

## NUS FELLOWS PROGRAMME (SOUTHEAST ASIA)

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

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15	Mechanobiology Institute (MBI) – 2 of 2	<a href="#">A/P Pakorn Tony KANCHANAWONG</a>	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
16		<a href="#">Asst. Prof Andrew HOLLE</a>	Cell Migration, Stem Cell Mechanobiology, Cancer Mechanobiology
17		<a href="#">Asst. Prof Chii Jou (Joe) CHAN</a>	Mammalian oogenesis, embryogenesis, tissue hydraulics, mechanochemical feedback in tissue self-organisation
18		<a href="#">Asst. Prof Jennifer YOUNG</a>	Tissue nanoenvironment, biomaterials, cell-ECM interactions
19	Faculty of Science (FoS)	<a href="#">A/P KANG Hway Chuan</a>	Surface Chemistry and Computational Chemistry (Silicon-germanium surfaces/interfaces, Electronic Structure and Reactivity of Nanoclusters of Pure and Mixed Transition metals, Sputtering Dynamics)
20		<a href="#">Prof Antonia MONTEIRO</a>	Evolution of novel traits, evo-devo, evolution of phenotypic plasticity, and evolution of behavior, primarily using insects and butterflies as study systems.
21		<a href="#">A/P CHEW Fook Tim</a>	(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
22		<a href="#">Prof Thorsten WOHLAND</a>	Single Molecule Fluorescence Spectroscopy: (a) Development of techniques (microscopy, optics); (b) Machine learning for data evaluation; (c) Measurements in cells and organisms
23		<a href="#">Prof Valerio SCARANI</a>	Quantum science and technologies, foundations
24		<a href="#">Prof Ariando</a>	Condensed Matter Physics, Strongly Correlated Systems, Superconductivity, Complex Oxides Heterostructures, Moire Physics and heterostructures
25		<a href="#">A/P WANG Zhisong</a>	Molecular motors, DNA nanotechnology, biomedical applications
26		<a href="#">A/P Andriwo RUSYDI</a>	Condensed matter physics (experiment & theory), photon science (from optics to x-rays), thin film growth and new technologies based on Mott-insulators
27		<a href="#">A/P Frank RHEINDT</a>	Population-genomics, phylogenomics, evolutionary biology, conservation science, ornithology, taxonomy

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28	Solar Energy Research Institute of Singapore (SERIS)	<a href="#">Prof Armin ABERLE</a>	Photovoltaic materials, Crystalline Solar Cells devices and modules, CIGS Solar Cells and Modules
29	College for Design & Engineering (CDE) – 1 of 2	<a href="#">Prof Andrew LIM</a>	Operations Research, Management Science, Big Data Analytics
30		<a href="#">Prof Philip LIU</a>	Coastal Oceanography and Engineering (water wave theories, tsunamis dynamics, wave-breaking processes, sediment transport processes, and interactions of water waves with structures)
31		<a href="#">Prof Rajasekhar BALASUBRAMANIAN</a>	Sustainable Development, Climate Change Mitigation, Urban Air Quality, Health Risk Assessment, Aerosol Science and Technology
32		<a href="#">A/P LAU Siu-Kit, Eddie</a>	Environmental acoustics, Soundscape, Architecture acoustics, Mechanical Noise and Vibration Control, Human perception, Solar energy, Agrovoltatics, Educational research
33		<a href="#">Prof Iftekhar Abubakar KARIMI</a>	Low-Carbon Energy Systems Modelling
34		<a href="#">A/P Daniel John BLACKWOOD</a>	Aqueous corrosion
35		<a href="#">A/P Stefan ADAMS</a>	Lithium- and sodium-based batteries; all-solid-state batteries; Ion transport in solids
36		<a href="#">A/P KOH Yee Kan</a>	Heat Transfer, thermal comfort, thermoelectrics, radiative cooling
37		<a href="#">A/P CHUI Chee Kong</a>	Medical Devices; Robotics; Imaging and Vision; Cyber-physical Systems
38		<a href="#">A/P OUYANG Jianyong</a>	Flexible/wearable electronics and flexible thermoelectrics
39		<a href="#">Prof HU Jiangyong</a>	Water quality, water treatment and reuse
40		<a href="#">Dr DU Hongjian</a>	Advanced Manufacturing, Low-carbon Construction
41		<a href="#">Asst. Prof Filip BILJECKI</a>	GIS, urban data science, artificial intelligence, urban planning, digital twins, geographic data, 3D, building information modelling
42		<a href="#">A/P Rudi STOUFFS</a>	Circular economy principles applied to building design and construction, and urban and architectural planning and design for adaptation to and mitigation of climate change

