

Stanford



Connie Fung

Postdoctoral Scholar, Pathology

Bio

BIO

Connie received her B.S. in Microbiology, Immunology, and Molecular Genetics from UCLA, where she conducted research on how the eukaryotic parasite *Toxoplasma gondii* invades and replicates inside host cells in the lab of Dr. Peter Bradley. Subsequently, she obtained her Ph.D. in Microbiology & Immunology from Stanford University with Dr. Manuel Amieva. Her thesis research involved the use of high-resolution microscopy to study how the bacterium *Helicobacter pylori* establishes and maintains persistent colonization of the gastric epithelium. Connie joined Dr. Michael Howitt's lab as a postdoctoral research fellow in 2019 and is currently investigating how tuft cells, specialized taste-chemosensory cells, modulate mucosal immunity in response to intestinal parasites.

INSTITUTE AFFILIATIONS

- Member, Maternal & Child Health Research Institute (MCHRI)

HONORS AND AWARDS

- A.P. Giannini Foundation Postdoctoral Research Fellowship, A.P. Giannini Foundation (2021-2024)
- Maternal & Child Health Research Institute Postdoctoral Fellowship, Stanford School of Medicine (2021)
- Dean's Postdoctoral Fellowship, Stanford School of Medicine (2020)
- Office of Graduate Education Travel Grant, Stanford School of Medicine (2016, 2017)
- NSF Graduate Research Fellowship, National Science Foundation (2014-2017)
- Stanford Graduate Fellowship, Stanford University (2012-2017)

PROFESSIONAL EDUCATION

- Doctor of Philosophy, Stanford University, Microbiology & Immunology (2019)
- Bachelor of Science, University of California, Los Angeles, Microbiology, Immunology, and Molecular Genetics (2012)

LINKS

- Howitt Lab Website: <https://www.howittlab.com/>

Publications

PUBLICATIONS

- **An infection-induced oxidation site regulates legumain processing and tumor growth.** *Nature chemical biology*
Kovalyova, Y., Bak, D. W., Gordon, E. M., Fung, C., Shuman, J. H., Cover, T. L., Amieva, M. R., Weerapana, E., Hatzios, S. K.
2022
- **A Tuft Act to Follow: Leukotrienes Take the Stage in Anti-worm Immunity.** *Immunity*

Fung, C. n., Howitt, M. R.

2020; 52 (3): 426–28

- **High-resolution mapping reveals that microniches in the gastric glands control *Helicobacter pylori* colonization of the stomach.** *PLoS biology*
Fung, C. n., Tan, S. n., Nakajima, M. n., Skoog, E. C., Camarillo-Guerrero, L. F., Klein, J. A., Lawley, T. D., Solnick, J. V., Fukami, T. n., Amieva, M. R.
2019; 17 (5): e3000231
- **A *Toxoplasma* Palmitoyl Acyl Transferase and the Palmitoylated Armadillo Repeat Protein TgARO Govern Apical Rhoptry Tethering and Reveal a Critical Role for the Rhoptries in Host Cell Invasion but Not Egress** *PLOS PATHOGENS*
Beck, J. R., Fung, C., Straub, K. W., Coppens, I., Vashisht, A. A., Wohlschlegel, J. A., Bradley, P. J.
2013; 9 (2)
- ***Toxoplasma* ISP4 is a central IMC Sub-compartment Protein whose localization depends on palmitoylation but not myristoylation** *MOLECULAR AND BIOCHEMICAL PARASITOLOGY*
Fung, C., Beck, J. R., Robertson, S. D., Gubbels, M., Bradley, P. J.
2012; 184 (2): 99-108