directors’ perspective

All of the Clinical and Translational Science Award (CTSA) collaborations have a prominent education component consisting of a TL1 (doctoral and postdoctoral) and a KL2 (early faculty) component. For our CTSC, the KL2 is the CTSA-funded successor of a K12 program established several years before with Rick Rudick as Principal Investigator. This KL2 program represents one of our great strengths. Our program now supports 19 new investigators, and provides support to one research mentor and one career mentor for each scholar, as well as modest research support. It also provides access to a well conceived program of coursework ranging from statistics to leadership and team building.

One of the features of our program of which we are the most proud is the diversity of the trainees. Over the life of the program, of 29 total trainees there have been 19 physicians, one dentist, five nurses, one engineer, one anthropologist, and two genetic epidemiologists. Moreover, these trainees are based at all the CTSC participating institutions; four from Metro, eight from UH, eight from CCF and nine from Case. These results fell out naturally from the scientific review process, conducted by a 27-person committee with representation from all the disciplines and all the institutions. The group of KL2 scholars is truly spectacular and we look to them for great things. Each year, the competition is very stiff. This year there were 30 applicants, but funding was available only for the top four; they are:

Jinbo Fan, PhD: [not pictured] Dr. Fan’s career goal is to achieve significant scientific breakthroughs through the design and conduct of methodologically innovative clinical research on the genetic and molecular basis of serious mental illness with a primary focus on bipolar disorder. As a KL2 Clinical Research Scholar, he plans to take a systematic three-stage approach to comprehensive and systematic assessment of the putative genetic risk factors in the phenomenology and treatment of bipolar disorder.

Sankar Dass Navaneethan, M.D., M.P.H: [top photo] Dr. Navaneethan is interested in obesity and outcomes in chronic kidney disease (CKD), referral to nephrologists for CKD care and systematic reviews and clinical trials in nephrology. As a KL2 Clinical Research Scholar, he plans to conduct a prospective study to assess the impact of various weight loss interventions in patients with chronic kidney disease. His other ongoing projects include development of a chronic kidney disease registry which would house details of over 40,000 kidney disease patients for research studies and systematic reviews relating to various topics in nephrology through his work.

Melissa Young, Ph.D. [middle photo] Dr. Young has a Research position in the Biomedical Engineering Department of the Cleveland Clinic, where she is a part of the Medical Device Solutions group and works directly with clinicians to develop new therapeutic technologies. As a KL2 Clinical Research Scholar, Dr. Young will [continue to] collaborate with physicians to develop realistic in vitro and in silico evaluation methods used to establish performance of peripheral vascular stents, to determine key design features that optimize their in vivo behavior, and to establish fatigue criteria that enable designers to improve the durability and ultimately long term patient care.

Thomas Frazier, Ph.D. [bottom photo] Dr. Frazier’s clinical expertise includes assessment and differential diagnosis in children and adolescents suspected of having disruptive behavior or autism spectrum disorders. Dr. Frazier’s research examines phenotypic and structural neural abnormalities in youth with autism spectrum disorders. His KL2 Multidisciplinary Clinic Research Training Program project, conducted in conjunction with Dr. Charis Eng and the Genomic Medicine Institute, examines the downstream neural and cognitive consequences of mutations in PTEN and related pathway genes in children with autism.

Please help us welcome these terrific scholars.

Pamela B. Davis, M.D., PhD
Principal Investigator
Dean, Case School of Medicine and
Vice President for Medical Affairs

Richard Rudick, M.D.
Co-Principal Investigator
Vice Chair of the Neurological Institute at the Cleveland Clinic

Visit our website casemed.case.edu/ctsc/ for more information about the Clinical and Translational Science Collaborative of northeast Ohio.
building collaborations

The Ohio Department of Health sees diabetes and hypertension rising at alarming rates throughout Ohio—especially in Northeast Ohio, and these illnesses place people at greater risk for developing chronic kidney disease (CKD). Understanding what interventions might minimize the effects of the disease and/or slow its progression toward dialysis or transplant is a priority for those who provide assistance and education to people suffering from CKD.

With this goal in mind, the Kidney Foundation of Ohio (KFO) approached The CTSC’s **Community Partnership Core Resource** through its Director Ash Seghal, MD and its Manager of Program Development Michele Abraham MSSA, LISW-S for research assistance. The research needed to be focused, measurable, and relevant to the needs of newly diagnosed CKD patients. Through a collaborative effort, the KFO and the CTSC groups devised a research tool – the Healthcare Needs Assessment Questionnaire – and presented it to those closest to the problem: CKD patients who recently started dialysis and who were attending renal support groups in the Cleveland area. The research group also arranged to audiotape, with appropriate consent, support group discussions in order to gather anecdotal information.

