

NUS FELLOWS PROGRAMME (SOUTHEAST ASIA)

List of Host PIs			
Science / Engineering / Medicine			
No.	Faculty/Institute	Professor / PI	Research Interests
1	NUS Environmental Research Institute (NERI)	Prof NG How Yong	Membrane Separation Processes, Membrane Bioreactors, Anaerobic and Aerobic Technology for Wastewater Treatment, Microbial Fuel Cells
2		Prof HU Jiangyong	Advanced Oxidation Process, Emerging Contaminants Detection and Removal, Water Disinfection Technology and Biofilm Control, Water reuse and reclamation
3		A/P Sanjay SWARUP	Metabolites biology, microbiomes in environment and agriculture, integrative systems biology
4		A/P Olivier Patrick LEFEBVRE	<ul style="list-style-type: none"> Industrial wastewater treatment Environmental electrochemistry Advanced oxidations processes Technology transfer Water reuse
5		A/P ONG Ghim Ping, Raymond	Waste Plastics Adoption in Road Materials, Sustainable and Energy Harvesting Roads, Electric and Autonomous Vehicles, Sustainable Transportation and Mobility Systems
6		A/P LAU Siu Kit, Eddie	Noise pollution, Traffic noise modelling and control, Noise mapping
7		Asst. Prof BAE Sung Woo	Ecotoxicology of microplastics in zebrafish; The relationship of antibiotics and biofilm development; Microbial ecology in natural and engineered systems
8	Mechanobiology Institute (MBI) – 1 of 2	Prof LIM Chwee Teck	Collective cell migration, Human Disease mechanobiology, Microfluidic technologies for disease detection and diagnosis, Flexible wearable Technologies for Healthcare Applications
9		A/P LOW Boon Chuan	Cell Signalling, Domain-discovery, Protein-protein Interaction, Structural Biology, Developmental Biology, Computational Biology and Mechanobiology
10		A/P Yusuke TOYAMA	Tissue dynamics, Apoptosis, Drosophila Development
11		Prof Rong LI	Cellular dynamics and mechanics, cell and tissue aging and regeneration, chromosomal biology in cellular adaptation
12		Prof Hanry YU	Cell and Tissue Engineering with a focus on innovative technologies for diagnostics, therapeutics and drug testing applications in pharmaceutical and healthcare industry
13		Prof YAN Jie	Stability and Interaction of Biomolecules under Mechanical Constraints
14		Prof Alexander BERSHADSKY	Actin Biomechanics and cell dynamics

NUS FELLOWS PROGRAMME (SOUTHEAST ASIA)

List of Host Professors / PIs			
Science / Engineering / Medicine			
No.	Faculty/Institute	Professor / PI	Research Interests
15	Mechanobiology Institute (MBI) – 2 of 2	A/P Virgile VIASNOFF	Cell-cell adhesion, microfabrication of controlled environment for cell culture, biophysics of single molecules
16		A/P Pakorn Tony KANCHANAWONG	Nanoscale Structure-Function Relationship, Super-resolution Microscopy, Cell-Matrix Interactions, Cell-Cell Interactions, Cellular Biophysics, Mechanobiology of Cell Adhesions and Cell Cortex, Computer Vision, Machine Learning, Bioimaging Technology, Bioimage Informatics
17		Asst. Prof Andrew HOLLE	Cell Migration, Stem Cell Mechanobiology, Cancer Mechanobiology
18		Asst. Prof Chii Jou (Joe) CHAN	Mammalian oogenesis, embryogenesis, tissue hydraulics, mechanochemical feedback in tissue self-organisation
19		Asst. Prof Jennifer YOUNG	Tissue nanoenvironment, biomaterials, cell-ECM interactions
20	Faculty of Science (FoS)	A/P KANG Hway Chuan	Surface Chemistry and Computational Chemistry (Silicon-germanium surfaces/interfaces, Electronic Structure and Reactivity of Nanoclusters of Pure and Mixed Transition metals, Sputtering Dynamics)
21		Prof Antonia MONTEIRO	Evolution of novel traits, evo-devo, evolution of phenotypic plasticity, and evolution of behavior, primarily using insects and butterflies as study systems.
22		A/P CHEW Fook Tim	(a) Allergens and Hypersensitivity; Epidemiology and Genetics of Asthma, Allergic Respiratory and Skin Diseases, Acne, COPD, Bronchiectasis, and Skin Ageing and Health (b) Genetics of Major Crops, Molecular Breeding/Genomic Selection and Genetic Systems in Plant and Animal Breeding, Large-Scale Plantation-wide Agri-Systems
23		Prof Thorsten WOHLAND	Single Molecule Fluorescence Spectroscopy: (a) Development of techniques (microscopy, optics); (b) Machine learning for data evaluation; (c) Measurements in cells and organisms
24		Prof Valerio SCARANI	Quantum science and technologies, foundations
25		A/P Ariando	Condensed Matter Physics, Strongly Correlated Systems, Superconductivity, Complex Oxides Heterostructures, Moire Physics and heterostructures
26		A/P WANG Zhisong	Molecular motors, DNA nanotechnology, biomedical applications

