

# NIDDK National Institute of Diabetes and Digestive and Kidney Diseases (



## NIDDK's Mission in Urology Research and Training

### Overview

The National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) (http://www2.niddk.nih.gov/) supports a broad range of basic and clinical research and training efforts relevant to benian urologic disease. The NIDDK's Division of Kidney, Urologic. and Hematologic Diseases (DKUH) houses the Urology Programs and has the primary responsibility for advancing the Institute's mission interests in urology.

### Major scientific areas of interest in the **Urology Programs Include:**

- Urology Basic Science, including Basic Studies of the Bladder. Prostate, and the Genitourinary Tract
- Developmental Biology of the Urogenital Tract
- Urology Clinical Science and Clinical Trials
- Urology Women's Health Studies
- Urology Genetics and Genomics
- HIV/AIDS
- Pediatric Urology
- Urologic Diseases Epidemiology
- Urology Technology Development

### The NIDDK promotes urology research and training through numerous activities, including:

- Funding of investigator initiated and Institute solicited individual research projects (e.g., R01s)
- Developing basic and clinical research networks
- Creating resources for investigators
- Enhancing training and career development
- Organizing scientific conferences and workshops
- Developing strategic plans to direct research efforts
- Advancing outreach efforts for the scientific and patient communities
- Promoting urology small business enterprises
- Collaborating with other Federal agencies, advocacy groups, professional organizations, etc.

### The NIDDK Urologic Diseases Information Clearinghouse (NKUDIC)

http://kidney.niddk.nih.gov/

The NKUDIC is an information dissemination service of the NIDDK. The NKUDIC was established in 1987 to increase knowledge and understanding of urologic and kidney disease among patients, their families, health care professionals, and the general public

## **Urology Contacts**

### Division of Kidney, Urologic & Hematologic Diseases (DKUH) Urology Staff

http://www.niddk.nih.gov/welcome/org/tables/kuh\_table.htm Telephone: (301) 594-7717

**Clinical Trials Programs** 

Urology Training/Career Programs

**Urology Cell Biology Programs** 

Genetics & Genomics Programs

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### NIDDK Review Branch

http://www.niddk.nih.gov/welcome/org/tables/dea\_table.htm#RB

The NIDDK Review Branch administers the review of applications responding to Institute specific solicitations and additional special application types

### NIDDK Review Branch Staff:

Review Branch Chief Francisco O. Calvo, Ph.D. Review Branch Deputy Chief Michele Barnard, Ph.D.

### NIH Center for Scientific Review (CSR)

The Digestive, Kidney, and Urological Systems Review Group (DKUS IRG) contains the Urologic and Genitourinary Physiology and Pathology (UGPP) Study Section. The UGPP serves as the primary study section for review of benign urology clinical and basic research applications directed toward the CSR

The scientific focus of the UGPP includes function/dysfunction of the bladder and lower urinary tract (LUT), male sexual function, urogynecology (e.g., pelvic floor), infection/inflammation of the LUT. urolithiasis/nephrolithiasis, and urology small business applications, among other areas.

CSR Staff: **DKUS IRG Chief** 

**UGPP Scientific Review Officer** 

## Training and Career Development

### **Post-Doctoral Training**

#### Ruth L. Kirschstein National Research Service Awards (NRSA)

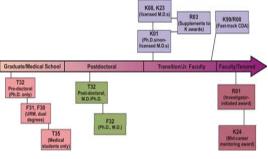
#### Individual (F32)

These awards provide support for fellows who have received their M.D., Ph.D., or other doctoral-level degree. Fellows need to identify a mentor and plan a research project before applying for 1 to 3 years of funding.

#### Institutional (T32)

In place at many major universities, these grants provide pre- and postdoctoral support to fellows at those institutions. To be appointed to a training grant, contact the director of the training program at your institution. http://grants.nih.gov/grants/guide/pa-files/PA-10-036.html

### Training & Career Development Timeline



### **Training-Related Program Announcements**

Small Grant Program for NIDDK K01/K08/K23 Recipients (R03) In the final two years of the career development grant, K recipients may apply for small grant funding for additional development support for their research.

