

The Singapore National Research Foundation (NRF) Fellowship Scheme is a competitive programme that seeks to attract, recruit and root outstanding young scientists from around the world to conduct independent research in Singapore.

The Singapore NRF Fellowship Scheme aims to build up a pool of bright, passionate researchers in various fields of science and technology to help us advance our scientific and technological edge.

CLASS OF 2024



Dr Alexey BERDYUGIN

National University of Singapore

Research Title : Vertical van der Waals superlattices. Quantum materials and technologies of tomorrow

Homepage :



Dr Kenneth LAY

*Agency for Science, Technology and Research (A*STAR)
Skin Research Lab*

Research Title : Going Skin-Deep: Targeting Stem Cells to Tackle Inflammatory Skin Diseases

Homepage :



Dr LEOW Wan Ru

*Agency for Science, Technology and Research (A*STAR) /
Nanyang Technological University*

Research Title : Photoelectrocatalytic:mediator strategies towards emissions-free e-refining of chemicals

Homepage :



Dr Leslie BEH

*Agency for Science, Technology and Research (A*STAR)
Institute of Molecular and Cell Biology (IMCB)*

Research Title : Mechanistic studies and applications of RNA modifications using 'designer' RNA

Homepage :



Dr Miao YU

*Nanyang Technological University
School of Chemistry, Chemical Engineering and Biotechnology*

Research Title : Molecular, structural, and functional studies of intrinsically disordered RNA-binding proteins in neurodegenerative diseases

Homepage :



Dr Mohammad SAMIZADEH NIKOOYTABALVANDANI

*Nanyang Technological University
School of Electrical and Electronic Engineering*

Research Title : Novel Extraordinary Electronic Devices for Super-fast Processing and Extreme Exchange of Data (NEED for SPEED)

Homepage :



Dr TAN Hwei Ee

*Nanyang Technological University
Lee Kong Chian School of Medicine*

Research Title : Microbes hungry for dessert: discovering gut-brain substrates that mediate craving

Homepage :



Dr TAN Yong Kiam

*Agency for Science, Technology and Research (A*STAR) /
Nanyang Technological University*

Research Title : Verifying the Verifiers: Trustworthy Proofs for Critical Computer Systems

Homepage :



Dr Timothy James STUART

*Agency for Science, Technology and Research (A*STAR)
Genome Institute of Singapore (GIS)*

Research Title : Design of synthetic DNA regulatory elements for precision gene therapy

Homepage :



Dr Xingang PAN

*Nanyang Technological University
School of Computer Science and Engineering*

Research Title : AI-Human Collaborative High-Quality 3D Content Generation

Homepage :



Dr Xinwei LI

*National University of Singapore
Department of Physics*

Research Title : Quantum-Inspired Protocols for Light Engineering of Correlated Materials

Homepage :



Dr Yi-Sheng CHEN

*Nanyang Technological University
School of Materials Science and Engineering*

Research Title : Embrittlement-tolerant alloys for safe hydrogen transmission and storage

Homepage :

CLASS OF 2023



Dr ZHANG Mengmi

*Agency for Science, Technology and Research (A*STAR)
Institute for Infocomm Research (I2R)*

Research Title : What AI cannot do but humans can: Closing gaps in visual search efficiency between AIs and humans with neuroscience-inspired approaches
Homepage : <https://www.a-star.edu.sg/cfar/about-cfar/our-team/dr-zhang-mengmi>



Dr Swapnil MISHRA

*National University of Singapore
Saw Swee Hock School of Public Health*

Research Title : Robust Bayesian inference of characterization and spread of infectious diseases by integrating genomic, serological, and epidemiological information
Homepage : <https://sph.nus.edu.sg/faculty-directory/mishra-swapnil/>



Dr YAN Chuan

*Agency for Science, Technology and Research (A*STAR)
Institute of Molecular and Cell Biology (IMCB)*

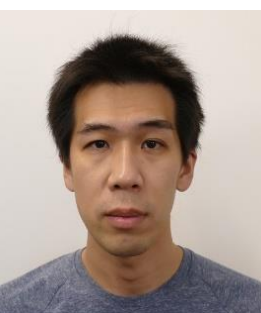
Research Title : Precision oncology approaches for hepatocellular carcinoma
Homepage : <https://www.a-star.edu.sg/imcb/imcb-research/scientific-programmes/cancer-signaling-therapies/chuan-yan>



Dr TAN Yong Zi

*National University of Singapore
Department of Biological Sciences*

Research Title : Structure-Function Understanding of Activation and Inactivation of a Bitter Taste Receptor
Homepage : <https://www.tyzlab.com/>



Dr Sho SUZUKI

*Nanyang Technological University
School of Biological Sciences*

Research Title : Investigating the molecular basis of endosomal membrane dynamics and its impact to neurodegeneration
Homepage :



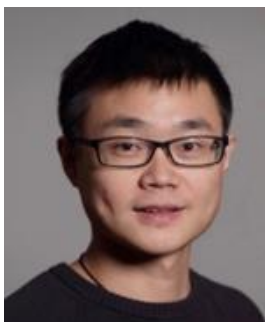
Dr HO Wen Wei

National University of Singapore

Department of Physics and the Centre for Quantum Technologies

Research Title : Non-equilibrium Many-Body Physics and Quantum Information Science
in the age of Programmable Quantum Systems

Homepage : <https://sites.google.com/view/wenweiho/bio>



Dr ZHU Di

National University of Singapore /

*Agency for Science, Technology and Research (A*STAR)*

Research Title : Developing an integrated photonic platform for scalable quantum
information processing

