University Awards 2023

RECOGNISING EXCELLENCE





University Awards
2023
RECOGNISING EXCELLENCE



The post-pandemic world is grappling with complex and unprecedented challenges from geopolitical and social tensions to climate change, ageing societies and rising income inequality. NUS must continually adapt, evolve and calibrate our strategies and action plans so that our institution stays ahead, rides the winds of opportunities and contributes towards building a better future.

A dynamic operating environment requires us to be alert, agile and adaptable. Notwithstanding, there is focus, alignment and clarity as we navigate this exciting journey. The organisational mission, vision and values at NUS are enduring; they direct where we are headed, what we will do and how we will achieve.

NUS strives to be a leading global university, shaping the future. Excellence is one of five core values at NUS. As an educational institution gearing up for the future, we want to be known for our commitment to the continual pursuit of excellence.

It is thus fitting that NUS devotes a special day each year to formally recognise and celebrate with members in the NUS community who exemplify excellence in the institution's core mission areas of education, research and service.

The recipients of the University Awards 2023 have dedicated themselves to scale new heights in their professional pursuits and they have achieved exceptional results. We are immensely proud of what they have achieved at NUS, and how they demonstrate vision, focus and a strong commitment to hard work and continuous learning. I extend my heartiest congratulations to all the award winners!

Professor Tan Eng Chye

President National University of Singapore





OUTSTANDING EDUCATOR AWARD

Acknowledges faculty members who have excelled in engaging and inspiring students in their quest for knowledge



YOUNG RESEARCHER AWARD

Commends researchers whose works show promise in extending the frontiers of knowledge in their respective fields



UNIVERSITY RESEARCH RECOGNITION AWARD

Recognises researchers whose works have impacted and advanced the frontiers of knowledge, and positioned NUS at the forefront of their areas of expertise



OUTSTANDING SERVICE AWARD

Honours individuals who have distinguished themselves by their sustained contributions in serving the University and society





OUTSTANDING EDUCATOR AWARD

Associate Professor Lee Kooi Cheng



YOUNG RESEARCHER AWARD

Assistant Professor Koh Ming Joo Professor Qu Hsueh Ming



UNIVERSITY RESEARCH RECOGNITION AWARD

Professor Patrick Tan Boon Ooi



OUTSTANDING SERVICE AWARD

Professor Barry Halliwell
Mr Quek Gim Pew

Outstanding Educator Award





Associate Professor Lee Kooi Cheng

PhD (University of Stirling)
MA (National University of Singapore)
BEd (University of Calgary)

Centre for English Language Communication Helix House

CURRENT TEACHING PORTFOLIO

- Critique and communication of thinking and design
- ◆ Humanising technology
- ◆ Technical communication for engineers

TEACHING ACHIEVEMENTS

- ◆ Leading the Centre for English Language Communication, driving the conceptualisation and designing of courses that integrate disciplinary knowledge with writing, thinking and communication competencies, through partnerships with university faculties and departments
- ◆ Championing out-of-classroom learning for a holistic student experience. Notable achievements include the conceptualisation and implementation of living-learning programmes. Key roles comprise stints as Master at Helix House (since 2023), Deputy Master at Tembusu College (2021 2023), Master at King Edward VII Hall (2016 2021), and Vice Dean at the Office of Student Affairs (2012 2016)
- ◆ Pioneering and co-spearheading collaborations with ASEAN universities through projects focused on English language teaching (ELT), with total funding from Temasek Foundation exceeding S\$1 million
- Principal and co-investigator of research grants funded by NUS and the Ministry of Education respectively, focusing on teaching methodologies, curriculum development, and academic literacy

PUBLICATION CREDITS

- ◆ Co-author of book chapters and papers on ELT in internationally referenced teaching and learning journals, including the Asia Pacific Journal of Educators and Education, the International Journal for the Scholarship of Teaching and Learning (SoTL), SoTL in the South Journal, and the Asian Journal of the SoTL
- ◆ Presented as invited/plenary speaker at regional conferences, such as the 8th International Conference on English Language Teaching (2020) and the 8th International Conference on Languages and Arts (2019)

