

# 60 INSTITUTIONS

## CTSAS ARE ALL BACKED BY AND INTEGRATED WITH LEADING ACADEMIC MEDICAL CENTERS

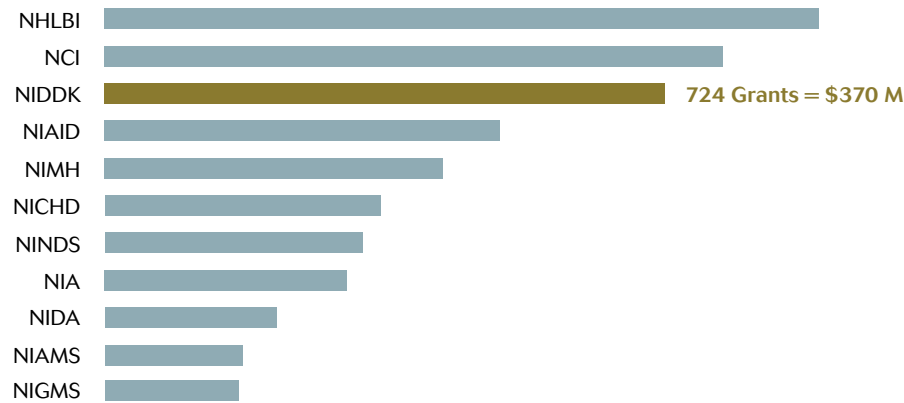
Albert Einstein College of Medicine • Boston University • Case Western Reserve University • Children's National Medical Center • Columbia University • Duke University • Emory University • Georgetown University and Howard University • Harvard University • Indiana University School of Medicine • Johns Hopkins University • Mayo Clinic • Medical College of Wisconsin • Medical University of South Carolina • Mount Sinai School of Medicine • New York University School of Medicine • Northwestern University • The

Ohio State University • Oregon Health & Science University • Penn State • Milton S. Eshelman Center • The Rockefeller University • The Scripps Research Institute • Stanford University • Tufts University • The University of Alabama at Birmingham • University of Arkansas for Medical Sciences • University of California, Davis • University of California, Irvine • University of California, Los Angeles\* • University of California, San Diego • University of California, San Francisco • University of Chicago • University of Cincinnati •

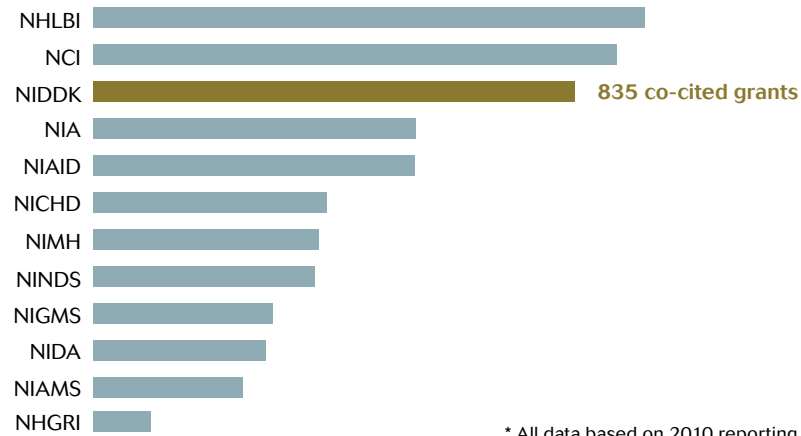
University of Colorado Denver • University of Florida • University of Illinois at Chicago • The University of Iowa • University of Kansas Medical Center\* • University of Kentucky\* • University of Massachusetts Medical School Worcester • University of Michigan • University of Minnesota, Twin Cities\* • University of New Mexico Health Sciences Center • The University of North Carolina at Chapel Hill • University of Pennsylvania • University of Pittsburgh • University of Rochester School of Medicine and Dentistry • University of

Southern California • The University of Texas Health Science Center at Houston • The University of Texas Health Science Center at San Antonio • The University of Texas Medical Branch at Galveston • The University of Texas Southwestern Medical Center at Dallas • The University of Utah • University of Washington • University of Wisconsin—Madison • Vanderbilt University • Virginia Commonwealth University • Washington University in St. Louis • Weill Cornell Medical College • Yale University

