Stanford

Gabriele Kockelkoren

Postdoctoral Scholar, Genetics

Bio

BIO

Gabriele has a strong background in both physics and molecular biology and, accordingly, he strives in interdisciplinary environments. After completing a cum laude BSc. and MSc. in Nanobiology at the Technical University of Delft in The Netherlands, Gabriele pursued a PhD at the University of Copenhagen under the supervision of Prof. Dimitrios Stamou. In his PhD, Gabriele studied the nanoscale spatial organization of G protein-coupled receptors (GPCRs) at the plasma membrane of living cells. Importantly, his work reveals heterogeneous spatial patterns of receptor density and activation, that are modulated in a drug-dependent manner. These findings identify GPCR spatial organization as an integral element of their activity and signaling. Currently, Gabriele is a Postdoctoral Fellow in the lab of Prof. Alice Ting developing programmable receptors for molecular sensing and controlling cellular behaviour.

HONORS AND AWARDS

- Walter V. and Idun Y. Berry Postdoctoral Fellowship, Stanford School of Medicine (2025 - now)
- Camurus Lipid Science Prize, Camurus Foundation (2025)

PROFESSIONAL EDUCATION

- Master of Science, Technische Universiteit Delft (2019)
- Bachelor of Science, Technische Universiteit Delft (2017)
- Doctor of Philosophy, University of Copenhagen (2024)
- BSc, Technical University of Delft, The Netherlands , Nanobiology (2017)
- MSc, Technical University of Delft, The Netherlands , Nanobiology (2019)
- PhD, University of Copenhagen (with Dimitrios Stamou), Denmark , Biophysics (2024)

STANFORD ADVISORS

- Alice Ting, Postdoctoral Faculty Sponsor

Research & Scholarship

LAB AFFILIATIONS

- Alice Ting (6/3/2024)

Publications

PUBLICATIONS

- **Molecular mechanism of GPCR spatial organization at the plasma membrane.** *Nature chemical biology*
  Kockelkoren, G., Lauritsen, L., Shuttle, C. G., Kazepidou, E., Vonkova, I., Zhang, Y., Breuer, A., Kennard, C., Brunetti, R. M., D'Este, E., Weiner, O. D., Uline, M., Stamou, et al
  2024; 20 (2): 142-150

- **WASP integrates substrate topology and cell polarity to guide neutrophil migration.** *The Journal of cell biology*
  Brunetti, R. M., Kockelkoren, G., Raghavan, P., Bell, G. R., Britain, D., Puri, N., Collins, S. R., Leonetti, M. D., Stamou, D., Weiner, O. D.
  2022; 221 (2)