



# Iceland is a High Tech Country

Dr. Sigríður Valgeirsdóttir leads American genetic company NimbleGen in Iceland

There is a lot to envy about Sigríður Valgeirsdóttir. She has a PhD in Medicine from Uppsala University in Sweden. She's young and friendly and extremely efficient. And she's a member of the senior management team of NimbleGen, an American genetics company with a rapidly expanding office in Reykjavik under Sigríður's leadership.

"I mostly enjoy the constant development of the technology," Sigríður says of her four-year term as director of NimbleGen's Iceland office. "At the university here, there are a lot of ideas and good people but too little money and equipment to let the ideas develop. When I started working at NimbleGen I realized that there was not such a big distance between ideas and results. And we are always coming up with new ideas."

Those new ideas are primarily in the field of genetic research. NimbleGen began its days in 1999 as a small start-up company in Wisconsin, USA. Since then it has grown to a team of about 90, with 30 biologists, biochemists and other scientists based at the Reykjavik facility. Its field is highly specialized, synthesizing microarrays for use in genetic studies at universities and institutes around the world. "Microarrays are used as tools to get a picture of the cells and what is happening inside them," explains Sigríður. "They help you to see if DNA in the cell's nucleus has mutated or changed and how the information from DNA is used to make proteins." NimbleGen's technology has been applied to DNA samples from humans, animals, plants and bacteria. It also sells its technology to scientists and researchers at various institutes. "They come up with the ideas of how they want to use our technologies to answer their questions," explains Sigríður.

NimbleGen's technology is patented and its applications are constantly being developed in order to remain a market leader in this highly competitive and rapidly changing industry. The Reykjavik office holds the company's main service laboratory and produces over 90% of the microarrays NimbleGen eventually sells around the world.

The facilities are impressive. Situated in an immaculate 1-year-old office building in the

rapidly growing neighborhood of Grafarholt in eastern Reykjavik, a series of high windows afford stunning, and hopefully inspirational, views of Mount Esja and Faxaflói Bay. Sigríður's spacious office is lined with binders no doubt containing crucial data that will perhaps one day help to change the face of genetic medicine. Outside the office, scientists in lab coats glide along the corridors. In Icelandic fashion, everyone is dressed casually, yet seemingly effortlessly stylishly. I covet Sigríður's striking red necklace.

"Why Iceland?" is the question that leaps to mind when considering NimbleGen's expansion strategy. Although multi-faceted, it seems the answer was ultimately pragmatic. "They wanted to set up an operation in a country where competing technology was not patented," reveals Sigríður. "Some of the patents in this field are quite broad so rather than spend several years and lots of money on finding out if the patents could stand, NimbleGen decided it would be better to set up here. And of course Iceland was already on the map for its bio-technology."

Sigríður got involved because she was working at the Iceland Genomics Corporation at the time and it helped with NimbleGen's start-up in Iceland. NimbleGen rented space from the IGC and also used some of its services in the beginning, and Sigríður credits this as allowing the company to establish and grow quite quickly at that time.

Establishing a company in a small foreign nation has brought both pleasant surprises and challenges. "At first NimbleGen's founders didn't know anything about Iceland, and they first arrived here in November in the middle of winter, so it didn't look very exciting for them," she says with a laugh. I look outside at the gale force winds and driving rain of a mid-June "summer" day and am not convinced the time of year would make any difference...

"The biggest surprise for them was there are a lot of well educated people here," she continues. "This is a high tech country. Technology is well used and developed. Also people speak fluent English and other languages. And often because this is such a small country, the distances between institutes and even the

government is very short. That makes it easier to get access to authorities. So NimbleGen is very happy with the work that is done here. There is constant collaboration between the two countries."

Iceland's recent financial jitters have not gone unnoticed, however. "Of course I'm concerned with what happens in terms of inflation and the economical instability," confesses Sigríður. "But the high value of the króna had not been good for us. Labor costs are rather high here compared to other countries, but that is getting better with the lower króna."

Other challenges arise because of international perception of the country. "We often have to convince people that it is OK to send samples to Iceland," says Sigríður, "but this is getting easier and easier and we have very efficient transport companies operating here."

Attracting new business is also simpler. NimbleGen tripled its production in 2005 and the company is on track to have another successful year. Many of the new sales come from Europe and Asia, making Iceland a closer partner for the work than the head office in Madison, Wisconsin.

NimbleGen Iceland is also co-operating with new start-ups. There are two Icelandic companies, owned by American scientists, which conduct their own projects using NimbleGen's technology. LindGen and WiCell are both based in the same building as NimbleGen in order to maximize their contacts and work together, although I suspect that the great view also has something to do with it. Sigríður says they are working on having European companies start up activities in Iceland soon as well.

The mood is certainly positive here, despite any bumps in the economy. When I ask if there are any specific news announcements she would like to make, Sigríður gets a twinkle in her eye and says only "no, not really at this moment." I think if I turned the tape recorder off I might get a different response.

There may not be any official press releases issued in the immediate future, but NimbleGen is a company to watch out for, and Sigríður should be proud of her and her team's achievements. Just remember you read it here first. □

Eliza Reid



Sigríður Valgeirsdóttir