Stanford



Alex Christopher Engel

Lecturer, Bioengineering

Curriculum Vitae available Online

Bio

ACADEMIC APPOINTMENTS

- Lecturer, Bioengineering

PROFESSIONAL EDUCATION

- Ph.D., University of California, San Francisco , Cell Biology (2007)

Teaching

COURSES

2026-27

- Fundamentals for Engineering Biology Lab: BIOE 44 (Aut)
- Introduction to Bioengineering (Engineering Living Matter): BIOE 80, ENGR 80 (Spr)
- Systems Physiology and Design: BIOE 103 (Spr)

2025-26

- Fundamentals for Engineering Biology Lab: BIOE 44 (Aut)
- Introduction to Bioengineering (Engineering Living Matter): BIOE 80, ENGR 80 (Spr)
- Systems Physiology and Design: BIOE 103 (Spr)

2024-25

- Fundamentals for Engineering Biology Lab: BIOE 44 (Aut, Win)
- Introduction to Bioengineering (Engineering Living Matter): BIOE 80, ENGR 80 (Spr)
- Systems Physiology and Design: BIOE 103 (Spr)

2023-24

- Fundamentals for Engineering Biology Lab: BIOE 44 (Aut, Win)
- Systems Physiology and Design: BIOE 103 (Spr)

Publications

PUBLICATIONS

- **Cofactors Required for TLR7-and TLR9-Dependent Innate Immune Responses** *CELL HOST & MICROBE*
  Chiang, C., Engel, A., Opaluch, A. M., Ramos, I., Maestre, A. M., Secundino, I., De Jesus, P. D., Nguyen, Q. T., Welch, G., Bonamy, G. M., Miraglia, L. J., Orth, A. P., Nizet, et al

2012; 11 (3): 306-318

- **Nucleic acid recognition by Toll-like receptors is coupled to stepwise processing by cathepsins and asparagine endopeptidase** *JOURNAL OF EXPERIMENTAL MEDICINE*
  Ewald, S. E., Engel, A., Lee, J., Wang, M., Bogyo, M., Barton, G. M.
  2011; 208 (4): 643-651
- **The yeast cell fusion protein Prm1p requires covalent dimerization to promote membrane fusion.** *PloS one*
  Engel, A., Aguilar, P. S., Walter, P.
  2010; 5 (5): e10593
- **Structure of sterol aliphatic chains affects yeast cell shape and cell fusion during mating.** *Proceedings of the National Academy of Sciences of the United States of America*
  Aguilar, P. S., Heiman, M. G., Walther, T. C., Engel, A., Schwudke, D., Gushwa, N., Kurzchalia, T., Walter, P.
  2010; 107 (9): 4170-5
- **Membrane lysis during biological membrane fusion: collateral damage by misregulated fusion machines.** *The Journal of cell biology*
  Engel, A., Walter, P.
  2008; 183 (2): 181-6
- **The plasma membrane proteins Prm1 and Fig1 ascertain fidelity of membrane fusion during yeast mating.** *Molecular biology of the cell*
  Aguilar, P. S., Engel, A., Walter, P.
  2007; 18 (2): 547-56
- **The Golgi-resident protease Kex2 acts in conjunction with Prm1 to facilitate cell fusion during yeast mating.** *The Journal of cell biology*
  Heiman, M. G., Engel, A., Walter, P.
  2007; 176 (2): 209-22