## UNIVERSITY OF CALIFORNIA, SAN FRANCISCO

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ALEXANDER MARSON, M.D., Ph.D. Assistant Professor, Department of Microbiology and Immunology Department of Medicine & UCSF Diabetes Center Affiliate Member, Innovative Genomics Initiative (IGI) Associate Member, UCSF Helen Diller Cancer Center January 14, 2019 513 PARNASSUS AVENUE ROOM HSW 1053 ALEXANDER.MARSON@UCSF.EDU HTTP://MARSONLAB.UCSF.EDU (415) 502 2611

We are recruiting a Staff Research Associate (SRA)/Specialist to assist with ongoing multidisciplinary cellular engineering projects. Our lab has pioneered the application of novel genetic engineering technologies such as CRISPR to primary human immune cells (Schumann et al., *PNAS* 2015). These new technical abilities have furthered our labs research into the genetic underpinnings of autoimmune disease and T cell biology (Farh and Marson et al., *Nature* 2015), as well as opened the door to novel cancer immunotherapies based on engineered human immune cells (Roth et al., *Nature* 2018). In addition to cell editing, our lab integrates genomic analysis (e.g. ChIP-seq, ATAC-seq, RNA-seq), human disease genetics, and high dimensional screening approaches for *in vitro* and *in vivo* studies of T cell function (Simeonov et al. *Nature* 2017; Shifrut and Carnevale et al. *Cell* 2018).

Working as part of a multidisciplinary group, the SRA will utilize various protocols to generate the molecular components, such as DNA constructs, necessary for specific cellular engineering experiments. Additional responsibilities will consist of isolation and culture of primary human immune cells, as well as functional analysis of engineered cells via Sanger sequencing, next-generation DNA sequencing, and flow cytometry. Strong organizational and communication skills are required. For exceptionally skilled applicants, opportunity exists to extend the SRA's role to include the design and completion of cellular editing experiments, as well as *in vivo* analysis of novel cellular cancer immunotherapies. This position represents an excellent opportunity to gain exposure to basic laboratory skills as well as genetics and genome engineering skills in a dynamic, well-established research environment.

Required Qualifications	<ul> <li>BA/BS degree and one or more years of laboratory experience utilizing techniques or methods required by the position; or an equivalent combination of education and experience</li> <li>Experience with general laboratory techniques, especially basic molecular and cellular biology techniques (including but not limited to DNA and RNA isolation, PCR, gel electrophoresis, DNA assembly, bacterial transformation, mammalian cell culture, etc.)</li> <li>Excellent organizational and interpersonal communication skills (verbal and written)</li> <li>Willingness and ability to learn new methods and skills for changing research priorities</li> <li>Ability to work independently and as a member of a research team</li> <li>Ability to prioritize tasks, coordinate work tasks with others, and meet multiple deadlines</li> </ul>
Preferred Qualifications	<ul> <li>Prior experience with DNA sequencing technologies, including Sanger and NGS</li> <li>Prior experience in the design and assembly of DNA constructs (via restriction digestion</li> </ul>

and ligation, Gibson assemblies, Golden-Gate assemblies, etc.)Prior hands on experience with mouse handling and injections

Payment is according to the UCSF pay scale. UCSF is an equal opportunity/affirmative action employer. All qualified candidates are encouraged to apply. Please submit your complete application documents including CV and references to: Theodore.roth@ucsf.edu and Alexander.marson@ucsf.edu

Sincerely,

Alex Marson, MD, PhD University of California, San Francisco