapore, 3-5 July 2006
264. Khong, Y.M., Chang, S., Samper, V., Yu, H. (2006) "A novel intra-tissue perfusion culture of thick liver slices." Regenerate World Congress on Tissue Engineering and Regenerative Medicine, Pittsburgh, USA, 24-27 April 2006
265. Chia, S.M., Ten, C.M., Yu, H. (2006) "Novel cell culture supplements for enhanced hepatocyte functions." Regenerate World Congress on Tissue Engineering and Regenerative Medicine, Pittsburgh, USA, 24-27 April 2006
266. Kumar, S., Kan. S.H., Ng. S., Yu. H. (2006) "Automated cell based high throughput screening via image analysis." Nanobio conference, San Francisco, USA, 19-21 June 2006
267. Yu, H. (2006) "Cell and tissue imaging using ultra-short lasers." IEICE Ultra-fast Photonics Meeting, Sophia University, Tokyo, Japan, 17 March 2006
268. Wu, Y.N., Chang, S., Yu, H., Kuleshova, L. (2005) "Study on cryopreservation of cell-biomaterial constructs by vitrification." 42nd Annual Meeting of Society for Cryobiology, Minneapolis, USA, 24-27 July 2005
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270. Ng, S.S.S, Han, R.B., Hunziker W., Yu, H. (2005) "Controlled presentation of extracellular polarity cues enhances hepatocyte repolarization and function." Tissue Models for Therapeutics, Cambridge, USA, 29-30 September 2005
271. Toh, Y.C., Yu, H. (2005) "A 3D in vitro model for hepatocytes culture in a physiological micro-environment." Tissue Models for Therapeutics, Cambridge, USA, 29-30 September 2005
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the stimulatory effects of 3D co-culture." The first international SBE Conference on Bioengineering and Nanotechnology (ICBN), Biopolis, Singapore, 27-29 September 2004

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confocal and multi-photon fluorescent microscopy." Microscopy Society of America, USA. Published in Microscopy and Microanalysis, 8(supplement 2):1048-1049.

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310. Chia, S.M., Quek, C.H., Lin, P.C., Mao, H.Q., Leong, K.W., Yu, H. (2001) "A novel 3D cell culture system for tissue engineering applications." Hilton Head Workshop on Tissue Engineering (ET-2001), Hilton Head, USA
311. Li, J., Zhou, Z., Ni, X., Yu, H., Leong, K. (2000) "Injectable supramolecular hydrogels for controlled drug delivery." 10th International Conference on Biomedical Engineering, Singapore, 6-9 December 2000
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314. Li, J., Zhou, Z.H., Yu, H., Leong, K.W. (2000) "Injectable supramolecular hydrogel for drug and gene delivery." 6th World Biomaterials Congress, Hawaii, USA, 15-20 May 2000
315. Wang, S., Wan, C.A.A, Mao, H.Q., Leong, K.W., Yu, H. (2000) "A biodegradable Poly(phosphoester) tube for peripheral nerve regeneration." 6th World Biomaterials Congress, Hawaii, USA, 15-20 May 2000
316. Chia, S.M., Xu, X., Li, J., Leong, K.W., Yu, H. (2000) "Double encapsulation preserves enhanced hepatocyte functions." 6th World Biomaterials Congress, Hawaii, USA, 15-20 May 2000
317. Er, P.N., Yu, H. (2000) "Kinectin-kinesin interaction is essential for *in vivo* organelle motility." Keystone Symposium on The Dynamics Of The Cytoskeleton, Keystone, Colorado, USA, 3-9 February 2000
318. Ong, L.L., Lim, A.P.C., Yu, H. (2000) "Identification and characterization of kinectin-associated proteins." Keystone Symposium on The Dynamics Of The Cytoskeleton, Keystone, Colorado, USA, 3-9 February 2000
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meeting of the CRWAD (Conference of Research Workers in Animal Diseases), Chicago, USA, 7-9 November 1999

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321. Sheetz, M., Martenson, C., Toyoshima, I., Yu, H. (1993) "Organelle motor complex and axonal growth." Journal of NeuroChemistry, 61: S191-S191

**Other publications**

1. Zhang, L., Yu, H. (2002) Trends in Multi-Dimensional Microscopy. Annals of Microscopy, 2:34-45
2. Wong, S., Gao, S.J., Xu, X., Yu. H. (2000) Partial cDNA of rTERT. GeneBank, AF247818
3. Yu, H. (2000) Tissue Engineering, Singapore Biochemist (SSBMB Journal)
4. Yu, H. (1999) Confocal Microscopy, Singapore Biochemist (SSBMB Journal)
5. Yu, H. (1996) Complete cDNA of Chicken Kinesin Light Chain. GeneBank, u48359
6. Yu, H. (1994) Complete cDNA of Chicken Kinectin. GeneBank, u15617

## PROFESSIONAL EXPERIENCES & SERVICES

**Management, organization, and advisory**

1. Promotion and Tenure (P&T) Clinic Advisor, NUS Medicine, 1 August 2024 – 31 July 2025
2. Chairman, Department Evaluation Committee (DEC), Associate Professor Matthew Chang's promotion to Full Professor (with Tenure), NUS, 2024.
3. Member, Department Evaluation Committee (DEC), Associate Professor Shyong Wei, Kevin Tan's promotion to Full Professor, NUS, 2024.
4. Member, Department Evaluation Committee (DEC), Associate Professor Qiu Anqi's promotion to Professor with tenure, NUS Biomedical Engineering, 2023.
5. Committee Member, International Society of Organoid Research (ISoOR), 2023 - present
6. Member, NUS Medicine Faculty Academic Advisory Committee (FAAC), 1 July 2021 – 30 June 2025
7. Member, Search Committee, WisDM and MBI Joint Recruitment of PI (Tenure Track Associate Professor) of Dr. Haiting Ma, 2023
8. Member, Evaluation Committee, Promotion and Tenure of Lisa Tucker-Kellogg, Duke-NUS Medical School Singapore, 2022
9. Chair, ISEP Membership Review Committee, 14 February 2022 – 13 February 2025

10. Member, Department Evaluation Committee (DEC), evaluate the suitability of Associate Professor WANG Wenru, Alice Lee Centre for Nursing Studies (NUS Nursing), for promotion to full Professor, 2022
11. Mentoring Committee, Alfred Sun – Programme in Neuroscience & Behavioural Disorders, Duke-NUS Medical School, 2021 - present
12. Member, NUS Medicine Faculty Academic Advisory Committee (FAAC), NUS, 1 July 2021 to 30 June 2023
13. Chairman of the Department Evaluation Committee (DEC) for A/Prof Tan Shyong Wei, Kevin for promotion to Full Professorship on Tenure Track in the Department of Microbiology and Immunology, 2021
14. Department Evaluation Committee for Associate Professor Sanjay Khanna, NUS, 2021
15. SMART CAMP Council Member, 2018
16. Member, University Research Committee (URC) Expert Panel 01/2019– Biomedical Engineering and Life Sciences Cluster, 2018
17. **Member, UPTC Sub-Committee in assisting the Provost in appointing President's Assistant Professorships, NUS, 1 January 2018 – 30 June 2018**
18. Member, Medical Sciences Cluster Institutional Research Core Facility Management Committee (Electron Microscopy Unit, Confocal Microscopy Unit and the Flow Cytometry Laboratory), NUHS, 1 April 2017 – 31 March 2019
19. **External Undergraduate Education Advisor of the Division for the UGEA exercise, The Hong Kong University of Science and Technology, 2017**
20. Academic Mentor to Dr Magkos Faidon, Assistant Professor (tenure track), Department of Physiology, 2016-2018
21. **Member, Advisory Board of Biotech Connection Singapore (BCS), 2016-** (https://www.biotechconnection-sg.org/)
22. Member, NUS Institutional Research Core Facility Management Committee (IRCF), National University Health System (NUHS), 1 April 2015 – 31 March 2017
23. **Member, Senate Delegacy, National University of Singapore, 1 July 2015 – 30 June 2019**
24. Member, S&T U-MTARC, University-level Mid-Term Advisory Report Committee, National University of Singapore, 15 February 2015 – 31 December 2016
25. Member, DART Technical Committee, HESI Global, 2012-
26. Residential Fellow, King Edward VII Hall, Block E, National University of Singapore, 1 July 2014 – 30 June 2021
27. Member, University Research Committee (URC) Expert Panel – Biomedical Engineering and Life Sciences Cluster, 5 October 2012
28. **Member, University Promotion and Tenure Committee (UPTC), National University of Singapore, 1 July 2012- 30 June 2013; 1 July 2016 – 30 June 2017; 1 July 2017 – 30 June 2018**
29. **Founder, technical advisor and non-executive director, Invitrocue Ltd, Australia (a publicly listed company) 2014-**
30. Evaluator, project Euro-BioImaging, review service for a German national roadmap of research infrastructures, Germany, 2012 (Euro 189 Million)

31. Scientific Advisory Board member, assist Professor Toi in the development of an UG and graduate program in tissue engineering/regenerative medicine at the International University in Ho Chi Minh City.
32. Faculty Advisor for FY11 CLR Awardee, Dr Saclolo Rafael Pulido, 2011
33. **Founding Scientist, Histo-Index Pte Ltd., Singapore, 2010- (http://www.histoindex.com)**
34. **Chairman, Physiology Department Search Committee for recruitment of Assistant Professor, Associate Professor without tenure & Associate Professor with tenure, 1 February 2011 - 31 January 2013**
35. Editorial Board Member, The Open Biomaterials Journal, Bentham Science Publishers, 2010-
36. Invited to University Promotion and Tenure Committee 2011 (declined)
37. Nominated for Headship in the Division of Bioengineering, National University of Singapore, 2010
38. Department of Physiology Evaluation Committee for Promotion and Tenure: for Dr Lina Lim, Dr Shen Shali, Dr Alan Lee, NUS, 2009-2011
39. Department of Physiology Management Committee, NUS, 2009
40. Faculty Teaching Excellence Committee (FTEC) at NUS Graduate School for Integrative Sciences and Engineering, 2009-
41. Professorial Faculty Promotion and Tenure Committee (FPTC) member. National University Health System (2009-2012; 01 July 2014 to 30 June 2015; 1 July 2015 to 30 June 2017)
42. **Member, NGS Review Panel for Faculty Membership, NUS, 2009-**
43. **Scientific Advisory Board member, Hong Kong University's Strategic Research Theme of Biomedical Engineering, 2009**
44. Member, Research Committee of Department of Physiology, NUS (2008-2011)
45. **Scientific Advisory Board member, REGEA Institute of Regenerative Medicine, Tampere, Finland (2008-2010)**
46. Technical Advisor, (2008-2014) Confocal Microscopy Facility, Biopolis Shared Facility, A*STAR
47. Member of User Committee, BRC, A*STAR (2008-)
48. Associate Professorial Faculty Promotion and Tenure Committee (APFPTC) member. National University of Singapore (2007-2009)
49. Executive-Committee member, Graduate Program in Bioengineering (GPBE), NUS Graduate School of Integrative Sciences and Engineering, National University of Singapore (2005-2006) (http://gpbe.nus.edu.sg)
50. **Founding Co-chair, The NUS Graduate Program in Bioengineering (GPBE), National University of Singapore (2001-2005)**
51. **Deputy Program Co-Chair and Graduate Committee Chair, Computational and Systems Biology Program (2005-2012), Singapore-MIT Alliance (SMA); Acting Co-Chair, 1st April – 31 December 2008.**
52. Scientific Advisory Board member (2004-2014), CyGenics Ltd (Cordlife Pte Ltd, Singapore, http://www.cordlife.com/), Australia (http://www.cygenics.com)
53. Biopolis Shared Facility Main Committee member (2003-2004)
54. Member, Medical Faculty Research Taskforce, December 2003-2009