Homepage : <https://www.dizhulab.org/people>



Dr YANG Le

*Agency for Science, Technology and Research (A*STAR)*

Institute of Materials Research and Engineering (IMRE)

Research Title : Spinning Towards a 'Bright' Future: Energy-Harvesting with Spin-Triplet
Excitons in Luminescent Materials

Homepage :



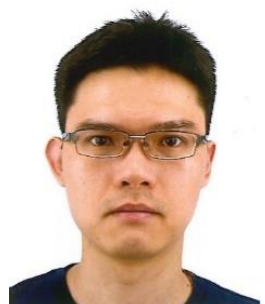
Dr Tedrick Thomas Salim LEW

National University of Singapore

Department of Chemical and Biomolecular Engineering

Research Title : Rational Design of Plant Nanotechnology: Towards Climate-Resilient
and Smart Agriculture

Homepage : <https://www.lewlab.org/>



Dr LIM Yuan Chong Jason

*Agency for Science, Technology and Research (A*STAR)*

Institute of Materials Research and Engineering (IMRE)

Research Title : ECO-Cycling: Environmentally-friendly Catalytic Oxidations for
Upcycling Waste Polyethylenes into Chemical Commodities

Homepage : <https://research.a-star.edu.sg/researcher/jason-y-c-lim/>



Dr LOW Jun Siong

*National University of Singapore /
Agency for Science, Technology and Research (A*STAR)*

Research Title : Clonal analysis of antigen-specific T and B cells in stomach cancer to
guide personalized immunotherapy and vaccine design

Homepage : <https://medicine.nus.edu.sg/mbio/about-us/our-people/academic-staff/low-jun-siong.html>

CLASS OF 2022



Dr FERNANDO Palamandadige Basura Chinath

*Agency for Science, Technology and Research (A*STAR)
Institute of High Performance Computing (IHPC)*

Research Title : Learning why do we do what we do through abductive and deductive understanding of human actions using Neurosymbolic AI

Homepage : <https://basurafernando.github.io/>



Dr Julius FREDENS

*National University of Singapore
Yong Loo Lin School of Medicine*

Research Title : Advancing DNA-Delivery for Gene Therapy

Homepage : <https://medicine.nus.edu.sg/bch/faculty/julius-fredens/>



Dr Kyle MORGAN

*Nanyang Technological University
Asian School of the Environment (ASE)*

Research Title : Back to the future: Integrating multiscale coral reef functions in Southeast Asia

Homepage : <https://earthobservatory.sg/research/climate/coral-reef-geomorphology>

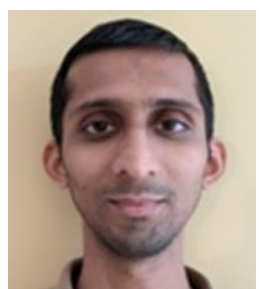


Dr LUM Yanwei

*National University of Singapore, Department of Chemical and Biomolecular Engineering /
A*STAR, Institute of Materials Research and Engineering (IMRE)*

Research Title : Developing innovative toolkits for elucidating the fundamentals of electrochemical CO₂-to-chemicals conversion

Homepage : <https://lumyanwei.wixsite.com/lumresearch/>



Dr Prashant Nalini VASUDEVAN

*National University of Singapore
Department of Computer Science*

Research Title : Fine-Grained Cryptography

Homepage : <https://www.comp.nus.edu.sg/~prashant/>



Dr Sandip BASAK

*Nanyang Technological University
School of Biological Sciences*

Research Title : Understanding the molecular mechanism of olfactory receptors in insects

Homepage : <https://www.ntu.edu.sg/sbs/research/research-directory/sandip-basak>



Dr Steven TOUZARD

*National University of Singapore
Department of Materials Science and Engineering,
Department of Physics and The Centre for Quantum Technologies*

Research Title : Building quantum networks of superconducting circuits mediated by telecom photons

Homepage : <https://twitter.com/steventouzard?lang=en>



Dr SUN Xuyang Alfred

*Duke-NUS Medical School
Neuroscience and Behavioural Disorders Programme*

Research Title : Constructing physiological human neural models to deconstruct PD pathogenesis

Homepage : <https://www.duke-nus.edu.sg/nbd/the-team/faculty-members/details/Detail/alfred-sun-xu-yang>



Dr Tong LING

*Nanyang Technological University
School of Chemical and Biomedical Engineering*

Research Title : All-optical electrophysiology: function-associated cellular deformations as intrinsic biomarkers for all-optical functional imaging at the cellular scale

Homepage : <https://www.tonglinglab.com>



Dr Ahmet AVSAR

*National University of Singapore
Department of Materials Science and Engineering*

Research Title : Unconventional Spin Transport in Layered Quantum Materials for Low-power Electronics

Homepage : <https://sites.google.com/site/aavsar>

CLASS OF 2021



Dr Andrew HOLLE

National University of Singapore

Department of Biomedical Engineering / Mechanobiology Institute

Research Title : Confinement Mechanobiology: A New Paradigm for Spatiotemporally Controlling Stem Cell Differentiation

Homepage : <https://www.mbi.nus.edu.sg/andrew-holle/>



Dr LIANG Kaicheng

*Agency for Science, Technology and Research (A*STAR)*

Institute of Bioengineering and Bioimaging (IBB)

Research Title : Comprehensive intra-operative assessment of tissue pathology in vivo and ex vivo with high-speed endoscopic microscopy and machine learning

Homepage : <https://liangresearch.com/>



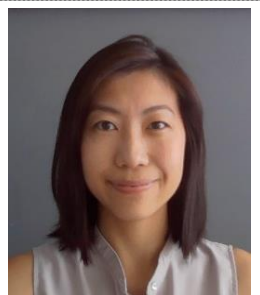
Dr WEE Lei Caroline

*Agency for Science, Technology and Research (A*STAR)*

Institute of Molecular and Cell Biology (IMCB)

