

MAYA OVERTON
maya_overton@berkeley.edu

OBJECTIVE

A passionate bioengineering student prepared to explore the interface of molecular biology and microfluidic design. My goal is to further my intellectual acuity in biotechnology by pursuing graduate research in single-cell analytical methods and device fabrication.

EDUCATION & AWARDS

Doctor of Philosophy Student, University of California Berkeley | Berkeley, CA Expected: May 2027
Lab group: Herr Lab, Department of Bioengineering

Bachelor of Arts, Yale College | New Haven, CT May 2020
Double-major: Molecular, Cellular & Developmental Biology, B.A. and Economics, B.A. GPA: 3.54
Awards & Grants: NIH: NIGMS Diversity Supplement to the grant of Prof. Susan Baserga, Nathan Hale Associates Scholarship, Yale Minute-to-Pitch Tech Start-Up Grand Prize, AABE Scholarship

WORK EXPERIENCE

Detect, Inc. | Senior Research Scientist | Guilford, CT May 2020-Present

- Formulated and optimized a device for the detection of SARS-CoV-2 in crude nasal samples using loop-mediated isothermal amplification
- Projects: characterized a proprietary strand displacement polymerase, designed analytical studies necessary for an FDA Emergency Use Authorization application, characterized inhibition of crude samples, optimized reaction mixes and buffers for the reduction of inhibition of crude samples, developed a novel DNA sequestration method for lateral flow assays

Simplex Sciences, Inc. | CEO | New Haven, CT December 2016-May 2020

- Commercialized the products of proprietary deoxyribozyme technology used for the synthesis of ssDNA ladders
- Licensed and commercialized Multi-Targeted RT-qPCR primers
- Managed a team of 15 scientists and managers
- Maintained and mediated relationships with large academic institutions and biotech companies

Baserga Lab, Yale MB&B | Undergraduate Researcher | New Haven, CT September 2017- March 2020

- Research to elucidate the nucleolar stress response to knockdowns of key ribosome biogenesis factors to further examine the pathology of ribosomopathies
- Research into the effects of acute to chronic ethanol exposure on the expression of key ribosome biogenesis factors in mammalian cell lines to further understand the phenotypes of Fetal Alcohol Syndrome

Vernalis Therapeutics | Commercial and Marketing Intern | Philadelphia, PA May-August 2017

- Created weekly sales performance reports and monthly forecasting reviews
- Presented analytical findings of regional and territorial sales diagnostics and marketing strategies

STARS I Program | Member | New Haven, CT September 2016-August 2017

- Development of unique leadership skills tailored to support historically underrepresented students in STEM

SKILLS & PUBLICATIONS

Laboratory Skills: Gel electrophoresis, Western Blot, Northern Blot, qPCR, tissue culture, RNAi, lateral flow assays, various isothermal amplification methods, analytical assay development, microbial culture techniques

Publications: Farley-Barnes, K. I., Deniz, E., **Overton, M. M.**, Khokha, M. K., & Baserga, S. J. (2020). Paired Box 9 (PAX9), the RNA polymerase II transcription factor, regulates human ribosome biogenesis and craniofacial development. *PLOS Genetics*, 16(8), e1008967.