

**2019 SUMMER INTERNSHIP PROGRAM**  
**VITALANT RESEARCH INSTITUTE (formerly Blood Systems Research Institute)**

Vitalant Research Institute (<https://research.vitalant.org/>) in San Francisco, an affiliate of the University of California, San Francisco, has openings for full-time 8-week paid internship positions as part of a larger internship program, **June 10 through August 2, 2019**. Selected students are eligible for a \$4,000 stipend for the successful completion of the 8-week program. Students will participate in seminars, presentations, and institutional events. The Summer Internship Program at VRI provides undergraduate and master's students the opportunity to participate in research in the areas of transfusion medicine and cellular therapy through pairing with an investigator/mentor in one of the following research areas:

1. A summer internship is available in the Pillai lab to investigate the molecular biology and pathogenesis of HIV/AIDS from an evolutionary perspective. Ongoing projects in our lab include studies of host and viral factors involved in the maintenance of HIV latency, which is the principal obstacle to a cure for HIV infection. Projects will involve learning cell culture, flow cytometry, and next generation sequencing techniques to characterize viral evolution and host gene expression. <https://research.vitalant.org/Investigators/Satish-Pillai>
2. A summer internship is available in the Norris immunology laboratory. Ongoing research projects focus on the immune control of HIV, extracellular vesicle signaling, and tumor immunology. The summer project will focus on optimizing methods to detect immune perturbation after antibody blockade of immune pathways. <https://research.vitalant.org/Investigators/Philip-Norris>
3. A summer internship is available in the laboratory of Dr. Rachael Jackman. Our lab studies the immunology of blood transfusion, and uses animal models to evaluate immune responses to blood transfusion such as alloimmunization and rejection. The project involves optimization of a model of xenogeneic transfusion of human blood products into mice in order to evaluate elements of blood quality. The intern will have the opportunity to work with human and mouse samples and learn cell-based assays, i.e. flow cytometry. Once optimized there may be opportunities to apply this model to ongoing projects in collaboration with other investigators here at Vitalant Research Institute. <https://research.vitalant.org/Investigators/Rachael-Jackman>
4. A summer internship is available in cell biology. Work will use cells and progenitors isolated from human tissues. The project will involve testing the differentiation of these cells in various in vitro and in vivo systems. The internship will offer the opportunity to learn basic laboratory skills in cell culture, flow cytometry and work with xenogeneic transplant models. Basic concepts in stem cell biology, hematology and developmental biology will be taught. Applicants must be willing to work with human pathology specimens, transplant models and be willing to handle potentially infectious agents. <https://research.vitalant.org/Cores/Cell-Therapy>

**Requirements:**

Candidates are required to be enrolled in an educational institution (must be matriculated in semester before or after summer 2019), work in a team environment, set priorities, and devote full time to this training experience. Candidates must also have effective oral and written communication skills and be self-motivated with good organizational skills.

**Application Deadline: end of day April 5, 2019**

Please complete the application on the VRI website <https://research.vitalant.org/Careers> and submit by regular mail, fax or email to:

**Mail:** F. Assenzio, Human Resources, VRI, 270 Masonic Ave., San Francisco, CA 94118.

**Fax:** (415)775-3859, F. Assenzio

**E-Mail:** [Vitalant Research Institute](mailto:Vitalant@vitalant.org)

**Accepted applicants will be notified by April 26, 2019**