

NIDDK Offers Many Types of Training Programs

In recent years, NIDDK has broadened the range of support it offers for training in kidney research. There are training opportunities available for students as well as physicians and scientists at various stages in their career paths. NIH training awards are limited to US citizens or permanent residents. There are two major categories of training awards: National Research Service Awards (NRSAs) and Career Development Awards. As outlined below, many of these awards have high applicant success rates.

National Research Service Awards

The National Research Service Awards (NRSAs) training program provides a stipend to cover the award recipient’s living expenses, tuition, and health insurance; the stipend also provides a small “institutional allowance” to be used for laboratory expenses or travel to scientific meetings. The following are brief descriptions of NRSA awards (for more detailed descriptions visit the NIDDK training page at <http://www.niddk.nih.gov/fund/training/training.htm>):

- **F31 Pre-Doctoral NRSA** (for minority students only) provides support for students enrolled in programs leading to a PhD or an equivalent research degree.
- **F32 Post-Doctoral NRSA** provides one to three years support for fellows who have received their MD, PhD, or other doctoral degree. Fellows must identify a mentor and plan their research project before applying.
- **F33 Senior Fellowship** is primarily a sabbatical support mechanism and provides one to two years of funding to allow scientists with at least seven years of experience to gain new expertise.
- **T35 Institutional Short-Term Training Grant** funds summer research experiences for medical students, usually between their first and second year of medical school.
- **T32 Institutional NRSA or Training Grant** provides pre- and post-doctoral support to fellows at many major universities. Persons wishing to be appointed to an institutional training grant should contact the director of that program at their university.

Career Development Awards (K Awards)

Career Development Awards, also known as “K Awards,” provide a salary with fringe benefits and an allowance for the purchase of research supplies. Applicants for all K Awards need a mentor (except for the K24 award) and a well-developed research plan for three, four, or five years of support. The following are brief descriptions of five types of K Awards (for more details of K Awards, go to the K-wizard under K-kiosk at <http://grants.nih.gov/training/extramural.htm> to decide which K Award is right for you):

- **K01 Mentored Research Scientist Development Award** supports PhD scientists who have at least three to five years of post-doctoral training and who need to make the transition to independence.
- **K01 Mentored Clinical Scientist Development Award** is aimed at physician-scientists to allow them to make the transition to independence. NIDDK K08 awardees may apply for a small grant (R03) to obtain additional funding during the last two years of their five-year award.
- **K23 Mentored Patient-Oriented Research Career Development Award** is available to clinical investigators who are engaged in patient-based research. NIDDK K23 awardees may apply for a small grant (R03) to obtain additional funding during the last two years of their five-year award.
- **K24 Mid-Career Patient-Oriented Career Development Award** is available to established clinical investigators who are serving as mentors.
- **K25 Mentored Quantitative Research Career Development Award** provides support to people with backgrounds in quantitative sciences (*e.g.*, engineering, mathematics, and computer science) who wish to pursue research in the area of biomedicine.

NIH conducts training programs at its campus in Bethesda, Maryland, and funds training programs at universities and medical schools throughout the United States.

NIDDK Career Development Awards

Mechanism	Eligibility and Conditions	Length	Mentor Required	Primary Investigator Salary	Research Support
K01: Mentored Research Scientist Development Award	PhD or comparable nonclinical degree, usually within 5 yr of having received degree; minimum of 75% effort	3 to 5 yr; not renewable	Yes	Up to \$75,000 plus fringe benefits	\$25,000/yr
K08: Mentored Clinical Scientist Development Award	MD or comparable clinical degree; minimum of 75% effort	3 to 5 yr; not renewable	Yes	Up to \$75,000 plus fringe benefits	\$25,000/yr; option for additional \$50,000 in yrs 3 to 4 ^a

Mechanism	Eligibility and Conditions	Length	Mentor Required	Primary Investigator Salary	Research Support
K23: Mentored Patient-Oriented Research Career Development Award	MD or comparable clinical degree; minimum 75% effort	3 to 5 yr; not renewable	Yes	Up to \$75,000 plus fringe benefits	\$25,000/yr; option for additional \$50,000 in yrs 3 to 4 ^a
K24: Mid-Career Investigator Award in Patient-Oriented Research	Outstanding, established clinical investigator within ≈15 yr of specialty training; minimum 25% effort; maximum 50% effort	5 yr; renewable once	No	Up to 50% of NIH salary limit plus fringe benefits	\$25,000/yr
K25: Mentored Quantitative Research Career Development Award	Advanced degree in quantitative area of science or engineering; minimum 75% effort	3 to 5 yr; not renewable	Yes	\$75,000 plus fringe benefits	Up to \$40,000/yr

^a NIDDK awardees only; *not* NIH-wide.

High Success Rates for K Awards

In FY 2001, the NIDDK received 40 new kidney-related research K applications. Twenty-five were awarded for an overall success rate of 62%. Here's the breakdown by specific mechanism:

Success rates for other training and career development awards are as follows:

Mechanism	No. of Applications	No. of Awards	Success Rate (%)
K01	8	4	50
K08	17	13	76
K23	7	4	57
K24	5	2	40
K25	3	2	67
Overall	40	25	62

- **Individual Fellowship (F32) Awards:** NIDDK funded 13 (52%) of 25 *new* applications in kidney-related research in FY 2001.
- **Institutional Training (T32) Grants:** In FY 2001, the NIDDK funded 42 Institutional Training Grants in kidney-related training. Of those, 2 were *new*.

Did You Know That . . .

2.5% of the NIH/NIDDK Budget Is Dedicated to SBIRs?

The Small Business Innovation Research (SBIR) program is a set-aside program that dedicates 2.5% of the NIH extramural budget for domestic small business concerns to engage in research and development with commercial potential. SBIR grants are mandated by Congress at a fixed annual rate and have been available for the more than 20 years. The US companies funded by these grants need academic advisors. This is a unique opportunity for members of the kidney community to make a major contribution to kidney research by serving as a consultant to SBIR companies.

NIDDK Has a New Pilot and Feasibility Program for Kidney Research?

From August 14, 2001, when the program was first announced, to October 1, 2004, when the program ends, investigators who have research interests related to the kidney and who fall within the NIDDK mission may apply for this exploratory and developmental grant (R21), which aims to:

- Foster the development of high-risk pilot and feasibility research by newly independent or established investigators.
- Sufficiently develop ideas to allow for subsequent submission of R01 applications that focus on research problems relevant to the study of both acute and chronic kidney diseases and their complications in both adults and children.

R21s are not intended to support or supplement ongoing funded research of an established investigator or to serve as an alternative funding mechanism for projects that are not receiving funding as competitive continuation applications.

Who may apply? Applications may be submitted by the following groups: domestic for-profit and nonprofit companies, public and private, including universities, colleges, hospitals, laboratories, units of state and local governments, and eligible federal government agencies.