

Resume

Francesco Neri

San Francisco Bay Area | fneri@buckinstitute.org

Molecular and cellular biologist working on aging to develop interventions for age-related diseases.

Skills: Primary Human Cell culture Molecular & Cellular Biology Assay Development R programming Immunocytochemistry Fluorescence Imaging ELISA RT-qPCR Western Blot Cloning Lab Managing Data Visualization & Communication

Experience

2021 - Present

Biology of Aging PhD Student | Campisi Lab | Buck Institute & University of Southern California | Novato, CA

- Led multiple collaborative projects with other Buck and external research groups that resulted in 2 first-author publications. These projects entailed the development of a high-throughput method to measure senescence burden and the identification of sub-populations of senescent cells with different sensitivity to senolytic treatment.
- Supported the organization and coordination of multiple international aging conferences, including managing all volunteer operations for the Seno-Therapeutic Summit 2023 and assisting with the Longevity Summit 2022 and 2023.

2019 – 2021

Research Associate | Campisi Lab | Buck Institute | Novato, CA

- Created a step-by-step workflow to generate and analyze senescent-associated secretory phenotype (SASP) samples, leading to a first-author publication. This involved collecting several protocols developed by colleagues and carefully distilling them into a generalized and clear workflow.
- Aided multiple projects led by other lab members, which resulted in 2 publications in peer-reviewed journals. My role involved preparing senescent samples using primary human cell strains.
- Performed lab managing duties, including setting up centralized laboratory resources to share tested protocols and reagents among lab members, general maintenance of lab equipment, and purchasing new instruments.

March 2019 – September 2019

Master's Degree Intern | Campisi Lab | Buck Institute | Novato, CA

- Contributed to characterizing the heterogeneity of the senescent-associated secretory phenotype (SASP) from cell culture senescence models, which resulted in a published manuscript in a peer-reviewed journal. Specifically, I prepared SASP samples, which involved culturing primary human cell strains, inducing cellular senescence in such cell culture models, and validating senescence induction via multiple molecular biology assays (e.g. immunocytochemistry, RT-qPCR, western blotting).

February 2017 – April 2017

Bachelor's Degree Intern | Perini Lab | University of Bologna | Bologna, Italy

- Established MYCN potential role in the upregulation of plasma membrane transporters SLC7A1 and SLC7A2 as measured by a luciferase assay in a MYCN-inducible neuroblastoma cell line. This involved the cloning of SLC7A1 and SLC7A2 promoter regions into a luciferase reporter plasmid, their transfection into the neuroblastoma cell line, and carrying out luciferase assays.

Publications

- **A Fully-Automated Senescence Test (FAST) for the high-throughput quantification of senescence-associated markers**

Francesco Neri, Selma N. Takajart, Chad A. Lerner, Pierre-Yves Desprez, Birgit Schilling, Judith Campisi, Akos A. Gerencser

[bioRxiv, 2023](#)

- **Role of the Senescence-Associated Factor Dipeptidyl Peptidase 4 in the Pathogenesis of SARS-CoV-2 Infection**

Stefanie Deinhardt-Emmer , Sharvari Deshpande, Koji Kitazawa, Allison B. Herman, Joanna Bons, Jacob P. Rose, Prasanna Ashok Kumar, Carlos Anerillas, Francesco Neri, Serban Ciotlos, Kevin Perez, Nilay Köse-Vogel, Antje Häder, Kotb Abdelmohsen, Bettina Löffler, Myriam Gorospe, Pierre-Yves Desprez, Simon Melov, David Furman, Birgit Schilling, Judith Campisi

[Aging And Disease, 2023](#)

- **Oxylipin biosynthesis reinforces cellular senescence and allows detection of senolysis**

Christopher D. Wiley, Rishi Sharma, Sonnet S. Davis, Jose Alberto Lopez-Dominguez, Kylie P. Mitchell, Samantha Wiley, Fatouma Alimirah, Dong Eun Kim, Therese Payne, Andrew Rosko, Eliezer Aimontche, Sharvari M. Deshpande, Francesco Neri, Chisaka Kuehnemann, Marco Demaria, Arvind Ramanathan, Judith Campisi

[Cell Metabolism, 2021](#)

- **Comprehensive Profiling of Plasma Exosomes Using Data-Independent Acquisitions – New Tools for Aging Cohort Studies**

Sandip K. Patel, Roland Bruderer, Nathan Basisty, Joanna Bons, Pierre-Yves Desprez, Francesco Neri, Lukas Reiter, Judith Campisi, Birgit Schilling

[GeroScience, 2021](#)

- **Quantitative Proteomic Analysis of the Senescence-Associated Secretory Phenotype by Data-Independent Acquisition**

Francesco Neri, Nathan Basisty, Pierre-Yves Desprez, Judith Campisi, Birgit Schilling

[Current Protocols, 2021](#)

Education

August 2024 (ongoing)

PhD in Biology of Aging | Buck Institute & University of Southern California | Novato, CA

- GPA 4.0

October 2019

Master's degree in Pharmaceutical Biotechnology | University of Bologna | Bologna, Italy

- Final mark: 110/110 *cum laude*

July 2017

Bachelor's degree in Biotechnology | University of Bologna | Bologna, Italy

- Final mark: 110/110 *cum laude*