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THE UNIVERSITY OF HONG KONG

Press Release

## HKU scholars awarded Croucher Senior Research Fellowships

December 8, 2022



*Croucher Senior Research Fellowships 2022  
Dr Jinyao TANG and Professor Mingxin HUANG*

Three distinguished scholars from the University of Hong Kong (HKU) were presented with Croucher Senior Research Fellowships by the Croucher Foundation today (December 8). They are:

### **Croucher Senior Research Fellowships 2022**

Dr Jinyao TANG (HKU)

Associate Professor, Department of Chemistry, Faculty of Science, The University of Hong Kong

Professor Mingxin HUANG (HKU)

Professor, Department of Mechanical Engineering, Faculty of Engineering, The University of Hong Kong



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### **Croucher Senior Research Fellowship 2023**

Dr Stephanie MA (HKU)

Associate Professor, School of Biomedical Sciences, Li Ka Shing Faculty of Medicine, The University of Hong Kong

#### **The three awardees and their research:**

##### **Dr Jinyao TANG, Associate Professor, Department of Chemistry, Faculty of Science, HKU**

As a physical chemist and material scientist, Dr Tang synergised the power of chemistry, nanotechnology, and soft matter physics, as well as synthesised a series of nanorobots that can be powered, guided, and programmed by chemical reactions, which may find applications in healthcare and new functional materials. Dr Tang's team will develop new synthetic and physical tools to understand how to integrate individual nanorobot into intelligent materials, where many unique properties that were previously only possible in the living system can be realised and exploited for new applications. (Please click [here](#) for Dr Jinyao TANG's biography)

##### **Professor Mingxin HUANG, Professor, Department of Mechanical Engineering, Faculty of Engineering, HKU**

Professor Huang's research mainly focuses on the development of high-performance metals. Professor Huang's team invented the Super Steel. It creates two world-records for strength-ductility and strength-toughness combinations, and invented the world's first anti-COVID-19 stainless steel that has been licensed to industry for production of daily products. He will continue to research on high-performance alloys including lightweight magnesium alloys for potential automobile and aerospace applications, which is financially supported by this Croucher Award. (Please click [here](#) for Professor Mingxin HUANG's biography)

##### **Dr Stephanie MA, Associate Professor, School of Biomedical Sciences, Li Ka Shing Faculty of Medicine, HKU**

Dr Ma's research focuses on understanding how phenotypic plasticity and cancer stemness contribute to therapy resistance and tumour recurrence, primarily using liver cancer (hepatocellular carcinoma, HCC) as a model system. Her team has contributed to the identification of liver cancer stem cell (CSC) markers, intrinsic regulators and signalling pathways as well as the role of various tumour microenvironmental factors in allowing HCC tumours to maintain a more stem/progenitor state. With the Croucher Senior Research Fellowship, she and her team will explore the mechanisms of T cell immune evasion and their link with cancer stemness in HCC by employing interdisciplinary approaches that cover CRISPR screening, high-throughput organoid-based immune-drug profiling, and single-cell/spatial transcriptomics. (Please click [here](#) for Dr Stephanie MA's biography)



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### **The Croucher Senior Research Fellowships**

The Croucher Senior Research Fellowships are presented to local academics in recognition of their excellent scientific research. The awards are granted after a robust process involving a paper selection exercise, detailed international peer review and long discussions between Trustees. The value of each Senior Research Fellowship, including the cost of a replacement teacher, is about HK\$3 million.

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