

MOVERS

Bruce Jones, chief scientist, United States Geological Survey, Washington DC



2003–2005 Senior scientist, US Environmental Protection Agency, Las Vegas, Nevada

1998–2003 Branch chief of landscape ecology, US Environmental Protection Agency, Las Vegas, Nevada

1992–1998 Technical coordinator for landscape ecology, US Environmental Protection Agency, Las Vegas, Nevada

When famed herpetologist and curator at the Bronx Zoo, Raymond Ditmars, entertained with stories of komodo dragons and their far-flung habitats, a seven-year-old Bruce Jones was hooked. "My life-long fascination with biology and biogeography began then," he says.

Snakes, however, charmed him into federal government. After getting his MSc in biology at New Mexico State University, Jones took a break from school to conduct habitat surveys of reptiles and amphibians for the Bureau of Land Management. From there, he listed endangered species for the US Fish and Wildlife Service.

He then moved to the US Environmental Protection Agency (EPA) to head an ecosystem-monitoring initiative called the Environmental Monitoring and Assessment Program. Eager to protect ecological systems as opposed to individual species, the project's success allowed him to establish a landscape-monitoring programme.

His pursuit of a PhD in environmental biology proved a turning point. "I got the brain boost that comes from debating theories without the repercussions of a federal title," he says. His biggest challenge remains working within the constraints of government science, whose policy focus sometimes falls short of academic-quality research.

Jones's work has helped change the EPA's focus from simply enforcing regulation on single eco-stressors to an integrated approach to environmental and human health. Using satellite imagery and geographic information science, his group published a landmark report on the ecological condition of the mid-Atlantic region of the United States.

One of his great successes involved a land-use change assessment — Jones's research showed that spending \$500 million to protect an upstate watershed, and therefore water quality, would save New York City the \$7 billion to build a filtration system. The oft-cited work is one of the first instances of placing economic value on services freely provided by ecosystems, such as water purification. He has since been involved in a NATO project with Europe and Australia to assess watershed conditions across the continents. "It's been a remarkable ride," he says.

Most recently, Jones left the EPA to become chief scientist for the US Geological Survey. He hopes to move the organization past mapping and into the science of spatial analysis and ecosystem vulnerability assessments. Jones says his first priority is to build a strong network of colleagues, his most important natural resource. ■

Virginia Gewin

BRICKS & MORTAR

Nurturing bioincubators in the north

After opening in November of last year, the new Sheffield Bioincubator has high hopes of contributing to bioscience proliferation in northern Britain. The facility follows several bioincubators that have already sprouted up in the region (*Nature* **425**, 430–433; 2003).

"It reflects strength of healthcare technology and the bioscience sector in the region," says Mark Tock, the Sheffield Bioincubator manager. "In the past, the northern regions hadn't been able to receive as much investment. It was largely a perception problem." Now, Tock suggests that "bioscience is booming under a steel sky".

The United Kingdom has a total of 17 bioincubators. Including Sheffield, seven are located in northern Britain — the York Bioincubator, the Institute of Pharmaceutical Innovation in Bradford, the Manchester Incubator, the MerseyBio Business Incubator in Liverpool, Biocity in Nottingham, and the Roslin Bioincubator. An eighth, the Leeds Bioincubator, will open for business in July 2007.

Twenty scientists and support staff currently occupy the building, says Tock. The incubator's 16 labs and 16 offices, though, have the potential to accommodate up to 150 staff. The incubator started with £6.9 million in investments from the University of

Sheffield and European Regional Development Funds, which were delivered through the South Yorkshire Objective 1 Programme.

The facility's first tenant, a company called Biofusion, specializes in the commercialization of intellectual property for life sciences, and, in particular, science generated at the University of Sheffield. One Biofusion spin-off diagnostic company, Lifestyle Choices, develops menopause and female fertility products. Another early tenant, ARC BioServ, provides custom production biomolecules, such as monoclonal and polyclonal antibodies. In July, the South Yorkshire Bioscience Enterprise Network will join the bioincubator.

The Sheffield facility also has a 'virtual network' to serve companies with less mature ideas that seek the benefit of the bioincubator's expertise. In return for a fee, companies can use the bioincubator as a professional front, taking advantage of a telephone answering service and meeting facilities. Virtual tenants can log on to the bioincubator's community website remotely. "It enables younger companies, and companies looking to expand into the UK and EU, to plug in to our community," Tok says. ■

Gene Russo

GRADUATE JOURNAL

Einstein's secret diary?

Routine pleasures get me through the day — that, and the grandiose dreams of a scientist in training. Welcome distractions pad out the path to a higher degree.

When I awake I'm slightly panic-stricken — have I slept in? A minute later my alarm goes off. I relax and go back to sleep. At work I check my e-mail every 20 minutes. Sometimes I become embroiled in esoteric arguments. I print off lots of articles and pile them on my desk with the hopeless intention of reading them all. I make sure to minimize the television schedule as my supervisor walks past. I scurry past her door a few times in my lab coat in the hope I look busy.

Often, I decide that I can't go on another minute without rating my favourite songs in iTunes or tidying my stationery drawer. I daydream that my lab mates look like the cast of *ER*. Occasionally I envisage myself making a major discovery and winning a Nobel prize.

When my supervisor heads home I check the latest celebrity gossip and turn the music up loud in defiance. Lab life rocks! When a sad song comes on I lapse into self-doubt: why aren't my experiments working? Am I the worst graduate student in the world? Early evening I go for a run. Afterwards I meet some fellow students and have a couple of drinks. I leave early 'to work'. Once home, I watch TV. In bed as I am about to nod off, I think of that great experiment I must do. I fall asleep dreaming of my Nobel prize acceptance speech. ■

Mhairi Dupré is a first-year PhD student in evolutionary developmental biology at the University of Oxford, UK.