NUS FELLOWS PROGRAMME (SOUTHEAST ASIA)

List of Host Professors / PIs			
Science / Engineering / Medicine			
No.	Faculty/Institute	Professor / PI	Research Interests
27	Solar Energy Research Institute of Singapore (SERIS)	Prof Armin ABERLE	Photovoltaic materials, Crystalline Solar Cells devices and modules, CIGS Solar Cells and Modules
28	College for Design & Engineering (CDE) – 1 of 2	Prof Andrew LIM	Operations Research, Management Science, Big Data Analytics
29		Prof Philip LIU	Coastal Oceanography and Engineering (water wave theories, tsunamis dynamics, wave-breaking processes, sediment transport processes, and interactions of water waves with structures)
30		Prof Rajasekhar BALASUBRAMANIAN	Sustainable Development, Climate Change Mitigation, Urban Air Quality, Health Risk Assessment, Aerosol Science and Technology
31		A/P LAU Siu-Kit, Eddie	Environmental acoustics, Soundscape, Architecture acoustics, Mechanical Noise and Vibration Control, Human perception, Solar energy, Agrovoltatics, Educational research
32		Prof Iftekhar Abubakar KARIMI	Low-Carbon Energy Systems Modelling
33		A/P Daniel John BLACKWOOD	Aqueous corrosion
34		A/P Stefan ADAMS	Lithium- and sodium-based batteries; all-solid-state batteries; Ion transport in solids
35		A/P KOH Yee Kan	Heat Transfer, thermal comfort, thermoelectrics, radiative cooling
36		A/P CHUI Chee Kong	Medical Devices; Robotics; Imaging and Vision; Cyber-physical Systems
37		A/P OUYANG Jianyong	Flexible/wearable electronics and flexible thermoelectrics
38		Prof HU Jiangyong	Water quality, water treatment and reuse
39		Dr DU Hongjian	Advanced Manufacturing, Low-carbon Construction
40		Asst. Prof Filip BILJECKI	GIS, urban data science, artificial intelligence, urban planning, digital twins, geographic data, 3D, building information modelling
41		A/P Rudi STOUFFS	Circular economy principles applied to building design and construction, and urban and architectural planning and design for adaptation to and mitigation of climate change

NUS FELLOWS PROGRAMME (SOUTHEAST ASIA)

List of Host Professors / PIs			
Science / Engineering / Medicine			
No.	Faculty/Institute	Professor / PI	Research Interests
42	College for Design & Engineering (CDE) – 2 of 2	Asst. Prof FONG Xuanyao Kelvin	Exploratory computational devices/circuits/systems, Modeling/simulation/applications of non-volatile electronic devices, Computing machinery (neuromorphic/stochastic/Ising)
43		Asst. Prof YANG Kaidi	Intelligent Transportation Systems, Intelligent Vehicles
44		A/P HUANG Zhiwei	Biomedical Optics; Biophotonics and Bioimaging; Advanced Fibreoptic; Raman spectroscopy and imaging; Coherent Raman scattering microscopy; Label-free super-resolution microscopy and imaging; Super-deep volumetric optical bioimaging
45		Prof ZHANG YONG	Nanomedicine, Nanobiophotonics, Biomaterials
46		Asst. Prof SING Swee Leong	Additive manufacturing; 3D printing; Machine learning; Materials
47		Dr Justin YEOH	Construction Management/ Building information Modeling/ Artificial Intelligence & Machine Learning for Built Environment
48		Asst. Prof Guillaume Adrien SARTORETTI	Multi-agent systems, multi-robot systems, decentralized control, distributed learning, deep reinforcement learning, legged robots
49	Faculty of Dentistry (FoD)	Asst. Prof Gopu SRIRAM	Microfluidic and 3D Printing Technologies for applications in Pulp Regeneration, Periodontal Health, Periodontal Disease, Oral-care and Dental/ Oral/ Craniofacial Tissue Regeneration
50		A/P Vinicius ROSA	Bioactive materials, personalized dentistry/medicine, dental pulp tissue engineering, hydraulic calcium silicate cements
51		A/P Stephen HSU	caries risk assessment/prediction; oral-systemic link
52		Asst. Prof Nileshkumar DUBEY	3D Bioprinting, Electrospinning, Tissue Regeneration, Biofabrication, Drug Delivery

