

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 benign 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.

Training and Career Development

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.*

Post-Doctoral Training

<http://www2.niddk.nih.gov/Funding/TrainingCareerDev/PostDoc.htm>

Ruth L. Kirschstein National Research Service Awards (NRSA)

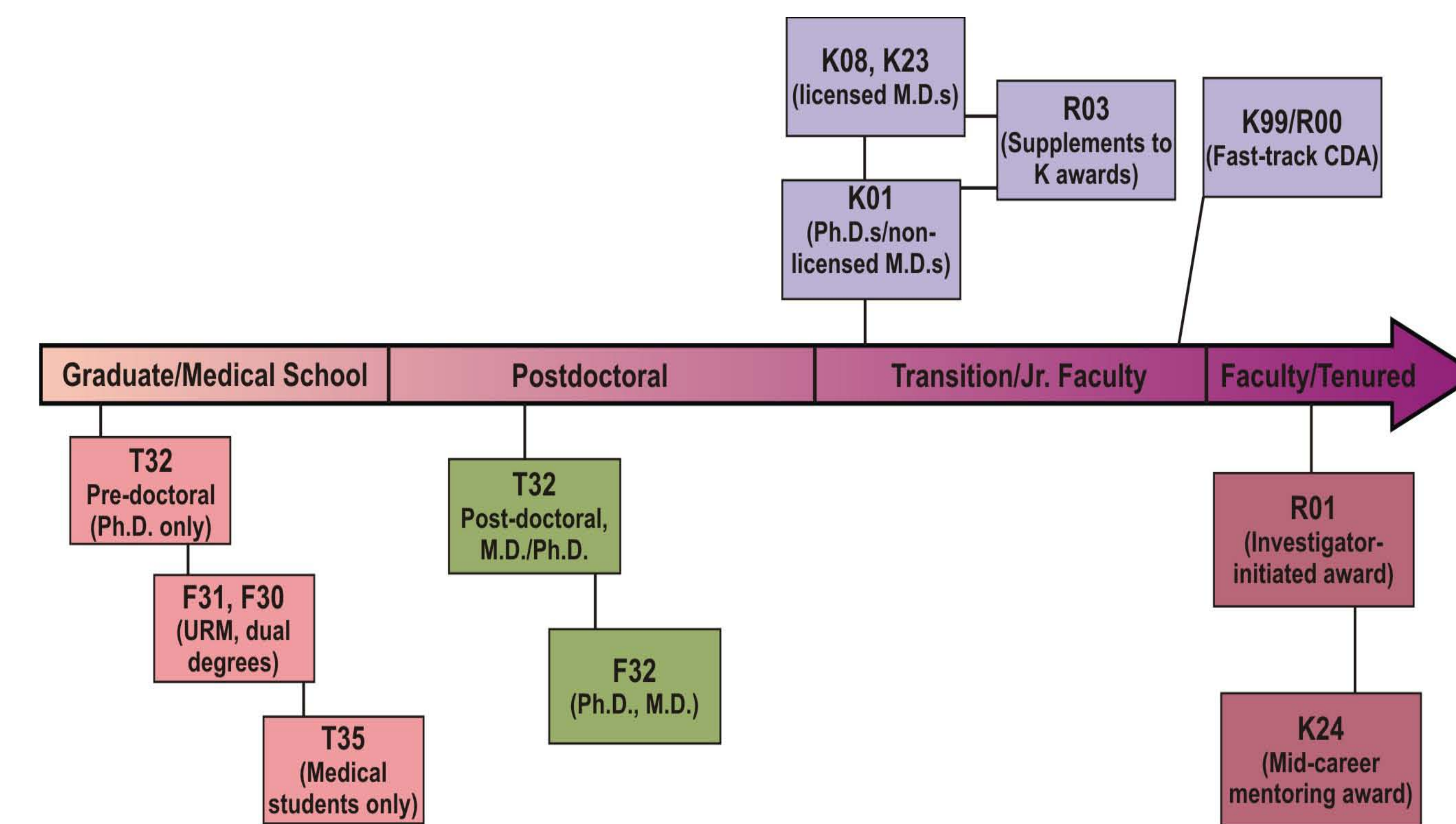
Individual (F32)

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.
<http://grants.nih.gov/grants/guide/pa-files/PA-10-110.html>

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



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 U.S. 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>.

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.
<http://grants.nih.gov/grants/guide/pa-files/PAR-09-230.html>

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-files/PAR-10-092.html>

Loan Repayment Program

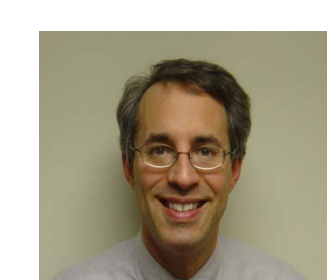
The purpose of the Extramural Loan Repayment Program is to ease the debt burden clinical scientists may have incurred while attending medical school and a residency program. Competitive applicants must demonstrate their commitment to a research career and have a debt-to-salary ratio of at least 20 percent. 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>.

