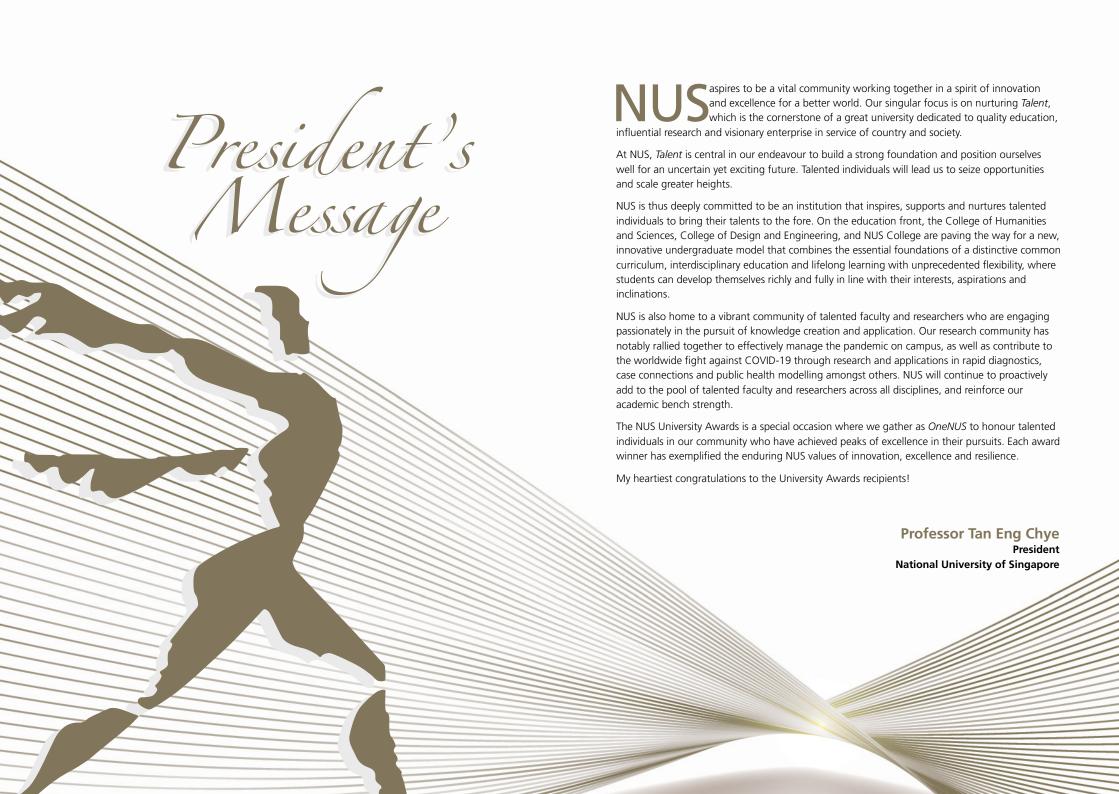
University Awards 2021

Recognising Excellence in **Education, Research and Service**











Assoc Prof Marleen DIELEMAN PhD (Leiden University) MSc (Rotterdam School of Management)

Department of Strategy & Policy

CURRENT TEACHING PORTFOLIO

- * Asian family business
- * Corporate strategy
- Management practicum/ field service project

TEACHING ACHIEVEMENTS

Demonstrated agility and adaptability by executing innovative pedagogical ideas during the COVID-19 pandemic, such as bringing in global guest speakers for real-time interaction with students, producing high-quality videos to enhance learning, and conceptualising gamified learning to connect both online and offline students seamlessly

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- * A pioneer in hybrid teaching, she held insightful pre-semester sharing sessions to show colleagues how to design and deliver lessons in the new hybrid mode, and capitalise on the benefits afforded by online teaching
- Demonstrated educational leadership as a member of NUS Business School's Teaching Excellence Council
- Programme director of the Astra General Management Programme, NUS Business School's joint programme with one of Indonesia's largest diversified conglomerates. She also has an extensive history of teaching in a range of tailored programmes for company executives

