

Early starter

Young and promising are words that attach easily to Eirik Vinje Galaasen. Even before reaching the age of 30, he had achieved what many researchers dream about throughout a lifetime. He had an article published in the journal *Science*.

TEXT JENS HELLELAND ÅDNANES

While you were still in the final stages of your PhD thesis, your peer-reviewed article, 'Rapid Reductions in North Atlantic Deep Water During the Peak of the Last Interglacial Period' was published in *Science*. How did that make you feel?

"It was great. I had been working on that study ever since I took my master's degree at the Department of Earth Science at the University of Bergen (UiB). I spent about two years writing it. To begin with, I had a lot to learn about the process of writing as such. I have lost count of how many drafts I wrote. But I didn't have much time to think over what the effect would be. I received the message about the publication whilst I was in the finishing stages of writing my thesis. But I must say that it was encouraging."

Many researchers spend all their professional life trying to get an article published in a prestigious magazine such as *Science*. You managed that before you were 30. How did your colleagues react to this?

"I have only had positive feedback. Some have jokingly pointed out that I have peaked far too early. I personally don't think that it is too early. Getting the article published also involved an

element of luck, and I was lucky in that I was awarded the project. A colleague and I were given a specific sediment core from the ocean floor, by our supervisors. This formed the basis for our research. Without it, we would never have succeeded."

The article in *Science* is also part of your PhD dissertation. Can you explain what this work is all about?

"I have worked on reconstructing past climate and ocean circulation variability. We can do this by looking at sediment from the ocean floor, in this case from the North Atlantic. Analyses of the sediment tell us about temperatures, salinity and nutrient content changes, and, for example, if there have been icebergs in the area. When adding all the information, we can learn a lot about climate and ocean changes 125,000 years ago. The dissertation shows that the deep ocean circulation in the Atlantic went through major changes in the last interglacial period. At that time, the climate in the North Atlantic shared key features with projections for the coming century."

What does your research tell us about what to expect from the climate in the future?

"It shows that the deep North Atlantic can change and that these changes can occur fast. In addition,



Eirik Vinje Galaasen (30)

- **From:** Naustdal, north of Bergen.
- **Title of dissertation:** "Instability of ocean ventilation during warm climates; insights from proxy reconstructions".
- **April 2014:** PhD graduate at the Department of Earth Science, University of Bergen (UiB).
- **Current employment:** Postdoctoral fellow at the Department of Earth Science, UiB.

it can do so in response to warming and freshwater addition. In the past, one has believed that this part of the ocean was stable, but our research shows that this is not necessarily the case."

Why did you decide to study at UiB?

"I knew from an early age that I wanted to study at university level, and then earth science looked the most interesting. I have always enjoyed the natural sciences, and some friends and I decided to apply for the same subjects. One of them is a

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postdoctoral fellow, who has his office down the corridor from my office. I had never planned on having an academic career, and at one stage I considered giving up earth science. But when I found such an interesting topic for my master's thesis, it proved very motivating and explains why my master's degree gradually became my doctorate dissertation."

And the transition from student to researcher. How was that?

"As far as I'm concerned it was fairly smooth. In the first year of my PhD studies I mostly took courses, and worked a bit in the laboratory. I noticed the biggest change when I started to write scientific papers. Previously, I had never written so much in such a short time."

You are now part of a large, international environment, with the Bjerknes Centre for Climate Research and UiB. What does that mean for your future research?

"I notice that people have different areas of expertise and different experiences, which benefits everybody's research. There isn't a great deal of competition between the researchers, except perhaps for local and national funding opportunities. Most of the researchers are working on different topics, and at Bjerknes in particular, we are encouraged to cooperate across academic disciplines. That being said, a little competition amongst peers is healthy as well."

What are you researching at the moment?

"I started a postdoctoral fellowship in the summer of 2015, as part of the same team where I took my doctoral degree. My work is a continuation of the discoveries that were published in *Science*. Now, we want to go back

further in time, and do similar work on a range of time intervals. The *Science* study on steroids, you could say. I want to discover new things and understand more of the world."

Do you think your research is important?

"Both yes and no. It is important to learn more about the climate and ocean circulation. At the moment, we are experiencing a period of change, and we need more knowledge. But when I sit and work with my shells and sediment samples in the lab, which is most of the time, it all feels a bit more mundane."

What do you see yourself doing in ten years time? Do you hope to achieve another major breakthrough in your research on level with the *Science* publication?

"I hope I am still a researcher in ten years. As far as a breakthrough goes, research into past climates is a giant jigsaw puzzle. There are small and large pieces to fit in. It is difficult to talk about achieving a major breakthrough, or how big the pieces will be or need to be. But one thing is certain; I want to contribute to more knowledge about and a better understanding of how climate changed in the past and what it can tell us about the future of our planet." ●



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