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43	College for Design & Engineering (CDE) – 2 of 2	<a href="#">Asst. Prof FONG Xuanyao Kelvin</a>	Exploratory computational devices/circuits/systems, Modeling/simulation/applications of non-volatile electronic devices, Computing machinery (neuromorphic/stochastic/Ising)
44		<a href="#">Asst. Prof YANG Kaidi</a>	Intelligent Transportation Systems, Intelligent Vehicles
45		<a href="#">A/P HUANG Zhiwei</a>	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
46		<a href="#">Prof ZHANG YONG</a>	Nanomedicine, Nanobiophotonics, Biomaterials
47		<a href="#">Asst. Prof SING Swee Leong</a>	Additive manufacturing; 3D printing; Machine learning; Materials
48		<a href="#">Dr Justin YEOH</a>	Construction Management/ Building information Modeling/ Artificial Intelligence & Machine Learning for Built Environment
49		<a href="#">Asst. Prof Guillaume Adrien SARTORETTI</a>	Multi-agent systems, multi-robot systems, decentralized control, distributed learning, deep reinforcement learning, legged robots
50		<a href="#">Asst. Prof YUAN Chao</a>	1. Sustainable Urban Planning 2. Future Climate Resilience 3. Multi-physics-scale Microclimate Sensing and Modelling
51		<a href="#">Asst. Prof Iris YU</a>	1. Biomass Valorization 2. Food Waste Upcycling 3. Microwave 4. Green Catalysis
52		Faculty of Dentistry (FoD)	<a href="#">Asst. Prof Gopu SRIRAM</a>
53	<a href="#">A/P Vinicius ROSA</a>		Bioactive materials, personalized dentistry/medicine, dental pulp tissue engineering, hydraulic calcium silicate cements
54	<a href="#">A/P Stephen HSU</a>		Caries risk assessment/prediction; oral-systemic link
55	<a href="#">Asst. Prof Nileshkumar DUBEY</a>		3D Bioprinting, Electrospinning, Tissue Regeneration, Biofabrication, Drug Delivery
56	Tropical Marine Science Institute (TMSI)	<a href="#">Prof WONG Sek Man</a>	Molecular Biology of Plant Viruses, Discovery of New Viruses, Virus Replication and Translation Mechanisms
57		<a href="#">Dr Srivatsan V RAGHAVAN</a>	Climatology, Regional Climate Modelling, Climate Change Impacts and Adaptation, Hydrology, Food Security, Climate risk assessments, Sustainability

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58	Yale NUS College	<a href="#">A/P Michiel VAN BREUGEL</a>	Ecology of Forests and Trees in human-modified landscapes
59	School of Computing (SoC)	<a href="#">Asst. Prof Umang MATHUR</a>	Programming Languages, Formal Methods, Software Engineering
60		<a href="#">A/P Stephane BRESSAN</a>	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.
61		<a href="#">A/P TEO Yong Meng</a>	Parallel & distributed computing, performance modeling including simulation and AI modelling
62		<a href="#">Prof CHUA Tat Seng</a>	Unstructured Multimodal Data Analytics, Multimedia and Social Media Computing, Computational Wellness and Finance, Multimedia Information Processing
63	Duke NUS Medical School – 1 of 2	<a href="#">Prof Marcus ONG Eng Hock</a>	Emergency Medicine, Prehospital Emergency Care, Health Services Research, Data Science, Artificial Intelligence, Medical Devices, Global Health
64		<a href="#">Prof WANG Linfa</a>	Emerging zoonosis and zoonotic diseases, virus host interface, novel diagnostics, vaccine and therapeutics, bat immunology and pathogen discovery
65		<a href="#">Asst. Prof OOI Yaw Shin</a>	Virus-host interactions; discovery of host factors for mosquito-borne viruses and human respiratory viruses
66		<a href="#">Assoc. Prof Ashley Lauren ST JOHN</a>	Viral immunology (Zika viruses, dengue), immune responses to respiratory viral pathogens (respiratory syncytial virus and SARS-CoV-2)
67		<a href="#">Prof Gavin SMITH</a>	Evolutionary genetics, virology, ecology, and infectious disease epidemiology
68		<a href="#">Assoc. Prof LIU Nan</a>	Health data science, AI in medicine, interpretable machine learning, explainable artificial intelligence, and biomedical engineering, with applications to a wide range of clinical domains including emergency and critical care, health service research, cardiology, and many others
69		<a href="#">Asst. Prof Rahul MALHOTRA</a>	(1) Correlates and outcomes of physical and psychosocial health of older adults; (2) Impact of caregiving on caregivers and older care recipients; (3) Health communication and Health literacy; (4) Health expectancy, for spatial and temporal comparison of population health; (5) Scale development, and/or validation of scales for older adult or caregiver outcomes.
70	<a href="#">Prof TEH Bin Tean</a>	Impact of Biodiversity, Herbal Medicine, Nutrition and Microbiome, Plant Genomics and Metabolomics	

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72	Saw Swee Hock School of Public Health (SSHSPH)	<a href="#">Asst. Prof Hannah CLAPHAM</a>	Infectious disease dynamics and control, Impact of vaccination, Dengue epidemiology and control, Japanese Encephalitis epidemiology and control and Inference from serological data
73		<a href="#">A/P HSU Li Yang</a>	Methicillin-resistant Staphylococcus aureus: Genomics and Epidemiology Bacterial antibiotic resistance: Epidemiology, Mechanisms, and Intervention
74		<a href="#">A/P Natasha HOWARD</a>	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
75		<a href="#">A/P Yann Felix BOUCHE</a>	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
76		<a href="#">A/P Jeremy LIM</a>	Global Health; Health Economics; Healthcare Services and Management; Health Systems and Policy.
77		<a href="#">Asst. Prof YI Siyan</a>	Infectious diseases (HIV, sexually transmitted infections, tuberculosis, viral hepatitis), Sexual & reproductive health, Substance abuse & mental health and Harm reduction & human rights
78		<a href="#">Dr Kiesha PREM</a>	Infectious disease modelling, Global Health and Health economic & policy modelling
79		<a href="#">Asst. Prof Jasper TROMP</a>	Cardiovascular disease in Southeast Asia and Healthcare services & systems
80	Centre for Sustainable Asian Cities (CSAC)	<a href="#">Prof HENG Chye Kiang</a>	Asian Urban Planning and Design History of Chinese Architecture and Cities