Research Title : You Are What You Eat: Gene-Diet Interactions Regulating Appetite and Food Choice

Homepage : www.carolineweelab.com



Dr LUO Xinwei Sarah

*Agency for Science, Technology and Research (A*STAR)*

Institute of Molecular and Cell Biology (IMCB)

Research Title : Defining a bidirectional liver-brain axis in metabolic regulation

Homepage : <http://www.sarahluo.com/>



Dr LI Qianxiao

National University of Singapore

Department of Mathematics

Research Title : A Dynamical Systems Approach to Deep Learning and its Applications in Science

Homepage : <https://blog.nus.edu.sg/qianxiaoli/>



Dr LI Boyang

Nanyang Technological University

School of Computer Science and Engineering

Research Title : Constructing Event-level Narrative Intelligence from the Ground Up

Homepage : www.boyangli.org



Dr WANG Lei

National University of Singapore

Department of Chemical and Biomolecular Engineering

Research Title : Controlling Electrocatalytic Carbon Dioxide Reduction: Towards Sustainable Fuels and Chemicals Production

Homepage : <https://blog.nus.edu.sg/wanglab/>



Dr SHOU Zheng

National University of Singapore

Department of Electrical and Computer Engineering

Research Title : Towards Next-generation Video Intelligence: Training Machines to Understand Actions and Complex Events

Homepage : <https://sites.google.com/view/showlab>



Dr Sergey KOZLOV

National University of Singapore

Department of Chemical and Biomolecular Engineering

Research Title : Rational Design of Catalysts Enhanced by Nanoscale Metal-Oxide Interactions

Homepage : <https://blog.nus.edu.sg/compnanocat/>



Dr CHANG Guoqing

Nanyang Technological University

School of Physical and Mathematical Sciences

Research Title : Theoretical and Numerical Study of Topological Materials for Applications in Next-Generation Quantum Technologies

Homepage : <https://sites.google.com/view/guoqingchang/home>



Dr Kedar HIPPALGAONKAR

Nanyang Technological University

School of Materials Science and Engineering

Research Title : Thermoelectric Materials by Design: Understanding and Extrapolating from Non-Equilibrium Charge and Heat Transport

Homepage : <https://www.ntu.edu.sg/mse/about-us/our-people/faculty-staff/kedar>



Dr Philipp HARMS

Nanyang Technological University

School of Physical and Mathematical Sciences

Research Title : Geometry, probability, and deep learning

Homepage : <https://www.philippharms.com/>

CLASS OF 2020



Dr Pieremanuele CANEPA

*National University of Singapore
Department of Materials Science and Engineering*

Research Title : Designing Functional Interfaces of Batteries Using Theory and Computation

Homepage : <https://caneparesearch.org/>



Dr Hortense LE FERRAND

*Nanyang Technological University
School of Mechanical and Aerospace Engineering*

Research Title : Additive manufacturing of resilient, strong and functional composites through bio-inspired microstructures.

Homepage : <https://hortenseleferrand.wixsite.com/hortenseleferrand>



Dr Christopher LEE

*Nanyang Technological University
School of Electrical and Electronic Engineering*

Research Title : Development of Novel Electric Machine Systems with Gearless Structure for Emerging Applications

Homepage : <https://dr.ntu.edu.sg/cris/rp/rp00563>



Dr Yvonne GAO

*National University of Singapore
Department of Physics*

Research Title : Enabling Scalable Quantum Computation via a Programmable Quantum Router

Homepage : <https://www.physics.nus.edu.sg/faculty/yvonne-y-gao/>



Dr YANG Bo

*Nanyang Technological University
School of Physical and Mathematical Science*

Research Title : Interplay between Geometry and Topology: Effective Theories and Novel Manipulations in Low-dimensional Strongly Correlated Topological Materials

Homepage : https://research.ntu.edu.sg/expertise/academicprofile/Pages/StaffProfile.aspx?ST_EMAILID=YANG.BO&CategoryDescription=Physics



Dr QIAO Yuan

*Nanyang Technological University
School of Physical and Mathematical Science*

Research Title : A Chemical Biology Approach to Investigate the Structures and Functions of
Blood Peptidoglycan-ome in Human

Homepage : <https://www.yqiaolab.com/home>



Dr Gloryn CHIA

*National University of Singapore
Department of Pharmacy*

Research Title : Engineering Personalized Cancer Vaccines Using Pluripotent Stem Cells-
Derived Red Blood Cells As Artificial Antigen Presenting Cells

Homepage : http://pharmacy.nus.edu.sg/profile_glorynchia/



Dr Jun NISHIYAMA

*Duke-NUS Medical School
Neuroscience and Behavioural Disorders Programme*

Research Title : Decoding Protein–Protein Interactions in Single Dendritic Spines

Homepage : <https://www.duke-nus.edu.sg/directory/detail/nishiyama-jun>



Dr Perrine HAMEL

*Nanyang Technological University
Asian School of the Environment*

Research Title : Designing resilient and inclusive cities in Asia-Pacific

Homepage : <https://www.perrinehamel.com/>

CLASS OF 2019 (ARTIFICIAL INTELLIGENCE FELLOWSHIP)



Dr YAO Yingjie Angela
National University of Singapore
Department of Computer Science

Research Title : Efficient Modelling and Learning for Video Understanding
Homepage : <https://www.comp.nus.edu.sg/cs/bio/ayao/>



Dr Arnab BHATTACHARYYA
National University of Singapore
Department of Computer Science

