

Hooked on Genetics

AGI director of genetic research brings global experience to American Angus.

by Sheryl Smith-Rodgers

As a teenager, Stephen Miller, AGI's director of genetic research, shadowed a local veterinarian in Ontario, Canada. The ag-related job seemed a natural fit since he already had plenty of livestock experience on his family's commercial cow-calf operation.

"Our herd vet had told me I'd either like the work and go on to vet school," he recalls, "or I wouldn't and would not waste four years in vet school, and that was OK, too. As it turned out, going around with the vet on his calls wasn't quite what I thought it'd be. It was much more routine than I had expected based on my experience at home."

That day turned out to be a lucky one for the global beef industry. Thanks to his distaste for vet work, Miller went on to become a leading international scientist in the genetics field of beef cattle. Since the 1990s, he has been recognized by both academic and industry leaders as an innovative beef geneticist.

Crunching numbers

Miller got his start at the University of Guelph, where he earned a bachelor's degree in animal and poultry science and international agriculture in 1992.

"I got involved in a research course while there," he says. "Once I got



PHOTOS COURTESY AMERICAN ANGUS ASSOCIATION

into crunching the numbers behind animal breeding research, I was hooked on genetics."

Still at Guelph, he began to work on his doctorate in animal breeding and genetics. While completing his doctorate, he was a visiting scientist at the Animal Genetics and Breeding Unit in Armidale, Australia, where he specialized in beef cattle.

In 1996, as a post-doctoral researcher, he helped to develop a web-based customizable software package for making selection decisions in beef cattle.

In 1999 Miller was hired on faculty as beef cattle geneticist at the University of Guelph, where he stayed for 14 years. In early 2013, a

red light blinked on his office phone.

"That meant I had a message," Miller says. "I was trying to get out of town to give a lecture, but there was a bad blizzard. I listened to the message. It was a hiring firm in New Zealand asking if I would be interested in a senior scientist position with AgResearch. This call just came out of the blue."

Before making his final decision, though, Miller hosted a family meeting with his wife, Charla, and their six children: Lukas, Virginia, Seth, Jedidiah, Mercy and Henry. Everyone agreed to move from their Ontario farm and home to New Zealand.

All about research

For the next three years, Miller stayed at AgResearch as a senior scientist and then principal scientist. The governmental research institute — which employs more than 800 people and was created in 1992 — serves the country's agriculture and biotech industries.

While there, Miller served as a scientific liaison within the animal genetics and genomics research global community. He also developed new technologies for livestock producers.

"In New Zealand, my work was all about research, and I really liked

"In the academia world, it takes three years or more from having a good idea to getting it out there," says AGI's Stephen Miller. "But here, the same pathway takes only three or so months."

that,” he says.

“Then, in 2016 another contact came just out of the blue from Dan Moser at AGI,” recounts Miller.

“My number one interest and skill had always been beef cattle,” he adds. “A research position with the world’s biggest beef breed association that has the biggest database was a great opportunity.”

After much thought, the Miller family was headed back to the Northern hemisphere, this time to a small acreage southeast of Saint Joseph, Mo.

In September 2016, Miller took the reins as AGI’s genetic research director. In his position, he leads



efforts for economic modeling of beef production, develops selection and management tools for both seedstock and commercial producers, and guides research priorities.

In his less than two years with AGI, Miller has accomplished far

more than he could have imagined, largely because there are few constraints that hinder his work.

“In the academia world, it takes three years or more from having a good idea to getting it out there,” he says. “But here, the same pathway takes only three or so months. That means we can quickly turn an idea into a concept, then build, test, promote and

launch right away. I love that! That’s been a great change for me and an important one.” ^{AJ}

Editor’s Note: Sheryl Smith-Rodgers is a freelance writer and photographer from Blanco, Texas.



77th Annual Sale

**O
K &
T** **ANGUS
BREEDERS
ASSOCIATION**

Wednesday, February 21, 2018 • 1 p.m.
Proffels, Oklahoma

At the Fairgrounds Pavilion

90 Registered Angus Lots Sell
60 Bulls • 30 Females
Open, Head and Feet

Register for 4 - \$100 certificates to be used toward buyer’s purchase.

Auctioneer - Col. Jerry Lehmann

American Angus Assn. Representative - Jeff Muth (816) 344-4266

Sale Day Phone - (816) 841-5071 • (800) 938-1094

FOR SALE BOOKS CONTACT:

OK&T Angus Breeders Association

Dennie Jenkins
17904-60th • Opa, OK 73052
(502) 938-1094

Joe Hite
(316) 841-5071

Lunch Available Sale Day at the Fairgrounds