Urology Contacts

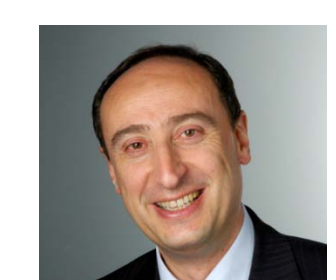
Division of Kidney, Urologic & Hematologic Diseases (DKUH) Urology Staff

http://www.niddk.nih.gov/welcome/org/tables/kuh_table.htm

Telephone: (301) 594-7717



Director, KUH
Robert A. Star, M.D.
starr@extra.niddk.nih.gov



Urology Programs
Ziya Kirkali, M.D.
kirkaliz@extra.niddk.nih.gov



Epidemiology Program
Paul W. Eggers, Ph.D.
eggersp@extra.niddk.nih.gov



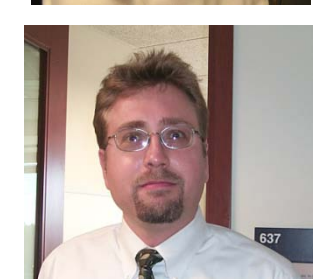
Development Program
Deborah Hoshizaki, Ph.D.
hoshizakid@niddk.nih.gov



Clinical Trials Programs
John W. Kusek, Ph.D.
kusekj@extra.niddk.nih.gov



Urology Training/Career Programs
Tracy L. Rankin, Ph.D.
rankint@mail.nih.gov



Urology Cell Biology Programs
Chris V. Mullins, Ph.D.
mullinsc@extra.niddk.nih.gov



Genetics & Genomics Programs
Rebekah Rasooly, Ph.D.
rasooly@extra.niddk.nih.gov

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.
calvo@extra.niddk.nih.gov

Review Branch Deputy Chief
Michele Barnard, Ph.D.
barnardm@extra.niddk.nih.gov

NIH Center for Scientific Review (CSR)

<http://www.csr.nih.gov>

The Digestive, Kidney, and Urological Systems Review Group (DKUS IRG) contains the **Urologic and Kidney Development and Genitourinary Diseases (UKGD) Study Section**. The UKGD 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 UKGD includes the normal and abnormal development of kidney, urinary tract, and the male genital system; as well as cellular, physiologic, and pathophysiologic processes of the bladder, prostate, genitourinary tract, and the pelvic floor.

CSR Staff:

DKUS IRG Chief
Mushtaq Khan, Ph.D.
khanmu@csr.nih.gov

UKGD Scientific Review Officer
Ryan Morris, Ph.D.
morrisr@csr.nih.gov

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/PPS). Scientific areas of emphasis include: Patient Clinical Phenotyping, Epidemiology, Neurobiology, and Basic Science. Associations of UCPPS with potential co-morbid conditions is another major area of emphasis. See <http://www.mappnetwork.org/> 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 the development of the murine GU system; tutorials describing GU organogenesis; and the rapid access to primary data via the GUDMAP 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.html>

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/guide/pa-files/PAR-09-129.html>



Animal Models of Diabetic Complications Consortium

An interdisciplinary consortium developing new animal models that closely mimic the human complications of diabetes. Current members studying diabetic uropathy include Firouz Daneshgari, Lori Birder, Matthew Fraser, Aria Olumi and Wade Bushman. A yearly Pilot and Feasibility Program allows access to new investigators with new ideas. Full details at www.amdcc.org

Recommended 2011 AUA Meeting Events

Plenary Session: "News from Rising Stars: A Review of the last 30 Years of the AUA Research Scholars Program" w/ Johannes Vieweg, MD and Steve Freedland, MD
 Sunday, May 15th 11:20 – 11:40 a.m., Convention Center Hall D

AUA Foundation Research Forum: "Showcasing Young Investigators"
 Sunday, May 15th 3:00 – 5:30 p.m., Convention Center, Room 144 A/B/C

Late Breaking Science Forum (featuring AUA Foundation Rising Stars and AUA Foundation/NIDDK/NCI Surgeon-Scientists)
 Tuesday, May 17th, 1:00 – 3:00 p.m., Convention Center, Room 103 A/B

NIDDK Biorepository

<http://www.NIDDKbiorepository.org>

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)
- ✓ Medical Therapy of Prostatic Symptoms (MTOPS)
- ✓ Boston Area Community Health (BACH) Survey
- ✓ Urinary Incontinence Treatment Network – SISTR (UITN)
- ✓ Interstitial Cystitis Database Study (ICDB)
- ✓ Diabetes Control and Complications Trial/Epidemiology of Diabetes Interventions and Complications (DCCT/EDIC)

NIH News!

