

# **Sam Lai, Ph.D.**

**Associate Professor, Eshelman School of Pharmacy at UNC-Chapel Hill**

Chapel Hill, NC, US

Professor Lai's research focuses on nanoparticle-based delivery of bioactive molecules to mucosal tissues.

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Sam Lai was born in Hong Kong and spent his childhood in both Hong Kong and Vancouver. After completing high school at Phillips Academy, Andover, he attended Cornell University and received his BS in chemical and biomolecular engineering in 2003. He then undertook doctoral studies at Johns Hopkins University, receiving his PhD in chemical and biomolecular engineering in 2007. Following a one-year postdoc, he became a research assistant professor at Johns Hopkins in fall 2008 before joining the UNC Eshelman School of Pharmacy in fall 2010. Lai's previous research focused on nanoparticle-based delivery of bioactive molecules to mucosal tissues. He helped pioneer the development of mucus-penetrating particle technology, a breakthrough that formed the basis of Kala Pharmaceuticals, launched in 2009 based on funding from a syndicate of leading VC firms. Lai remains an adviser to Kala.

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Research, Education/Learning, Laboratory Services

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PEG (polyethylene glycol), Non-hormonal Contraception, Anti-drug Antibodies, Mucosal Immunology, Mucus, Antibody, Infectious Disease, Drug Delivery, Acute Respiratory Infections

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**Johns Hopkins University**

PhD Chemical and Biomolecular Engineering

**Cornell University**

BS Chemical and Biomolecular Engineering

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