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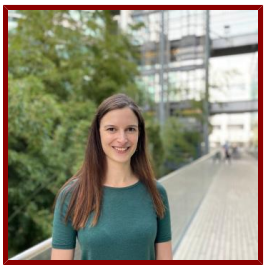

Dorien Feyaerts

Postdoctoral Scholar, Anesthesiology, Perioperative and Pain Medicine

Bio

INSTITUTE AFFILIATIONS

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

HONORS AND AWARDS

- SRI/Bayer Discovery/Innovation grant, Society for Reproductive Investigation (July 2023 - July 2024)
- Best poster for Clinical Science, Stanford Department of Anesthesia (June 2022)
- Postdoctoral Support Grant, Stanford Maternal and Child Health Research Institute (March 2021 - June 2023)

STANFORD ADVISORS

- Brice Gaudilliere, Postdoctoral Research Mentor
- Brice Gaudilliere, Postdoctoral Faculty Sponsor

LINKS

- Gaudilliere lab: https://gaudillierelab.stanford.edu

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

Biomedical scientist and immunologist with a strong background in fetal-maternal immunology that aims to conduct impactful translational research in women's health to improve the health of mothers and their children.

Publications

PUBLICATIONS

- **Discovery of sparse, reliable omic biomarkers with Stabl.** *Nature biotechnology*
  Hédou, J., Mari#, I., Bellan, G., Einhaus, J., Gaudillière, D. K., Ladant, F. X., Verdonk, F., Stelzer, I. A., Feyaerts, D., Tsai, A. S., Ganio, E. A., Sabayev, M., Gillard, et al
  2024

- **Spatial subsetting enables integrative modeling of oral squamous cell carcinoma multiplex imaging data.** *iScience*
  Einhaus, J., Gaudilliere, D. K., Hedou, J., Feyaerts, D., Ozawa, M. G., Sato, M., Ganio, E. A., Tsai, A. S., Stelzer, I. A., Bruckman, K. C., Amar, J. N., Sabayev, M., Bonham, et al
  2023; 26 (12): 108486

- **Uterine Natural Killer Cells Modulate Endometrial Growth and Persistence in Endometriosis**
  Diop, M., Feyaerts, D., Irwin, J., Einhaus, J., Stelzer, I., Bonham, A., Casillas, A., Vo, K., Blish, C., Giudice, L., Gaudilliere, B.

ELSEVIER IRELAND LTD.2023: 25

- **Longitudinal clinical phenotyping of post COVID condition in Mexican adults recovering from severe COVID-19: a prospective cohort study.** *Frontiers in medicine*

  Núñez, I., Gillard, J., Fragoso-Saavedra, S., Feyaerts, D., Islas-Weinstein, L., Gallegos-Guzmán, A. A., Valente-García, U., Meyerowitz, J., Kelly, J. D., Chen, H., Ganio, E., Benkendorff, A., Flores-Gouyonnet, et al

  2023; 10: 1236702

- **Expanded vacuum-stable gels for multiplexed high-resolution spatial histopathology.** *Nature communications*

  Bai, Y., Zhu, B., Oliveria, J., Cannon, B. J., Feyaerts, D., Bosse, M., Vijayaragavan, K., Greenwald, N. F., Phillips, D., Schurch, C. M., Naik, S. M., Ganio, E. A., Gaudilliere, et al

  2023; 14 (1): 4013

- **STABL Enables Reliable and Selective biomarker Discovery in Predictive Modeling of High Dimensional Omics Data**

  Verdonk, F., Hedou, J., Maric, I., Bellan, G., Einhaus, J., Gaudilliere, D., Ladant, F., Stelzer, I., Feyaerts, D., Tsai, A., Bonham, A., Angst, M., Aghaeepour, et al

  LIPPINCOTT WILLIAMS & WILKINS.2023: 814-821

- **Integrated Mass Cytometry Accurately Predicts Hemorrhagic Transformation Following Acute Ischaemic Stroke**

  Tsai, A., Hedou, J., Einhaus, J., Feyaerts, D., Verdonk, F., Choisy, B., Desilles, J., Ho-Tin-Noe, B., Olivot, J., Mazighi, M., Gaudilliere, B.

  LIPPINCOTT WILLIAMS & WILKINS.2023: 261-262

- **An immune signature of postoperative cognitive dysfunction (POCD), a prospective cohort study**

  Verdonk, F., Hedou, J., Bellan, G., Ganio, E., Stelzer, I., Feyaerts, D., Sato, M., Bonham, A., Ando, K., Gaudilliere, D., Gaillard, R., Molliex, S., Sharshar, et al

  LIPPINCOTT WILLIAMS & WILKINS.2023: 466-467

- **Large-scale correlation network construction for unraveling the coordination of complex biological systems** *NATURE COMPUTATIONAL SCIENCE*

  Becker, M., Nassar, H., Espinosa, C., Stelzer, I. A., Feyaerts, D., Berson, E., Bidoki, N. H., Chang, A. L., Saarunya, G., Culos, A., De Francesco, D., Fallahzadeh, R., Liu, et al

  2023

- **Large-scale correlation network construction for unraveling the coordination of complex biological systems.** *Nature computational science*

  Becker, M., Nassar, H., Espinosa, C., Stelzer, I. A., Feyaerts, D., Berson, E., Bidoki, N. H., Chang, A. L., Saarunya, G., Culos, A., De Francesco, D., Fallahzadeh, R., Liu, et al

  2023; 3 (4): 346-359

- **Stabl: sparse and reliable biomarker discovery in predictive modeling of high-dimensional omic data.** *Research square*

  Hédou, J., Mari#, I., Bellan, G., Einhaus, J., Gaudillière, D. K., Ladant, F. X., Verdonk, F., Stelzer, I. A., Feyaerts, D., Tsai, A. S., Ganio, E. A., Sabayev, M., Gillard, et al

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- **Towards multiomic analysis of oral mucosal pathologies.** *Seminars in immunopathology*

  Einhaus, J., Han, X., Feyaerts, D., Sunwoo, J., Gaudilliere, B., Ahmad, S. H., Aghaeepour, N., Bruckman, K., Ojcius, D., Schurch, C. M., Gaudilliere, D. K.