Research Title : Efficient Algorithms with Provable Guarantees for Causal Inference
Homepage : <https://www.comp.nus.edu.sg/cs/bio/arnab/>



Dr Kuldeep S. MEEL
National University of Singapore
Department of Computer Science

Research Title : Provably Verified and Explainable Probabilistic Reasoning
Homepage : <https://www.comp.nus.edu.sg/cs/bio/meel/>

CLASS OF 2019



Dr Aron MELTZNER

*Nanyang Technological University
Asian School of the Environment*

Research Title : Sea-level and land-level change in Southeast Asia: A geological approach to quantifying hazard from rising seas and earthquakes

Homepage : <https://earthobservatory.sg/people/aron-meltzner>



Dr CHEN Qing Lian, Patricia

*National University of Singapore
Department of Psychology*

Research Title : Scalable Interventions to Cultivate Strategically Self-Regulated Learners

Homepage : <https://www.patriciachen.com/>



Dr Franklin ZHONG Lei

*Nanyang Technological University
Lee Kong Chian School of Medicine*

Research Title : Targeting innate immune sensors to develop novel immune-modulatory therapeutics

Homepage : <http://www.lkcmedicine.ntu.edu.sg/aboutus/Faculty-and-Staff/Pages/Franklin-Zhong.aspx>



Dr Jonathan SCARLETT

*National University of Singapore
Department of Computer Science*

Research Title : Robust Statistical Learning Under Model Uncertainty

Homepage : <https://www.comp.nus.edu.sg/~scarlett/>



Dr LIM Ci Wen Charles

*National University of Singapore
Department of Electrical & Computer Engineering*

Research Title : Framework for Practical Quantum Communication with Untrustworthy Devices

Homepage : <https://www.ccwlim.com/>



Dr Qian HE

*National University of Singapore
Department of Materials Science & Engineering*

Research Title : Electron Microscopy for Catalyst Discovery and Innovation

Homepage : <https://www.eng.nus.edu.sg/mse/staff/he-qian/>



Dr SHAM Lok To, Chris

*National University of Singapore
Department of Microbiology & Immunology*

Research Title : Exploiting capsule synthesis pathway in *Streptococcus pneumoniae* to identify new antimicrobial compounds.

Homepage : <http://medicine.nus.edu.sg/mbio/About-Us/Academic-Staff.html>



Dr YU Jing

*Nanyang Technological University
School of Materials Science & Engineering*

Research Title : Bio-inspired adhesives for wet environment: Molecular Designs to Applications

Homepage : http://research.ntu.edu.sg/expertise/academicprofile/Pages/StaffProfile.aspx?ST_EMAILID=YUJING&CategoryDescription=NanotechnologyNanoScience

CLASS OF 2018

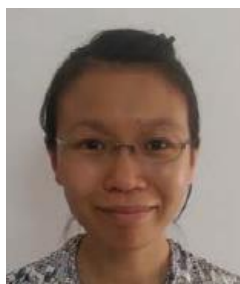


Dr Vincent TAN

*National University of Singapore
Department of Electrical and Computer Engineering*

Research Title : Fundamental Performance Limits for Statistical Learning Algorithms

Homepage : <https://www.ece.nus.edu.sg/stfpage/vtan>



Dr LOH Huanqian

*National University of Singapore
Department of Physics*

Research Title : Designing Novel Quantum Materials at the Microscopic Level with Ultracold Molecules

Homepage : <http://www.physics.nus.edu.sg/staff/lohhq.html>



Dr NG Shi Yan

*Agency for Science, Technology and Research (A*STAR)
Institute of Molecular and Cell Biology*

Research Title : Investigating Altered Metabolic Pathways in Neurodegeneration using Organoids

Homepage : <https://www.a-star.edu.sg/imcb/Science/Investigators/Independent-Fellows/Independent-Fellows-Profile/ResearchListID/12>



Dr LI Yinghui

*Nanyang Technological University
School of Biological Sciences*

Research Title : Role of non-canonical NF- κ B signaling in the transcriptional and epigenetic reprogramming of malignant cancers

Homepage : http://research.ntu.edu.sg/expertise/academicprofile/Pages/StaffProfile.aspx?ST_EMAILID=LIYH&CategoryDescription=BiomedicalSciencesLifeSciences&print=1



Dr Matteo SEITA

*Nanyang Technological University
School of Mechanical and Aerospace Engineering*

Research Title : Layerwise microstructure scanner: A new technology for online materials assessment in additive manufacturing

Homepage : <http://www.ntu.edu.sg/home/mseita/>



Dr David LALLEMANT

*Nanyang Technological University
Earth Observatory of Singapore*

Research Title : Analytics for Dynamic Urban Risk and Disaster Impact Modeling

Homepage : <http://david-lallemant.com/>



Dr Georgios PILIOURAS

*Singapore University of Technology and Design
Engineering Systems and Design*

Research Title : Algorithmic Prediction and Practical Control of Large Scale Population
Dynamics

Homepage : <http://people.sutd.edu.sg/~georgios/>

CLASS OF 2017



Dr Derrick ONG

*National University of Singapore
Yong Loo Lin School of Medicine*

Research Title : Mechanisms of Aberrant Brain Stem Cell Behavior: Implications in Aging and Gliomagenesis

Homepage : http://medicine.nus.edu.sg/phys/Staff_Fac_Acad_Ong.html



Dr LI Jingmei

*Agency for Science, Technology and Research (A*STAR)
Genome Institute of Singapore*

Research Title : Identification of women at high-risk of breast cancer in Singapore: Towards more effective primary prevention

