香 港 大 學
THE UNIVERSITY OF HONG KONG

Dr Carmen Wong Chak-Lui
Assistant Professor, Department of Pathology,
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Biography

Dr Carmen Wong Chak-lui obtained her BSc degree in Microbiology and Immunology from The University of British Columbia in Canada, MSc degree in Biotechnology from The Hong Kong University of Science and Technology, and PhD degree in Cancer Biology from The University of Hong Kong (HKU). She received the Croucher Foundation Fellowship in 2009 and obtained her post-doctoral training at the Johns Hopkins University in the United States. She is currently an Assistant Professor at the Department of Pathology of Li Ka Shing Faculty of Medicine, HKU.

Her main research focuses on the molecular dysregulation and metabolic reprogramming of liver cancer. Recently, she is actively studying the roles and molecular consequences of hypoxic and oxidative stress in cancer development. She is particularly interested in identifying novel prognostic indicators and molecular targets in a locally prevalent cancer, liver cancer which to date has no curative therapy. She recently revealed that liver cancer cells relied on the pentose phosphate pathway to produce anti-oxidants to survive oxidative stress. She also discovered that liver cancer cells use a special unit in the electron transport chain to decelerate electron transfer to survive hypoxia-induced oxidative stress.

Her research has been published in *PNAS*, *Gastroenterology*, *Hepatology*, *Clinical Cancer Research*, and *Journal of Clinical Investigation*. She is an editorial board member of *Scientific Reports* of the Nature Publishing Group. She is currently a principal investigator of the State Key Laboratory for Liver Research of HKU.

Dr Wong is the recipient of the 2017 Croucher Innovation Award for her work in "Identifying the Metabolic Vulnerabilities of Liver Cancer". She will comprehensively map the metabolic network of liver cancer, and integrate the knowledge on the genetics, epigenetics, and signaling pathways, with their associated metabolic phenotypes in liver cancer. She strives to identify drugs that could selectively target the metabolic machinery of liver cancer cells but not the normal cells.

Being able to build her career on science is one of the most rewarding things in her life. She enjoys learning new knowledge, doing new experiments, and making new discoveries every day. She especially enjoys working with other scientists to tackle clinically-relevant and scientifically-important questions. She is also very enthusiastic in nurturing students as they will be the pillars of the scientific community.

<u>Awards and Scholarships</u>

2017	Croucher Innovation Award, The Croucher Foundation
2009-2011	Croucher Foundation Fellowship, The Croucher Foundation
2009	Hong Kong Young Scientist Award, Hong Kong Institution of Science
2009	Li Ka Shing Prize (best PhD thesis award), Graduate School, HKU
2009	Dr KP Stephen Chang Gold Medal (best PhD thesis award), Li Ka Shing Faculty of Medicine, HKU