PUBLICATION CREDITS

- Published 24 teaching cases that sold over 51,000 copies in 35 countries
- Published 14 international refereed academic articles, including in the Journal of Management Studies, Organization Studies and the Journal of World Business, as well as two books and a number of book chapters and reports

INTERNATIONAL STANDING

- * Vice Chair of the Academy of International Business' Special Interest Group on Teaching & Education
- * Founding editor, Sage Business Cases series on Family Business
- * Regular speaker and workshop leader at international conferences
- Her work on Asian family businesses has been widely featured in international media, including the Financial Times, The Economist and Bloomberg

AWARDS AND ACCOLADES

- Annual Teaching Excellence Award (2014 to 2016) and Honour Roll (2017), NUS
- Outstanding Educator Award (2013 to 2015 and 2021), NUS Business School
- BoardAgender Champion, Singapore Council of Women's Organisations (2012)



Assoc Prof Alfred KOW Wei Chieh MBBS (NUS) MMed (Surgery) MRCS (Edinburgh) MRCS (Ireland) FRCSEd (General Surgery)

Department of Surgery

CURRENT TEACHING PORTFOLIO

- Assistant Dean (Education),
 NUS Medicine (since 2013)
- Chair, Medical Education Technology & Enterprise Committee (since 2019); Undergraduate Curriculum Committee (since 2013); and Curriculum Rationalisation Task Force (since 2012)

TEACHING ACHIEVEMENTS

- Pioneered the General Surgery Slide Review, a session on a wide range of surgery topics, incorporating real-time annotation, animations and videos. It garnered excellent student feedback for its high interactivity and relevance, and will be offered as a Massive Open Online Course on EdX
- Demonstrated exceptional leadership in medical curriculum development by adopting innovative advanced technology to facilitate interactive learning, particularly in the domains of patient safety, and general perioperative and systemic surgery through:
 - "Patient Safety in Surgical Education" an iPad game which imparts practical tips on patient safety in surgery. The game, which includes real life adverse and sentinel events, will be adopted by the other medical schools and healthcare professionals in Singapore
 - "Patient Safety in Surgery as Interprofessional Training" (PASS-IT) a virtual reality training session that allows students to receive universal education on patient safety in an immersive environment during the COVID-19 pandemic
 - "Let's PASS-IT"

 a mobile app, developed together with a team
 at the Ministry of Health, which is now used as a compulsory
 education module for Professional Training and Assessment
 Standards on patient safety for junior doctors locally
- Headed a team of physicians across four specialties to create an iPad game on "Healthcare Economic Awareness LearnING" to educate healthcare professionals on the cost of investigations and treatments in hospitals
- Led a medical education team and collaborated with Microsoft Inc. on the use of Hololens 2.0 to create 3D-holographic technology (named Project Horizon), for the training of medical and nursing undergraduates on bedside procedural skills

PUBLICATION CREDITS

 Published more than 100 papers in internationally refereed journals, including Cell and Nature Communications

INTERNATIONAL STANDING

- Lead, Regional Expansion Advanced Learning project, Education & Scholarship Committee, International Liver Transplant Society (since 2020)
- * Study Group Lead, Minimally Invasive Surgery in HPB Surgery, International Society of Liver Surgeons (since 2020)
- * Fellow, American College of Surgeons (2016)

- ★ Fellow, NUS Teaching Academy (since 2016)
- * Teaching Excellence Award (Medical) (2018 to 2020 and 2014), NUHS
- ★ High Achiever Award, NUHS-Mocktar Riady Pinnacle Awards (2018)
- * Faculty Teaching Excellence Award (2014/2015 and 2011/2012); and Educator of the Year Award (AY2019/2020), NUS Medicine
- * Dean's Award for Teaching Excellence (2011/2012 to 2017/18); and Dean's Honour Roll (2017/2018), NUS Medicine
- * Annual Teaching Excellence Award, NUS (2014/2015 and 2011/2012)





Asst Prof SHAO Huilin PhD (Harvard University) PhD (Harvard-MIT Health Sciences and Technology) BA (Cornell University)