### NIDDK Education Program Grants (R25)

The R25 program provides support for educational opportunities (E.g., workshops, classes) to engage students from undergraduate to graduate in research areas relevant to NIDDK. http://grants.nih.gov/grants/guide/pa-

### Career Development Awards (Ks)

http://www2.niddk.nih.gov/Funding/TrainingCareerDev/

- K01 (Mentored Research Scientist Development Awards)\* Support Ph.D. scientists who have at least 3 to 5 years of postdoctoral training and who need to transition to independence
- K08 (Mentored Clinical Scientist Development Awards)\* Aimed at physician-scientists to transition them to independence
- K23 (Mentored Patient-Oriented Research Career Development Awards)\*

Aimed at clinical investigators engaged in patient-based research.

- K24 (Investigator Awards in Patient-Oriented Research) Support mid-career physicians in patient-oriented research with funded clinical investigations and who are mentoring young clinicians
- K25 (Mentored Quantitative Research Career Development Awards)

Available to individuals with quantitative (e.g., engineering, mathematics, computer science, etc.) backgrounds who wish to pursue biomedical research.

\*NIDDK-funded K awardees may apply for a small grant (R03) to obtain additional funding during the last 2 years of their 5-year K award.

### K99/R00 NIH Pathways to Independence

The NIH has another opportunity for career development. This is an ideal award for exceptional postdoctoral candidates on the fast-track to a productive research career. Applicants must have five-years or fewer of postdoctoral research experience and may not already have an independent faculty position. The first two years of the award, the K99 phase, are intended to be the mentored career-development phase. At the end of the second year, the applicant must have secured an independent tenure-track position to continue the final three years of the award as an R01. Unlike the above career development awards, this opportunity does not require LLS citizenship or permanent residency status, but the applicant must be able to remain in the U.S. to conduct the full five years of the proposed work. For additional information about this award, see

http://grants2.nih.gov/grants/guide/pa-files/PA-10-063.html.

### Loan Repayment Program

The purpose of the Extramural Loan Repayment Program is to ease the debt burden clinical scientists may have incurred while attending medical school and a residency program. Competitive applicants must demonstrate their commitment to a research career and have a debt-tosalary ratio of at least 20 percent. The Loan Repayment Program may repay up to a maximum of \$35,000 a year toward each participant's outstanding eligible educational load debt, depending on total eligible repayable debt. For more details about eligibility and to apply online, visit http://www.lrp.nih.gov.



## IDDK National Institute of Diabetes and Digestive and Kidney Diseases 🥒



## NIDDK Urology Research Highlights

### MAPP Research Network

The NIDDK has established the Multidisciplinary Approach to the Study of Chronic Pelvic Pain (MAPP) Research Network in order to address the fundamental, underlying etiology and natural history of urologic chronic pelvic pain syndromes (UCPPS), including Interstitial Cystitis/Painful Bladder Syndrome (IC/PBS) and chronic prostatitis/chronic pelvic pain syndrome (CP/CPPS). Scientific areas of emphasis include: Patient Clinical Phenotyping, Epidemiology, Neurobiology, and Basic Science Associations of LICPPS with potential co-morbid conditions is another major area of emphasis. See <a href="http://www.mappnetwork.org/">http://www.mappnetwork.org/</a> for more information.