55. Member, Medical Faculty Research Committee (MFRC), Yong Loo Lin School of Medicine, National University of Singapore, October 2001-Present
**56. Singapore Bio-Imaging Consortium Steering committee, March 2005-2007**
**57. Vice-Chair, Scientific Advisory Board, Singapore-University of Washington Alliance (SUWA) in Bioengineering, 1st November 2003 - 31 December 2008**
58. Member of Organizing Committee of the Singapore National Academy of Science (SNAS) (2005)Young Scientist Award
59. Member, Bioimaging Task Force leading to the establishment of Singapore Bioimaging Consortium, (2004) A*STAR, Singapore
60. Member of Research Taskforce Workgroup (2004-2006) Faculty of Medicine, NUS, Singapore
61. Officer In-Charge for BMRC 3rd Grant Call Review Evaluation, Singapore (2004)
62. Member of the management committee for NUS Tissue Engineering Program (NUSTEP) (2003) Singapore
63. Non-executive Director (2001-2004), Cordlife Pte Ltd, Singapore
64. Advisor, Technical Advisory Panel (2000-2002) Diploma in Life Science, School of Applied Sciences, Temasek Polytechnic, Singapore
65. Member, Expert Panel for the Human Stem Cell Research Sub-committee of the Bio-ethics Advisory Committee to Singapore government (2001) Singapore
66. Member, President's Life Science Commission, (2000) National University Of Singapore
67. Faculty of Medicine Coordinator, Bioengineering Initiative (Postgraduate Program) (2000-2001) National University of Singapore
68. Biopolis planning committee, Agency for Science, Technology and Research (2000-2001)

**Conference organization**

1. Member, MPS2025 World Summit Scientific Program Committee, 2023-2025
2. Session Chair, "Mechanobiology of Cancer " session, conference "From Molecules to Organs: The Mechanobiology of Morphogenesis", online, 28-30 October 2020
3. Promotion Committee, MicroTAS2020, online, 4-9 October 2020
4. Moderator, Session 6E: "Bionanotechnology", 9thWACBE World Congress on Biomedical Engineering (WACBE 2019), Taipei, Taiwan, 16-19 August 2019
5. Special Guest at Panel Discussion, Conference on Definitions in Biomaterials 2018, Chengdu, China, 11-12 June 2018
6. Organizer, Workshop on 'A Critical Assessment of Determinism in Physics and Biology', Singapore, 7 May 2018
7. Session chair, 2nd International Workshop on Molecular, Cell, Tissue Mechanobiology, China, 6-7 November 2017
8. Member, Technical Program Committee (TPC), 5th Nano Today Conference, Hawaii, 6-10 December 2017
9. Member, Technical Program Committee (TPC), MicroTAS 2017, the 21st International Conference on Miniaturized Systems for Chemistry and Life Sciences, Savannah, Georgia, USA, 22-26 October 2017

10. Member, Scientific Advisory Committee (SAC) for TERMIS-AP Annual Conference, Nantong, China, 21-24 September 2017
11. Technical Program Committee, The 7th International Multidisciplinary Conference on Optofluidics (Optofluidics 2017), Singapore, 25-28 July 2017
12. Scientific Advisory Committee (SAC) Member, TERMIS-AM Annual Conference, Charlotte, NC, USA, 3-6 December 2017
13. Session Chair, Mechanobiology of cells on biomaterials, 10th World Biomaterials Congress (WBC2016), Montreal, Canada, 17-22 May 2016
14. Technical Program Committee (TPC) member, MicroTAS 2016, the 20th International Conference on Miniaturized Systems for Chemistry and Life Sciences, Dublin, Ireland, 9-13 October 2016
15. Member, Scientific Committee, International Conference of Microfluidics, Nanofluidics and Lab-on-a-Chip, Dalian, China, 10-12 June 2016
16. Plenary lecture 2 Chair, 7th WACBE World Congress on Bioengineering (WACBE2015), Singapore, 6-8 July 2015
17. International Advisory Board member, Tissue Engineering and Regenerative Medicine International Society-Asia-Pacific (TERMIS-AP) 2016 meeting, Taipei, Taiwan, 3-6 September 2016
18. Technical Program Committee (TPC) member, MicroTAS 2015, Seoul, Korea, 25-29 October 2015
19. Session Chair, Daily Oral Session 3: Advances in Polymeric Biomaterials (3), The 5th Asian Biomaterials Congress (ABMC5), Taipei, Taiwan, 6-9 May 2015
20. Session Chair, Student Oral Competition: Biomaterials for Tissue Engineering, The 5th Asian Biomaterials Congress (ABMC5), Taipei, Taiwan, 6-9 May 2015
21. Session Chair, 3rd Session: Reconstitution of cell dynamics or biomolecular networks in vitro/in silico, A*STAR-JST Joint Workshop, 12 January 2015
22. Member, Organizing Committee, The 1st International Workshop on Multiscale Mechanobiology (IWMM 2014), Hong Kong, 15-18 May 2014
23. Member, International Advisory Board of organization committee, 2013 Annual Meeting of the Asia Pacific Chapter of the Tissue Engineering and Regenerative Medicine International Society (TERMIS), Shanghai, China, 23-26 October 2013
24. Member, International Advisory Board, The European Chapter Meeting of the Tissue Engineering and Regenerative Medicine International Society (TERMIS-EU 2013), Istanbul, Turkey, 17-20 June 2013.
25. Session Chairman, Session Topic: Congress Plenary II – Research, APASL Liver Week 2013, 6-10 June 2013.
26. Session Chair, Session 2 Bioengineering & Cell Physio, Models of Physiology and Disease Symposium, Singapore, 27-28 September 2012
27. Scientific Committee Member, APASL 2013
28. Scientific Advisory Board member, The 4th International Conference on The Development of Biomedical Engineering, Ho Chi Minh City, Vietnam, 8-12 January 2012.
29. Session Co-chair, Session 1.12 Liver, TERMIS AP 2011, Singapore, 3-5 August 2011
30. Chair of Symposium entitled “Biomaterials and Mechanobiology for Complex Tissues”, participation in establishing scientific program, and take part in

reviewing the abstracts submitted to symposium, 9th World Biomaterials Congress, Chengdu, China, 1-5 June 2012

31. Session chair, Cell Fate Signalling in Health and Disease 2nd Mini Symposium, Singapore, 3 March 2011
32. Session chair, 2nd Asian Biomaterials Congress, Session 13 – Nanoparticles for Cancer Treatment, Singapore, 26 – 27 June 2009
33. Session chair, 2nd Asian Biomaterials Congress, Session 16 – Advanced Biomaterials Engineering, Singapore, 26 – 27 June 2009
34. Session Chair, Session 5: Tissue Mechanics, 2nd Mechanobiology Workshop 2008, 5 November 2008.
35. Session Co-chair, BIT's 6th Annual Congress of International Drug Discovery Science and Technology (IDDST), Session 8: Hepatology and Drug Discovery, 18-22 October 2008, Beijing, China (2008)
36. Advisory Board member, Biomaterials Asia, 5-8 April 2009, Hong Kong. (2008-2009)
37. Workshops for Institute for the Future (IFTF), July 24 2008
38. Member, Scientific Advisory Board, BIT Life Sciences' 1st Annual World Congress of Regenerative Medicine & Stem Cell (RMSC-2008), Guangzhou, China, 2-4 December 2008 (http://www.bitlifesciences.com/rmsc2008/index.htm)
39. Symposium Co-Chair, International Conference of Materials for Advanced Technologies (ICMAT 2009), Symposium A: Advanced Biomaterials and Tissue Engineering, Singapore
40. International advisory committee member & Session Chair, the International Conference On Advances in Bioresorbable Biomaterials for Tissue Engineering - from Research to Clinical Applications. 5-6 January 2008, Marina Mandarin Hotel, Singapore
41. Member, local organization committee & chair of the "Cell and Tissue Engineering I" session, the 3rd International Conference on Bioengineering and Nanotechnology, 12-15th August, Singapore
42. International Academic Committee member, 1st international symposium on surface and interface of biomaterials, Chengdu, China, 5-7 October 2007
43. Co-organizer, EMBO World Workshop on Electron Microscopy in Cell Biology, 20 June-1st July 2007, Singapore
44. Session chair, 9th International Conference on Optics Within Life Science (OWLS9), National Yang-Ming University, Taipei, Taiwan, 26-29 November, 2006
45. Chair/co-chair, ICMAT 2005 Symposium A: Advanced Biomaterials, Singapore, July 4-8, 2005
46. Chairman for Session of Cell, Tissue and Implant Engineering I, The First International SBE Conference on Bioengineering and Nanotechnology (ICBN), Biopolis, September 27-29, 2004
47. Co-chair, 4th BMRC Symposium on Tissue Engineering, 29/06/2004, Theaterette 4, Matrix, Biopolis, Singapore
48. Co-organizer, IBE-EMBO Practical Course on Investigation of Live Specimens by Modern Optical Methods, 11-31/4/2003, Singapore

49. International Advisory Committee member (2003) Multi-Dimensional Microscopy, Wuhan, China
50. Session co-chair, Liver and Pancreas section, Tissue Engineering Society International Annual Meeting, Orlando, Florida, USA, December 10-13, 2003
51. Scientific Program Sub-Committee Member (2002) Biomedical & Biotechnica Asia (Economic Development Board/Agency for Science, Technology and Research of Singapore government)
52. International Organization Committee member (2002) Multi-Dimensional Microscopy and Cell-Tissue Engineering, Guangzhou, China
53. Member, international advisory committee, Conference on Multidimensional Microscopy (MDM2001) (25-28 November 2001) Melbourne, Australia
54. Organization committee member, Biomaterials & Tissue Engineering symposium, International conference on materials for advanced technologies (July 2001) Singapore
55. Session Chair, 10th international conference on biomedical engineering (2000) Singapore
56. Co-Session Chair, 34th Singapore-Malaysia Congress of Medicine/Combined Hospitals Medical & Dental Scientific Meeting: "Tissue Engineering", (August 2000) Singapore
57. Organizer (1999) First Asia-Pacific Symposium on Confocal Microscopy & Related Technologies (SCMRT)
58. Organizer (1999) Confocal Day: Workshop On Confocal Microscopy
59. Symposium Chair (1999) Tissue Engineering symposium, National University Hospital , 3rd Annual Scientific Meeting, Singapore

