others want to retrain. A 2009 study by the American Association of Community Colleges in Washington DC found that enrolment in for-credit courses had increased by 16.9% between autumn 2007 — before the economic downturn — and autumn 2009. "You see a surge when the economy goes down, mainly because we provide access and affordability," says Rittling. "The change in the economy has really impacted us in science," agrees Sarah Quast, a professor of chemistry at Middlesex Community College. "Our science courses, if they haven't doubled, are close to doubling."

Although the US national unemployment rate remains high — at 7.9% as of January this year — there is a need for 'middle-skill jobs' with community-college training, says Matthew Meyer, associate vice-president for science, technology, engineering and mathematics innovations in the North Carolina Community College system, based in Raleigh. Nurses, for example, are always in demand, and many get their training at community colleges, where they take courses such as anatomy, physiology and microbiology. Dental hygienists, radiology technicians and lab technicians all take biology, engineering or physics courses. Meyer also sees a growing need for employees with training in aeronautics, nanotechnology, advanced manufacturing and life sciences such as pharmaceuticals.

Those trends will mean more openings for science teachers, as will demographic changes. "Our faculty on average are in their upper forties or fifties," says Meyers. "We're going to have to be able to replace them."

Although teaching at a community college is not research-oriented, scientists can still use their training. Schultz says that it is not uncommon for community-college instructors to publish in educational-research journals. "Although we are not doing research on subatomic particles, we are constantly collecting data and doing research on how to improve learning in our classroom," he says.

Teaching appeals to the researcher in Schinske. Assessing his class involves gathering data from students about what they know at the beginning of the course, getting feedback on what concepts they understand and which ones they struggle with, and measuring how they have changed by the end. In some ways, he says, the experience is not unlike his graduate work in monitoring fish populations to study their evolution. "There are times when I view my students very similarly to my study organisms," he says, "and I mean that in only the most respectful way." ■

**Neil Savage** *is a freelance writer based in Lowell, Massachusetts.*

# TURNING POINT
# Jörg Wiedenmann

*Jörg Wiedenmann, head of the Coral Reef Laboratory at the UK National Oceanography Centre, Southampton, won a €1.29-million (US$1.7-million) European Research Council (ERC) Starting Grant in December. He will use the money to investigate how nutrient starvation influences coral bleaching, in which the symbiotic microbes that give corals their colour are damaged.*

**Did you have an aquarium as a child?**
Yes. My grandmother took me to the local aquarium, where I became fascinated with corals and saltwater invertebrates. Eventually I got my own seawater aquarium. This childhood hobby developed into an important skill set: I am one of the few people in the field who can maintain long-term coral collections and use them as experimental models in an aquarium.

**Describe your first research finding.**
It was for my senior thesis at the University of Ulm in Germany. I came across anemones in the Mediterranean Sea that had red fluorescent proteins, even though they were non-luminescent. I realized that, as an ecologist, I would need to gain skills in biochemistry, genetics and structural biology to study these proteins.

**How did that set your research direction?**
I was lucky. I worked with open-minded biomedical researchers who taught me techniques that opened up a new horizon — exploring the use of fluorescent proteins in biomedical applications. It was very exciting, collaborating with experts in different disciplines.

**You have moved through your career quickly. What motivated you?**
I finished my PhD in three and a half years when colleagues were taking four to five. I realized that moving on would help me to further my career. After my PhD, the head of the department offered me a group-leader position at Ulm. One is expected to move around and gain experience, but having worked in an interdisciplinary environment gave me the confidence to lead a group. In 2005, I got my habilitation, the prerequisite to become a professor in Germany; I was three and a half years younger than average. Trying to complete tasks in a short time was probably an important decision in my career.

**Do you think skipping a postdoc helped you to get established?**
I do. It is instructive to have early independence, but it can be hard. I needed to get my own funding: I could not rely on a senior figure with a grant. As a result, I applied for, and got, many prestigious fellowships. I think demonstrating independence helped my ERC application.

**How has moving to Southampton helped you?**
I needed a change. The move allowed me to explore questions about coral biology — such as what drives stress responses. In my first years there, I got a number of small grants, but after three and a half years, my lab needed a big proposal to continue to do good science.

**How did you put together your ERC proposal?**
I was convinced that I had a very exciting idea that would fit perfectly into the ERC funding scope. My collaborators and I collected data to convince a sceptical scientific community that we could combine lab experiments with field-based approaches to get useful answers for coral-reef management (J. Wiedenmann *et al. Nature Clim. Change* **3,** 160–164; 2013).

**What did it feel like to get the grant?**
It is a game changer. It gives me the freedom to do science and produce papers that would otherwise be delayed. I am happy to invest this time in science instead of another proposal.

**What part does outreach play in your job?**
We have a strong outreach culture at the National Oceanography Centre. I built a coral aquarium in the reception area, to educate visitors and students. Researchers can use it to explain how the coral changes with light level. Pressing a button changes the illumination of the tank from white to blue to bring out the fluorescence of the corals, which gives us the opportunity to explain the biomedical applications for those proteins. ■

INTERVIEW BY VIRGINIA GEWIN