REMINDER: CHANGES TO THE NIH APPLICATION PROCESS
<http://grants.nih.gov/grants/guide/notice-files/NOT-OD-11-021.html>

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 Subjects section or Appendix).

Limits on post-submission material: The NIH restricts acceptable post-submission materials to those resulting from unforeseen administrative issues

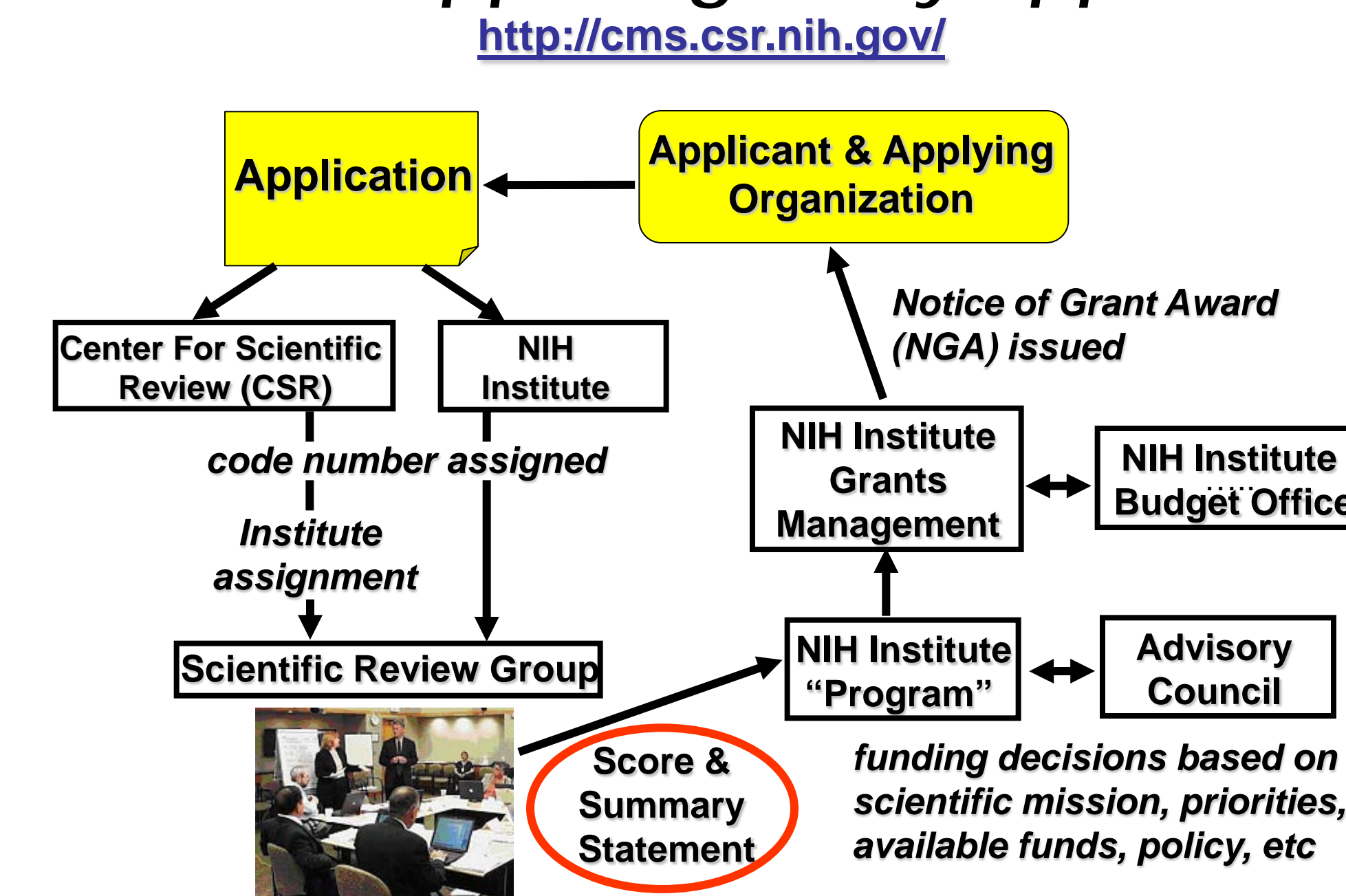
End of two-day correction window: applications must now be complete and error-free on the receipt date

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)
- 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

