

Job Title: PostDoctoral Fellow

Department:

Job Number: 64015

Division: Research

Grade: Trainee (NIH Guidelines)

Reports To: Principal Investigator

Current as of: May, 2004

Employee:

JOB SUMMARY

The Rivella laboratory is located at the Children's Hospital of Philadelphia (CHOP), which is the nation's first hospital devoted exclusively to the care of children. Since 1855, CHOP has been the birthplace for many dramatic firsts in pediatric medicine. The Hospital has fostered medical discoveries and innovations that have improved pediatric healthcare and saved countless children's lives. Our laboratory is located in the Leonard and Madlyn Abramson Pediatric Research Center and in the Colket Translational Research Building.

CHOP is one of the largest private employer in Philadelphia, is a world-renowned leader in education, research, and innovation. CHOP consistently ranks among the top Children's Hospitals in the annual U.S. News & World Report survey and offers a unique working environment within the city of Philadelphia. CHOP is situated on a beautiful urban campus, with easy access to a range of educational, cultural, and recreational activities. With its historical significance and landmarks, lively cultural offerings, and wide variety of atmospheres, Philadelphia is the perfect place to call home for work and play.

The laboratory of Dr. Rivella has a long-term expertise in the use of lentiviral vectors for modulation of gene expression and gene transfer for the cure of hemoglobinopathies and in the pathophysiology and genetics of several murine models of hematopoiesis-, inflammation-, and iron-related disorders. We characterized the role of seminal factors contributing to the morbidity and mortality in β -thalassemia, Polycythemia vera, hemochromatosis and in anemia of inflammation, such as such hepcidin, interleukin-2 and ferroportin, the phosphokinase Jak2 and macrophages. Based on some of these studies, we are developing novel therapeutic approaches (gene therapy and drug development).

The postdoctoral fellow (postdoc) will have a terminal degree PhD, MD, DVM, etc. and will, under the direction/guidance of a mentor (principal investigator), assume responsibility for a specific, on-going research project. The postdoc experience will serve to extend, refine and enhance skills necessary for professional and career development, and will enable the individual to broaden his/her scientific background by acquiring new research capabilities. It is expected that this individual will conduct independent scholarly research, and will contribute directly to the overall research goals of the project and the research group. Postdocs will be expected to participate in project planning, recording and interpretation/evaluation of data, and communication of results. Postdocs will also be expected to acquire technical, lab management, and manuscript/grant writing skills; and participate in seminars, lectures, poster sessions and presentations at national meetings. Postdoctoral fellows also may be required to supervise junior lab members, develop new methods and protocols for research, and assist with the development of other research projects in the lab.

The postdoc will work on projects related to anemia of inflammation and the role of macrophages in normal and abnormal erythropoiesis and iron metabolism. A strong background in biochemistry and flow cytometry is required. The projects will also require handling, breeding and analysis of mouse models and tissue culture techniques. Preferred: Previous experience on iron metabolism, erythropoiesis and/or immunity.

JOB SPECIFIC STANDARDS:

- 1) Conduct independent scholarly research and develop new methods and protocols
- 2) Participate in project planning, recording and evaluation of data
- 3) Acquire technical, lab management and grant writing skills
- 4) Participate in seminars, lectures, poster sessions and presentation at national meetings
- 5) Supervise junior lab members
- 6) Assist with other research projects