  2023

- **Early prediction and longitudinal modeling of preeclampsia from multiomics.** *Patterns (New York, N.Y.)*

  Maric, I., Contrepois, K., Moufarrej, M. N., Stelzer, I. A., Feyaerts, D., Han, X., Tang, A., Stanley, N., Wong, R. J., Traber, G. M., Ellenberger, M., Chang, A. L., Fallahzadeh, et al

  2022; 3 (12): 100655

- **Upcoming and urgent challenges in critical care research based on COVID-19 pandemic experience.** *Anaesthesia, critical care & pain medicine*

  Verdonk, F., Feyaerts, D., Badenes, R., Bastarache, J. A., Bougle, A., Ely, W., Gaudilliere, B., Howard, C., Kotfis, K., Lautrette, A., Le Dorze, M., Mankidy, B. J., Matthay, et al

  2022: 101121

- **Integrated plasma proteomic and single-cell immune signaling network signatures demarcate mild, moderate, and severe COVID-19.** *Cell reports. Medicine*

  Feyaerts, D., Hédou, J., Gillard, J., Chen, H., Tsai, E. S., Peterson, L. S., Ando, K., Manohar, M., Do, E., Dhondalay, G. K., Fitzpatrick, J., Artandi, M., Chang, et al

  2022: 100680

- **Establishment of tissue-resident immune populations in the fetus.** *Seminars in immunopathology*

  Feyaerts, D., Urbschat, C., Stelzer, I. A.

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- **An immune signature of postoperative cognitive dysfunction (POCD)**
  Verdonk, F., Tsai, A. S., Hedou, J., Heifets, B. D., Gaudilliere, D., Bellan, G., Sharshar, T., Gaillard, R., Molliex, S., Feyaerts, D., Stelzer, I., Ganio, E. A., Sato, et al
  LIPPINCOTT WILLIAMS & WILKINS.2022: 577-578

- **Revealing the impact of lifestyle stressors on the risk of adverse pregnancy outcomes with multitask machine learning.** *Frontiers in pediatrics*
  Becker, M., Dai, J., Chang, A. L., Feyaerts, D., Stelzer, I. A., Zhang, M., Berson, E., Saarunya, G., De Francesco, D., Espinosa, C., Kim, Y., Maric, I., Mataraso, et al
  2022; 10: 933266

- **Integrated Single-Cell and Plasma Proteomic Modeling to Predict Surgical Site Complications: A Prospective Cohort Study.** *Annals of surgery*
  Rumer, K. K., Hedou, J., Tsai, A., Einhaus, J., Verdonk, F., Stanley, N., Choisy, B., Ganio, E., Bonham, A., Jacobsen, D., Warrington, B., Gao, X., Tingle, et al
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- **Integrated trajectories of the maternal metabolome, proteome, and immunome predict labor onset.** *Science translational medicine*
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- **A Peripheral Immune Signature of Labor Induction.** *Frontiers in immunology*
  Ando, K., Hédou, J. J., Feyaerts, D., Han, X., Ganio, E. A., Tsai, E. S., Peterson, L. S., Verdonk, F., Tsai, A. S., Mari#, I., Wong, R. J., Angst, M. S., Aghaeepour, et al
  2021; 12: 725989

- **Single-Cell Analysis of the Neonatal Immune System Across the Gestational Age Continuum.** *Frontiers in immunology*
  Peterson, L. S., Hedou, J., Ganio, E. A., Stelzer, I. A., Feyaerts, D., Harbert, E., Adusumelli, Y., Ando, K., Tsai, E. S., Tsai, A. S., Han, X., Ringle, M., Houghteling, et al
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- **Clusters of Tolerogenic B Cells Feature in the Dynamic Immunological Landscape of the Pregnant Uterus** *CELL REPORTS*
  Benner, M., Feyaerts, D., Garcia, C., Inci, N., Lopez, S., Fasse, E., Shadmanfar, W., van der Heijden, O. H., Gorris, M. J., Joosten, I., Ferwerda, G., van der Molen, R. G.
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- **VoPo leverages cellular heterogeneity for predictive modeling of single-cell data.** *Nature communications*
  Stanley, N. n., Stelzer, I. A., Tsai, A. S., Fallahzadeh, R. n., Ganio, E. n., Becker, M. n., Phongpreecha, T. n., Nassar, H. n., Ghaemi, S. n., Maric, I. n., Culos, A. n., Chang, A. L., Xenochristou, et al
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- **Respiratory Syncytial Virus Infects Primary Neonatal and Adult Natural Killer Cells and Affects Their Antiviral Effector Function.** *The Journal of infectious diseases*
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- **Placental disposition of the immunosuppressive drug tacrolimus in renal transplant recipients and in ex vivo perfused placental tissue.** *European journal of pharmaceutical sciences : official journal of the European Federation for Pharmaceutical Sciences*
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  2018; 119: 244-248

- **Endometrial natural killer (NK) cells reveal a tissue-specific receptor repertoire.** *Human reproduction (Oxford, England)*
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- **Human uterine lymphocytes acquire a more experienced and tolerogenic phenotype during pregnancy.** *Scientific reports*
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