Stanford

Marina Francis

Postdoctoral Scholar, Radiation Therapy

Bio

BIO

Dr. Francis is a Postdoctoral Scholar in Dr. Everett Moding's lab at the Department of Radiation Oncology. She uses genomic analysis of patient samples and preclinical models to identify new targets that sensitize sarcoma to treatments like radiation and immunotherapy. Before joining Stanford University, she completed her PhD in Biomedical Sciences at the American University of Beirut, where she worked in Dr. Youssef Zeidan's lab investigating the role of the sphingolipid-modifying enzyme SMPDL3b in radiation nephropathy. Her research interests revolve around improving cancer treatment outcomes and patients' quality of life by optimizing radiation therapy, combined treatment strategies, personalized precision oncology, and mitigating collateral treatment-associated toxicities.

HONORS AND AWARDS

- Raja N. Khuri Award, American University of Beirut (June 2024)
- Best Poster Award, Biomedical Research Day, American University of Beirut (April 2023)
- SAFAR Program Award - Funded Research Training, Campus France Paris (May 2022)
- B.S. awarded with highest distinction (Summa Cum Laude), Notre Dame University (2017)
- Dean's Honor List, Notre Dame University (2014-2017)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Member, AACR (2024 - present)
- Member, ASTRO (2023 - present)
- Member, ASN (2022 - present)
- Member, APS (2018 - present)

PROFESSIONAL EDUCATION

- PhD, American University of Beirut , Biomedical Sciences (2024)
- MS, American University of Beirut , Physiology (2019)
- BS, Notre Dame University , Biology (2017)

STANFORD ADVISORS

- Everett Moding, Postdoctoral Faculty Sponsor

Research & Scholarship

LAB AFFILIATIONS

- Everett Moding, Moding Lab (7/1/2024)

Publications

PUBLICATIONS

- **Novel Role for SMPDL3b in Radiation Nephropathy**
  Francis, M. S., Ahmad, A., Bodgi, L., Fornoni, A., Marples, B., Zeidan, Y.
  ELSEVIER SCIENCE INC.2024: E360
- **SMPDL3b modulates radiation-induced DNA damage response in renal podocytes** *FASEB JOURNAL*
  Francis, M., Ahmad, A., Bodgi, L., Azzam, P., Youssef, T., Abou Daher, A., Eid, A. A., Fornoni, A., Pollack, A., Marples, B., Zeidan, Y. H.
  2022; 36 (10): e22545
- **Crosstalk Between SMPDL3b and NADPH Oxidases Mediates Radiation-Induced Damage of Renal Podocytes** *FRONTIERS IN MEDICINE*
  Azzam, P., Francis, M., Youssef, T., Mroueh, M., Abou Daher, A., Eid, A. A., Fornoni, A., Marples, B., Zeidan, Y. H.
  2021; 8: 732528
- **Radiation-induced neuropathies in head and neck cancer: prevention and treatment modalities** *ECANCERMEDICALSCIENCE*
  Azzam, P., Mroueh, M., Francis, M., Abou Daher, A., Zeidan, Y. H.
  2020; 14: 1133
- **Modulation of DNA Damage Response by Sphingolipid Signaling: An Interplay that Shapes Cell Fate** *INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES*
  Francis, M., Abou Daher, A., Azzam, P., Mroueh, M., Zeidan, Y. H.
  2020; 21 (12)
- **Modulation of radiation-induced damage of human glomerular endothelial cells by SMPDL3B** *FASEB JOURNAL*
  Abou Daher, A., Francis, M., Azzam, P., Ahmad, A., Eid, A. A., Fornoni, A., Marples, B., Zeidan, Y. H.
  2020; 34 (6): 7915-7926