INTERNATIONAL STANDING

- ◆ Co-editor-in-chief of the *Asian Journal of Teaching and Learning* (since 2021)
- ◆ Editorial board member of the Asia Pacific Journal of Educators and Education (since 2021), SoTL in the South Journal (since 2017), and the Asian Journal of English Language Studies (since 2012)
- ◆ Member of the International Advisory Board of the Electronic Journal of Foreign Language Teaching (since 2011)
- ◆ General Secretary of the Asia Pacific Association for Student Affairs (2016 – 2021)

- ◆ NUS Residential College Teaching Excellence Award (AY2022/2023)
- ◆ Public Administration Medal (Bronze) (2021)
- ♦ NUS Annual Teaching Excellence Award (Team) (AY2019/20)
- ◆ Fellow, NUS Teaching Academy (AY2012/13 AY2018/19)
- ◆ NUS Annual Teaching Excellence Honour Roll (AY2016/17)
- ◆ NUS Annual Teaching Excellence Award (AY2015/16, AY2011/12, AY2008/09)



Young Researcher Award





Assistant Professor Koh Ming Joo

President's Assistant Professor

PhD (Boston College)
BSc (Nanyang Technological University)

Department of Chemistry College of Humanities and Sciences

RESEARCH INTERESTS

- ◆ Non-precious metal catalysis
- ◆ Radical chemistry
- ◆ Cross-coupling
- ◆ Sustainable chemical synthesis

RESEARCH ACHIEVEMENTS

- ◆ Leads the Koh Research Group at NUS Chemistry, driving research on sustainable catalysis, and leading global efforts in the drive towards cost- and energy-efficient chemical synthesis with lower carbon emissions and waste generation. Achievements include:
 - Inventing a "catalyst control" blueprint using non-precious nickel catalysts that shorten chemical synthesis and enable lower environmental footprint, a major breakthrough in the field
 - Designing earth-abundant iron catalyst systems that form the foundations of the global drive towards sustainability
 - Inventing groundbreaking cross-coupling technologies to generate molecular complexity
 - Developing innovative technologies for biorelevant carbohydrate synthesis, paving the way for future applications in the field
- ◆ Discoveries have led to five patents filed
- ◆ Secured more than \$2.5 million in funding from the Ministry of Education and NUS as Lead Principal Investigator
- ◆ First Singaporean recognised as the American Chemical Society's Chemical & Engineering News' Talented 12 (2022) for his work on sustainable catalysis, an accolade honouring early-career researchers in the chemical sciences fearlessly tackling global issues

PUBLICATION CREDITS

- ◆ 40 high-impact papers published in the last five years, with over 90% of these in leading journals such as Nature Chemistry and Nature Catalysis
- ◆ Obtained more than 2,260 total citations with a Hirsch index of 26

INTERNATIONAL STANDING

- ◆ Editorial board member of *Green Synthesis and Catalysis* (since 2022)
- Advisory board member of the Asian Journal of Organic Chemistry (since 2022)
- ◆ Editorial board member of Current Opinion in Green and Sustainable Chemistry (since 2022)

- ◆ Chemical & Engineering News' Talented 12, American Chemical Society (2022)
- ◆ Young Scientist Award, Singapore National Academy of Science (2022)
- ◆ Faculty Young Scientist Award, NUS (2022)
- Innovators Under 35 Asia Pacific Award, MIT Technology Review (2021)
- ◆ Tokyo Chemical Industry-Singapore National Institute of Chemistry Industry Award in Synthetic Chemistry (2021)
- ◆ NUS Inauguration Grant (2019)



Professor Qu Hsueh Ming

Provost's Chair Full Professor

PhD (New York University)
BPhil (Oxford University)