Department of Biomedical Engineering

Institute for Health Innovation & Technology

RESEARCH INTERESTS

- Circulating biomarkers
- * Novel assay development
- * Nanomaterial synthesis
- * Miniaturised sensors

RESEARCH ACHIEVEMENTS

- Invented multiple biological and physical nanotechnologies for molecular diagnostics
- Developed enVision, molecular switches that can directly measure nucleic acids of infectious diseases as well as COVID-19 in 30 minutes at room temperature

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- Established the Amplified Plasmonic Exosome system, a highly sensitive blood test for early detection of Alzheimer's disease even before the onset of clinical symptoms
- Pioneered the Sequence-Topology Assembly for Multiplexed Profiling technology to determine protein distribution in cells and evaluate cancer aggressiveness
- * Founded a biotechnology company to support the translation and commercialisation of molecular diagnostics technologies
- Garnered over \$5 million research grants from the National Medical Research Council, Ministry of Education and NUS

PUBLICATION CREDITS

- Published 20 peer-reviewed papers under NUS, including publications in high impact journals such as Nature Nanotechnology, Nature Biomedical Engineering, Nature Communications and Science Advances
- * Obtained more than 5,000 total citations with a Hirsch index of 29

INTERNATIONAL STANDING

- * Member, Editorial Advisory Board of ACS Sensors
- * Reviewer for leading journals including Nature and Science
- * Invited speaker at international conferences and workshops

AWARDS AND ACCOLADES

- Young Scientist Award, Microsystems and Nanoengineering, Springer Nature (2020)
- * President's Young Scientist Award (2019)
- * L'Oreal-UNESCO For Women in Science National Fellowship (2016)



Assoc Prof Benjamin C.K. TEE PhD, MS (Stanford University) BSc (University of Michigan)

Department of Materials Science and Engineering

Institute for Health Innovation & Technology

N.1 Institute for Health

RESEARCH INTEREST

* Sensory devices for complex systems, including bio-inspired flexible electronic and selfhealing materials for human-machine interactions, robotics and biotechnology applications

RESEARCH ACHIEVEMENTS

- Invented the world's fastest electronic skin nervous system that is 1,000 times more responsive than the human nervous system, for medical and neuroprosthetic applications
- * Pioneered the development of a self-healing, transparent and water-resistant electronic skin that can self-repair autonomously at room temperature
- * Developed a self-healing electronic material capable of emitting light at low operating voltage to create damage resilient soft lighting devices for next generation human-machine interfaces
- Co-founder of Hannah Life Technologies and Privi Medical; raised more than \$3 million
- * Secured more than \$9 million of research grants from the National Research Foundation, AiSkin, Agency for Science, Technology and Research, and Clarins
- * Innovations have led to nine patents filed, with four exclusively licensed to industry

PUBLICATION CREDITS

- * Published more than 20 peer-reviewed papers with over 500 citations, including publications in high impact journals such as Nature Materials, Nature Electronics, Science Robotics and Advanced Materials
- **★** Obtained over 17.000 total citations with a Hirsch index of 32

INTERNATIONAL STANDING

- Chair of Stretchable Materials and Devices for Wearables and Robotics for the 10th International Conference on Materials for Advanced Technologies (2019)
- Reviewer for 15 peer-reviewed journals including Nature, Science and Science Robotics
- Research breakthroughs received extensive coverage in international media including National Geographic, BBC and CNN International
- Regular speaker at international conferences, workshops and seminars

- * IES Prestigious Engineering Achievement Award, Institution of Engineers Singapore (IES) (2020)
- * Young Scientist of the Year, World Economic Forum (2019)
- **★** National Research Foundation Fellowship (2017)



Assoc Prof WU Jie PhD (Boston University) BSc (Beijing Normal University)

Department of Chemistry

RESEARCH INTERESTS

- Flow automated synthesis of pharmaceutical molecules
- Development of novel homo and heterogeneous photocatalysts, and photochemical reactions for sustainable fine chemical synthesis

