



Protein Highway™

Network for plant-based protein innovation

January 2022

Welcome to the Protein Highway Quarterly Newsletter!

The [Protein Highway](#)™ is an initiative to enhance cross-border collaboration among entrepreneurs, researchers, and end users across the Canadian Prairies and U.S. Midwest-Great Plains region. The mission is to support and facilitate bilateral, precompetitive initiatives that unite industry, academia, and government in advancing the North American plant protein sector.

The *Protein Highway Newsletter* is published quarterly. If you or someone you know would like to be added to our mailing list, or if you have ideas for future newsletter content, please contact proteinhwy@gmail.com.

[Learn more about the Protein Highway.](#)





Become a Member of the Protein Highway!

The Protein Highway has three affordable levels of membership—individual, corporate, and student. Members can participate in exclusive events, join an Action Team, and stay apprised of the latest intelligence on alternative proteins in the United States and Canada. Learn more and [apply now!](#)

Spotlights...

MBOLD Managing Director, JoAnne Berkenkamp, Joins Protein Highway Board

MBOLD is a Minnesota-based [coalition](#) of leading food and agricultural companies, researchers and non-profits working across the value chain to accelerate practical solutions to global challenges facing the food and agriculture sectors. We are pleased to share the news that [JoAnne Berkenkamp](#), MBOLD's Managing Director, has joined the board of [Protein Highway](#). "Plant proteins are key to the future of our food system and environment", Berkenkamp asserted. "They represent a critical opportunity to confront climate change and develop new solutions for the world to feed itself within planetary boundaries in the decades ahead. I'm delighted to join Protein Highway and advance the plant protein industry with collaborators in the U.S. and Canada."

MBOLD's priorities include soil health & water stewardship, circular economy & flexible packaging, innovation & entrepreneurship, among others. Stay tuned for updates on collaborative efforts between the Protein Highway and MBOLD!

2022 NIFA Sustainable Ag Systems (SAS) Grant Opportunity: Update

We are awaiting the RFP for the [USDA-NIFA Sustainable Ag Systems grant opportunity](#), with plans to apply along with a larger bi-national coalition led by the University of Minnesota's [Plant Protein Innovation Center](#).

Cross Border Project Funded to Develop the Lupin Ecosystem

Protein Industries Canada has announced its 24th technology project aimed at developing a farm to fork ecosystem for lupin. The cross-border partnership includes [Lupin Platform Inc.](#), [Hensall Co-op](#), [Lumi Foods](#)

and [PURIS. The CAD\\$7.3 million project](#) will develop a lupin supply and value chain, from crop production through to the development and manufacturing of functional ingredients and products.

Circularity in Plant and Meat Protein in Manitoba

In the latest International Institute for Sustainable Development (IISD) report created for Manitoba Agriculture and Resource Development, Manitoba explores its potential for [circular economy opportunities](#). A circular economy is a model that utilizes the by-products of production instead of destroying them, reducing the need for raw inputs and resource extraction.

Ask a Protein Industry Expert- Connie Carlson



Connie Carlson, Co-Director

Statewide Sustainable Ag and Food Systems at the University of Minnesota

The Protein Highway Initiative functions because of the active engagement of the plant protein continuum. Connie Carlson shares her experiences in working with a wide variety of crops... and how plant based protein finds its way in to her family menu plans.



ForeverGreen Initiative

What is your role?

I serve as the co-director for the Statewide Sustainable Ag and Food systems team for UMN-Extension Regional Sustainable Development Partnerships (RSDP). My work is focused on developing the partnerships, markets and supply chains for new sustainable crops and cropping systems coming out of the University of Minnesota’s Forever Green Initiative. I work closely with growers, processors, innovators and industry across the state, nationally and globally to increase adoption and utilization of crops such as winter camelina and domesticated pennycress -- two oilseeds in development that have been identified as sustainable new plant protein sources. There are sixteen crops in the Forever Green portfolio, including winter pea, hybrid hazelnuts, perennial flax and Kernza®, the first commercially available perennial grain in the U.S.

Tell us about the path that brought you to your current position?

My path to this work actually started in my childhood. I grew up on an organic farm in western Minnesota that was (and continues to be) highly involved with UMN researchers to pilot, test, research and develop new crops and systems for organic production. As a teen, I took photos, soil samples and recorded weather data for the research happening on the farm. I left after high school and got a double degree in English and Theatre (as far from agriculture as you can get, right?!). I worked in marketing, sales, product and business development for nearly two decades, with the last few years as a freelance consultant. As a consultant, I found myself working on a number of food and agriculture systems projects. I was already familiar with RSDP and Forever Green, so when I saw an opening at RSDP, I jumped.

Initially, my work at RSDP was focused on supply chain research and development for specific crops, but it didn’t take long for the work to expand. Also, I took a personal interest in the Forever Green research portfolio, so I made a point of learning as much as I could about the research and

development of crops. In 2019, FGI received funding to support two commercialization specialists. I applied for one of the positions and when leadership offered it, I negotiated for my work to stay in UMN Extension RSDP, in order to continue to strengthen the link between Forever Green research and rural Minnesota communities. It's been my pleasure to travel the state and partner directly with rural and urban businesses, growers and communities to build new opportunities for the crops in the Forever Green portfolio.

What is the biggest challenge facing the alternative proteins industry today?

From my corner of the world, the biggest challenge I see for new alternative protein crops such as winter camelina and pennycress, is the chicken or egg scenario of supply and demand. We want farmers to grow more winter camelina and pennycress to both increase supply and provide the ecosystem benefits for which they were developed. However, farmers need robust markets and efficient supply chains to ensure they can make a viable living producing the crops. At the same time, we need industry (and consumers) sourcing these new crops for food applications, but they can't test, develop and launch new products without a reliable, safe and cost-effective supply.

My work and that of my University colleagues, is serving as the bridge between the research that is coming out of the University and the growers and industry we want adopting the crops. I sit in the middle of the chicken and egg every day, developing the pilot projects, collaborations, and innovations intended to de-risk new crop adoption and scale production sustainably and responsibly.

Do you have a favorite plant-based food and/or restaurant?

I'm a pretty big fan of black bean burgers and keep a few different MorningStar Farms products in my freezer. I have managed to convince my family to enjoy them too and, lately, we've been expanding our selections to include other companies, including Impossible Burger and Dr. Praegers.



2022 Protein-Focused Events

Alternative Protein Virtual Pitch Event – Feb 1 & 8, 2022

The Protein Highway is delighted continue partnering with Natural Products Canada, