

MOVERS

Larry McKinney, director, Harte Research Institute for Gulf of Mexico Studies, Texas A&M University, Corpus Christi, Texas



1986–2008: Director of resource protection, senior director of aquatic resources, and director of coastal fisheries, Texas Parks and Wildlife Department, Austin, Texas

1980–86: Director, Texas Environmental Engineering Field Laboratory, Galveston, Texas

Larry McKinney grew up in a small town in west Texas during the worst drought in the state's history. It inspired him to revolutionize Texas's water policies by using ecosystem-based coastal management. Colleagues hope his new move will raise awareness of the Gulf of Mexico's national importance: more than 60% of US lands drain into the gulf.

Escaping the desert, McKinney became an oceanography undergraduate at Texas A&M University in Corpus Christi. His PhD focused on the origin and distribution of amphipods, tiny crustacea, throughout the Gulf and Caribbean. A summer fellowship at the Smithsonian Institution working with the biologists there sealed his academic intentions.

But first he found his expertise in demand for addressing real-world problems. Having returned to Texas A&M, McKinney became involved in several high-profile research projects. One — studying the environmental impacts of pumping concentrated brine out of oceanic salt zones to create cavities for the strategic petroleum reserve — led to the creation of the Texas Environmental Engineering Field Laboratory, which McKinney oversaw. He successfully brought in additional grants and contracts for other coast-based research work, but got burnt out chasing money.

When the Texas Parks and Wildlife Department asked him to help establish a resource-protection division, he accepted. Endangered-species concerns soon created controversy among landowners. McKinney crafted several policies, including funding for landowner conservation efforts, which became part of the federal Endangered Species Act.

At the Parks and Wildlife Department, McKinney sought to incorporate ecosystem-based management by connecting conservation, hydrology and economics. Andy Sansom, now director of the River Systems Institute at Texas State University in San Marcos, says McKinney successfully got an ecological component into Texas water policy despite the state legislature's reluctance. "Larry developed that capability and capacity by bringing sound science — that could not be discounted — to the table," says Sansom.

McKinney says two massive challenges face the Gulf of Mexico: population growth and climate change. "If we don't build a strong science base to develop policies while we still have some options, it's going to be a disaster," he says.

With McKinney ready to tackle such nationwide issues, Samson says the Harte Institute will realize its potential to become a Scripps Institution of Oceanography or Woods Hole Oceanographic Institute for 'America's third coast'. ■
Virginia Gewin

NETWORKS & SUPPORT

The softer side of science

Success in science is about more than mastering lab techniques. It also depends on 'soft' skills such as motivation, personality, research strategy and communication. It is not always easy for well-trained objective truth-seekers to consider soft skills, which are subjective. But they may help you boost your productivity and communicate your science better.

Scientists should shield themselves from discouraging events and develop a 'frustration tolerance' for paper and grant rejections, criticism by well-meaning colleagues and the depressing tedium of data collection. Then there's hypermotivation. To avoid burn-out, try relaxation (sports, yoga, meditation) and a healthy social life. Just as learning requires a quiet consolidation phase to store material in long-term memory, success in science needs intermittent silence.

Personality traits cannot usually be changed, but there are ways to improve one's disposition in the lab. Perfection, for example, can only be expected in pure mathematics or fairy tales. Beware of the 80–20 rule: for perfection, the last 20% of a task may take 80% of the effort — not a wise choice if you want to be productive. Worse, perfectionism is a sure path to leaving projects or papers incomplete.

A related trap is failure to bring a

project to publication. A finished experiment may satisfy your curiosity, but data are only of value to your CV and the rest of the world if published. The drive to completion is healthy, if you wish to succeed in science. Many of us have papers that are 90% finished but never submitted. Consider the time you have already invested, how little is left to do and how much effort it would take to get to the same point with another project.

Writer's block can be a major challenge: sitting in front of a blank page, lacking the wherewithal to start writing. This may be linked to the perfectionist trap ("I do not write unless my text is perfect"), but it could also be the result of a lack of ideas, of writing ability or of self-confidence. It is usually the first 10 minutes of writing that are hardest. Try to start writing without worrying about the presentation or structure.

Scientific leadership qualities — exhibiting responsibility, flexibility and trust — are also essential in all aspects of science.

These seemingly simple tasks can be taxing. But improving soft skills is a critical element of science success. ■

Bernhard Sabel is a member of the medical faculty at the Institute of Medical Psychology at the University of Magdeburg in Germany.

POSTDOC JOURNAL

Singapore's happiest person

My husband Andy is 'Singapore's happiest person'. He won a contest, organized by the aptly named Philip Merry, that was part of a conference on happiness and well-being. Judges selected the winner from nominations submitted by the public, based on criteria such as disposition, resilience and impact on others. But as the news headline puzzled: "What's he so jolly about?"

Many people in Singapore aspire to the 'five Cs': cash, credit card, car, condominium (privately developed luxury apartments) and country-club membership. Fierce drive and ambition pervade the working environment in Singapore, so much so that friends who relocate overseas do not know what to do with their free time; they fear that it made them less competitive.

Yet Andy's happiness defies this definition of success. We are humans, not automatons. Andy works hard and plays hard, focusing on four Fs: family, friends, fun and food. He likes organizing barbecues and dinner parties, at the end of which everyone rolls home satiated and happy.

A visiting researcher once emphasized the importance in science of openness and unselfishness. Outside the lab these qualities can contribute to a positive feedback cycle that buoys spirits. I try to emulate Andy's positive effect on others, in the lab and in general. I would not trade it for any amount of cash. ■

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