RESEARCH ACHIEVEMENTS

- Invented a 'stop-flow' micro-tubing reactor platform for effective transformation of gaseous feedstocks into value-added fine chemicals under light-irradiation at high pressure
- * Discovered neutral eosin Y as a direct hydrogen atom transfer photocatalyst and utilised it for the development of numerous green organic transformations
- Developed various green photocatalytic methods to incorporate gaseous feedstocks including carbon dioxide, ethane, methane, ethylene, acetylene and freon-22 into complex organic molecules
- Developed an automated end-to-end multistep synthesis of active pharmaceutical ingredients by merging continuous-flow synthesis and solid-phase synthesis that could potentially shift the paradigm of drug synthesis in the pharmaceutical industry. This study was published in Nature Chemistry in April 2021
- Raised about \$12.3 million of research grants as Principal Investigator from the Ministry of Education, GSK-EDB, Agency for Science, Technology and Research, Pharma Innovation Programme Singapore and National Research Foundation Singapore
- * Secured about \$2 million of research grants as Co-Principal Investigator from the Pharma Innovation Programme Singapore
- ★ Discoveries have led to four patents

PUBLICATION CREDITS

- Published over 50 peer-reviewed papers in top-tier journals such as Nature Chemistry, Chem, Journal of the American Science Society, Nature Communications and Angewandte Chemie International Edition
- Obtained more than 2,400 citations in published papers with a Hirsch index of 30

INTERNATIONAL STANDING

- Reviewer for more than 30 peer-reviewed journals including Nature Chemistry, Nature Catalysis, Journal of the American Chemical Society and Chemical Reviews
- * Editorial board member of Green Synthesis & Catalysis
- Keynote and invited speaker at more than 30 international conferences and symposiums

- ★ Young Scientist Award, NUS Science (2020)
- ★ Thieme Chemistry Journal Award (2019)
- ★ Asian Core Program Lectureship Award (2017 to 2019)
- * Young Chemist Award, NUS Chemistry (2018)
- * 4th Green & Sustainable Manufacturing Award, The GSK-Singapore Partnership (2017)







Prof OOI Beng Chin Lee Kong Chian Centennial Professor PhD, BSc (Monash University)

Department of Computer Science

RESEARCH INTERESTS

- * Database systems
- Distributed and blockchain systems
- * Large scale analytics

RESEARCH ACHIEVEMENTS

- His research on the fundamental data and systems abstractions of modern data-driven applications laid the foundation for the design and implementation of systems that are not only efficient, robust, but also scalable and secure
- His other extensive research, which ranges from end-to-end pipeline supporting all data processing steps to complex data analytics, yielded a large-scale software system that significantly improves on prior research-focused systems. The rigorous algorithmic and theoretical results were published in top journals and international conferences
- Led a team to develop the scalable, useable and efficient Apache SINGA system, a layer abstraction optimised for distributed machine learning. This is Apache's first Top Level Project on distributed deep learning platform and also the first from Singapore
- Developed ForkBase, the first immutable data and tamper evident storage system that enables fast verification required in highstakes and sensitive domains such as healthcare and finance. It also supports efficient data provenance processing known as LineageChain—which won the Very Large Data Bases' (VLDB) 2019 Best Paper Award, and provides effective storage for FabricSharp blockchain, a variant of Hyperledger Fabric
- * Developed the GEMINI, a healthcare analytics system; and FoodLg, a food journaling, nutrition tracking and analysis app

PUBLICATION CREDITS

- Published and presented more than 200 papers in leading journals and prestigious conferences
- * Obtained over 25,000 total citations with a Hirsch index of 85

INTERNATIONAL STANDING

- * Founding Editor-in-Chief of ACM/IMS Transactions on Data Science (2018 to 2021)
- ★ President of VLDB Endowment (2014 to 2017)
- Founding co-Editor-in-Chief of Elsevier's Journal of Big Data Research (2013 to 2015)
- * Editor-in-Chief of IEEE Transactions on Knowledge and Data Engineering (2009 to 2012)

- * ACM SIGMOD Edgar F. Codd Innovations Award, Special Interest Group on Management of Data (2020)
- Overseas Outstanding Contributions Award, China Computer Federation (2016)
- * IEEE Technical Committee on Data Engineering and Computer Science, Engineering, and Education Impact Award (2014)
- ★ Outstanding Researcher Award, NUS (2013)
- ★ IEEE Computer Society Tsutomu Kanai Award (2012)
- ★ Co-winner of the President's Science Award (2011)
- Fellow, Singapore National Academy of Science (2016); ACM (2011); and IEEE (2009)





OUTSTANDING SERVICE AWARD 24



"In the inter-connected, complex and digitised future, I hope for NUS-ISS to be at the 'heart of the always-learning digital economy', delivering multiple learning pathways and industry relevant learning experiences that enable Singaporeans to build resilient careers and social mobility.

