

Proposal requesting support for the

**National Kidney Foundation of Northern California's  
Research Fellowship Program**

**Summary**

For many years, the National Kidney Foundation of Northern California, in partnership with the national organization, has offered research fellowships to qualified Fellows working in the fields of kidney disease and organ transplant research at Stanford University Medical Center and the Universities of California at San Francisco and Davis. Fellowships are awarded for two year periods for either basic science or clinical research work and provide a \$40,000 per year stipend. Researchers are required to have mentors senior, professorial-level researchers at their learning institution to provide them with lab space and project oversight. The primary goal of the NKF's Research Fellowship Program is to produce high quality kidney related research of immediate value to the medical community. But the program also functions as an invaluable educational tool for young physicians working in the fields of basic and clinical research, providing them with practical research experience under the guidance of a trained mentor and encouraging them to continue to pursue careers in academic nephrology. With cases of kidney failure expected to double in the United States during the next decade, the need for both research and researchers is more urgent than ever. By funding the Research Fellowship Program, the NKF of NC's partners support not only cutting edge research with an immediate impact on individuals coping with kidney disease, but also ensure the development of the next generation of scientist physicians in the field.

**The Research Fellowship Program**

While the most visible day-to-day efforts of the National Kidney Foundation of Northern California are its educational and patient service programs, its support for medical research is equally vital. Approximately 20 million Americans suffer from diseases of the kidney and urinary tract. Of this number, more than 300,000 experience kidney failure and require dialysis or kidney transplants in order to live. This number is expected to double in the coming decade. Today, kidney disease is the ninth leading cause of death in the United States. Through its fellowship program, the NKF supports research that advances our understanding of kidney diseases and trains young investigators in the research field vital work that produces more effective treatments and which may ultimately find cures for those diseases.

To become nephrologists, physicians must first complete a three-year internal medicine program followed by at least a two-year nephrology fellowship. The trainees then have the option of beginning a career in private practice or continuing their training in academic nephrology. A career in academic nephrology usually requires two to four additional years of training in basic science or clinical research. After the National Institutes of Health, the National Kidney Foundation is the most significant source of

funding for fellowship training in the United States. NKF Fellowships consist of a \$40,000 per year stipend and are awarded to doctors who have completed at least three years of research training beyond their doctoral degree. Applicants must have a sponsoring mentor to provide laboratory space and project oversight at their learning institution. The goal of the NKF's Fellowship Program is not only to produce new research, but also to train young scientists and encourage a continued focus on nephrology research after completion of the fellowship.

The NKF Fellowship Program's application and screening process is systematic and thorough, designed to ensure that fellowships are awarded to the most qualified applicants performing the most significant research. Prospective Fellows must submit a detailed application package containing a description of their training program, the record and qualifications of their research sponsor, and a precise description of the proposed research. This description includes statements about the aims and significance of the project, the methods to be used, preliminary work on the project by the applicant and the relevant research of other investigators. Applicants submit both to the national office of the NKF where their applications are screened by a peer-review board and evaluated, as well as to the affiliate headquarters in San Francisco where their applications are assessed further by a review panel of physicians selected from the NKF of Northern California's Medical Advisory Board, a group of physicians and allied health professionals with expertise in the field of nephrology from around the Northern California region. The criteria for review include the quality of the applicant, sponsor, training program or environment, and the research project as described in their application materials.

The value of the NKF of Northern California's Research Fellowship Program can be judged by the strength of the research it has produced, the accomplishments of past program participants, and their endorsement of the program. Past fellowship recipients have been published extensively in the *Journal of the American Society of Nephrology* and the *American Journal of Kidney Disease*, among other publications. Current and former Fellows have also presented their research at conferences and meetings of the American Society of Nephrology and medical symposia of the National Kidney Foundation and have been awarded subsequent grants for research by the National Institutes of Health.

### **Program Evaluation**

In carrying out its management of the Research Fellowship Program, and in order to provide program feedback to its funding partners, it is the policy of the National Kidney Foundation of Northern California to collect information from research fellows on a regular basis regarding the progress of their research and training projects, the status of their careers and the effectiveness of the Research Fellowship Program. To this end, both Fellows and their sponsors are required to provide a progress report written for a lay audience at the conclusion of each academic year and a scientific abstract of work accomplished at the end of each calendar year. In addition, Fellows and sponsors agree to provide reprints of every publication (including abstracts) resulting from research conducted during their Fellowship tenure. Following completion of their Fellowship,

both program participants and their sponsors may be contacted for updates on various aspects of the Fellow's subsequent employment history, publications, support from research grants or contracts, honors and awards, professional activities and other information that is necessary for the continued evaluation of the impact of the Research Fellowship Program.

### **Budget**

A total of \$200,000 is budgeted for Research Fellowships at Stanford Medical Center and the Universities of California at San Francisco and Davis for 2004, funding a total of five Fellows. Like all of the National Kidney Foundation of Northern California's programs, the Research Fellowship Program relies on the contributions of philanthropic individuals, corporations, and private foundations for its funding. The NKF of NC is currently seeking general support for the program and seeking partnerships with foundations and corporations with a specific interest in nephrology research to fund Fellowships in their name. These Fellowships would acknowledge their funding partner in all printed publications, on the NKF of NC's website, and in all published work by the researcher funded through this grant.

### **Conclusion**

The need for trained research scientists and high quality nephrology research has never been more pressing. In the United States, cases of kidney failure are expected to double in the next decade and will continue to increase as our population grows older. The National Kidney Foundation of Northern California is committed to facing this challenge at multiple levels: by providing educational programs and materials aimed at preventing kidney disease; by providing medical screening to individuals identified as at-risk; by educating and providing services and assistance to individuals and families already coping with kidney disease; and, perhaps most importantly, through the funding of medical research programs to train the researchers and produce data that gives rise to new treatments and, potentially, cures to these diseases. By funding the Research Fellowship program, partners ensure that the best and brightest young scientist physicians can develop their ideas and talents, offering promising scientific breakthroughs in the present and knowledge, experience and insight for the future.