Homepage : https://www.a-star.edu.sg/gis/our-people/investigator-details.aspx?source=faculty_member&user_id=205



Dr CHEN Qingfeng

*Agency for Science, Technology and Research (A*STAR)
Institute of Molecular and Cell Biology*

Research Title : Development of Humanized Mouse Model to Study Human Specific Immune Responses, Pathogenesis and Drug Discovery of Human Systemic Lupus Erythematosus

Homepage : <https://www.a-star.edu.sg/imcb/Science/Investigators/Pls/Pls-Profile/ResearchListID/21>



Dr SEH Zhi Wei

*Agency for Science, Technology and Research (A*STAR)
Institute of Materials Research and Engineering*

Research Title : Multivalent Energy Storage for a Sustainable Future: A Quest beyond Lithium-Ion Technologies

Homepage : <http://www.zwseh.com/>



Dr Lena HO

Duke-NUS Medical School

Research Title : Finding Gems in Disguise: Novel Peptides and Hormones from Long Non-Coding RNAs Significance, Utility and Therapeutic Potential

Homepage : <https://www.duke-nus.edu.sg/content/lena-ho>



Dr Thomas YEO

*National University of Singapore
Department of Electrical and Computer Engineering*

Research Title : Unsupervised Machine Learning of Mental Disorder Factors From Magnetic Resonance Imaging

Homepage : <https://sites.google.com/site/yeoyeo02/>



Dr John HO

*National University of Singapore
Department of Electrical and Computer Engineering*

Research Title : Small-scale Wireless Devices for Bioelectronic Therapies

Homepage : <https://www.ece.nus.edu.sg/stfpage/hsyj/index.html>



Dr Benjamin Tee

*National University of Singapore
Department of Materials Science & Engineering*

Research Title : Nature-inspired digital devices and networks for multi-scale environment sensing

Homepage : <http://www.benjamintee.com/>



Dr Yair ZICK

*National University of Singapore
Department of Computer Science*

Research Title : Data-Driven Strategic Collaboration



Dr Xavier BRESSON

*National University of Singapore
School of Computing*

Research Title : Unifying Spectral Networks and Sparse Representations for Big Data Science

Homepage : <https://www.comp.nus.edu.sg/cs/bio/xavier/>



Dr Bent WEBER

*Nanyang Technological University
School of Physical and Mathematical Sciences*

Research Title : Atomic Manipulations in 2D Materials for Quantum Computation Applications

Homepage : <http://weber-lab.com/>

CLASS OF 2016



Dr Manvendra SINGH

Duke-NUS Medical School

Cardiovascular and Metabolic Disorders Program

Research Title : Role of Hippo Signalling in the Epicardium: Expanding the Outer Limit of Heart Repair

Homepage : <https://www.duke-nus.edu.sg/cvmd/content/manvendra-singh>



Dr GU Mile

Nanyang Technological University

School of Physical and Mathematical Sciences

Research Title : Enhancing the Efficiency of Modelling and Simulating Complex Systems via Quantum Mechanics

Homepage : <http://www.milegu.org>



Dr FOO Jia Nee

Nanyang Technological University

Neuroscience and Mental Health Programme, Lee Kong Chian School of Medicine

Research Title : Genetic and genomic approaches to unlock the secrets of neurological diseases

Homepage : <http://www.lkcmedicine.ntu.edu.sg/aboutus/Faculty-and-Staff/Pages/Foo-Jia-Nee.aspx>



Dr Caroline BOUVET DE MAISONNEUVE

Nanyang Technological University

Earth Observatory of Singapore

Research Title : Assessing the Volcanic Hazard for Singapore

Homepage : <http://www.earthobservatory.sg/people/caroline-bouvet-de-maisonneuve>



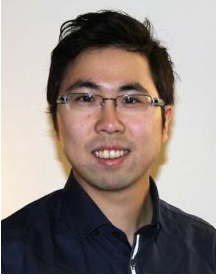
Dr Justin SONG

Nanyang Technological University

School of Physical and Mathematical Sciences

Research Title : Topological electronics and opto-electronics (TEAO): van der Waals heterostructures as a platform for new valley, spin, energy, and charge manipulation in devices

Homepage : <https://sites.google.com/site/justincsong/>



Dr TEE Wee Wei

*Agency for Science, Technology and Research (A*STAR)
Institute of Molecular and Cell Biology*

Research Title : DNA Topological and Epigenetic Regulation in Neurodevelopment and Disease

Homepage : <https://wwteelab.com/>



Dr Hady Wirawan LAUW

*Singapore Management University
School of Information Systems*

Research Title : Dimensionality Reduction for Recommender Systems: Unified Latent Co-representation of Multi-Modal Preference Signals

Homepage : <http://www.smu.edu.sg/faculty/profile/9621/Hady-W-LAUW>

CLASS OF 2015



Dr Yvonne TAY

*National University of Singapore
Cancer Science Institute of Singapore*

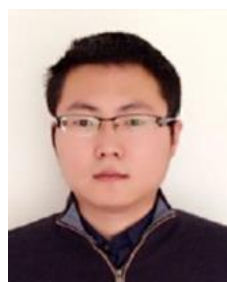
Research Title : MicroRNA and competing endogenous RNA crosstalk: Post-transcriptional regulatory networks in cancer pathogenesis and therapeutics
Homepage : <http://bch.nus.edu.sg/bchtmty.htm>



Dr KIM Young-Jin

*Nanyang Technological University
School of Mechanical & Aerospace Engineering*

Research Title : Ultra-precision Dimensional Metrology using Femtosecond Laser Frequency Combs