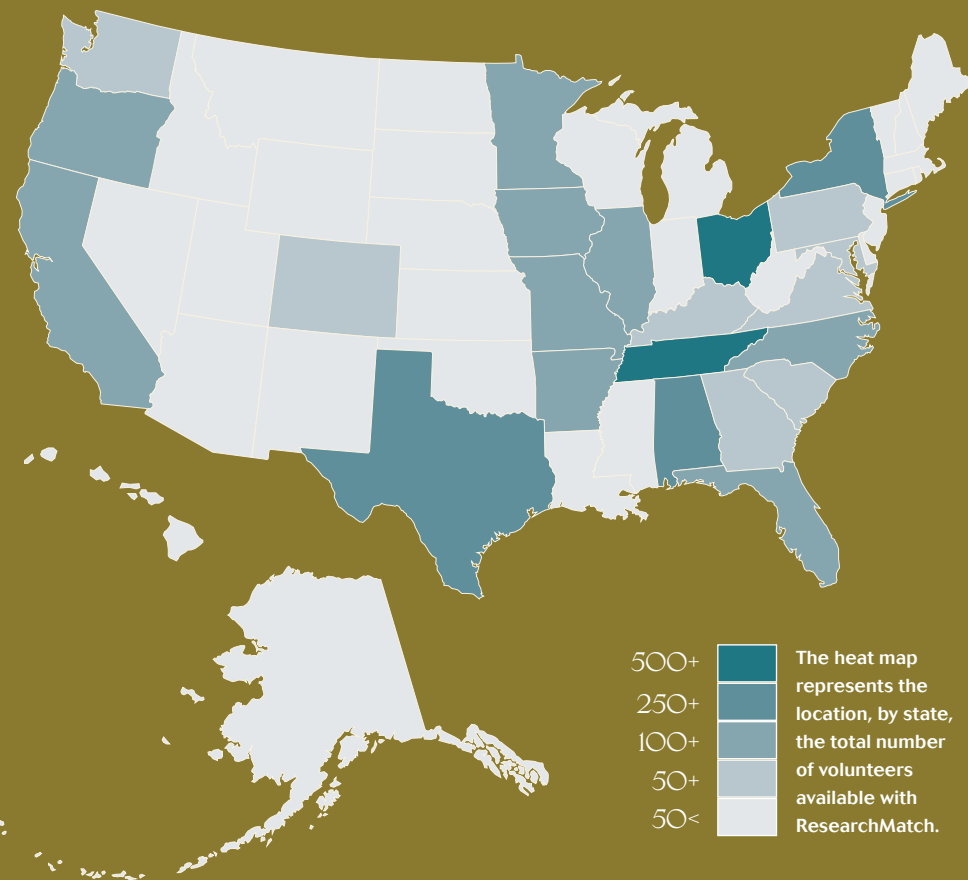
## 5,886 UNIQUE GRANTS WERE AWARDED FOR CTSA-SUPPORTED WORK



## 5,375 PUBLICATIONS BY CTSA-SUPPORTED RESEARCHERS RECEIVED CTSA SUPPORT



\* All data based on 2010 reporting



## Volunteers available in ResearchMatch

	Total	Diabetes, Digestive and Kidney Diseases Related Studies	% Diabetes, Digestive and Kidney Diseases Related Studies
Volunteers ready to participate in studies	19,759	1,970	10%
Active studies	301	15	5%
Institutions	65	9	14%

# CTSA

## NIDDK ANNUAL SUMMARY 2011

The CTSA support the innovation and partnerships necessary to bridge the traditional divides between basic research and medical practice. The combination of resources and collaboration made possible by these awards is essential for developing and delivering new treatments and prevention strategies.

NIH Director Francis S. Collins, M.D., Ph.D.

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## REDCAP FOR NIDDK

The CTSAs supported REDCap tool is used by 418 active institutional partners including almost all CTSAs. REDCap is designed to support data capture for research studies and allows users to build and manage online surveys and databases quickly and

securely. It is currently in production use or development build status for more than 40,430 studies with over 54,120 users spanning numerous research focus areas including those of critical importance to NIDDK. **REDCap includes studies such as:**

Altered mitochondrial membrane potential, mass, and morphology in the mononuclear cells of humans with type 2 diabetes.

Widlansky ME, Wang J, Shenouda SM, Hagen TM, Smith AR, Kizhakekuttu TJ, Kluge MA, Weihrach D, Gutterman DD, Vita JA.

