Stanford

Franziska Marie Heydenreich

Postdoctoral Research Fellow, Molecular and Cellular Physiology

Bio

PROFESSIONAL EDUCATION

- Bachelor of Science, Eidgenossische Technische Hochschule (ETH Zurich) (2010)
- Master of Science, Eidgenossische Technische Hochschule (ETH Zurich) (2012)
- Doctor of Science, Eidgenossische Technische Hochschule (ETH Zurich) (2017)

Research & Scholarship

LAB AFFILIATIONS

- Brian Kobilka (9/2/2018)

Publications

PUBLICATIONS

- **How GPCR Phosphorylation Patterns Orchestrate Arrestin-Mediated Signaling.** *Cell*
  Latorraca, N. R., Masureel, M., Hollingsworth, S. A., Heydenreich, F. M., Suomivuori, C., Brinton, C., Townshend, R. J., Bouvier, M., Kobilka, B. K., Dror, R. O.
  2020
- **High-throughput Site-directed Scanning Mutagenesis Using a Two-fragment PCR Approach** *BIO-PROTOCOL*
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- **High-throughput mutagenesis using a two-fragment PCR approach.** *Scientific reports*
  Heydenreich, F. M., Miljuš, T., Jaussi, R., Benoit, R., Mili#, D., Veprintsev, D. B.
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- **A new inhibitor of the #-arrestin/AP2 endocytic complex reveals interplay between GPCR internalization and signalling.** *Nature communications*
  Beautrait, A., Paradis, J. S., Zimmerman, B., Giubilaro, J., Nikolajev, L., Armando, S., Kobayashi, H., Yamani, L., Namkung, Y., Heydenreich, F. M., Khoury, E., Audet, M., Roux, et al
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- **GlnK Facilitates the Dynamic Regulation of Bacterial Nitrogen Assimilation.** *Biophysical journal*
  Gosztolai, A., Schumacher, J., Behrends, V., Bundy, J. G., Heydenreich, F., Bennett, M. H., Buck, M., Barahona, M.
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- **Diverse activation pathways in class A GPCRs converge near the G-protein-coupling region.** *Nature*
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- **GPCR-G Protein-ß-Arrestin Super-Complex Mediates Sustained G Protein Signaling.** *Cell*
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- **Backbone NMR reveals allosteric signal transduction networks in the #1-adrenergic receptor.** *Nature*
  Isogai, S., Deupi, X., Opitz, C., Heydenreich, F. M., Tsai, C. J., Brueckner, F., Schertler, G. F., Veprintsev, D. B., Grzesiek, S.
  2016; 530 (7589): 237–41

- **Stabilization of G protein-coupled receptors by point mutations** *FRONTIERS IN PHARMACOLOGY*
  Heydenreich, F. M., Vuckovic, Z., Matkovic, M., Veprintsev, D. B.
  2015; 6: 82

- **AAscan, PCRdesign and MutantChecker: A Suite of Programs for Primer Design and Sequence Analysis for High-Throughput Scanning Mutagenesis** *PLOS ONE*
  Sun, D., Ostermaier, M. K., Heydenreich, F. M., Mayer, D., Jaussi, R., Standfuss, J., Veprintsev, D. B.
  2013; 8 (10): e78878

- **Nitrogen and carbon status are integrated at the transcriptional level by the nitrogen regulator NtrC in vivo.** *mBio*
  Schumacher, J., Behrends, V., Pan, Z., Brown, D. R., Heydenreich, F., Lewis, M. R., Bennett, M. H., Razzaghi, B., Komorowski, M., Barahona, M., Stumpf, M. P., Wigneshweraraj, S., Bundy, et al
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- **Activity of the mycobacterial proteasomal ATPase Mpa is reversibly regulated by pupylation.** *The Journal of biological chemistry*
  Delley, C. L., Striebel, F., Heydenreich, F. M., Özcelik, D., Weber-Ban, E.
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