**Reviewers and examiners**

1. Reviewer, Tsinghua Shenzhen International Graduate School, faculty promotion candidate, Dr. LIAO Ran, who was recommended as a Tenured Associate Professor, 2024
2. Examiner, doctoral candidate Novrynda Eko Satriawan, Universitas Indonesia, 2024
3. External Reviewer, Promotion of Dr. Yunfang Wang to Tenured Full Professorship, School of Medicine Tsinghua University, 2022
4. Assessor, Dutch Research Council, research proposal entitled: 'Communication is key! - Unravelling organoid cell fate decisions to drive liver tissue engineering', The Netherlands. (2021)
5. Reviewer, Letter of Intent (LOI) review panel, Biomedical Engineering Programme (Run 2, FY2021) (2021)
6. Tsinghua Shenzhen International Graduate School (Tsinghua SIGS) – Faculty Candidate External Review for Dr. Tingrui Pan (2020)
7. Grant Reviewer, NUHS-NHIC Joint MedTech Grant, National University Health System, Singapore (2019)
8. Scientific Reviewer, The 16th SMART Grant Cycle for ING-000158, Innovation Centre of the Singapore-MIT Alliance for Research and Technology (SMART Innovation Centre), Singapore (2018)

9. External examiner for Madhura Satish Bhave, PhD candidate. “Bacteria-Mediated Anti-Cancer Therapy.” Nanyang Technological University, Singapore. (2018)
10. Judge for WSPC-ICAAS the Most Outstanding Junior College Science Student Award & SIYSS 2018, Singapore. (2018)
11. Grant Reviewer, Cancer Research Wales, project titled “Identification of Molecular Pathways and Therapeutic Opportunities in Axin-1-deficient Hepatocellular Carcinoma”, United Kingdom (2018)
12. Reviewer, NUHS Joint Grant Call FY17, Singapore (2017)
13. Reviewer, Singapore Ministry of Education Translational R&D and Innovation Fund (TIF),"Development of Nanofiber infused Complex Resistance Accelerator chip for Cancer". (2017)
14. Member of the Department Evaluation Committee (DEC) for Promotion and Tenure of A/P Ganaganor Visweswara Shivashankar (Department of Biological Sciences) to Professor (2017) NUS, Singapore
15. Reviewer, NMRC grant applications, Singapore (2017)
16. Reviewer, NTU Integrated Medical, Biological and Environmental Life Sciences (NIMBELS) grant call 2016 (2016)
17. Reviewer, MOE Tier 1 FRC FY2016 (1st Call) and (2nd Call), NUHS, Singapore. (2016)
18. Reviewer, ARC 01/2017 MOE Tier 2, Biomedical Engineering & Life Sciences (BELS) cluster, (2016)
19. External Examiner for Padmaja Anand, PhD candidate. “Development of a FRET-Based in Vitro 3D Breast Tumor Model and its Application in Evaluation of Drug-Induced Apoptotic Effects.” National University of Singapore, Singapore. (2016)
20. Ad-hoc grant reviewer for SingHealth Foundation (SHF) Research Grant, Singapore. (2015, 2016)
21. External examiner for Liu Xiaofeng, PhD candidate. “Study diabetes-related endothelial cell dysfunction in a hemodynamic microfluidic system.” Nanyang Technological University, Singapore. (2015)
22. Reviewer, A*STAR-P&G Joint Grant Call, Singapore. (2015)
23. Member of NUHS Bench to Bedside and Bench to Bedside to Product Grant review panel, NUHS, Singapore. (2015)
24. Reviewer, MOE Tier 1 FRC FY2015 (1st Call), NUHS, Singapore. (2015)
25. Member of local review panel, 3rd joint grant call between A*STAR and the Japan Science and Technology Agency (JST), Singapore. (2015)
26. External examiner for Tan Mei Hua, PhD candidate. “Regulation of differentiation by RhoGTPases in mouse embryonic stem cells.” Nanyang Technological University, Singapore. (2014)
27. External examiner for Liu Xiaofeng, PhD candidate. “Study the diabetes-related endothelial cell dysfunction in a hemodynamic microfluidic system.” Nanyang Technological University, Singapore. (2014)
28. Reviewer, Singapore Ministry of Education-National Research Foundation Translational R&D and Innovation Fund (TIF),"Developing a high throughput screening platform for stem cell potency" (2014)

29. External Assessor for Promotion to the Post of Professor in Universiti Kebangsaan Malaysia – Associate Professor Dr. Zaiton Binti Zakaria, 2013
30. Reviewer, MOE AcRF T1 Proposal, "Characterization and drug target validation of S1P receptors in multiple myeloma" by Dr Deron Raymond Herr, (2013)
31. Science peer reviewer for the 2013 science investment round currently underway, "Milk Concentration" by Dr Cather Simpson, New Zealand Ministry of Business, Innovation, and Employment (MBIE) (2013)
32. External reviewer for the project proposal (Ref: ITS/129/13) under the Innovation and Technology Support Programme (ITSP), research proposal "Automated High-throughput, Low-cost, On-chip Vertebrate Screening Systems Based on Digitals", Innovation and Technology Commission, Hong Kong SAR Government, 2013
33. Reviewer for research proposal for innovative funding programme called "Gravitation", Dutch Research Council (NWO), (2013)
34. Reviewer of selected white papers submitted for Track A of the 9th call-for-proposal for NRF's Competitive Research Programme (CRP), (2012)
35. External Assessor for Promotion to the Post of Associate Professor in Universiti Kebangsaan Malaysia – Dr. Chua Kien Hui. 2012
36. External Examiner for Miss Wong Mei Yi, MPhil candidate. "Improving engraftment of hMSCs after collagen encapsulation: in vitro and in vivo studies". The University of Hong Kong, Faculty of Engineering. 2011
37. Panel of reviewers for National YSA award, in Biological & Biomedical Sciences category, administered by the Singapore National Academy of Sciences and supported by the Agency for Science, Technology and Research
38. External reviewer for Innovation and Technology Commission (ITC), a funding agency for applied research of the Government of the Hong Kong Special Administrative Region (2010)
39. Reviewer for applicants for short-term fellowships for the Human Frontier Science Program (HFSP) (2009)
40. Judge for "Pitch for Funds" Round, Clinician Scientist Unit (CSU), a unit with the NUHS Leadership in Academic Medicine (NLAM) Program, 20 May 2009
41. External assessor for tenure appointment for Dr. B.P. Chan, Assistant Professor, Department of Mechanical Engineering, University of Hong Kong. (2009)
42. A*Star Talent Search Award Committee Member, organized jointly by A*Star and the Singapore Science Center (2008-2009; 2009-2010)
43. External Examiner for Mr. Au-yeung Kwan Lok, MPhil candidate. "Effect of cyclic compressive loading on human mesenchymal stem cells (hMSCs) seeded in type I collagen matrix". The University of Hong Kong, Faculty of Engineering. 2008
44. Guest reviewer for the Bioethics Advisory Committee (2007) Singapore
45. Guest reviewer for NMRC IRG proposals & Ad Hoc panel member (2007) Singapore
46. Guest reviewer for the Academic Research Fund, Ministry of Education (2007)
47. External Examiner for Miss Hui Ting Yan, MPhil candidate. "In vitro chondrogenesis of human mesendrymal stem cells in collagen hydrogels." The University of Hong Kong, Faculty of Engineering.

48. Reviewer of the "World Premier International Research Center (WPI) Initiative" center proposals to the Japanese Ministry of Education, Culture, Sports, Science and Technology (MEXT) (2007)
49. Internal Examiners in Physiology, First Professional B.D.S. & M.B.B.S Examinations (2002- ) Singapore
50. Guest Local Review Panel member, Biomedical Research Council, Agency for Science, Technology and Research of Singapore government, (2001- ) Singapore
51. Grant Reviewer, MFRC (Medical Faculty Research Committee), FRC Grant; Grant Reviewer, BSF (United States-Israel Binational Science Foundation) for Research Proposal, January 2004 – 31st May 2009
52. University Research Committee (URC) Evaluation Panel for Biomedical Engineering and Biomedical Sciences, 11/2006-2008, NUS, Singapore
53. Member of the National Science Talent Search (NSTS) Award Committee (2004 & 2005) Singapore Science Centre
54. Member of Department Evaluation Committee (Department of Physiology) for tenure appointment (2006) NUS, Singapore
55. University Research Committee (URC) Evaluation Panel for Sciences, 1/7/2003-2006, NUS, Singapore
56. Judge, Pitch for Funds Round organized by Clinical Scientist Unit, NUS Leadership for Academic Medicine Program, April 2006, Singapore
57. Member of Department Evaluation Committee for Promotion (Dept of Physiology) to Full Professor, (2005) NUS, Singapore
58. Reviewer, Training Fellowship application for Wellcome Trust, February (2005), United Kingdom
59. Assessor for Singapore Bioimaging Consortium, Recruitment of Group Leader candidates, Biomedical Research Council (BMRC), Feb-Mar 2005, Matrix, Biopolis, Singapore
60. Nomination to Expert Panel for Academic Research Fund Committee, Ministry of Education, (22/4/2005; declined) Singapore
61. Panel Interviewer, A*STAR NSS (PhD) Scholarship, June 9, 2005, Singapore
62. Reviewer, IES publication award papers (student category) (September 2004)
63. Member of the Department Evaluation Committee (DEC) for Promotion and Tenure (Dept of Otolaryngology) to Research Associate Professor (2004) NUS, Singapore
64. Reviewer, National Technology Award, A*STAR (2004) Singapore
65. External examiner for Diploma in biotechnology (2001-2003) Temasek Polytechnic, Singapore (http://www-as.tp.edu.sg/)
66. Grant Reviewer: National Medical Research Council (Singapore), Biomedical Research Council (Singapore) & Human Frontier Science Program (HFSP) Strasbourg, France
67. Reviewer for 30 journals: “Biomaterials”, “Tissue Engineering”, “Journal of Cell Biology”, “Biotechnology and Bioengineering”, “Angewandte Chemie, Intl ed.”, “Analytica Chimica Acta”, “Materials Science and Engineering: C”, “HFSP Journal”, “Acta Biometerialia”, “European Surgical Research”, “Journal of Biomedical Materials Research Part B – Applied Biomaterials”, “Journal of Biomedical Materials Part A”, “Lab on a Chip”, “Experimental Cell Research”,

"Chemical Engineering and Processing", "Chemical Engineering Research and Design", "Nanobiotechnology", "Microfluidics and Nanofluidics", "Journal of Biomedical Engineering and Technology", "Journal of Biomedical Optics", "PLoS One", "Nanomedicine", "International Journal of Cancer", "Biomicrofluidics", "Advanced Drug Delivery Reviews", "Annals of Biomedical Engineering", "Journal of Cellular and Molecular Medicine", "Hepatology", "Nature Biotechnology", and "Biomaterials Science".

**Others activities**

1. Featured in Faces of A*STAR https://www.a-star.edu.sg/News/faces-of-a-star/faces/faces/biology-and-engineering-crossing-all-borders, 9 March 2022, "Biology and Engineering: Crossing All Borders".
2. Featured in The Straits Times, 8 June 2021, "Scientists from Singapore-MIT alliance develop more precise method to detect Sars-CoV-2".
3. Radio interview for SMART CAMP launch on Channel News Asia CNA 93.8FM, Mediacorp Radio, 25 July 2019
4. Featured in MediCine - Issue 26 / May 2018, 25 April 2018, "Recreating Liver Tumours as Organoids for Faster, More Accurate Drug Screening".
5. Featured in Physiology Newsletter – Issue: January – March 2018, 16 April 2018, "Lab-grown liver tumours help Singapore scientists to develop anti-cancer drugs".
6. Featured in The Straits Times, 28 February 2018, "Lab-grown liver tumours help Singapore scientists to develop anti-cancer drugs".
7. Featured in The Straits Times, 3 February 2016, "InvitroCue takes tech licensed from A*Star to market".
8. Featured in Evidence+, No. 10 July 2015, a quarterly publication of the NUHS
9. Featured in Hepatology Digest for APASL 2010, Beijing, China
10. Mentor for National Science Scholars in Biomedical Sciences, Agency for Science, Technology and Research of Singapore government (2001-, http://scholarships.a-star.edu.sg/)
11. Mentor & institution representative (1999- ) Science Research Program (SRP) for Junior College Students, Ministry of Education (Gifted Education Branch)-NUS, Singapore
12. Interview by Finnish Broadcasting Company on air 13th March 2007, Tampere, Finland
13. Invited official visit to research institutions in France organized by French Embassy. November 21-28, 2004
14. Chair and judge, Presentation session for the 1st BMRC Postdoctoral Retreat, 26-27/07/2004 (declined)
15. Industrial supervisor (1999–2004) Student Internship Program (SIP), Temasek Polytechnic
16. Industrial supervisor (1998–2004) Final Year Project (FYP), Temasek Polytechnic
17. Mentor (2000-2004) Work Experience Program, Raffles Girls' School, Singapore

18. BIO2003 EDB/A*STAR/Contact Singapore recruitment tours, June 2003, Washington DC and San Francisco, USA
19. Industrial supervisor (2000-2001) Industrial Training Program (ITP), Singapore Polytechnic
20. Radio interview with "Living Room" and "People Passion" on NewsRadio 93.8FM, Mediacorp Radio
21. Research highlights on NUS Research Gallery

**TEACHING AND EDUCATIONAL SERVICES**

1. Lecturer, BN5303 Tissue Engineering for Designing Food, AY2022/2023 Semester 2, AY2023/2024 Semester 2
2. Lecturer, BN4303 Tissue Engineering for Designing Food, AY2022/2023 Semester 2, AY2023/2024 Semester 2
3. Lecturer, GS6883B Journal Club, AY2022/2023 Semester 1,
4. Lecturer, MB5104: An Integrative Approach to Understand Cell Function, AY2019/2020 Semester 1.
5. Guest Lecturer, DBS Summer Workshop "Chemistry of Life", 15 July – 2 August 2019
6. Module Coordinator and Lecturer, NST2036 Creating Wolverine in Real Life, AY2022/2023 Semester 2, AY2023/2024 Semester 2
7. Module Coordinator and Lecturer, UBM2202 Creating Wolverine in Real Life, AY2017/2018 Semester 2, AY2018/2019 Semester 1 and 2, AY2019/2020 Semester 1 and 2, AY2020/2021 Semester 1 and 2, AY2021/AY2022 Semester 2
8. Guest Lecturer, CS6221 MODELING AND ANALYSIS TECHNIQUES IN SYSTEMS BIOLOGY, 7 November 2014
9. MB5103, Lecturer 2011/2012 Semester 2, 2013/2014 Semester 1, 2014/2015 Semester 1
10. GS5002 Academic Professional Skills and Techniques, AY2011/2012 Semester 2, AY2012/2013 Semester 2, AY2014/2015 Semester 1, AY2015/2016 Semester 1, AY2016/2017 Semester 1, AY2017/2018 Semester 1, AY2018/2019 Semester 1, AY2019/2020 Semester 1, AY2020/2021 Semester 1, AY2021/2022 Semester1
11. BN4301 Principle of Tissue Engineering, Guest Lecturer, 2010/2011 Semester 1, 12 October 2010
12. MB5101 The Cell as a Machine, Lecturer and Coordinator, 2009/2010 Semester 1 - present
13. Guest Lecturer, Cytoskeleton and traffic, IM6002 Membrane Biology course, IMCB, 26 August 2009
14. SMA5301, Computational and Systems Biology, NUS, 29 June 2009
15. Guest Lecturer, CS6280 Computational Systems Biology, NUS, 7 October 2008
16. BN5104, Quantitative Physiology Principles in Bioengineering, 2008/2009 Semester 1; 2009/2010 Semester 1.
17. SMA5304, Biomedical Information Technology, SMA, 2.771J, 20.453J, HST.958J, SMA5304, fall 2008 and fall 2009.
18. MDG5101, Advanced Cell Biology, for first year graduate students, 2001-Present

19. BN5104, Coordinator, Quantitative Physiology Principles in Bioengineering, 2003-2010
20. MD1120 Structure and Cell Biology (CB) for year 1 medical students, (M1CB), 2001-2007
21. Temasek Life Sciences Laboratory graduate cell biology course on methods in cell biology as part of the curriculum, November 24-25, 2003 on "optical microscopy for documentation" and "optical microscopy for manipulation"
22. BL5204, 2004
23. BN5203, Coordinator, Advanced Tissue Engineering, 2003-2004
24. LSM2103, Cell Biology, 2003
25. Facilitator, Problem-based learning (PBL), for year 1 medical students, 2001-2003
26. PY3101, Cell and Molecular Physiology, for year 3 science students, 2001-2003
27. PY4104, Physiology of Membrane Disorders, for year 4 science honors students, 2001-2003
28. PY4101, Research Methods in Physiology, for year 4 science honors students, 1998-2003
29. Tutor, first year dentistry, pharmacy and medical students, 2001
30. Lectures/practicals at GAME PhD Coursework 3 - Visit Confocal & Flow (CO5604 Basic Biology and Genetics)
31. Invitation lecture "Tissue Engineering: An overview" to graduate students in NUS, Faculty of Science (BL5204)
32. GEM4 Summer School on Cancer – Guest Lecture July, 2007
33. SMA 5304 – Biomedical Information Technology – Singapore-MIT Alliance course – 2007 (BE453J, 2.771J/20.453J/HST.958J, MIT course code)
34. SMA5201 – Principles of Biological Engineering – NUS-MIT Alliance course – 2007 (BE400, 7.548J, MIT course code)
35. Ph.D. thesis advisory committee member for **26** students:
    1. Boon Siew Seah, 2009-2013 (Director, Accenture, SEA)
    2. Chia-Hung Chen, 2017-
    3. Chong Seow Khoon, Mark, 2004-2008 (Senior Lecturer, NUS)
    4. Dacheng Hao, 2001-2003
    5. Darren Tan Cherng-Wen, 2006-2009 (Deputy to Head, Institute of Synthetic Bioarchitectures, Austria)
    6. Divyanshu Mishra, 2017
    7. Joshua Chin Yen Song, 2009-2013
    8. Kingshuk Poddar, 2011-2012
    9. Lanfeng Liang, 2020-
    10. Linbo Liu, 2007-2011
    11. Liu Dan, 2011-2015 (now Consultant at Deloitte)
    12. Luo Xuan, 2004-2008
    13. Ng Kian Kok, Johnson, 2003-2007
    14. Nyi Lay Maung 2004-2006
    15. Pauline Tay, 2003-2007
    16. Qie Lan, 2003-2005
    17. Rong Yan, 2003-2005

18. Seah Sock Hong, 2021-
19. Tong Guo Qing, 2002-2006
20. Tzu-Rung Huang, 2017- (Scientist, P&G)
21. Wai Yeow Lee, 2015-2018
22. Wee Ling Koh, 2013-2015 (Medical Doctor, Australia)
23. Xie Huangming, 2008-2009
24. Yian Yang, 2012-2016
25. Yong Yaw Lee, 2007-2010
26. Yue Zhang, 2017-2019

36. Ph.D. qualifying examiner for **29** students:
    1. Aishwarya Sridharan, 2010
    2. Akila Surendran, 2011
    3. Bhav Harshad Parikh, 2019
    4. Bina Rai, 2004
    5. Cenk Celik, 2017
    6. Dan Yock Young, 2008 (now Associate Professor, Medicine, NUS)
    7. Darren Tan Cherng-Wen, 2006 (Deputy to Head, Institute of Synthetic Bioarchitectures, Austria)
    8. Diana Low Hooi Ping, 2007
    9. Equeen Leung, 2007
    10. Fang Fang, 2008
    11. Feng Yu, 2006
    12. Ge Zigang, 2003
    13. Heidi Cheng Lai Ling, 2008
    14. Jagadish Sankaran, 2009
    15. Jyothsna Vasudevan, 2018
    16. Khanh P. Dang, 2009
    17. Kingshuk Poddar, 2011
    18. Min Zin Oo, 2010
    19. Nyi Lay Maung, 2004
    20. Ong Siew Min, 2006
    21. Sim Khe Guan, 2001
    22. Wu Yingnan, 2011
    23. Xie Huangming, 2007
    24. Yang Bo, 2013
    25. Yap Fung Ling, 2004
    26. Zhang Shao Chong, 2003
    27. Zhiyong Zhang, 2007 (now Associate Professor, Shanghai Jiao Tong University)
    28. Zhu Hongyuan, 2009
    29. Zhu Shiwen, 2009
37. Ph.D./MSc/MEng dissertation examiner for **13** students:
    1. Alvin Ng Yu-Jin (PhD, SMA), 2012
    2. Ashish Chetan Kalhan (PhD, Dentistry), 2019
    3. Han Bucong (PhD, SMA-CSB), 2013
    4. Lin Jian (PhD Engineering), 2012

5. Neha Bahl (PhD, SMA-CSB), 2013
6. P Jaya Kausalya (IMCB-PhD), 2005
7. Shiwen Zhu (PhD, SMA-CSB), 2015
8. Shi Yuan (PhD SMA), 2012
9. Sun Wei (PhD NGS), 2010
10. Tarun Kumar Maheshwari (MSc Dentistry), 2007
11. Tingyuan Tu (PhD MBI), 2015
12. Wai Yeow Lee (PhD, SOM), 2018
13. Wei Yung Ding (PhD MBI), 2017

38. Ph.D. qualifying examination committee chairman for **19** students:
    1. Achuth H N, Nov 2003
    2. Ashlynn Lee Lingzhi, 2010 (now Research Scientist, IBN)
    3. Baskaran Mani, 2012
    4. Bina Rai, 2006
    5. Chua Kian Ngiap, 2004
    6. Giorgiana Ribeiro Salgado, 2013
    7. Haifeng Zhang, 2001 (currently at Yale University)
    8. Jia Sun, 2007
    9. Nooshin Nourbaksh, 2020
    10. Nurual Dinah Bte Kadir, 2016
    11. Ouyang Hongwei, 2003 (now professor at Zhejiang University, China)
    12. Phoon Yee Peng, 2004
    13. Poh Chye Khoon, 2010
    14. Shuoyu Xu, 2007
    15. Sihua Huang, 2013
    16. Tianting Zhang, 2012
    17. Wai Teng Tang, 2010
    18. Ye Lei, 2002
    19. Zheng Ce, 2010
39. **64** Post-doctoral fellows or research scientists supervised/supported:
    1. Alvin Yeo Boon Keng (Exxon Mobil-NUS Research Fellow, 2007) now senior registrar at National Dental Center, Singapore
    2. **Andrew Wan (Postdoc, 1998-2000) now team leader and principal research scientist, Institute of Bioengineering and Nanotechnology, A*STAR**
    3. Anil Kumar PR (Postdoc, 2007-2008; faculty position at the Sree Chitra Tirunal Institute for Medical Sciences and Technology in India) Scientist C, Division of Implant Biology, Biomedical Technology Wing, SCTIMST, India
    4. Anju Mythreyi Raja (Lab Officer, 2010) now lecturer at Ngee Ann Polytechnic, Singapore.
    5. Ciprian Iliescu (Senior Research Scientist, 2009-2016) awarded "Valued reviewer in 2009" by Sensors and Actuators A. Now Senior Research Scientist in IMT Bucharest, Romania.
    6. Danny von Noort (Senior Research Scientist, 2006-2009) now Research Professor at Daegu Gyeongbuk Institute of Science and Technology, Korea.

7. Dean Tai (Postdoc, 2007-2010) won 2nd Runner Up S$10,000 Prize at the Start-Up@Singapore business plan competition on May 30, 2009. Awarded COT funding. Now co-founder and Chief Scientific Officer at HistoIndex.
8. Eliza Li Shan Fong (Research Fellow and Senior Tutor, 2015-2019) now Assistant Professor, Biomedical Engineering at National University of Singapore
9. Fan Lee (Postdoctoral Fellow, 2018-2019)
10. Farah Tasnim (Research Scientist, 2012-2023) now in BMS-IPO
11. Felix Margadant (Visiting Senior Fellow, 2007-2008) now senior scientist in Mechanobiology Institute, Singapore
12. Gowri Manohari Balachander (Research Fellow, 2019-2023) now faculty position in the School of Biomedical Engineering at IIT (BHU), Varanasi. Invited to talk at Olympus "Ask The Experts" webinar, entitled "Depth Does Matter: Transforming Biology for More Realistic and Meaning Pursuits", 28 July 2021
13. **Guping Tang (Research Scientist, 2003-2004) now professor of chemistry at Zhejiang University, Hangzhou, China**
14. Haobin Zhao (Research Associate, 2013) now Professor in Central China Normal University, China
15. Huan Li (Laboratory Officer, 2014 - 2016) Now Lecturer, Temasek Polytechnic.
16. Hui Hui Isabel (Research Fellow, 2012-2013) now Cofounder of Foshan, China
17. **Hwa-Leong Leo (Postdoc, 2005-2009) wef 2015 Now Tenured Associate Professor, Department of Biomedical Engineering, Faculty of Engineering, NUS, Singapore.**
18. Inn Chuan Ng (Research Fellow, 2015-2022)
19. **Jeffrey Michael Robens (Research Fellow, 2010-2012) now Editorial Development Manager, Springer Nature, Singapore. Won 1st place in 2nd MBI Microphotography Competition. Awarded Best Poster Presentation Award at NUS-Kyushu-U Joint Symposium on Biochemistry & Cell Biology, 2011. Won 1st place in 3rd MBI Microphotography Competition.**
20. Jianghang Zhu (2003-2004) now professor at the Chinese Academy of Sciences (Hsingdao, China) and Nanchang University, China
21. Jiangwa Xing (Postdoctoral Fellow, 2015-2018) now Associate Professor at Qinghai University. Awarded YSTA 2015 – Young Scientist Travel Award 2015. Awarded The 2018 LUSH Prize Young Researcher Asia (https://lushprize.org/2018-prize/2018-prize-winners/).
22. Jianxin Yao (Lab Manager, 2012-2012) now Senior Manager at NTUitive
23. Jingli Ren (Postdoc, 2006-2008) now Professor in a medical college in Henan province, China).
24. Jun Jun Fan (Research Fellow, 2013-2015) now Physician in Xijing Hospital, the Fourth Military Medical University, China
25. **Jun Li (Research Fellow, 1998-2001) now tenured full professor of** biomedical engineering, National University of Singapore

26. Karl Schumacher (Senior Research Scientist, 2004-2005) now Lead Clinical Program Leader at Novartis
27. Kartik Mitra Venkat (Research Fellow, 2024-)
28. Larry Loo Sai Weng (Research Scientist, 2020-2023) now in SIFBI A*STAR
29. Lei Xia (Research Fellow, 2009-2014) now investment manager at Zhangjiang industrial park in Shanghai
30. Lilia Kuleshova (Senior Research Fellow, 2004-2005) now in Guest Scientist at Leibniz Universität Hannover, Germany
31. Lingyu Sun (Research Fellow, 2024-)
32. Nancy Tan (Exxon Mobil-NUS Research Fellow, 2007-2008) now consultant at Gleneagles Hospital, Singapore
33. Nikhil Mittal (Postdoctoral Fellow, 2013-2016) now field application scientist of ACEA Biosciences stationed in New York
34. Ming Ni (Research Scientist, 2015-2016) now Global Development Lead at Genetech, China
35. Nobert Weber (Senior Research Scientist, 2005-2006) now Senior Scientist, Orthobiologics, Musculoskeletal Transplant Foundation in in New Jersey Center for Biomaterials, USA.
36. Nur Aida Binte Abdul Rahim (GEM4 Postdoctoral Fellow, 2008-2010) now working as field applications engineer in Luna Innovations, US
37. Paul Miller (Visiting Professor, University of Maine, USA, for sabbatical research 2007-2008)
38. Qimin Chen (Research Scientist, 2020-)
39. Roopesh Ramesh Pai (Research Fellow, 2023-2024) now Principal Scientist in India
40. Rupambika Das (Research Fellow, 2021)
41. Samuel Hsi-Chi Wang (Research Scientist, 2019-2022)
42. Sermien Chia, (SMA Research Fellow; SMA joint-postdoc, 2004-2009) Merck, Singapore
43. **Shu Wang (Senior Research Fellow, 1998-2001) now tenured full professor of biological sciences, National University of Singapore**
44. **Shuangmu Zhuo (Research Fellow, 2012-2014) now Professor at Fujian Normal University, Fuzhou, China.**
45. Sihua Huang (Research Assistant, 2015-2016) now Researcher at Mercuri Urval, Singapore
46. Tao Sun (2000-2001) – now senior lecturer, Loughborough University, UK.
47. Tianming Chen (Postdoc, 2007-2008) Associate Professor, Gasteroenterology, Nanfang Hospital, Southern Medical University, Guangzhou, China
48. **Unadkat Hemant Vijaykumar (Research Fellow, 2012-2015) now Clinical Scientist and Principal Investigator in National Dental Centre and joint position as Assistant Professor in Duke-NUS medical school.**
49. Wanxin Sun (Research Scientist, 2004-2006) now regional manager in Bruker Nano Surface Division.
50. Wenxia Zhang (Research Fellow, 2009-2011) now working as Associate Patent Examiner in IPOS

51. Wuzheng Xia (Research Fellow, 2009-2010) now in Guangdong Provincial Hospital, Guangzhou, China
52. Xiaolin Wu (Postdoctoral Associate , 2020-) won Swee Liew-Wadsworth Research Publication Awards [1 Jan 2021 – 31 Dec 2021] - Gold Award, National University of Singapore.
53. Xin Hong (Research Fellow, 2010-2014)
54. Xuejun Lao (2001-2002) now professor of surgery at Jinan University Medical School, Guangzhou, China
55. Yan Wang (Post-Doctoral Fellow, 2009-2010) now Deputy Director of Hepatobiliary Surgery in Zhujaing Hospital, Southern Medical University, China. Now Professor, Department of Hepatobiliary Surgery, Zhujiang Hospital, Southern Medical University.
56. Yan Zhou (Research Associate, 2013-2017) now Director of Vasinfuse Pte Ltd, Singapore
57. Yang Cao (Research Fellow, 2007-2008) now Senior Clinical Research Coordinator, Tan Tock Seng Hospital
58. **Yan-Ru Lou (Research Scientist, 2007-2009) now Principal Investigator and University Researcher (Academy of Finland fellow), University of Helsinki, Finland**
59. Yao Teng (Research Fellow, 2018-2021) now Senior Scientist at L'Oréal, China
60. **Yi-Chin Toh (Research Scientist, 2010-2013) now Professor, Queensland University of Technology**
61. Yong Xiao (Bioimaging Engineer, 2005-2009) now sales manager in PCO–Imaging Asia
62. Yue Wu (Research Fellow, 2023-)
63. Yuzhan Kang (Research Fellow, 2010-2014) now medical doctor in Zhujiang Hospital, China
64. Zhilian Yue (Research Scientist, 2006-2009) now Senior Researcher in Intelligent Polymer Research Institute, University of Wollongong, Australia

40. **90** Graduate students supervised/co-supervised:
    1. Abhishek Ananthanarayanan (**Ph.D.**, GPBE, NGS 2008-2013) now Assistant Vice President at Radlink
    2. Angeline Lim (M.Sc. 2000) now a research officer (RO) in DSO
    3. Anju Mythreyi Raja (**Ph.D.** 2005-2009, co-supervised) now lecturer at Ngee Ann Polytechnic, Singapore.
    4. Baixue Zheng 郑白雪 (**Ph.D.**, SMA-CSB 2006-2011, NUS President's Graduate Fellowship awardee) Now Director of Data Analysis at Genometry, Inc, Cambridge, MA, USA
    5. Balakrishnan Chakrapani Narmada (**Ph.D.**, GPBE, NGS 2008-2012) now Research Fellow in Institute of Molecular and Cell Biology, Singapore
    6. Bowen Zhu (**Ph.D.**, SOM, NUS 2015-) (co-supervisor)
    7. Bramasta Nugraha (**Ph.D.**, GPBE, NGS 2008-2012) 2nd winner for Oral Presentation Award at 3rd East Asian Pacific Student Workshop on Nano-biomedical Engineering. Won CBS2011 Travel Awards, The 29th Annual Conference of the Canadian Biomaterials Society (CBS2011). Now Senior

Scientist in Stem Cell Biology / Project Leader in Kidney Organoids for Cell Therapy Novo Nordisk, Copenhagen, Denmark.

