

## In The Spotlight: Gary Laverty, Ph.D.

March 2006 -- When conducting research, faculty will often encounter others within their field that share similar interests. These encounters can lead to agreements to work together towards a common goal, often spanning several years and sometimes even entire careers. A collaborator might work in the lab next door to you, or at an institution on the other side of the world. [Dr. Gary Laverty](#), an associate professor in the Department of Biological Sciences, considers himself fortunate to have had such a relationship with Dr. Sighvatur Árnason for the past nine years. The two will meet again this spring when Dr. Árnason comes to Delaware; their last meeting was in January when Dr. Laverty made the trip - to the University of Iceland at Reykjavik.



Drs. Gary Laverty (right) and Sighvatur Arnason

The two collaborators first met in 1995 at a symposium honoring their mutual mentor, Professor Erik Skadhauge from The Royal Veterinary and Agricultural University in Denmark. Dr. Árnason was a former Ph.D. student of Dr. Skadhauge's, and he and Dr. Laverty decided to combine their efforts after discovering they were working independently on a similar project. This study examined how glucose and amino acids are absorbed by the lower intestine of the chicken. Dr. Skadhauge and his colleagues had noticed that the chicken's dietary salt intake affected the glucose transport in this part of the digestive system. This is a potential problem because without a proper amount of glucose absorption, a chicken could either develop intestinal problems or become malnourished. Iceland's government had also taken an interest in this research because they were looking to increase the country's poultry production, and were specifically interested in knowing whether fishmeal, a readily available, but high salt protein source could be used as a feed for poultry. To study this system further, the two expanded their work to include two native Icelandic bird species that live naturally on high or low salt diets, the [murre](#) (a seabird) and [rock ptarmigan](#) (a type of grouse).



Dr. Laverty (upper-right corner) prepares to descend the 40m (130 ft.) cliffs at Krísuvíkurborg in search of murre

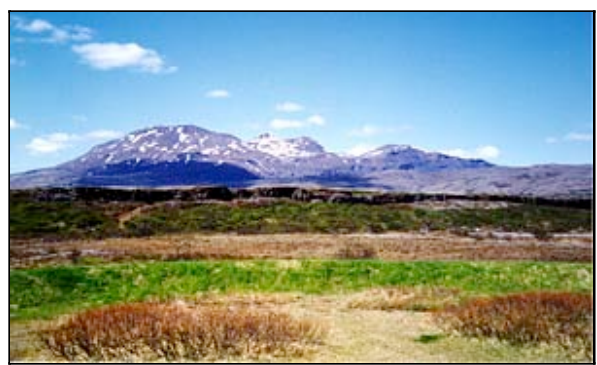
Their initial work together led to Dr. Laverty being named as a Fulbright Scholar. The Fulbright program is designed as a type of exchange; it encourages U.S. faculty to do research and present seminars in foreign countries and vice versa. This funding allowed him to live in Iceland for four months during the summer of 1998 and continue the



Reykjavik under the midnight sun

collaboration. Since then, he has made traveling to Iceland an annual experience by going every January and has added an occasional trip during the summer as well. "It's very rewarding," Dr. Laverty said. "It's a good team because scientifically we complement each other. We both keep coming up with things the other hasn't thought of." Their work together recently resulted in [their fourth publication](#), a review article in the journal 'General and Comparative Endocrinology'.

Dr. Laverty has made sure his time in Iceland has not been all work. In fact, he and his wife traveled to other parts of the country on a vacation this past summer. With a population of 300,000 and a land area similar to the state of Ohio, Iceland is filled with natural sights ranging from glaciers, sea cliffs, and waterfalls to geysers, hot springs, and active volcanoes. The capital city of Reykjavik has a high concentration of museums, galleries, restaurants, and clubs. The combination of its location being less than 200 miles from the Arctic Circle and the Gulf Stream providing a climate that is often warmer than New York allows for some unique experiences as well. With three months of almost continual light during the summer, golfers travel to Iceland to play midnight golf. "I like the people, I like the country," said Dr. Laverty. "There are so many interesting things to see and experience there."



Thingvellir National Park. The crevasse in the center of the picture is where the European and North American tectonic plates meet.