Transl Res. 2010 Jul; 156(1):15-25. Epub 2010 May 11.

Development and initial validation of the barriers to diabetes adherence measure for adolescents.

Mulvaney SA, Hood KK, Schlundt DG, Osborn CY, Johnson KB, Rothman RL, Wallston KA.

Diabetes Res Clin Pract. 2011 Jul 5. [Epub ahead of print].

Normothermia to prevent surgical site infections after gastrointestinal surgery:

holy grail or false idol?

Lehtinen SJ, Onicescu G, Kuhn KM, Cole DJ, Esnaola NF.

Ann Surg. 2010 Oct; 252(4):696-704.

## ABOUT CTSA

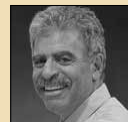
The CTSA program creates academic homes for clinical and translational science at 60 health research institutions nationwide. The CTSAs are committed to reducing the time it takes for laboratory discoveries to become treatments for patients, to engaging communities in clinical research efforts, and to training a new generation of clinical and translational researchers. The CTSA program is funded by the National Institutes of Health through its National Center for Advancing Translational Sciences.

**Each CTSA site is required to provide the following resources:**

- Regulatory support
- Pilot funding
- Clinical research facilities
- Informatics
- Education, training and career development
- Community engagement
- Biostatistics

**Consortium activities focus on:**

- Clinical and Translational Research Management Capability
- Training and Career Development of Clinical and Translational Scientists
- Enhancing Consortium-Wide Collaborations
- Enhancing the Health of Our Communities and the Nation
- T1 Translation



### INVESTIGATOR SPOTLIGHT

## Dan Cooper, M.D.

Director, Institute for Clinical and Translational Science  
University of California Irvine

As founder of UC Irvine's Pediatric Exercise Research Center, Dan's research focuses on childhood health and the effects of exercise on diabetes, asthma and obesity. In a national CTSA-supported study called HEALTHY, he shows how school environments providing healthier food choices can help reduce obesity and diabetes in at-risk children.

UC Irvine was among eight U.S. academic medical centers chosen to participate in this multi-year effort. At UC Irvine, CTSA funding has helped bring about novel technologies such as devices that can detect conditions like diabetes in exhaled breath.



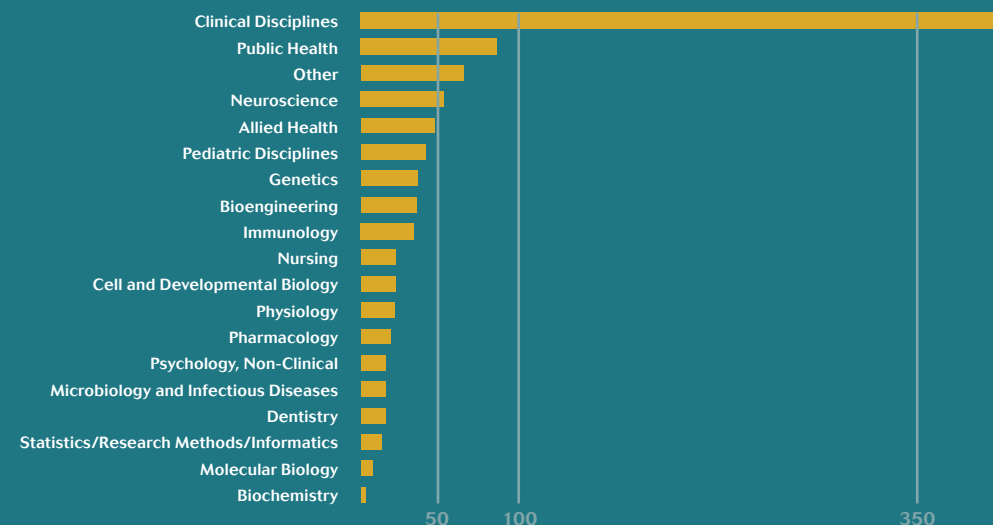
### VOLUNTEER SPOTLIGHT

## Anastasia Albanese-O'Neill, R.N., M.A.

Anastasia has participated in diabetes studies and was at a congressional briefing about the importance of NIH-funded diabetes research.