Dr GAO Weibo

*Nanyang Technological University
School of Physical & Mathematical Sciences*

Research Title : Quantum manipulation of hybrid solid state system
Homepage : <http://www1.spms.ntu.edu.sg/~weibogroup/>



Dr TAM Wai Leong

*Agency for Science, Technology and Research (A*STAR)
Genome Institute of Singapore*

Research Title : Integrated strategies to target the vulnerabilities of cancer stem cells
Homepage : https://www.a-star.edu.sg/gis/our-people/investigator-details.aspx?source=faculty_member&user_id=172



Dr Daniel MESSERSCHMIDT

*Agency for Science, Technology and Research (A*STAR)
Institute of Molecular and Cell Biology*

Research Title : Mechanisms of epigenetic reprogramming and its implications in complex human diseases
Homepage : https://www.a-star.edu.sg/imcb/Science/Investigators/PIs/PIs_Profile/ResearchListID/69



Dr KOH Tong Wey

*Temasek Life Sciences Laboratory Limited
Developmental Biology*

Research Title : Investigating the Interactions between Type 2 Diabetes and Neurodegeneration
Homepage : <http://www.tll.org.sg/group-leaders/koh-tong-wey/>

CLASS OF 2013



Dr Joseph FITZSIMONS

*Singapore University of Technology and Design
Engineering Product Development (EPD)*

Research Title : Methods for Verifying Quantum Computation



Dr Takaomi SANDA

*National University of Singapore
Cancer Science Institute of Singapore*

Research Title : Novel Therapeutics Targeting the Core Regulatory Circuits in Human T-cell
Acute Lymphoblastic Leukemia

Homepage : <https://www.csi.nus.edu.sg/ws/team/pi/takaomi-sanda>



Dr Sylvain BARBOT

*Nanyang Technological University
Earth Observatory of Singapore*

Research Title : Physics-Based and Data-Driven Predictive modelling of the Earthquake Cycle in
Sumatra



Dr Melissa FULLWOOD

*Nanyang Technological University
Cancer Science Institute of Singapore*

Research Title : Harnessing the Power of Next-Generation DNA Sequencing: Characterization of
Human Transcriptomes and Transcriptome Regulation Mechanisms in Gastric
Cancer

Homepage : <http://fullwoodlab.com/>



Dr Judith HUBBARD

*Nanyang Technological University
Earth Observatory of Singapore*

Research Title : Assessing seismic hazards in Southeast Asia by characterizing the geometries
and slip histories of active faults

Homepage : <https://sites.google.com/site/judithahubbard/>



Dr QUEK Su Ying

*National University of Singapore
Department of Physics*

Research Title : Spin Transport across Interfaces in Emerging Materials - Towards Materials
Design for Next Generation Data Storage Applications

Homepage : <http://www.physics.nus.edu.sg/staff/queksy.html>



Dr LIU Zheng

*Nanyang Technological University
Division of Materials Science*

Research Title : Synthesis, Characterizations and Performance of Novel Two-dimensional Atomic Layers: Hexagonal Boron Nitride (h-BN) and Molybdenum Disulfide (MoS₂)

Homepage : <http://www3.ntu.edu.sg/home/z.liu/index.html>



Dr Timothy SAUNDERS

*National University of Singapore
Mechanobiology Institute, Singapore*

Research Title : Using biophysics to probe the mechanisms of scaling and robustness in development

Homepage : <http://mbi.nus.edu.sg/timothy-saunders/>



Dr Karen CRASTA

*Nanyang Technological University
Lee Kong Chian School of Medicine*

Research Title : Molecular mechanisms that dictate cell fate following treatment with anti-mitotic drugs



Dr LAN Shau-Yu

*Nanyang Technological University
Division of Physics & Applied Physics*

Research Title : Quantum sensor using guided matter waves in optical fibers

Homepage : http://www1.spms.ntu.edu.sg/~physics/Home/Faculty/Lan_Shau_Yu.html



Dr Troy LEE

*Nanyang Technological University
Center for Quantum Technologies*

Research Title : Quantum query complexity, communication complexity, and semidefinite programming: exploring the limits of efficient computation



Dr Mikinori KUWATA

*Nanyang Technological University
Division of Earth Sciences*

Research Title : Atmospheric Organic Aerosol in the Changing Environment of Southeast Asia

CLASS OF 2012



Dr Shaffique ADAM

Yale-NUS College

Research Title : Harnessing Interacting Dirac Fermions for Future Technology

Homepage : <https://sites.google.com/site/shaffiqueadam/home>



Dr CHONG Yidong

Nanyang Technological University

Division of Physics and Applied Physics

Research Title : Enhancement of optical absorption in coherent photonic structures

Homepage : <http://web.spms.ntu.edu.sg/~ydchong/index.html>



Dr Nathalie GOODKIN

Nanyang Technological University

Earth Observatory of Singapore

Research Title : The Oceanographic Perspective: Reconstructing seasonal climate variations in the Indo-Pacific using coral geochemical records



Dr LING Xing Yi

Nanyang Technological University

Division of Chemistry and Biological Chemistry

Research Title : Engineering Plasmonic Nanocrystal Super-lattices for Emerging Optical Properties and Sensing Applications

Homepage : <http://www3.ntu.edu.sg/home/xyling/index.htm>



Dr Katsutomo OKAMURA

Temasek Life Sciences Laboratory Limited

Genome Structural Biology

Research Title : Mechanisms of miRNA biogenesis: Substrate recognition by the miRNA processing enzymes and regulation of miRNA stability



Dr Thomas PEYRIN

*Nanyang Technological University
Division of Mathematical Sciences*

Research Title : Analysis and Conception of Symmetric Key Cryptography Primitives

