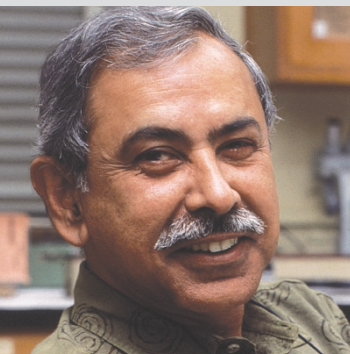


MOVERS

Sudhansu K. Dey, director of Division of Reproductive Sciences, Cincinnati Children's Research Foundation



2002-08 Director, Division of Reproductive and Developmental Biology, Vanderbilt University Medical Center, Nashville, Tennessee
1973-2002 Postdoctoral fellow to professor, University of Kansas Medical Center, Kansas City, Kansas

After earning a PhD in India, Dey landed a postdoc in the United States. But when he arrived in Kansas City, Kansas, in 1972 with eight dollars in his pocket, he had nowhere to stay and no one greeted him. His mentor's number was unlisted. Eventually, with the help of the university's vice chancellor, he found some lodging.

"That was a pretty scary 24 hours," Dey says. It was an inauspicious beginning to a productive research career; Dey ended up staying at the university nearly 30 years and publishing hundreds of papers on reproductive biology, an ambition inspired by watching his parents struggle to provide for their 12 children on the outskirts of Calcutta.

But things got worse in Kansas City before they got better. On his own initiative, Dey studied whether preimplantation embryos produce steroid hormones, which are critical for embryo implantation. But it was his mentor, not Dey, who received first authorship — the first of a few such incidents. With thoughts of abandoning his postdoc and the United States, Dey visited the department chair, who offered Dey a job independent of his former mentor, with one year to get his own funding.

"That was the best mentoring I ever had to steer through my career path," says Dey. He literally knocked on doors and formed collaborations at Kansas City "out of necessity". The strategy worked. Dey eventually earned his own first-author paper and landed National Institutes of Health funding.

His basic reproductive biology research encompasses embryo implantation and several forms of cancer, and some stem-cell work. "I am quite aggressive in terms of collaboration," Dey says. "I just pick up the phone and ask." That approach helped get him recruited at Vanderbilt.

Dey's Vanderbilt enthusiasm was short-lived, owing to limited institutional support for reproductive sciences. Former Vanderbilt colleague Arnie Strauss, now head of Cincinnati Children's Research Foundation, asked Dey to come to the foundation's Cincinnati Children's Hospital Medical Center. Strauss clinched the deal by asking Dey to start a new division of reproductive sciences.

"He's a tremendous collaborator," says Strauss. He calls Dey a "tenacious" investigator, who tackles difficult goals by bringing people together and sharing credit. Dey says he learned his biggest lesson — one he passes on to students, postdocs and junior faculty — on that first day in Kansas City. "You have to be stubborn but generous," he says. ■

Paul Smaglik

BRICKS & MORTAR

Shock physics

The growing field of shock physics has received crucial support from the UK government. Imperial College will get £10 million (US\$20 million) over five years to establish a research institute for shock physics: the study of matter at extreme conditions and how materials respond to shock waves, high pressures and temperatures. The funding comes from the UK's Atomic Weapons Establishment (AWE), the private contractor charged by the UK Ministry of Defence to develop and maintain nuclear weapons.

Imperial's new Institute for Shock Physics will consolidate theoretical and computational research by Earth scientists, engineers and energy researchers. They will investigate the physical properties of materials exposed to extreme pressures or temperatures such as those associated with asteroid impact on Earth.

Although no defence research will be carried out at the institute, AWE hydrodynamics scientist David Holder says it will be an important training ground for future employees. The directorship, three faculty positions and 20 PhD fellowships are currently available. As of 2009, a one-year MSc course will be offered.

Interim director Steven Rose says interest in new energy sources such as fusion and in understanding

phenomena such as tsunamis are among the factors driving the field. "In the UK, there is yet no single point of focus for these disparate bits of related research," he says. New equipment, such as a gas-gun able to fire a projectile at several kilometres per second to create high-velocity impacts, will help researchers investigate, for example, how aircraft would respond to a meteorite strike.

The additional infrastructure could be key for the field as a whole. "With the Imperial institute, the field of shock physics gets a boost of experimental capabilities," says Yogendra Gupta, director of Washington State University's Institute for Shock Physics and a leader in the field.

Gupta says the recent ability to achieve pico- and nanosecond measures of matter being destroyed at extreme conditions sheds light not only on the fundamental physics necessary to develop the next generation of materials, but on new ways to generate energy. New opportunities should come next year with the completion of the US Department of Energy's National Ignition Facility. It will enable researchers to conduct fusion experiments by squeezing matter with shock waves. ■

Virginia Gewin

POSTDOC JOURNAL

Getting people to talk

Conferences charge me with motivation: they provide opportunities to share data, ideas and enthusiasm. But it is easy to make the excuse that one is "too busy" to attend. It is thus with anticipation and trepidation that I am helping to organize the first annual symposium for students and postdocs at my institute.

A previous postdoc seminar series was run single-handedly by fellow postdoc Claire Canning. To get speakers, she had to send e-mails that were alternately wheedling and forceful. Even within the institute, people seemed wary of sharing unpublished data. One even demanded that we somehow guarantee presented data would not be misappropriated. Still more discouraging was the turnout: fewer than 20 people from an institute of more than 400. The poor response may have been partly due to the lack of involvement and support by lab leaders. A few students told me that their supervisors specifically instructed them to focus on their benchwork rather than participate. Claire's tenacity and valiant effort truly deserves credit, as she kept the seminars going for almost a year.

Despite her experience, I hope the forthcoming symposium will see more enthusiastic participation. This time we have the active support of our institute director. There will be food, drink, and even prizes! Hopefully we will all come away with a stronger sense of community, well-fed in both mind and body. ■

Amanda Goh is a postdoctoral fellow in cell biology under the Agency of Science, Technology and Research in Singapore.