She is affiliated with the University of Florida Clinical and Translational Science Institute through her work as a consultant for the UF Diabetes Center of Excellence in College of Medicine. She believes that to change the future, an increased commitment to NIDDK must reflect the burden diabetes imposes on families.

# CTSAs supported 930 clinical and translational scholars and trainees in 2010.



## Drugs, biologics and devices

Food and Drug Administration

### Outcomes reported

### % NIDDK activity

764 Drug license applications

6%

80 Patent applications

1%

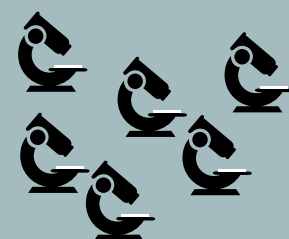
57 Invention disclosures

4%

## CTSA helps plant seeds for meaningful research.

ESTIMATED 1,898 PILOT STUDIES

NIDDK-related work: 60  
Based on 36 out of 60 reporting sites.



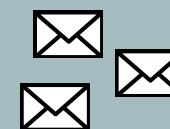
PRELIMINARY RESULTS/ FINDINGS



MANUSCRIPTS



NIDDK GRANT SUBMISSIONS



PEER-REVIEWED SCIENTIFIC PROGRAMS



CTSA projects are of excellent quality and CTSA-supported investigators publish in high impact journals.

## Visibility: Examples of high impact

CTSA SUPPORT	PUBLISHED TITLE	INSTITUTION/ REFERENCE
Support from the Pediatric Pulmonary Core for spirometry and the Pediatric Nursing Core: Support was for nursing services for the collection and performance of pharmacokinetic studies and the monitoring for adverse events. Other assistance: CTSA resources on patient encounters and procedures, Clinical Research Unit, CTSA PCIR Core and regulatory core.	Effect of VX-770 in persons with cystic fibrosis and the G551D-CFTR mutation.	University of North Carolina at Chapel Hill, University of Pennsylvania, University of Pittsburgh, Case Western Reserve University, Johns Hopkins University, University of Washington, Stanford University, University of Colorado Denver/N Engl J Med. 2010 Nov 18; 363(21):1991-2003
CTSA-supported K-scholar	Mapping the NPHP-JBTS-MKS protein network reveals ciliopathy disease genes and pathways.	University of Washington/Cell. 2011 May 13; 145(4):513-28.
CTSA Salary Support	9p21 DNA variants associated with coronary artery disease impair interferon- $\gamma$ signalling response.	The Scripps Research Institute, University of California, San Diego/Nature. 2011 Feb 10; 470(7333):264-8
CTSA phlebotomy services: Support from the Johns Hopkins CTSA Genome-Wide Association Study (GWAS) Innovative Methodology Workgroup	Common variants in KCNN3 are associated with lone atrial fibrillation.	Case Western Reserve University, Johns Hopkins University, The Scripps Research Institute/Nat Genet. 2010 Mar; 42(3):240-4. Epub 2010 Feb 21
CTSA Support of Columbia University's Organic Synthesis Collaborative Center	Mechanism for the inhibition of the carboxyltransferase domain of acetyl-coenzyme A carboxylase by pinoxaden.	Columbia University/Proc Natl Acad Sci U S A. 2010 Dec 21; 107(51):22072-7. Epub 2010 Dec 6
Pilot award	MLCK-dependent exchange and actin binding region-dependent anchoring of ZO-1 regulate tight junction barrier function.	University of Chicago/Proc Natl Acad Sci U S A. 2010 May 4; 107(18):8237-41. Epub 2010 Apr 19.
CTSA support from the Metabolism Core Lab and resources provided by the Clinical Research Unit	Serum 25-hydroxyvitamin D and parathyroid hormone are independent determinants of whole-body insulin sensitivity in women and may contribute to lower insulin sensitivity in African-Americans 1-3.	University of Alabama at Birmingham/Am J Clin Nutr. 2010 Dec; 92(6):1344-9. Epub 2010 Sep 22
Pilot award	Familial aggregation of autoimmune disease in juvenile dermatomyositis.	University of Chicago/Pediatrics. 2011 May; 127(5):e1239-46. Epub 2011 Apr 18.
Support from the CTSA Genome-Wide Association Study (GWAS) Innovative Methodology Workgroup	Genetic variants in novel pathways influence blood pressure and cardiovascular disease risk.	Johns Hopkins University/Nature. 2011 Sep 11; 478(7367):103-9