Homepage : <https://sites.google.com/site/thomaspeyrin/>



Dr SUN Lei

*Duke-NUS Medical School
Cardiovascular & Metabolism Disorders Program*

Research Title : Regulation of Brown Fat Development by Non-coding RNAs

Homepage : <https://www.duke-nus.edu.sg/content/sun-lei>



Dr Fumio MOTEGI

*Temasek Life Sciences Laboratory Limited
Cell Biology*

Research Title : The Mechanisms of Breaking Cellular Symmetry in Metazoan Development



Dr Slaven GARAJ

*National University of Singapore
Department of Physics*

Research Title : Graphene nanopore platform for single-molecule DNA analysis and physical DNA sequencing

Homepage : <http://nanopore.science.nus.edu.sg/>

CLASS OF 2011



Dr CHO Nam-Joon

*Nanyang Technological University
Division of Materials Technology*

Research Title : Combating Infectious Diseases: Engineering Strategies for Molecular Virology
Homepage : <https://www.namjooncho.com/>



Dr Goki EDA

*National University of Singapore
Department of Chemistry*

Research Title : Novel Electronic and Opto-electronic Materials from Two-Dimensional Layered Transition-Metal Dichalcogenide Nanosheets
Homepage : <http://www.physics.nus.edu.sg/~phyeda/index.html>



Dr Emma HILL

*Nanyang Technological University
Earth Observatory of Singapore*

Research Title : Towards a better understanding of climate change and natural hazards in and around Southeast Asia through geodetic data combination
Homepage : <http://www.earthobservatory.sg/people/emma-hill>



Dr Pakorn (Tony) KANCHANAWONG

*National University of Singapore
Department of Bioengineering*

Research Title : Mechanotransduction by Integrin-mediated Cell Adhesions
Homepage : <http://mbi.nus.edu.sg/pakorn-tony-kanchanawong/>



Dr Ali MISEREZ

*Nanyang Technological University
Division of Materials Technology*

Research Title : Frontiers in Physical and Life Sciences: Bio-Inspired and Biomimetic Materials
Homepage : <http://www.ntu.edu.sg/home/ali.miserez/index.html>



Dr Mankei TSANG

National University of Singapore

Department of Electrical and Computer Engineering

Research Title : General Theory of Quantum Sensors: Estimation, Control, and Fundamental Limits

Homepage : <https://sites.google.com/site/mankeitsang/home/mankei>



Dr WANG Xianfeng

Nanyang Technological University

Earth Observatory of Singapore

Research Title : Tracking hydro-climate variation in the tropical Indo-Pacific with highly resolved cave records

Homepage : <http://www.earthobservatory.sg/people/wang-xianfeng>

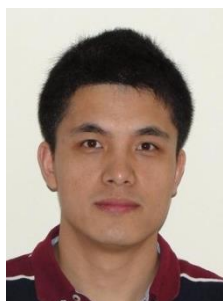


Dr WU Min

National University of Singapore

Mechanobiology Institute, Singapore

Research Title : Regulation of Endocytosis by Curvature-Generating Proteins and the Actin Cytoskeleton



Dr ZHAO Yu

National University of Singapore

Department of Chemistry

Research Title : New Catalysis Concepts and Methods for More Efficient and Economical Chemical Synthesis And Improvement of Chemistry Tools for Biological Labeling

Homepage : <https://zhaoyugroup.sg/>



Dr Kimberly Ann KLINE

Nanyang Technological University

Singapore Centre on Environmental Life Sciences Engineering (SCELSE)

Research Title : Localized Virulence Factor Assembly in Gram Positive Bacteria: Mechanism of Coordination and Therapeutic Targeting

Homepage : <http://kimberlyklinelab.com/>

CLASS OF 2010



Dr GAO Yonggui

*Nanyang Technological University
Division of Structural Biology & Biochemistry*

Research Title : Structure and functional interactions of translational factors with ribosome by X-ray crystallography
Homepage : <http://www.ntu.edu.sg/home/ygao/Site/Home.html>



Dr LEE Sang Hyun

*Duke-NUS Medical School
Cancer & Stem Cell Biology Program*

Research Title : The mechanisms of chromosomal instability in human cancers and development of novel anti-mitotic cancer therapies



Dr Christian NIJHUIS

*National University of Singapore
Department of Chemistry*

Research Title : Self-assembled organic-inorganic nanostructures to solve longstanding problems in Physics
Homepage : https://www.chemistry.nus.edu.sg/people/academic_staff/Nijhuis.htm



Dr Adam SWITZER

*Nanyang Technological University
Earth Observatory of Singapore*

Research Title : Geological records of coastal hazards in southeast Asia
Homepage : <http://www.earthobservatory.sg/people/adam-switzer>



Dr TEO Yik Ying

*National University of Singapore
Department of Statistics & Applied Probability*

Research Title : Modeling complex interactions in the genetics and genomics of common phenotypes and infectious diseases
Homepage : <https://sph.nus.edu.sg/about/faculty-directory/teo-yik-ying>



Dr Joanne YEW

Temasek Life Sciences Laboratory Limited

Research Title : Understanding the role of chemical communication in insect social behavior:
Identifying new pheromones, neural circuits and metabolic pathways using
novel mass spectrometry methods



Dr YU Ting

*Nanyang Technological University
Division of Physics & Applied Physics*

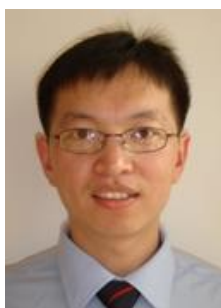
Research Title : Tailoring electronic structure of graphene for nanoelectronic, photonic and
phononic applications
Homepage : <http://www1.spms.ntu.edu.sg/~yuting/>



