Stanford



Wendy Fantl

Associate Professor (Research) of Urology

NIH Biosketch available Online

Bio

ACADEMIC APPOINTMENTS

- Associate Professor (Research), Urology
- Member, Bio-X

LINKS

• My labsite: https://med.stanford.edu/fantllab.html

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

Dr Fantl leads a laboratory program that studies ovarian and kidney cancer to address their areas of unmet clinical need. Specifically, her lab addresses two key questions related to drug resistance and immuno-therapy. Firstly, why do most ovarian cancer patients initially respond to chemotherapy but eventually experience relapse and chemotherapy-resistant disease? The second question asks why some malignancies respond to immuno-therapy whereas others do not. To fulfill these goals, she applies multi-parametric single-cell proteomic technologies (mass cytometry aka Cytometry by Time-Of-Flight (CyTOF) and CO-Detection by indEXing (CODEX) imaging) combined with specialized computational approaches for analyzing single-cell datasets. These technologies reveal cell heterogeneity identifying minority cell subpopulations of interest, such as those with roles in metastasis and therapeutic resistance, that would elude bulk analyses. Dr Fantl is deeply committed to translating her findings in the lab to helping patients.