8. Chan Way Ng (**Ph.D.**, NGS, 2012-2017) now Manager, IPI Singapore
9. Chaihoon Quek (M.Sc. 2002), a PhD student at BME, Duke University, now Managing Editor, Biomaterials
10. Chua Huey Eng (**Ph.D.**, co-supervised, SMA 2007-)
11. Chi Zhang 张弛 (**Ph.D.** NGS 2005-2009) now Research Scientist, Bosch, Singapore
12. Chiew-Yen Chua, Adeline (M.Sc. 2005) now work as Scientist in Novartis
13. Ching-Ho Wong, Stephen (**Ph.D.** 1999-2003) now working in Singapore
14. Chu-Jun Yuan 袁初军 (M.Sc. 2001-2005), currently Resident Physician at Nassau University Medical Center, USA
15. Deepak Choudhury (**Ph.D.**, GPBE, NGS, 2008-2012) won Best Oral Presentation Award for the Biomedical devices section at 4th East Asian Pacific Student Workshop on Nano-Biomedical Engineering. Title: " Fish on Chip: A Microfluidic Platform for In Vivo Drug Studies in Developing Fish Embryo". Now working as Research Scientist at SIMTech.
16. Deqiang Zhao 赵德强 (**Ph.D.** 2004-2009, co-supervised) now working in iFAST, Singapore
17. Elijah Tan Keng Foo (**Ph.D.**, NGS, 2018-2021)
18. Elisabeth Tan Li Sa (M.Sc. 2005) now Research Assistant at Duke-NUS Graduate Medical School
19. Erica Xiaoli Gou (Ph.D. candidate, NGS 2010-2012) now Regulatory Affairs Specialist, Leica Biosystems, Netherlands.
20. Fang Fang (**Ph.D.** SMA-CSB, 2006- , co-supervised)
21. Feng Wen 文峰 (**Ph.D.** 2004-2008, co-supervised) now work in Nanyang Technological University in Singapore
22. Francesca Ong Yi Teng (MEng, 2022-2023)
23. Kapish Gupta (**Ph.D.**, MBI, 2014-2019) awarded EMBO Travel Award for EMBO Workshop Membrane contact sites in health and disease, 21-25 September 2018, Switzerland. Now Postdoctoral Research Scientist at University of Pennsylvania, USA.
24. He Yuting (**Ph.D.** SMA-CSB, 2006-2010) now Director, Bracco, Italy
25. Helen Zhou Hanzhang (Ph.D. candidate, SOM, 2021-)
26. Hsien-Loong Foo, Alex (**Ph.D.** 2004-2009, co-supervised) now work in SMART
27. Huipeng Li (**Ph.D.**, SMA-CSB, 2008-2013) now working as Postdoctoral Fellow in Genome Institute of Singapore.
28. Jacky Zhao Junzhe (Graduate Student, MD-PhD, Duke-NUS, 2021-, co-supervised)
29. Jiahao Wang (Ph.D. candidate, MBI, 2018-)
30. Jianbiao Zhou (**Ph.D.**, Oncology Research Institute, 2006-2009 , co-supervised) Senior Research Scientist, NUS
31. Jiangwa Xing (**Ph.D.**, MBI, 2010-2015) now Associate Professor at Qinghai University, China
32. Jie Yan (**Ph.D.**, SMART, 2010-2015, co-supervised)

33. Jun Ni 倪军 (M.Sc. 2005-2007, co-supervised)
34. Justin Heng Kiang (M.Sc., 2007-2009) now teaching in Hwachong Institution in Singapore
35. Justinian Liu Zheng (**Ph.D.**, NGS, 2014-2018) now High Commissioner at Alibaba Group
36. Kim Whye Leong (Ph.D, MBI, 2019-2023) now Research Fellow in MBI
37. Lee-Lee Ong 王莉莉 (**Ph.D.** 2005) now as senior regulatory specialist in Health Science Authority (HSA), Singapore
38. Lei Gu 顾磊(M.Sc. 2001), now working as research associate in Philadelphia, USA
39. Lei Xia 夏磊 (**Ph.D.**, NGS 2005-2009) now a financial analyst in Shanghai
40. Leng Gek Kwang (PhD candidate, MBI, 2021-present)
41. Liang Zhu (**Ph.D.**, MBI, 2011-2015) now Project Manager, SIMTech
42. Lijuan He 何丽娟 (M.Sc. 2004-2005, NUS President Graduate Fellowship awardee) now Postdoctoral Fellow at Johns Hopkins University
43. Lijuan Shen 沈丽娟 (M.Eng. 2004, co-supervised) now in Minnesota, USA
44. Marie Beatrix Kruth (**MEng**, Engineering, 2020-2023)
45. Min Sun (**Ph.D.**, SOM, 2015-2019) now Associate Consultant
46. Mo Xuejun (**Ph.D.**, co-supervised 2007-2011)
47. Nan Ma 马楠 (**Ph.D.** 2003) now group leader in Berlin, Germany
48. Ng Inn Chuan (**Ph.D.**, NGS 2007-2014) now Research Fellow at National University of Singapore
49. Poe, Chan Po Mak (M.Sc., 2009 - 2010) now in US
50. Poh-Nee Er, Connie 余宝妮 (M.Sc. 2002) now working as Laboratory Technical Specialist, Quintiles, Japan
51. Pornteera Pawijit (**Ph.D.**, NGS, 2012-2017) now Specialist at L.E.K. Consulting
52. **Qiushi Li (Ph.D., Mechanobiology, 2010-2014) Won 2nd place in 3rd MBI Microphotography Competition. now own his own startup company in precision medicine in China.**
53. Qiwen Peng (Ph.D., SMA-CSB, 2008-2014) now working as working as Laboratory Executive, Mechanobiology Institute.
54. San-San Ng, Susanne 黄珊珊 (**Ph.D.** A*STAR Graduate Scholar 2003-2007) **now a famous writer.**
55. Ser-Mien Chia 谢思敏 (**Ph.D.** 2002) – now a senior scientist in a company in Singapore.
56. Shao Lin 邵林 (M.Sc. SMA-CSB 2005-2007) now engineer in a Singapore company
57. Shufang Zhang 张淑芳 (**Ph.D.** 2005-2009) now Associate Professor in Center for Stem Cell and Tissue Engineering, School of Medicine, Zhejiang University
58. Sihua Huang (**Ph.D.**, SMART, 2013-2014) now Researcher at Mercuri Urval, Singapore
59. Si Ke (**Ph.D.**, co-supervised 2009-2010) now Professor, Department of Optical Engineering and Basic Medical School, Zhejiang University

60. Siew-Min Ong 王秀敏 (**Ph.D.** NGS 2004-2008) now postdoc research fellow at Singapore Immunology Network, A*STAR
61. Vishnu Goutham Kota (Ph.D. candidate, Engineering, 2023-)
62. Wallace Lim Tse Loong (Ph.D. candidate, Part-time SOM, 2012-2014) now Lecturer and Course Manager at Temasek Polytechnic
63. Wang Junjie (**Ph.D.**, SMA-CSB 2007-2013) now in CTO at Shanghai Fahe Information & Technology Pte Ltd.
64. Wen Hao Tong (**Ph.D.**, NGS, 2009-2014) now Regional Venture Capital Manager, Santen
65. Xiaotao Pan 潘晓涛 (**Ph.D.** 2004-2007, co-supervised) now runs his own company in Jinghua near Shanghai, China. Conferred on 3 June 2009.
66. Xiaoyun Xu 徐晓云 (M.Sc. 2001) now working in London, Ontario, Canada
67. Xiaozhong Huang (**Ph.D.**, SOM, 2016-2021) now Research Scientist, China
68. Xin Zhang (**Ph.D.** 2005-2009, NUS President's Graduate Fellowship awardee) now in US
69. Xu Shuoyu (**Ph.D.**, co-supervised SMA 2007-2013) now runs his own company on optical medical instrument
70. Xuanming Lou (Ph.D. candidate, SOM, 2020-2024) now lecturer in SUTD
71. Yang Yu (**Ph.D.**, SoM & SMART, 2015-2019) now Scientist at Institute of Infocomm Research A*STAR. won Young Investigator Award for the 26th Conference of Asian Pacific Association for the Study of the Liver (APASL) Annual Meeting 2017 in Shanghai, China.
72. Yajuan Zhu 朱亚娟 (M.Sc. 2004-2005, NUS President's Graduate Fellowship awardee) now Senior Lecturer at SUTD, Singapore
73. **Yanan Du 杜亚男 (Ph.D. 2004-2007, NUS President's Graduate Fellowship awardee) now Professor (Principal Investigator) in Biomedical Engineering Department of Tsinghua University, China**
74. Yee-Han Tee (**Ph.D.** 2005-2011) won Best Oral Presentation Award at 1st Graduate Scientific Congress, 25 Jan 2011 and won Best Student Publication Award 2010, The 3rd Physiology Graduate Students' Symposium, 7 Jan 2011. Now Senior Research Fellow at Mechanobiology Institute, Singapore.
75. Yi Zhou (M.Eng. 2003, co-supervised) now PhD student at University of Pittsburgh, USA.
76. **Yi-Chin Toh 卓艺群 (Ph.D. A*STAR Graduate Scholar 2003-2007) now Assistant Professor, NUS**
77. Yin Lu (**Ph.D.**, co-supervised, SMA-CSB 2007-2012) now PI and Professor at Nanchang University
78. Ying Li 李颖 (**Ph.D.** 2005)
79. Yingnan Wu (M.Sc. 2005) now Research Assistant in NUSSTEP
80. Yu Fang (**Ph.D.**, AGA, 2012-2016) now Postdoctoral Fellow at SIMTech
81. Yu Haidong (**Ph.D.** GPBE, 2004-2009, co-supervised) in IMRE
82. Yu Yu (**Ph.D.**, SOM, 2011-2016) now Senior Associate, USA
83. Yue Cao (MSc, MBI, 2014-2016)
84. Yuet-Mei Khong (**Ph.D.** 2003-2008, NUS President's Graduate Fellowship awardee) now a Senior Scientist in Abott Laboratories

85. Yumeng Xu (MSc., MBI, 2018-2018) now Image Algorithm Engineer at Hikivision, China
86. Zhi-han Zhou (M.Sc. 2002) now working in Canada
87. Zhiyi Zhang (Graduate student, SOM, 2024-)
88. Zijian Chen (**Ph.D.**, Engineering, 2018-2022)
89. Ziwei Song (**Ph.D.** SOM, 2014-2018) won Best Presenter Award, IBN Research Symposium 2017, 6 July 2017; Physiology Pitch Perfect Awards 1st Runner-up, 25 May 2018
90. Zixuan Zhao (**Ph.D.**, MBI, 2018-2023) now Research Fellow in NUS

41. **47** Lab rotation graduate students trained:

1. Azita Gorji (Lab Rotation, MBI graduate student AY2013)
2. Balakrishnan Chakrapani Narmada (Lab Rotation, Graduate student AY2008)
3. Bramasta Nugraha (Lab Rotation, Graduate student AY2008)
4. Abhishek Ananthanarayanan (Lab Rotation, Graduate student AY2007)
5. Anju Mythreyi Raja (Lab Rotation, Graduate student AY2004)
6. Chan Way Ng (Lab Rotation, NGS graduate student, 2012)
7. Dasvit Shetty (Lab Rotation, MBI Graduate Student AY2017)
8. Deepak Choudhury (Lab Rotation, GPBE student, AY2008)
9. Elaine Tan (Graduate Program in Bioengineering student, 2004, NUS President Graduate Fellowship awardee)
10. Justinian Liu Zheng (Lab Rotation, NGS Graduate Student, 2013-2014)
11. Jiangwa Xing (Lab Rotation, Graduate student AY2010)
12. Jiahao Wang (Lab Rotation, MBI Graduate Student AY2018)
13. Jingwei Xiao (Lab Rotation, MBI Graduate Student AY2018)
14. Jun Ni (Lab Rotation, Graduate student AY2004)
15. Kapish Gupta (Lab Rotation, Graduate student AY2014)
16. Lan Qie (Lab Rotation, Graduate student 2003) – now PhD student at Department of Biological Science, NUS
17. Leng Gek Kwang (Lab Rotation, MBI Graduate Student AY2021)
18. Lijuan He (Lab Rotation, Graduate student 2004)
19. Min Sun (Lab Rotation, SOM Graduate student 2015)
20. Nick Sern Ooi, Brandon (Lab Rotation, Graduate student AY2004)
21. Pornteera Pawijit (Lab Rotation, NGS graduate student, 2012)
22. Pui-Ching Kong, Christie (Lab Rotation, Graduate student 2005, co-supervised)
23. Pui-Ching Kong, Christie (Lab Rotation, Graduate student AY2004)
24. Qiushi Li (Lab Rotation, Graduate student AY2009) PhD student in Centre of Mechanobiology, NUS
25. Rongbin Han (Lab Rotation, Graduate student AY2004, AY2005)
26. Seow-Khoon Chong, Mark (Lab Rotation, Graduate student 2004)
27. Shufang Zhang (Lab Rotation, Graduate student AY2004)
28. Si Ming Pang (Lab Rotation, MBI Graduate student AY2015)
29. Tianhao Mu (Lab Rotation, SOM Graduate student AY2014)
30. Wee-Jin Tan (Lab Rotation, Graduate student 2003)
31. Xia Lei (Lab Rotation, Graduate student AY2005)