Dr Ronen ZAIDEL-BAR

*National University of Singapore
Mechanobiology Institute, Singapore*

Research Title : Linking cell-cell adhesion with the actin cytoskeleton: Combining genetics and
mechano-manipulations to discover novel adaptors in cadherin-based
adhesion



Dr ZHAO Yanli

*Nanyang Technological University
Division of Chemistry and Biological Chemistry*

Research Title : Light- and pH-operated mechanized nanoparticles as controllable drug
delivery systems
Homepage : <http://www.ntu.edu.sg/home/zhaoyanli/index.html>

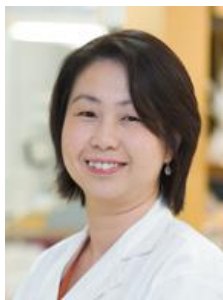


Dr Swaine CHEN

*National University of Singapore
Department of Medicine*

Research Title : *Novel evolutionary approaches to studying host-pathogen interactions and
infectious diseases*
Homepage : <http://www.nuh.com.sg/scripts/webformshowprofile.aspx?id=13719>

CLASS OF 2009



Dr LOK Shee Mei

Duke-NUS Medical School

Emerging Infectious Diseases Program

Research Title : Identification of dengue therapeutics and determination of its neutralization mechanisms using a combination of immunological, biochemical and structural techniques

Homepage : <https://www.duke-nus.edu.sg/content/lok-shee-mei>



Dr WANG Hongyan

Duke-NUS Medical School

Neuroscience & Behavioral Disorders Program

Research Title : Analyzing molecular machinery that regulates neural stem cell self-renewal and differentiation in Drosophila larval brains

Homepage : <https://www.duke-nus.edu.sg/content/wang-hongyan>



Dr CHI Yonggui Robin

Nanyang Technological University

Division of Chemistry & Biological Chemistry

Research Title : New strategies for selective and site-selection protein modification via local environment and proximal residue-directed cooperative organic catalysis under mild, non-toxic and biocompatible conditions

Homepage : <http://www.ntu.edu.sg/home/robinchi/>



Dr CHEN Xiaodong

Nanyang Technological University

Division of Materials Technology

Research Title : Nanostructured-Biomaterial hybrid systems for bioelectronics

Homepage : <http://www.ntu.edu.sg/home/chenxd/index.html>

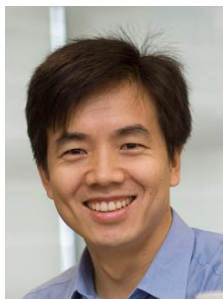


Dr Naohiko YOSHIKAI

Nanyang Technological University

Division of Chemistry & Biological Chemistry

Research Title : Development of cooperative transition metal catalysis for carbon-carbon bond formation



Dr XIONG Qihua

*Nanyang Technological University
Division of Physics & Applied Physics*

Research Title : Optical properties of novel nanomaterials and field effect transistor nanopore devices for single molecular detection and DNA sequencing



Dr Frederique OGGIER

*Nanyang Technological University
Division of Mathematical Sciences*

Research Title : Information theoretical security for wireless communications

Homepage : <http://www1.spms.ntu.edu.sg/~frederique/index.html>



Dr Edith ELKIND

*Nanyang Technological University
Division of Mathematical Sciences*

Research Title : Algorithmic aspects of coalitional games



Dr Hilmi Volkan DEMIR

*Nanyang Technological University
Division of Microelectronics*

Research Title : Nanostructured white LEDs of nanocrystal quantum dot emitters for high quality mesopic solid state lighting

Homepage : http://research.ntu.edu.sg/expertise/academicprofile/Pages/StaffProfile.aspx?ST_EMAILID=HVDEMIR

CLASS OF 2008



Dr Gijsbert Marnix GROTENBERG

National University of Singapore

Departments of Microbiology and Biological Sciences

Research Title : Conditional ligands for class I MHC products; application to epitope discovery for Dengue and respiratory syncytial virus-specific CD8+ T-cells



Dr Cynthia HE Yingxin

National University of Singapore

Department of Biological Science

Research Title : Morphological and molecular characterization of a bi-lobed structure required for organelle biogenesis and cytokinesis in *Trypanosoma brucei*

Homepage : <http://www.dbs.nus.edu.sg/lab/cynthia/index.html>



Dr Eugene MAKEYEV

Nanyang Technological University

Division of Molecular & Cell Biology

Research Title : Understanding molecular mechanisms of post-transcriptional control in neuronal differentiation: a link between microRNAs, alternative pre-mRNA splicing and mRNA quality control



Dr Barbaros ÖZYILMAZ

National University of Singapore

Department of Physics

Research Title : Phase Coherent Charge and Spin Transport in Nanostructured Graphene and Ferromagnet Hybrid Devices

Homepage : <http://graphene.nus.edu.sg/barbaros/>



Dr Christos PANAGOPOULOS

Nanyang Technological University

Division of Physics & Applied Physics

Research Title : Novel Quantum Phases on the Border of Magnetism

Homepage : <http://phynelab.org/Staff/christos-panagopoulos/>



Dr YEO Yee Chia

National University of Singapore

Department of Electrical and Computer Engineering

Research Title : Strain Engineering for Next-Generation Semiconductor Manufacturing

Homepage : <https://www.ece.nus.edu.sg/staff/bio/yeoyc.html>



Dr ZHOU Jianrong Steve

Nanyang Technological University

Division of Chemistry and Biological Chemistry

Research Title : Asymmetric Catalytic [4+1] Cycloadditions between Dienes and Carbene
Precursors
