

BIOGRAPHICAL SKETCH

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NAME: Siegel, Noah Alexander

eRA COMMONS USER NAME (credential, e.g., agency login): NOAHSIEGEL

POSITION TITLE: Graduate Student Researcher

EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
California State University, East Bay	B.S	06/2018	Biology
University of California, Davis	Ph.D.	06/2023	Immunology

A. Personal Statement

I am a first-year graduate student researcher in the lab of Dr. Lisa Miller at the Respiratory Disease Unit located in the California National Primate Center. Much of my laboratory preparation comes from the time I spent as an undergraduate in the lab Dr. Chul Kim at the California State University, East Bay. There, I became acquainted classical biophysical and biochemical techniques such as FPLC and Fluorespectroscopy. With my unique skills, I hope to provide novel insights in addressing research questions. Furthermore, I plan to utilize common mathematical and statistical software, such a R studio, to investigate differentially expressed genes in rhesus macaques in the context of various lung related insults. For this application, I bring exceptional skills in data analysis and, with my prior experience working under a physics instructor, mathematics. To the best of my knowledge, there are no other predoctoral candidates who offer such a unique perspective and training.

Positions and Employment

2016–2018	Supplemental Instructional Leader, Student Center for Academic Achievement, California State University, East Bay
2017–2018	Undergraduate Student Researcher, Kim Lab, California State University, East Bay
2018–	Graduate Student Researcher, Respiratory Disease Unit at the CNPRC, University of California, Davis

Other Experience and Professional Memberships

2019–	Member, American Thoracic Society
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Honors

2019	California National Primate Research Center Diversity Fellowship, University of Californai, Davis, Davis, CA
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B. Contribution to Science

1. As an undergraduate student, I volunteered for over a year in a structural biochemistry lab at the California State University, East Bay. There, the lab and I worked on a binding study to investigate critical RNA-protein interactions of the Brome Mosaic Virus. My primary role on the project was sample preparation and analysis for quenching and anisotropy experiments. We also utilized size exclusion chromatography via FPLC to determine the binding strength between mutant variants of a known pseudoknot of the BMV and the virus capsid protein. In these experiments, I prepared samples and measured fractions of various concentrations of RNA. Furthermore, I aided the masters students in the lab with interpreting and analyzed collected data.

We presented our findings at a California Student Research poster event in April 2018.