I am deeply humbled by this award and I share this honour with all NUS-ISS colleagues and board members, past and present."

CURRENT PORTFOLIO

- * Singapore's Non-Resident Ambassador to the Holy See
- * Nominated Member of Parliament
- * Chairman, NUS Institute of Systems Science; and Member, NUS Alumni Advisory Board
- * Chairman, Singapore Polytechnic, SISTIC.com and Caritas Singapore Agape Fund
- ★ Deputy Chairman, Singapore Business Federation Foundation
- * Independent Director, Singapore Press Holdings and Bank of the Philippine Islands
- * Senior Advisor, Royal Golden Eagle Group
- Member, Boards of the Home Team Science
 Technology Agency, The Esplanade Co Ltd,
 Cenacle Mission (Singapore), Council for Board
 Diversity and Tanoto Foundation
- ★ Fellow, Singapore Computer Society and Singapore Institute of Directors

LIFETIME ACHIEVEMENTS

- * Ms Ang carved a stellar 37-year career in the IT industry, 33 years of which was with IBM, where she was key in charting the tech giant's growth, both locally and internationally. She also spent four years with Lenovo Group where she contributed to the successful merger of the IBM PC business with the Chinese company and played a significant part in taking the company global
- As Chairman of the NUS Institute of Systems
 Science (NUS-ISS) Management Board since 2016,
 Ms Ang oversaw the transformation of NUS-ISS
 into a leading institution for the development of
 industry digital talents
 - Implemented a unique operating model of multiple, modular and stackable learning pathways and launched a wide array of strategic industry sectoral partnerships
- Led the establishment of an ecosystem of collaboration amongst the institutions of higher learning, including NUS-ISS, other NUS schools and faculties as well as the polytechnics, to advance industry digital proficiency in Singapore
- A strong believer of industry business transformation, Ms Ang forged a synergetic partnership between the Singapore Business Federation Foundation and NUS-ISS to support the digitalisation of local enterprises

- Executed groundbreaking strategies, such as the appointment of NUS-ISS as the operations partner of The Digital Academy, serving the whole of government in Singapore
- * Ms Ang played a pivotal role in bringing together NUS School of Computing and NUS Business School to set up the NUS Business Analytics Centre in 2013, in collaboration with IBM and EDB, to meet the increasing demand for business analytics professionals and data scientists

SERVICE TO NATION AND INTERNATIONAL COMMUNITY

- As the Founding Chair of the Digitalisation Committee at Singapore Business Federation Foundation from 2017 to 2020, Ms Ang worked closely with government agencies, trade associations and Chambers of Commerce to address the digital needs of Singapore businesses
- * A passionate advocate for gender equality and women's career advancement, Ms Ang serves on the Council of Board Diversity since 2019, and was a Past President of the International Women's Forum (Singapore Chapter)
- A member of the NUS Alumni Advisory Board, Ms Ang provides strategic guidance and counsel to the Board, particularly on matters related to community service and women issues
- Contributed generously towards the NUS Business School Alumni Association Undergraduate Bursaries through the Maria Tan Kim Lan Bursary Fund in 2008, in honour of her late mother, as well as the Kent Ridge Hall – Janet Ang Bursary

AWARDS AND ACCOLADES

- * Public Service Medal (2019)
- ★ IT Leaders Award Hall of Fame, Singapore Computer Society (2018)
- * NUS Distinguished Alumni Service Award (2015)
- Eminent Business Alumni Award, NUS Business School (2014)

EDUCATION

- * INSEAD International Directors Programme 2021
- * BBA (Hons) (NUS)

OUTSTANDING SERVICE AWARD 26 27



"NUS is working towards creating change drivers through new and exciting innovative programmes and learning opportunities for students to self-actualise and develop their own strengths. This transformation will build capability and cohesiveness in our society.

