

## **Postdoc puts experience to work as medical affairs scientist**

*By Eddy Ball*

In December 2014, Mallikarjuna Metukuri, Ph.D., became one of the latest NIEHS trainees to join the growing Ph.D. scientific workforce employed in the field of clinical trials.

Metukuri accepted a position away from the bench as a medical affairs scientist with the contract research organization (CRO) INC Research, which has more than 5,000 employees in 50 countries worldwide. His Raleigh, North Carolina-based employer is one of the leading companies in this rapidly growing field, which includes Triangle-based major players Quintiles, PRA Health Sciences, and PPD.

INC and other CROs support the Phase I, II, and III clinical trials with human subjects required by the U.S. Food and Drug Administration to ensure the safety and effectiveness of drugs developed by major pharmaceutical companies. Over the past decade, big pharma has been phasing out its in-house oversight of clinical trials, focusing its resources on drug discovery and development, and creating a profitable niche for CROs, which are experiencing double-digit growth each year.

“This is a great opportunity for me with a lot of growth potential,” Metukuri said of his move to INC. “I wanted to pursue my interest in translational research, and this position keeps me in touch with clinical trials going on all over the world involving drugs to treat disease across the spectrum, from psychological and neurological disorders to cancer, cardiovascular disease, and diabetes.”

### **From bench to desktop**

During his postdoctoral training, Metukuri received extensive mentoring and instruction at the bench, honing his skills as a research scientist. After a 5-year stint at the University of Pittsburgh Medical Center, he joined the Metabolism, Genes, and Environment Group at NIEHS, headed by [Xiaoling Li, Ph.D.](#)

From the beginning of his 3-year experience at NIEHS, Metukuri set his sights on developing the kind of diverse skill set that landed him the job at INC. He took advantage of career development workshops and other services coordinated and presented by NIEHS Office of Fellows' Career Development (OFCD) Director [Tammy Collins, Ph.D.](#)

In January 2012, he became a guest writer for the Environmental Factor newsletter, contributing papers-of-the-month summaries on the broad spectrum of outstanding research conducted by in-house labs at NIEHS and building an impressive portfolio of writing samples. He also worked as a special volunteer with the NIEHS Clinical Research Unit, where he got a close-up look at research involving human subjects.

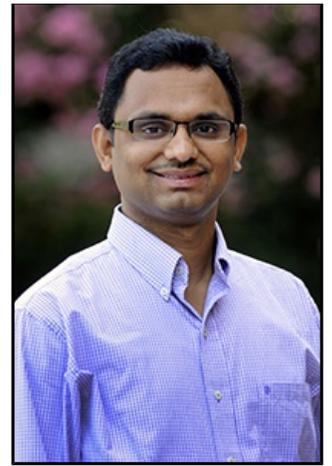
“NIEHS offers exceptional opportunities for trainee career development,” Metukuri said. He credits encouragement and supportive mentoring from Li, Collins' help with his resume and other aspects of career development, and extensive networking for the success of his job search.

### **Careful attention to details and regulatory requirements**

As a medical affairs scientist, Metukuri reviews and analyzes project-specific data and medical literature in a broad range of areas related to disease and drug development. He also manages committees related to the studies he oversees, data monitoring groups, data safety monitoring boards, and adjudication committees.

Because clinical trials are closely regulated by U.S. and foreign government agencies to protect the health and privacy of human subjects, it is important that research protocols are developed and approved prior to enrollment of subjects and followed carefully throughout the trials to endpoint adjudication. One of Metukuri's regular duties involves identifying signs of potentially adverse events at any point in the clinical trial.

The medical affairs scientist is the primary interface for the trials under his or her oversight between the CRO and its pharmaceutical company clients, vendors, and other departments in the area of subject safety. He or she provides specialized knowledge for international guidance regarding the conduct of study-related committees.



*Metukuri said his new job demands exceptional written and oral communication skills. "The OFCD's career development activities organized by Tammy [Collins] and writing with the Efactor helped me a lot." (Photo courtesy of Steve McCaw)*



*"When Mallik joined our group in 2011, he already knew where he wanted his career to go," Li said. "He put in the extra effort necessary to conduct quality research and at the same time gain the other skills he needed to meet his career goals." (Photo courtesy of Steve McCaw)*



*"Mallik started planning his career early on and was able to strategically position himself to stand out to employers by developing the additional skills required of a medical affairs scientist," said Collins. She is a former NIEHS trainee who knows from personal experience the importance of developing a diverse skill set. (Photo courtesy of Steve McCaw)*

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