32. Xiaotao Pan (Lab Rotation, Graduate student 2004)
33. Xin Zhang (Lab Rotation, Graduate student AY2004)
34. Yajuan Zhu (Lab Rotation, Graduate student 2003)
35. Yanan Du (Lab Rotation, Graduate student 2004)
36. Yanjing Liu (Lab Rotation, SOM Graduate student AY2014)
37. Yanyu Guo (Lab Rotation, MBI Graduate Student AY2021)
38. Yan Wu (Lab Rotation, MBI Graduate student AY2019)
39. You Wu (Lab Rotation, SOM Graduate student, 2011)
40. Yu Feng (Lab Rotation, Graduate student AY2004)
41. Yue Cao (Lab Rotation, Graduate student AY2014)
42. Yumeng Xu (Lab Rotation, MBI Graduate student AY2017)
43. Yuze Sun (Lab Rotation, MBI Graduate student AY2021)
44. Zhang Chi (Lab Rotation, Graduate student AY2005)
45. Zhiyi Zhang (Lab Roatation, SOM Graduate student AY2023)
46. Ziwei Song (Lab Rotation, SOM Graduate student AY2014)
47. Zixuan Zhao (Lab Rotation, MBI Graduate Student AY2018)

41. **72** Research staff supervised:
    1. Alvin Kang Chiang Huen
    2. Andrea Ho
    3. Angeline Lim
    4. Beibei Dong
    5. Beeling Ng
    6. Candy Zhuang
    7. Chin Min Toh
    8. Chittimalla Santhosh Kumar
    9. Clarissa Bernice Quah
    10. Connie Poh Nee Er
    11. Corey Bryen Lingam
    12. Delia Pang Yu Hui
    13. Derek Phan Tan Dung
    14. Eugenia Yeo Li Ling
    15. Feichin Chiew
    16. Foongyee Kuan
    17. Haiting Ho
    18. Haoyu Tang
    19. Hoe King Lim
    20. I Fon Bambang
    21. Jeanie Tan
    22. Jeff Chee Min Ten
    23. Jie Zhang
    24. Jing Zhang
    25. Jun Xie
    26. Junie H'ng
    27. Kelly Doss
    28. Koktee Toh
    29. Kongheng Lee

30. Lingyeow Ong
31. Loo Ling Tan
32. May Aung
33. Melinda Chan
34. Mihir Yogesh Naik
35. Narelle Nichola, Shen Yi Ying
36. Nisha Hari Singh
37. Nur Faezah Begum Binte Akbar Hussain
38. Pang Wan Rion Marion
39. Paochun Lin
40. Phoebe Koh Kang Sheing
41. Rashidah Binte Sakban
42. Rui Rui Jia
43. Sahara Binte Abdul Rahim
44. Saw Marlar
45. Shi Chang
46. Shobhit Sandeep Jaipurkar
47. Shujun Gao
48. Shu Ying Lee
49. Shupei Mo
50. Sibo Zhou
51. Siow Thing Teo
52. Sylvia Chew Yu Ting
53. Talha Arooz
54. Vishnu Goutham Kota
55. Waimun Poon
56. Weian Zhang
57. Xi Xu
58. Xian Hu
59. Xianwei Wang
60. Xiao Guangfa
61. Xiaoning Wang
62. Xiaoshan Min
63. Xiaoyan Jia
64. Yeeling Tan
65. Yi Zhou
66. Yier Toh
67. Yimin Lee
68. Yinghua Qu
69. Yoohyun Song
70. Yun Ting Soong
71. Zhiyi Han
72. Ziqing Zhao

42. **146** Exchange/Undergraduate/polytechnic/high school students supervised:
    1. Akid Ornob (University of Hong Kong summer internship, 2013)

2. Alex Fung (Cambridge University – St John's College Research Attachment, 2017)
3. Alexander Jeremias Odermatt (The École polytechnique fédérale de Lausanne (EPFL) internship, 2022-2023)
4. An Yee Low (RGS, intern, 2013) now medicine student at University College London
5. Anil Kumar PR (Exchange student from Trivandrum, India, 2003)
6. Ang Ming Yi (FYP, NTU-IBN, 2008)
7. Anna Linda Maria Seeman (Exchange student from Sweden, 2003)
8. Bhavik Undaka (MBI Intern, 2015)
9. Caroline Cvetkovic (IGERT International Experience Summer, University of Illinois at Urbana-Champaign, 2014)
10. Caroline Hogan (NUS Summer Undergraduate Research Program URAPS, University of California San Diego, 2019)
11. Carrie Wong (University of Hong Kong summer internship, 2005)
12. Chan Yong Sheng, Jason (Science UROP, NUS, 2004)
13. Chao Li (Science UROP, NUS, 2005)
14. Chee-Min Ten (Biomedical Science undergraduate, NUS, 2001)
15. Chin Yein Chin (Honors Year Thesis, undergraduate, NUS, 2008) now Senior Executive, NUS
16. Ching Ying Kong (Honors Year Thesis, undergraduate, NUS, 2005)
17. Christopher Hu (NUS Summer Undergraduate Research Program URAPS, University of Alberta in Canada, 2018)
18. Christopher Martinus (SPS, undergraduate, NUS, 2017-2018)
19. Chun Wu (Science UROP, NUS, 2003-2004)
20. Chun-Ning Lau (Biochemistry undergraduate, NUS, 2002)
21. Corey Bryen Lingam (Honors Year Thesis, undergraduate, NUS, 2017)
22. David Gao (High School internship, 2010)
23. Deveci Ahmet (Honors Year Thesis, undergraduate, NUS, 2005)
24. Dickson Man Dik Siu (University of Hong Kong summer internship, 2015)
25. Ducrot Aurélie Marie Lisette (Polytechnique University of Lausanne summer internship, 2018)
26. Eden Steel (NUS Summer Undergraduate Research Program URAPS, University of California Berkeley, 2019)
27. Elisabeth Tan (Final Year Project - Lee Kuan Yew award winner, Temasek Polytechnic, 2000)
28. Ethan Soh Wen Han (Honors Year Thesis, undergraduate, NUS, 2018) won EINST May 2019 calendar competition for image
29. Fang-Ying Yew (Physiology undergraduate, NUS, 2002)
30. Farhan Mohamed Navas (NUS High School, 2019-2020)
31. Foong Yew Kuan (Honors Year Thesis, undergraduate, NUS, 2005)
32. Francisca Wong Siu Yin (University of Hong Kong summer internship, 2010) now PhD student in the Hong Kong University
33. Guan Hui Tricia Lim (SMP, Raffles Girls School, 2012)
34. Guillaume Herry (Exchange student from University Paris South, 2005)
35. Hannah Chun Ha Eun (University of Hong Kong summer internship, 2018)

36. Huei-Yee Thum, Elaine (Honors Year Thesis, undergraduate, NUS, 2004)
37. Hui-Jun Lim (Raffles Girl School-Hwa Chong Junior College student 2000-2002)
38. Hui-Li Gan, Valerie (M1 UROP, NUS, 2002-)
39. Ian Chau Yin Yan (University of Hong Kong summer internship, 2010)
40. Jade Gong Chun (University of Hong Kong summer internship, 2009)
41. Jaslyn Ng Hui Shan (Honors Year Thesis, undergraduate, NUS, 2015)
42. Jeffrey Fung Hon Sing (University of Hong Kong summer internship, 2012)
43. Jia Hao Sim (Intern, Singapore Polytechnic, 2019)
44. Jiang Jia (University of California, Berkeley summer internship, 2018)
45. JieFu Zhou (SPS, undergraduate, NUS, 2017-2018)
46. Jie Liu (Science UROP, NUS, 2003)
47. Jing Yin (Science UROP, NUS, 2003-2004)
48. Joanne Lim Tze Chin (UROPS and FYP, NUS, 2018-2020)
49. Johnny Yu Hin Wong (University of Hong Kong summer internship, 2015)
50. Joshua Raymond Ng (NUS High School, 2019-2020)
51. Joseph Jo Yin Wong (University of Hong Kong summer internship, 2013)
52. Junqiang Su (Honors Year Thesis, undergraduate, NUS, 2015) now Medical Technologist, SGH
53. Justin Heng Kiang (Honors Year Thesis, undergraduate, NUS, 2006) now Hwa Chong Institution lecturer
54. Kabigting Jessica Evangeline (University of Hong Kong summer internship, 2017)
55. Kae-Siang Ngo (Science UROP, NUS, 2003) now graduate student and Research Assistant, Department of Surgery, NUS
56. Kai Doberstein (IBN Youth Research Program attachment student, Biological Chemistry, University of Applied Sciences in Mannheim,2006)
57. Kai-Bin Kuan, Kelvin (MBBS-PhD rotation, NUS, 2001-2002)
58. Kaisy Xinhong Ye (Exchange student, ANU, 2015)
59. Kaladhar Kamal Nair (Exchange student from India, 2005)
60. Kartik Mitra Venkat (Exchange PhD student, Indian Institute of Technology-Madras, 2021-2023)
61. Kimia Aboukazempouramiry (Intern, University of York in United Kingdom, 2019)
62. Lee Ying Teo (Honors Year Thesis, undergraduate, NUS, 2009) now educator, Singapore
63. Lei Zhang (Biomedical Science undergraduate, NUS, 2001, CRISP award nominee) now PhD student in Barcelona, Spain.
64. Leng Gek Kwang (Honors Year Thesis, undergraduate, NUS, 2019)
65. Leon Tang Jia Wei (UROPS, undergraduate, NUS, 2018-2019)
66. Lim Hui Yi (IBN Youth Research Program attachment student, EE/CE/BME student from Carnegie Mellon University, 2005)
67. Ling Yi Samantha Kwok (SMP, Raffles Girls School, 2012)
68. Ling-Zhi Heng (MBBS-PhD rotation, NUS, 2003-2004)
69. Liu Yang (ACSi, research attachment for SSEF, 2007-2008)
70. Luke Ooi Hao Shuan (UROPS, undergraduate, NUS, 2018)

