

### Professor Profiles

**Piyush Koria** is an assistant professor of Chemical and Biomedical Engineering. He received his PhD from the University at Buffalo, SUNY. Professor Koria's teaching and research interests are in tissue engineering, biomaterials, drug delivery, nanomedicine, protein engineering and bioMicroelectromechanical systems (BioMEMs). The main focus of his lab is to develop novel therapeutics for tissue regeneration, specifically wound healing. He is also interested in building in vitro dynamic living models of diseases such as cancer metastases and tissue regeneration using tissue engineering and microfabrication.



**Arash Takshi** received his PhD in 2007 from the University of British Columbia (UBC) in organic electronics. After that Professor Takshi worked as a post-doc at UBC for two years. From December 2009 to August 2010 he worked with a research team at the University of Maryland on developing energy harvesting systems for wireless sensors. In August 2010 Professor Takshi joined the Electrical Engineering department. His research interests are in bio and organic electronics, particularly in photovoltaic devices. Using proteins from natural photosynthetic cells he has devised a photo-battery which can be charged with solar energy. Also he has a patent on "Thin-Film Field-Effect Transistors having Schottky gate-channel junction." The invented device is a low voltage flexible transistor which can be printed on fabrics for wearable electronics.



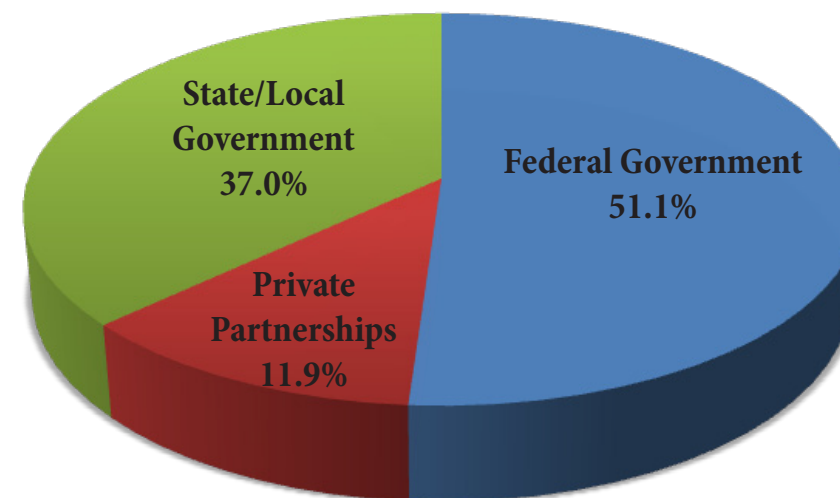
**Robert D. Frisina** joins the College as a Professor of Chemical and Biomedical Engineering. He received his PhD from the College of Engineering at Syracuse University where his disciplines of study were Bioengineering, Auditory Neuroscience and Physiology. His multidisciplinary research includes the fields of Auditory and Molecular Neuroengineering with a focus on developing novel interventions and treatments for different types of sensory deficits. He also uses biomedical engineering techniques to study how we hear, and what goes wrong in cases of hearing loss and deafness, with a special emphasis on age-related hearing loss – presbycusis. Dr. Frisina currently has four, 5-year research grants from the National Institutes of Health (NIH), one pending NIH grant, and twenty previous grants. He leads an internationally recognized inter-collegiate, bench-to-bedside research team, in close collaboration with the Department of Communication Sciences and Disorders, of the College of Behavioral and Community Sciences.

#### QUICK FACTS

- 70% of tenure-track faculty in the College are principal investigators on at least one active contract or grant.

- The effective indirect cost rate for the College of Engineering expenditures in 2009/10 was 20.8%

#### College of Engineering Current Awards by Funding Source



# Student Profile

Dayna Lee Martinez-Torres

Ph.D. Candidate Department of Industrial and Management Systems

## 1. Why did you decide to pursue a PhD in Industrial Engineering?

“Ever since I was a little girl I’ve been attracted to math and science, and Industrial Engineering came as a natural decision for me. It offers a great combination of science and math with human interactions at both service and manufacturing industries. Once I finished my undergraduate degree at the University of Puerto Rico-Mayaguez, I wanted to continue with my Ph.D. at USF and continue my career in the academia direction. My goal is to do research and inspire others, especially young women and minority students.”

## 2. What are your career and professional goals?

“My career and professional goals are to become a professor where I can continue doing research and teach this profession that I love so much.”