## GUDMAP Genito Urinary Development Molecular Atlas Project (GUDMAP)

GUDMAP is a public database funded by the NIH to provide the scientific and medical community with tools to facilitate research. The key features of this database are: a molecular atlas of gene expression for the developing organs of the GenitoUrinary (GU) tract; a high resolution molecular anatomy that highlights development of the murine GU system; tutorials describing GU organogenesis; and the rapid access to primary data via the GLIDMAP database

NEW! Transgenic mouse line for mapping migrating neural crest-derived progenitors and mature neurons in autonomic ganglia throughout the peripheral nervous system is now available. The dual expression of Cherry-Red fluorescent protein in the nucleus and membrane expression of the Green fluorescent protein allows illuminates of neuronal nuclei and axonal processes, respectively. For more information see attached flyer or contact Dr. Hoshizaki (dkhosh@nih.gov)

## NIH Common Fund

http://commonfund.nih.gov/index.aspx

### Overview

The NIH Common Fund was enacted into law by Congress through the 2006 NIH Reform Act to support cross-cutting, trans-NIH programs that require participation by at least two NIH Institutes or Centers (ICs) or would otherwise benefit from strategic planning and coordination. The requirements for the Common Fund encourage collaboration across the ICs while providing the NIH with flexibility to determine priorities for Common Fund support.

### **Current Common Fund funding opportunities:**

Institutional Clinical and Translational Science Award (U54): sustains and advances clinical and translational science as a distinct discipline in order to maximize the safety, efficiency, quality and speed of clinical and translational research. http://grants.nih.gov/grants/guide/rfa-files/RFA-RM-10-020.htm

NIH-HMO Collaboratory Coordinating Center Limited Competition (U54): to strengthen the capacity, capability and cost-effectiveness of conducting longitudinal large and multi-site studies using primary clinical data and samples in a distributed network of health care organizations. http://grants.nih.gov/grants/guide/rfa files/RFA-RM-11-003.html

Solicitation of Assays for High Throughput Screening (HTS) in the Molecular Libraries Probe Production Centers Network (MLPCN) (R03): promotes discovery and development of new chemical probes as research tools for use by scientists in both the public and private sectors to advance the understanding of biological functions and disease mechanisms. http://grants.nih.gov/grants/quide/pafiles/PAR-09-129.html



### **Diabetic Complications Consortium** (formerly the AMDCC)

The goal of the DCC is to provide an environment that fosters communication and collaboration between investigator communities involved in complications research. Toward this goal, the DCC:

- 1. Supports a website to serve the diabetic complications community (www.diacomp.org):
- Sponsors annual meetings in complications-relevant scientific areas;
- Solicits and funds pilot projects in high impact areas of complications

### Recommended 2012 AUA Meeting Events

"The Science of Female Pelvic Health." Saturday, May 19th, 8:00am-12:00pm. Georgia World Congress Center. Rooms A411/412b

AUA Research Forum: "Showcasing Young Investigators." Sunday, May 20th, 3:00-5:30pm.

"ALIA Foundation's Rising Stars Program" w/ Dr. Johannes Vieweg and Dr. David C. Miller Plenary Session 1. Tuesday, May 22nd, 10:30am.

"Measurements of Urinary Symptoms: Future Perspectives." Dr. Ziya Kirkali, NIDDK.

## NIDDK Biorepository

The NIDDK Central Repositories store samples and data from large NIDDK-funded clinical studies. Materials/data are made available to the research community at the end of the study or when an interim phase is completed. There are 3 Central Repositories:

- Biosample Repository Stores many types of biosamples
- Genetics Repository Receives bio-samples to isolate DNA, etc
- Data Repository Maintains study databases Sample and/or data are currently available from various studies, including:
- Interstitial Cystitis Clinical Treatment Group (ICCTG): Elmiron, Hydroxyzine, and BCG RCTs Medical Therapy of Prostatic Symptoms (MTOPS)
- Boston Area Community Health (BACH) Survey
- Urinary Incontinence Treatment Network (UITN): SISTR , BE-DRI
- Chronic Prostatitis Collaborative Research Network (CPCRN): cohort, Alfuzosin, Pregabalin RCTs Interstitial Cystitis Database Study (ICDB)
- The Program to Reduce Incontinence by Diet and Exercise (PRIDE)
  Diabetes Control and Complications Trial/Epidemiology of Diabetes Interventions and

