

MOVERS

Richard Somiari, president and chief scientific officer, ITSI-Biosciences, Johnstown, Pennsylvania



2003-04: Chief operating officer, Windber Research Institute, Windber, Pennsylvania

2001-03: Chief operating officer/chief scientific officer, Windber Research Institute/Clinical Breast Care Project

2000-01: Scientific director, Windber Research Institute/Clinical Breast Care Project, Walter Reed Army Medical Center, Windber, Pennsylvania

Richard Somiari's belief that technology can advance biology has taken him from studying food technology in Nigeria to founding a proteomics company in the United States. "Technology has caught up to biology," he says. "I try to adapt technology to answer scientific questions."

Somiari's interest in technology began as a child in Nigeria; he liked to build model cars. His mother wanted him to become a doctor but he was saddened to see the local hospital struggle to cure patients.

"I thought, if I go into research, I can come up with better ways to help patients," says Somiari. He studied microbiology and began working in industry, which at the time in Nigeria was dominated by food manufacturing.

His master's work in enzyme and food technology was his introduction to the study of proteins. Then a fellowship from the Polish government and the World Bank took him to the Technical University of Lodz in Poland and to the University of Strathclyde, Scotland, for a PhD where he switched to biotechnology. He took up molecular biology and biomedical research as a postdoc at the University of Maryland's School of Medicine, studying gene expression in clinical samples.

There he met Nicholas Jacobs, president of Windber Medical Centre in Pennsylvania. Jacobs had funding to establish a research institute and was looking for a scientist to head it. It was an opportunity Somiari couldn't pass up.

"It gave me a chance to finally implement the ideas I'd had over the past ten years," he says. He bought the latest high-throughput genomics and proteomics analytical equipment, established key research partnerships, built an extensive tissue bank and increased the institute's size to 45 employees working on eight research programmes.

By 2004, Somiari saw a need for another organization. Many researchers needed to do analytical proteomics work, but didn't have the necessary instrumentation and couldn't afford to use service companies that cater mainly to drug companies. Somiari started his own company, Integrated Technologies and Services International (ITSI) Biosciences, which began providing affordable proteomics services to academics this year.

Somiari advises young scientists to move into new areas and diversify their knowledge and skills. "The good thing about being a scientist is that they may take your job from you but not your knowledge," says Somiari. "Your success, achievements and failures will remain with you." ■

Corie Lok

BRICKS & MORTAR

Pittsburgh power tower

The University of Pittsburgh's Biomedical Science Tower 3 (BST3) opened last month. By next year, the \$205-million, ten-storey tower will house a wide range of high-powered nuclear magnetic resonance (NMR) instruments, the world's largest zebrafish colony and a biosafety level-3 lab. There will also be scientists from an eclectic mix of disciplines, from drug discovery to fish genetics and vaccine development. Researchers have worked with architects to make BST3 as user-friendly as possible.

The building will house about 500 workers: some in the structural and computational biology departments; some in neurobiology, bioengineering and molecular genetic groups; and some at centres in neurodegeneration, cognition, drug discovery and vaccine research. Half or so of the 50 principal investigators will be in new jobs.

Angela Gronenborn migrated from the National Institute of Diabetes and Digestive and Kidney Diseases in Bethesda, Maryland, to chair the new structural biology department and oversee the NMR facility. Her office overlooks the gigantic underground bay holding 600, 700 and 800 MHz magnets (a 900 MHz magnet will be added soon).

The only NMR facility in the United States with such a range of instruments under one roof, it will let researchers elucidate different properties of difficult molecules such as membrane proteins, says Gronenborn. Natural light streams into the bunker, nine metres underground, where removable plate glass windows allow easy installation of future magnets.

Upstairs, the 10,000-tank zebrafish facility can accommodate up to half a million fish, enabling collaborative genetic screening projects. Special light-tight cabinets help speed breeding and experiments. Interchangeable freshwater tanks are equipped with computer-automated pumping and water quality systems.

All that means more time and energy focused on lab work, and less on the 'nuts and bolts' of maintaining the colony, says Nathan Bahary, a zebrafish molecular geneticist at the University of Pittsburgh. The tower also contains modular lab benches and other features for ease of expansion and upgrades.

The diversity of scientists in BST3 — basic 'fish people' collaborating with bioreactor engineers and talking to nearby neurobiologists — should keep the science bubbling. ■

Kendall Powell

GRADUATE JOURNAL

Who needs evidence?

I have returned to my graduate lab to keep my project moving along and to pass along the scientific torch. Today was a rough one at work and a news report I caught this evening only worsened my mood. It was news from Kansas and it was not pretty. The state's board of education voted to change the science curriculum so that it casts doubt on evolution and includes the teaching of 'intelligent design'. To most scientists, it is a tragedy. To me, it's personal.

I earned my undergraduate degree in biochemistry at the University of Kansas. During those years, I embraced the scientific method with ferocity and moved in the direction of teaching science. Now, this decision in Kansas stands contrary to the principles of science and it feels like a kick in the teeth.

It also inspires some playful mocking and melts away my stress about postdoctoral projects. Let us imagine science free of any burden of evidence. My life would be so much easier! Suddenly, I can come up with sweeping conclusions without doing boring experiments. I am fascinated by fine mechanistic questions in biology and I previously thought such enquiries required rigorous research methods. Now, I realize that biochemical reactions occur because some 'designer' said that's how they should happen.

This could really work in our favour, fellow scientists. Since the news from Kansas, I have finished two 'scientific' manuscripts! I think I can do about ten per week and never have to go to the lab! There's bad news, however. I will scoop all of *Nature's* readership by next Christmas. Wink. Nod. ■

Jason Underwood completed his PhD in molecular biology at the University of California, Los Angeles, in June.