Department of Philosophy
College of Humanities and Sciences

RESEARCH INTERESTS

- ◆ Hume
- ◆ Kant
- ◆ Early modern philosophy

RESEARCH ACHIEVEMENTS

- His body of work offers novel and rigorous contributions to Hume scholarship. Achievements include:
 - Receiving acclaim for his monograph, Hume's Epistemological Evolution (Oxford University Press, 2020), which offers a novel solution to a critical problem in Hume scholarship, the 'Kemp Smith Problem'. It was nominated for the American Philosophical Association's Book Prize in 2021 and received highly favourable reviews, including from the Journal of the History of Philosophy, the Journal of Scottish Philosophy, and Hume Studies
 - Publishing work on Hume's metaphysical principles in leading journals, including Mind, the Pacific Philosophical Quarterly, the Australasian Journal of Philosophy, and the British Journal of the History of Philosophy
- ◆ His work won the NUS Department of Philosophy a place, for the first time, in the 2021/2022 Philosophical Gourmet Report's "Early Modern: 18th Century" category, tying with the likes of Stanford University's and Princeton University's philosophy departments

PUBLICATION CREDITS

- ◆ A monograph published by Oxford University Press and 20 papers in leading journals
- ◆ Three homeruns (a journal article that receives 10 times more citations than the average in a particular discipline)

INTERNATIONAL STANDING

- ◆ Director of NUS Press (since 2023)
- Associate editor of the Australasian Journal of Philosophy (since 2022)
- ◆ Member of the Hume Society Executive Committee (since 2020)
- ◆ Invited speaker/panelist at various leading conferences, including the American Philosophical Quarterly Eastern Division (2021) and the 45th International Hume Society Conference (2018)

- ◆ Provost's Chair, NUS (2023)
- ◆ Faculty Teaching Excellence Award, NUS (2022)
- ◆ Dean's Chair, NUS (2021)
- ◆ NUS FASS Excellent Researcher Award (2021)
- American Philosophical Association Book Prize nomination (2021)
- NUS FASS Promising Young Researcher Award (2018)

University
Research
Recognition
Award





Professor Patrick Tan Boon Ooi

MD, PhD (Stanford University) BA (Harvard University) Duke-NUS Medical School

RESEARCH INTERESTS

- Genomics and epigenomics of Asian-endemic cancers
- ◆ Precision medicine and population genomics
- ◆ Genomic technologies

RESEARCH ACHIEVEMENTS

- ◆ Pioneering research using genomic approaches to unlock the molecular and clinical diversity of gastric cancer and other Asianendemic malignancies, paving the way for advancements in the diagnosis and treatment of Asian cancer patients
- Co-discoverer of aristolochic acid, a constituent of traditional herbal remedies, as a cause of certain forms of urogenital and liver cancers
- ◆ Leader of Singapore's National Precision Medicine programme establishing the world's largest genetic data bank of multi-ethnic Asian populations, which has enhanced research into Asian diseases, improved clinical practice, and contributed to public equality through a moratorium on the use of genetic information in insurance underwriting
- Deciphered the genomes of plants of significant social and cultural value to Singapore, including the durian and national orchid Vanda Miss Joaquim
- ◆ Contributed to national resilience during the COVID-19 pandemic by leading the establishment of the Stronghold Diagnostics Lab, one of Singapore's largest COVID-19 testing facilities founded by A*STAR and the National University Health System

PUBLICATION CREDITS

- Published over 310 peer-reviewed journal articles
- Obtained over 33,000 citations since 2006, with a Hirsch index of 101
- ◆ Featured in Stanford University's World's Top 2% Scientists List, which recognises the mostcited scientists in various disciplines, in the fields of oncology and carcinogenesis (2021, 2022)

INTERNATIONAL STANDING

- ◆ Editorial board member of *Cancer Discovery* (since 2023)
- ◆ Advisory board member of the Qatar Precision Health Institute (since 2023) and Riyadh Biotech City (since 2022)
- Member of the Board of Reviewing Editors for Science (since 2021)
- ◆ Board member of the International Gastric Cancer Association (since 2016)
- ◆ Elected member of the American Society for Clinical Investigation (since 2013)