71. Madlin Schenk (MBI Intern, 2014)
72. Mao Mao (Internship, 2011) now SMA3 student in NTU
73. Margaret Teoh (Nanyang Technological University, Final Year thesis, 2006)
74. Margaret Teoh (Nanyang Technological University, Industrial attachment, 2006)
75. Maria Zakhary (NUS Summer Undergraduate Research Program URAPS, University of Toronto in Canada, 2018)
76. Maryam Iqbal (Exchange student, Abdul Wali Khan University, 2020)
77. Matthew Christopher Lo (NUS Summer Undergraduate Research Program URAPS, University of California Berkeley, 2019)
78. Max Chen Zi (University of Hong Kong summer internship, 2009)
79. May Aung (Final Year Project – Distinction, Temasek Polytechnic, 2001)
80. Melanie Mei-Yi Wong (University of Hong Kong summer internship, 2007)
81. Melissa Tan ((UROPS, undergraduate, NUS, 2018)
82. Miaoqing Fang (Science UROP, NUS, 2004)
83. Michael Becker (Medical student from Moscow U., Duke U., 1994 finished Ph.D. from Max-Plank Institute for Biochemistry at Martinsried)
84. Michelle Ma Xuanyi (University of Hong Kong summer internship, 2011) now graduate student in UC San Diego
85. Mina Muflih Thaika (University of Hong Kong summer internship, 2013)
86. Ming-Li Ho, Joanne (SRP student, National Science Talent Search Award 2004 Grand Award winner; & Intel ISEF Biochemistry 4th Award)
87. Miranda Terwilliger (Rocky Mount High School student, Duke U., 1995 – is finishing her Ph.D. studies at the University of Alaska)
88. Murtaza Rangwalla (University of Hong Kong summer internship, 2015)
89. Nguyen Vy (University of California, Berkeley intern, 2017)
90. Nichole Tan Yue Ting (UROPS, undergraduate, NUS, 2018-2019) now Pharmacist at Khoo Teck Puat Hospital
91. Nusrat Jahan (SPS, undergraduate, NUS, 2017-2018)
92. Pan Yeung (University of Hong Kong summer internship, 2012)
93. Pao-Chun Lin (Honors Year Thesis, undergraduate, NUS, 2001-2004) now Research Scientist, BTI, Singapore.
94. Peter Woo Hon Kwan (University of Hong Kong summer internship, 2012)
95. Poe Po Mak Chan (University of Hong Kong summer internship, 2007)
96. Poh Liang Siang Suriani Bte S (Honors Year Thesis, undergraduate, NUS, 2009) now Assistant Director at TTSH
97. Qiao Wei Ngo (Honors Year Thesis, undergraduate, NUS, 2015)
98. Qiongqiong Dai (Honors Year Thesis, undergraduate, NUS, 2017)
99. Ritu Raman (IGERT International Experience Summer, University of Illinois at Urbana-Champaign, 2014)
100. Rui Wang (Exchange student, Tsinghua University, 2022)
101. Russell Tan Tian Jie (UROPS and Final Year Internship, undergraduate, NUS, 2019-2021) now Director of Operation, Ants Innovate
102. Seoh Wei Teh (Intern, International Medical University, 2015)
103. Shanshan Zhao (Intern, China Emergency General Hospital, 2022)
104. Shermaine Siew Xuemin (Intern, NTU, 2012)

105. Shimin Ong (MBBS-PhD rotation, NUS, 2003-2004)
106. Shiva Bharathi Gupta (MBI MUST summer internship, 2021)
107. Shujian Ong (UROPS and FYP, undergraduate, NUS, 2017, 2018, 2019) now Co-Founder and Director of R&D in Ants Innovate. Awarded NUS Faculty of Science Outstanding Undergraduate Researcher Prize 2019/2020 (Individual).
108. Shyam S Sivakumar (Internship, University of Pennsylvania, 2013)
109. Siddharth Uppal (FYP, Birla Institute of Technology & Science (BITS) Pilani, Pilani Campus, India, 2019)
110. Simi Elisabeth George (Final Year Project, Temasek Polytechnic, 2002)
111. Sin Hui Yeap (Honors Year Thesis, undergraduate, NUS, 2009) now Research Assistant, Dentistry, in NUS
112. Sohyun Kim (Ehwa Womans University summer internship, 2007)
113. Song-Hooi Teh (Final Year Project, Temasek Polytechnic, 2003)
114. Sylvia Chew Yu Ting (Honors Year Thesis, undergraduate, NUS, 2015)
115. Stella Xinzi Wu (Summer Internship, University of Illinois at Urbana Champaign, 2013)
116. Sze Khen Chin (Final Year Internship, 2020)
117. Tan Lizhi (IBN Youth Research Program attachment student, Biomedical Engineering student from Washington University in St Louis, 2005)
118. Tang Xin Yan (Honors Year Thesis, undergraduate, NUS, 2011) now working as Quality Development & Management, National Cancer Centre
119. Tasneem Cheytan (Honors Year Thesis, undergraduate, NUS, 2012) now graduate student at Heidelberg University
120. Tay Oon Lin Cheryl (Honors Year Thesis, undergraduate, NUS, 2006)
121. Teo Soon Hock (Honors Year Thesis, undergraduate, NUS, 2006)
122. Teo Qi-Wen, Elizabeth-Raye (NJC student, 2008)
123. Terry Lo Kwan Yau (University of Hong Kong summer internship, 2012)
124. Ting-Ting Lim, Jayne (Honors Year Thesis, undergraduate, NUS, 2002)
125. Valerie Ho (High School student, summer internship, 2013)
126. Valeria Raaft Rezk (NUS Summer Undergraduate Research Program URAPS, University of Toronto in Canada, 2018)
127. Wahyunia Likhayati Septiana (NUS Fellow, Universitas Indonesia, 2022)
128. Wen Ju Choy, Julieanne (Honors Year Thesis, undergraduate, NUS, 2005) – The Lijen Industrial Development Medal winner 2005-2006
129. Wing Tai Tung (University of Hong Kong summer internship, 2010)
130. Wuchu Fulei (The Hong Kong Polytechnic University summer internship, 2019)
131. Xiaobei Luo (Southern Medical University intern, 2012-2013)
132. Xiaojuan Khoo (Bioengineering junior, UC-Berkeley, 2002) – PhD student in Biomedical Engineering at Boston University. Now postdoctoral fellow at Langer Lab, MIT.
133. Yafang Tang (Science UROP, NUS, 2005)
134. Yan Liu (Xi'an Jiaotong University intern, 2019)
135. Yam Qiu Xia Candice (FYP, NTU-IBN, 2008)
136. Yan Xu (Exchange student, Tongji, 2023)

137. Yee-Han Tee (Honors Year Thesis, undergraduate, NUS, 2004)
138. Yeh-Xian Peh, Wendy (Honors Year Thesis, undergraduate, NUS, 2004)
139. Yi-Wei Yeo, Kirsten (M2 UROP, NUS, 2001-2003)
140. Yi Xi Kang (SMP, Raffles Girls School, 2012)
141. Yingke He (Honors Year Thesis, undergraduate, NUS, 2008) now graduate student in Duke Graduate Medical School
142. Yong-He Chong (SRP student, NSTS Award 2004 finalist)
143. Yuqi Deng (University of Hong Kong summer internship, 2013)
144. Zenan Wang (Southern Medical University intern, 2012-2013)
145. Zi-Zong Ho (Science UROP, NUS, 2003)
146. Zhe Wen (Zhejiang University FYP to MBI, NUS 2011)

43. **6** Medical student mentorship:
    1. Huang Qingyao Daniel (2005-)
    2. Tan Ziwei Joyce (2005-)
    3. Wong Shiu Hong (2002-2003)
    4. Wong Xin Hao (2002-2003)
    5. Wong Zeng Hao (2002-2003)
    6. Yap Ming Quan Wayne (2005-)
44. **25** A*STAR National Science Scholar mentorship:
    1. Weng-Si Ho (National Science Scholar, BME-Columbia U., 2002) – Senior officer at EDB Biomedical Sciences group
    2. Xin-Yi Su (National Science Scholar, Medicine- U. Cambridge, 2002)
    3. Hongye Ye (A*Star BS-PhD scholar, 2003)
    4. Jia-Nee Foo (A*Star Scholar, 2003)
    5. Jian Duan Johnathan (NSS(PhD) Scholar; Biomedical Engineering, Columbia University) (2013-)
    6. Lei Zhong (A*Star Scholar, 2003)
    7. Cheung Christine (A*Star National Science Scholar; Biomedical Engineering, Imperial College) (2004-) now working in IMCB as Junior Investigator
    8. Sia Junren (A*Star National Science Scholar; Biomedical Engineering, Duke University) (2004-)
    9. Ke Chyan Ying (Biomedical Engineering, Johns Hopkins University; chyan-ying.ke@jhu.edu) (2005-)
    10. Kuang Jinghao (A*Star National Science Scholar; Northwestern BME B.Eng; U Penn Bioengineering PhD; jinghao_kuang@scholars.a-star.edu.sg)
    11. Huang Feiyang (Biomedical Engineering, Johns Hopkins University) (2021-)
    12. Ong Qunya (Biomedical Engineering, Michigan-Ann Arbor University; Qunya_Ong@scholars.a-star.edu.sg) (2005-) now PhD student at MIT
    13. Ong Qunya (Medical Engineering (Health, Sciences and Technology), Massachusetts Institute of Technology) (2013-2018)
    14. Richie Tay Pei Kun (A*Star National Science (BS) Scholars; Biomedical Engineering, Johns Hopkins University; ) (2005-)
    15. Sun Baoluo (A*Star National Science Scholar; Biomedical Engineering; baoluo_sun@scholars.a-star.edu.sg) (2007-)

16. Tay Zhi Wei (A*Star National Science Scholar; Biomedical Engineering; (zhiwei_tay@scholars.a-star.edu.sg) (2007-)
17. Tjio Ci'en Gabriel (A*Star National Science Scholar; Biomedical Engineering; Gabriel_Tjio@scholars.a-star.edu.sg) (2007-2010) graduated from Duke. Now working at MRI lab in SBIC.
18. Rosa Yue Qi (A*Star National Science Scholar; Johns Hopkins University, BME B.Eng; Duke University BME PhD; rosa_qi@scholars.a-star.edu.sg) (2007-)
19. Lim Teck Chuan (NSS(PhD) BMRC Scholars, Massachusetts Institute of Technology, Harvard-MIT Health Science Technology (HST) program) (2008-2014) now Post-doctoral Fellow, IBN.
20. Wang Ying Min (NSS(PhD) BMRC Scholars, California Institute of Technology, Bioengineering) (2008-)
21. Shengnan Xiang (NSS(BS), Duke University, Biomedical Engineering; kpl.europa@gmail.com ) (2011-)
22. Winston Koh Lian Chye (A*STAR National Science Scholar; Bioengineering; Stanford University ; (2010-)
23. Zhang Xinglong (National Science (BS) Scholar, University of Cambridge, Natural Sciences) (2011-)
24. Pang Wan Rion Marion (National Science (BS) Scholar, John Hopkins University, Biomedical Engineering) (2017-)
25. Wang Yan (NSS (BS-PhD) Scholar, Massachusetts Institute of Technology, Biological Engineering) (2021-2025)

I have co-founded and managed 3 inter-disciplinary graduate programs (a NUS-wide Graduate Program in Bioengineering; and an international Singapore-MIT Alliance Computation & Systems Biology Program; and the Graduate Program for the Mechanobiology Institute). I have founded 4 startup companies (one is listed public company) and supported the early phase development of 2 other technical companies (one was listed public company Cordlife Pte Ltd).