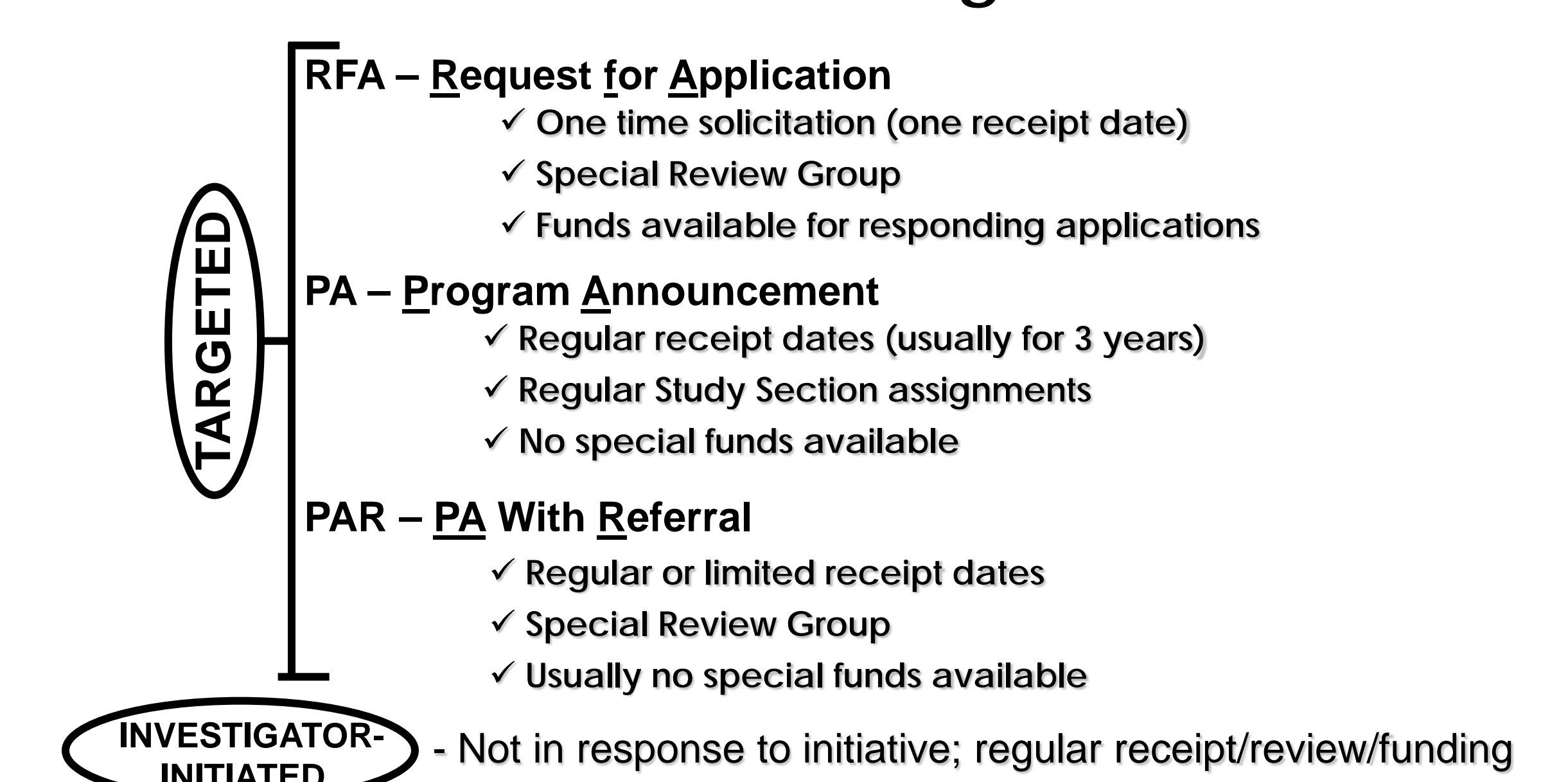
New PIs

http://www2.nidddk.nih.gov/Funding/Grants/Resources_NewInvestigators.htm

The NIDDK has a strong commitment to the training and research funding of new investigators. Both the NIH and NIDDK have resources to assist new investigators, including:

- **Peer-Review**
All NIH peer reviewers are instructed to focus more on a proposed approach than a track record for new Principal Investigators (PIs). Additionally, NI/ESI applications are clustered during review to facilitate this focus.
- **Second-Level Review**
Automatic 2% boost in payline for a full five years of support! In addition, all new-investigator 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 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"...??



Identify/Contact appropriate NIH staff



Workshops

Mechanisms of Organ Repair and Regeneration.
 September 13-16, 2011. Ellicott City, MD. For more information contact: MORR@nih.gov.

Meeting on Measurement of Urinary Symptoms (MOMUS). Fall, 2011. Washington, DC area.

Urology Program Directors' Meeting (for K-12s, P50s, and P20s).
 Nov. 30-Dec. 2, 2011. Bethesda, MD.

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.