- ◆ Singapore Translational Research Investigator Award, National Medical Research Council (2022, 2016)
- ◆ Public Administration Medal (Silver) (2022)
- American Association for Cancer Research Team Science Award (Team Leader) (2018)
- ◆ Japanese Cancer Association International Award (2016)
- ◆ President's Science Award (Team) (2015)
- ◆ Chen New Investigator Award, Human Genome Organisation (2013)



Outstanding Service Award



The powerful research profile of NUS enables us to make major impacts in many areas, especially on human health and disease in an ageing population. In particular, we aim to discover a means of slowing the onset and progression of dementia in the elderly, based on our research on novel antioxidants.

Professor Barry Halliwell



CURRENT PORTFOLIO

- Distinguished Professor, Department of Biochemistry, Yong Loo Lin School of Medicine, NUS
- Senior Advisor (Academic Appointments and Research Excellence), Office of the Provost, NUS
- Programme Leader (Neurobiology Research Programme), Life Sciences Institute, NUS
- Chairman, Biomedical Advisory Council, A*STAR

LIFETIME ACHIEVEMENTS

Professor Halliwell's 25-year career at NUS has seen him play a pivotal leadership role in driving the University's research excellence and global reputation as a top research-intensive university. Achievements include:

- Promoting NUS as a hub for excellence in life sciences at the Life Sciences Institute, where he heads the Neurobiology Research Programme
- ◆ Playing an instrumental role in establishing NUS research institutes, centres and programmes, contributing to successful bids for four Research Centres of Excellence—three at NUS, one jointly with NTU (NTU-led)—and the Centre for Advanced 2D Materials
- Overseeing various key research programmes at NUS, including the Neurobiology Research Programme at the Life Sciences Institute and the Solar Energy Research Institute of Singapore
- Spearheading pioneering models of multidisciplinary graduate research education, thereby strengthening the quality of graduate education at NUS
- Raising the translational impact of NUS research by driving research collaborations with industry, in collaboration with NUS Enterprise

SERVICE TO NATION AND THE INTERNATIONAL COMMUNITY

◆ Lauded as one of the world's leading biochemists, Professor Halliwell has significantly advanced our understanding of the role of free radicals and antioxidants in biological systems, paving the way for more effective treatment of disease, especially neurodegenerative diseases

- His transformative research, particularly on Alzheimer's disease and other brain disorders, includes identification of the most important antioxidants in the human diet as well as the development of novel antioxidants to treat diseases
- His outstanding contributions have garnered him numerous accolades, including the Lifetime Achievement Award by the Society for Free Radical Biology and Medicine, USA (2008) and Citation Laureate (2021), a distinction awarded by Clarivate to the most highly cited researchers in their field and whose work is of Nobel class. In 2013, he was awarded the Science and Technology Medal by the President of Singapore for sustained and exceptional contributions to Singapore's science and engineering landscape
- Professor Halliwell has played an instrumental role in the strategic development of the R&D sector in Singapore and beyond. Contributions include:
 - Playing a key role in the development of core new intellectual activities in Singapore in fields such as ageing, clean water, neurobiology, and digital media, including the establishment of the NUS Virtual Institute for the Study of Ageing in 2015
 - Shaping the growth of the R&D sector as consultant and advisor to national and international industry and public bodies in various fields, including biomedical research, and environmental and water technologies

AWARDS AND ACCOLADES

- Advances in Nutrition Research Award, Society of Nutrition and Food Science (2015)
- ◆ Lifetime Achievement Award, Singapore Neuroscience Association (2014)
- ◆ NUS Outstanding Researcher Award (2012)
- Ken Bowman Research Award, Institute of Cardiovascular Sciences, Canada (2011)
- ◆ Public Administration Medal (Silver) (2010)

EDUCATION

- ◆ DSc (University of London)
- ◆ DPhil (University of Oxford)
- ◆ BA (University of Oxford)

NUS has nurtured generations of talents over the years and contributed much to the success story of Singapore. It is my fervent wish that NUS will continue to spearhead our country's growth and development through its leadership, excellence and dynamism.