The data gathered was sent to the research team for analysis, which revealed clear trends. For instance, many respondents indicated that talking to someone else with kidney disease would have been a great resource when they were first diagnosed. Based on the overall findings, KFO is developing new services through their Case Management Program that will more directly address the needs of CKD patients in the community. The new initiative is called **A.S.K.**:

A-**Assist** kidney patients with services they need through KFO’s financial aid referral system

S-**Support** efforts to maintain kidney function by providing education, resources and psychosocial support

K-**“Konnect”** patients and their families to other resources in the community, such as a support group or mentor.

The KFO/CTSC research effort is ongoing. “Dialysis is a rigorous treatment and patients often have difficulties when they first start,” says Lori Diamond of the KFO. “Knowledge gained through the research we are doing with the CTSC will help newly diagnosed patients manage their disease to avoid dialysis as long as possible.”

frequently asked questions

**Q:** What are the “Core Resources” of the CTSC?

**A:** A wide variety of professionals who hold primary positions in the School of Medicine, The Cleveland Clinic, MetroHealth and University Hospitals, devote a portion of their time to the Clinical and Translational Science Collaborative. Organized into groups by their area of expertise or interest, these people are at the heart of the initiative. They:

- help design research studies and research tools
- facilitate clinical-investigator interfaces
- facilitate community outreach
- educate everyone involved
- administer and track all CTSC activities.

Please explore the Core Resources Tab of our website to learn more and look for frequent columns in this newsletter featuring one of the Core Resources.

**Q:** What are “DNA Days” at the Great Lakes Science Center?

**A:** National DNA Day on April 23, 2010 commemorates the discovery of the double helix and the completion of the Human Genome Project. The CTSC is allied with the GLSC in celebrating with speakers, games, workshops and interactive tours to learn more about genetics and genomics. **Mitchell Drumm, Ph.D.**, Professor of Medicine, Division of Pediatric Pulmonology, University Hospitals Case Medical Center, will be a CTSC speaker. Dr. Drumm’s primary interests are the genetics and molecular biology surrounding the inherited disease cystic fibrosis; he worked with Francis Collins, M.D., Ph.D., on identification of the gene causing cystic fibrosis. Check the Science Center’s website at [www.greatscience.com/visit](http://www.greatscience.com/visit) for the time of Dr. Drumm’s talk and a complete schedule of the day’s events.

**Q:** What does Community Engagement mean relative to clinical and translational science?

**A:** Broadly engaging members of the community in the research process is an essential part of the CTSC initiative. Through our work, we reach out to communities to share research efforts and their findings, and to encourage those with a shared interest in improving health to become involved by designing and conducting their own research. At the same time, we want to help all researchers conduct culturally competent research. A **conference and neighborhood tour** that will be of interest to individuals working on a variety of research, including laboratory research, clinical trials, evidence-based guidelines, dissemination research, or community-based and population research has been organized by the CTSC Community Partnership Core Resource for May 19th (CME, CEU for nurses and social workers, and CREC are pending). Visit the announcement for the Spring Cultural Competency Tour on our website’s homepage for details.

**Q:** How can I learn more about the CTSC?

**A:** Explore our website or attend our **Seminar Series** the third Tuesday of every month in the Frohring Auditorium, 105 Biomedical Research Building at 4:30 pm: **March 16 - Sleep Disordered Breathing: An Overlooked Culprit in Arrhythmogenic Risk?** presented by Reena Mehta, M.D., Assistant Professor of Medicine, Division of Pulmonary, Critical Care and Sleep Medicine, Center for Clinical Investigation, Medical Director, Adult Sleep Service, University Hospitals Case Medical Center

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**ac-ro-nym** /əˈkrɑːnəm/ pronounced [ak-ruh-nim]

-noun 1. a word formed from the initial letters or groups of letters of words in a set phrase or series of words/

Love them or hate them, we use a lot of them. How well are they understood? Test yourself here.

**1. DNA  2. RNA  3. NSF  4. HIPAA**

(answers below)

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1. DNA

2. RNA

3. NSF

4. HIPAA

- (answers below)