## 3. Discuss your involvement with the NSF GK-12 STARS program?

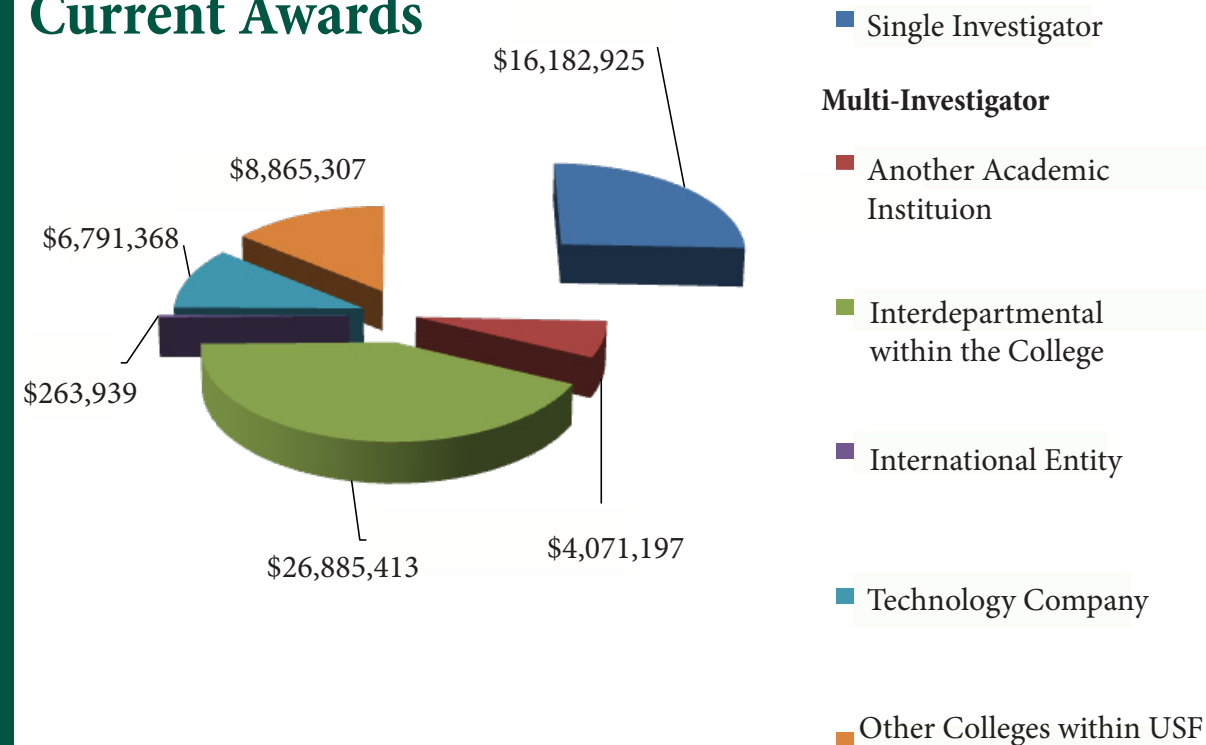
“As an NSF STARS fellow, I help local elementary teachers improve their science curriculum. I spend 8 hours a week at Maniscalco Elementary in Lutz Florida and help 5th grade teachers develop and perform science lab activities. I love this job since it gives me the opportunity to excite kids about science and inspire them to pursue careers in this field.”

## 4. Describe the intellectual merit of your research and its broader impact.

“Non-pharmaceutical interventions (NPI) will likely be the only mitigation strategy at the early stages of a pandemic influenza. NPI includes quarantine, school closure, work place closure and travel restrictions among others. In my research, we attempt to develop a dynamic non-pharmaceutical intervention strategy using a simulation-based model that can both reduce attack rates and societal cost of a pandemic. This research will ultimately produce a decision-aid tool for mitigating a critical societal problem by reducing societal woes as well as economic forfeitures.”

## Interdisciplinary Research Profile

### Current Awards



## Stipend Report: Fall 2010

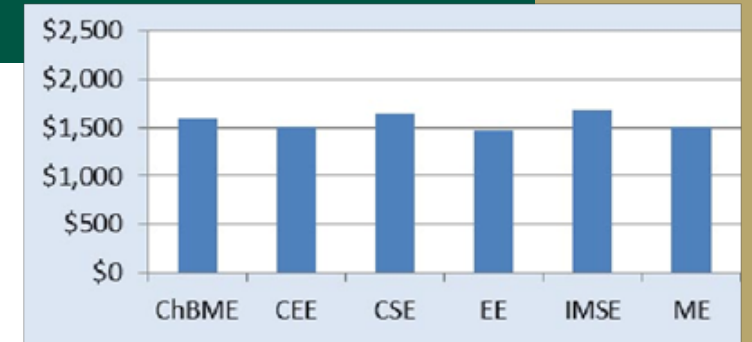
### Graduate Assistants

- 377 students
- 439 appointments

### Fellowships

- 78 students
- 94 awards

- 29 students with GA appointment(s) and fellowship(s)
- 49 students with fellowship(s) only (no GA appointment)
- 348 students with GA appointment(s) only (no fellowship)



### Graduate Assistants Stipends in the College of Engineering

#### Average Monthly Stipend

(Assigned FTE)

\$1,436

#### Average Monthly Stipend

(Adjusted to 0.5 FTE)

\$1,562

Average FTE

0.45

## News You Should Know

### Data Management Plan

A long-standing data sharing/management policy at the NSF is being more rigorously enforced as of January 18, 2011. Specifically, all proposals must include a plan for data management in the supplementary documents section. Please see <http://www.nsf.gov/bfa/dias/policy/dmp.jsp> for details. A template/example is available from the COE Research Office – contact Anne Gallacher ([agallach@usf.edu](mailto:agallach@usf.edu)).

### Responsible Conduct in Research Training

Responsible Conduct in Research Training – Starting January 2010 new requirements were in place for NSF and NIH grants. On NSF grants, all non-faculty researchers are required to receive responsible conduct in research training which can be completed on-line at [www.citiprogram.org](http://www.citiprogram.org). For NIH grants all participating researchers are required to receive the training. For details please contact Cindy Vallaro ([cvallaro@usf.edu](mailto:cvallaro@usf.edu)). To date, approximately 322 faculty and students have completed the training in the College.

### Graduate Student Mentoring on GRS Supplements

Supplemental requests for graduate student support on existing grants must now include a mentoring plan for the identified student candidate. According to the NSF guidelines, activities should include setting up a mutually agreed upon list of expectations and goals, and providing timely evaluations of progress towards those goals, along with other career development activities.

### Proposal Reviewing Service Gains Momentum

The service, sponsored by the College and available to COE faculty at all ranks, is catching on and has received positive feedback. Reviews are performed by Patricia Ball, a former CUTR employee with many years of experience in editing. Contact Melodie Austin for details ([maustin1@usf.edu](mailto:maustin1@usf.edu)).

If you would like to be included in the next newsletter or have questions/comments please contact Marcy Enoch at [menoch@usf.edu](mailto:menoch@usf.edu)