Mr Quek Gim Pew



CURRENT PORTFOLIO

- Chairman, National Supercomputing Centre Steering Committee
- ◆ Co-Chair, National Quantum Steering Committee
- Deputy Chairman, Office for Space Technology and Industry
- ◆ Senior R&D Consultant, Ministry of Defence
- ◆ Fellow, Academy of Engineering, Singapore
- Adjunct Professor, NUS Department of Electrical and Computer Engineering
- ◆ Board member of A*STAR; Campus for Research Excellence and Technological Enterprise (Scientific Advisory Board); Monetary Authority of Singapore Risk Committee; NUS High School; Singapore Institute of Technology; Singapore University of Technology and Design; SMRT Trains Ltd; Technology Centre for Offshore and Marine, Singapore

LIFETIME ACHIEVEMENTS

- ↑ Throughout his 42-year engineering career, Mr Quek has made significant contributions to the development of advanced defence technologies for the Singapore Armed Forces during his stints as CEO of DSO National Laboratories (2004 2016) and Chief Defence Scientist at the Ministry of Defence (2016 2021), among others, as well as the enhancement of Singapore's capabilities in space, quantum and digital technologies in his roles as Chairman of the Centre for Quantum Technologies' Governing Board (2016 2022) and Co-Chair of the National Quantum Steering Committee (since 2021), among others. Achievements include:
 - Playing a key role in shaping cutting-edge technological solutions that enhance Singapore's national security, including developing disruptive concepts and technologies for the Singapore Armed Forces
 - Overseeing the transformation of Singapore's approach to quantum research, shifting the country's primary focus on fundamental research to a nationwide initiative that harnesses quantum technology to support economic and national imperatives
 - Shaping the build-up of Singapore's space technology community and satellite development capabilities
 - Enhancing Singapore's research capacity by steering the development of highperformance computing, and championing the convergence of supercomputing, quantum computing and Al in the local research ecosystem

SERVICE TO NATION AND THE INTERNATIONAL COMMUNITY

- → A strong advocate for STEM education, Mr Quek has initiated various nationwide programmes to enhance the accessibility of STEM education among young Singaporeans, such as the Young Defence Scientist Programme, which introduces students to emerging topics in science and engineering, national science competitions that spur scientific ingenuity, as well as outreach programmes that promote STEM through space science and satellite technology
- ♠ Mr Quek's efforts in fostering collaborations between various sectors, such as between the defence and public sectors, research and industry sectors, as well as local and overseas entities, have brought about strategic partnerships that tap into the ecosystem's strengths, further strengthening Singapore's research and development capacity and impact across the globe
- ◆ As a member of a number of Research, Innovation and Enterprise (RIE) committees at the National Research Foundation and various government agencies, Mr Quek has provided critical input on RIE domains that have contributed to the advancement of national cross-disciplinary science and technology capabilities, amplifying Singapore's innovation, growth and talent development
- ◆ As a board member of various educational institutions in Singapore, including several institutes of higher learning, Mr Quek has contributed to the strategic development of the nation's education and research capacities, as well as industry partnerships and entrepreneurship efforts at local universities

AWARDS AND ACCOLADES

- NUS Distinguished Engineering Alumni Award (2014)
- ◆ Public Administration Medal (Gold, 2007; Silver, 1999; Bronze, 1992)
- ◆ Defence Technology Prize (Individual) (1992)

EDUCATION

- ◆ MS (Naval Postgraduate School)
- ◆ BEng (National University of Singapore)





Professor Barry HalliwellOutstanding Service Award



Mr Quek Gim PewOutstanding Service Award



Professor Patrick Tan Boon Ooi University Research Recognition Award



Associate Professor Lee Kooi ChengOutstanding Educator Award



Assistant Professor Koh Ming Joo Young Researcher Award



Professor Qu Hsueh Ming Young Researcher Award