NUS FELLOWS PROGRAMME (SOUTHEAST ASIA)

List of Host Professors / PIs			
Science / Engineering / Medicine			
No.	Faculty/Institute	Professor / PI	Research Interests
53	Tropical Marine Science Institute (TMSI)	Prof WONG Sek Man	Molecular Biology of Plant Viruses, Discovery of New Viruses, Virus Replication and Translation Mechanisms
54		Dr Srivatsan V RAGHAVAN	Climatology, Regional Climate Modelling, Climate Change Impacts and Adaptation, Hydrology, Food Security, Climate risk assessments, Sustainability
55	Yale NUS College	A/P Michiel VAN BREUGEL	Ecology of Forests and Trees in human-modified landscapes
56	School of Computing (SoC)	Asst. Prof Umang MATHUR	Programming Languages, Formal Methods, Software Engineering
57		A/P Stephane BRESSAN	Data management, data analysis, machine learning, and their applications to mathematics, science, engineering, and environmental engineering. South-east Asian natural language processing, information retrieval, and social media and networks analysis.
58		A/P TEO Yong Meng	Parallel & distributed computing, performance modeling including simulation and AI modelling
59		Prof CHUA Tat Seng	Unstructured Multimodal Data Analytics, Multimedia and Social Media Computing, Computational Wellness and Finance, Multimedia Information Processing
60	Duke NUS Medical School	Prof Marcus ONG Eng Hock	Emergency Medicine
61		Prof TANG Shenglan	Health policy, Health Systems, Infectious Diseases, Monitoring and Evaluation, Implementation Science
62		A/P Amos LOH Hong Pheng	Clinical and translational research in paediatric solid tumours, Discovery of biomarkers for prognostication and therapeutic stratification of paediatric solid tumours
63		Prof Truls OSTBYE	Obesity and diseases of the elderly
64		A/P WONG Ting Hway	Injury outcomes in older patients. Emergency Surgery in Ageing populations
65		A/P Jayant Venkatramani IYER	Glaucoma, General Cataract & Comprehensive Ophthalmology
66		A/P LEE Jan Hau	Acute respiratory distress syndrome, paediatric critical care nutrition and severe sepsis

NUS FELLOWS PROGRAMME (SOUTHEAST ASIA)

List of Host Professors / PIs			
Science / Engineering / Medicine			
No.	Faculty/Institute	Professor / PI	Research Interests
67	Saw Swee Hock School of Public Health (SSHSPH)	A/P HSU Li Yang	Methicillin-resistant Staphylococcus aureus: Genomics and Epidemiology Bacterial antibiotic resistance: Epidemiology, Mechanisms, and Intervention
68		A/P Natasha HOWARD	Global health, Infectious disease control policy and practice, Health systems, particularly issues relevant to low and middle-income countries in Asia and the Middle East, qualitative, mixed and participatory methods.
69		A/P Yann Felix BOUCHE	Discovery and characterization of novel pathogens: genomic taxonomy and epidemiology, Human and environmental reservoirs of enteric pathogens: molecular microbial ecology, Emergence of novel pathogens: experimental evolution and evolution on human timescales
70		A/P Jeremy LIM	Global Health; Health Economics; Healthcare Services and Management; Health Systems and Policy
71		Asst. Prof Hannah CLAPHAM	Infectious disease dynamics and control, Impact of vaccination, Dengue epidemiology and control, Japanese Encephalitis epidemiology and control and Inference from serological data
72		Asst. Prof YI Siyan	Infectious diseases (HIV, sexually transmitted infections, tuberculosis, viral hepatitis), Sexual & reproductive health, Substance abuse & mental health and Harm reduction & human rights
73		Dr Kiesha PREM	Infectious disease modelling, Global Health and Health economic & policy modelling
74		Asst. Prof Jasper TROMP	Cardiovascular disease in Southeast Asia and Healthcare services & systems