Thank you for this award and for the opportunity to have served on the Board."

CURRENT PORTFOLIO

- Executive Chairman, Allgreen Properties Limited; Director, Kuok (Singapore) Limited (and its various subsidiaries); and Director, Shangri-La Hotel Singapore
- Managing Director, Shangri-La Hotels (Malaysia)
 Bhd; Director, Kuok Brothers Sdn Bhd; and
 Deputy Chairman, Kuok Foundation Berhad
- ★ Founding Chair of Yale-NUS College Governing Board
- * Chairman, The Courage Fund Limited
- * Vice-Chair, Executive Committee, Board of VIVA Foundation for Children with Cancer
- Independent Non-Executive Director, Venture Corporation Limited
- * Member, SGX Council for Board Diversity; and Board of the Singapore Hotel Association

LIFETIME ACHIEVEMENTS

- * A dedicated leader of the Shangri-La Group, Mdm Kuok is involved in the growth of Shangri-La Hotel into one of the most prestigious and best-regarded landmark hotels in Singapore
- Contributed immensely to NUS as a member of the NUS Board of Trustees from 2008 to 2020, providing effective leadership and oversight in setting the University's strategic goals in education and research, and charting its growth
- * Under her stewardship as the Founding Chair of the Yale-NUS College Governing Board, Mdm Kuok provided strategic direction, guidance and support to the College in various aspects, from curriculum development and faculty hiring, to finances and infrastructure

SERVICE TO NATION AND INTERNATIONAL COMMUNITY

- * Co-chaired the COOL taskforce in 2003 as a member of the Singapore Tourism Board's Tourism Consultative Council and Board of Directors, and played a key role in implementing various initiatives which mitigated the impact of SARS on businesses, and helped the tourism industry recover rapidly
- A compassionate leader and a devoted philanthropist, Mdm Kuok supports several worthy causes such as the Viva Foundation for Children with Cancer and the Ministry of Health's Rare Disease Fund, which seeks to improve care and treatment for afflicted patients
- As Chairman of the Board of Directors of The Courage Fund – a fund set up in 2003 to provide relief to SARS victims and healthcare professionals – Mdm Kuok advocates paying tribute to healthcare workers through the annual Healthcare Humanity Awards
- Chaired and served on several community service and statutory boards including the National Healthcare Group Pte Ltd, Wildlife Reserves Singapore Conservation Fund, Singapore Tourism Board, South West Community Development Council, National Arts Council, Singapore Environment Council and National Environment Agency

INTERNATIONAL STANDING

- Meritorious Service Medal (2015)
- Inaugural Award for Lifetime Achievement for Outstanding Contribution to Tourism (2009) and Special Recognition Award (2004), Singapore Tourism Board
- * Public Service Star (BBM) (2005)
- * Public Service Medal (PSM) (1998)
- Pingat Ibrahim Sultan (PIS) Medal from the Sultan of Johor for Social Work (1980)

EDUCATION

* Barrister-at-Law (Gray's Inn London)



Award Recipients

Award Recipients



Ms Janet ANG
OUTSTANDING SERVICE AWARD



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Mdm Kay KUOK Oon Kwong
OUTSTANDING SERVICE AWARD



Prof OOI Beng Chin
Lee Kong Chian Centennial Professor
UNIVERSITY RESEARCH RECOGNITION AWARD



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Asst Prof SHAO Huilin YOUNG RESEARCHER AWARD



Assoc Prof Marleen DIELEMAN
OUTSTANDING EDUCATOR AWARD



Assoc Prof Alfred KOW Wei Chieh
OUTSTANDING EDUCATOR AWARD



Assoc Prof Benjamin C.K. TEE YOUNG RESEARCHER AWARD



Assoc Prof WU Jie YOUNG RESEARCHER AWARD