## NIH News!

### REMINDER: CHANGES TO THE NIH APPLICATION PROCESS

Shorter page limits: most mechanisms are now limited to 12 pages for Research Strategy section. Limits cannot be circumvented with inappropriate text in other sections (Human

acceptable post-submission materials to those resulting from

End of two-day correction window: applications must now be complete and error-free on the receipt date Use latest forms: ADOBE Version B1 package

No more A2 submissions: second revisions no longer accepted Time window for A1 submissions: no greater than 37 months from original submission date.

## **Grant Basics**

### What's happening to my application?



### Which type of grant is best for me ...?

R01 - Investigator Research Project (5 yrs; >\$250K/yr)

R21 - Exploratory/Development Grants (\$275K over 2 yrs; selected funding initiatives only; Contact your Program Officer for details)

K - Career Awards (varied)

F and T - Fellowship and Training Awards (varied)

R41/R42 - Small Business Technology Transfer (STTR) Program

R43/R44 - Small Business Innovative Research (SBIR) Program

## New/Early Stage Pls

Sites for information regarding New and Early Stage Investigators:

http://grants2.nih.gov/grants/new\_investigators/

The NIDDK has a strong commitment to the training and research funding of New and Early Stage (i.e., New Investigators within 10 years of completion of their terminal research degree or medical residency at the time of applying for an R01) Principal Investigators (PIs). Both the NIH and NIDDK have resources to assist these investigators, including:

### Peer-Review

All NIH peer reviewers are instructed to focus more on a proposed approach than a track record for New and Early Stage Investigators. Additionally, New and Early Stage Investigator applications are clustered during review to facilitate this focus

### Second-Level Review

Automatic 5% boost in payline for Early Stage Investigators! In addition, all New and Early Stage R01 applications that receive a score in initial review receive special consideration by NIDDK staff.

### NIH High Priority, Short-Term Project Award (R56)

During second-level review, New and Early Stage Investigators are given special consideration for a small R56 award, which provides modest support for the PI to collect more preliminary data and submit an improved application.

> Career Development (K) awards, Small grants (R03) awards and Mentoring Workshops (see adjacent poster).

### What about a "Funding Initiative"...??



PAR - PA With Referral √ Regular or limited receipt dates

✓ Special Review Group

✓ Usually no special funds available

- Not in response to initiative; regular receipt/review/funding

### Identify/Contact appropriate NIH staff



## Workshops

- NIDDK New Investigator Workshop, Washington, D.C. area, December 2-4. 2012.
- Urologic Complications of Diabetes. Washington, D.C. area. February, 2013.
- NIDDK K-Awardee Workshop. Washington, D.C. area. April, 2013.

The NIDDK provides support for investigator-initiated scientific conferences and workshops through the R13/U13 Program. See Program Announcement PA-10-017 and http://grants.nih.gov/grants/funding/r13/index.htm. Potential applicants should contact their Program Officer for additional submission requirements.

## Small Business

### Why Seek SBIR/STTR Funds?

Over \$1 billion are available across NIH

They provide seed money for high-risk projects

They promote and foster partnerships with collaborators - including academia.

Intellectual property rights are normally retained by small business

Funds are NOT A LOAN - no repayment!

Large corporations look to small companies for initial development

### Small Business Innovation Research (SBIR)

http://www.zyn.com/sbir

http://grants.nih.gov/grants/oer.htm

> The SBIR program supports innovative research conducted by small businesses to develop products for commercialization. The PI must be employed by the small business, but a research institution may be involved.

### Small Business Technology Transfer (STTR)

http://www.zyn.com/sbir http://grants.nih.gov/grants/oer.htm

> The STTR program supports innovative research for products that have the potential for commercialization. STTR projects must be conducted cooperatively by a small business and a research institution.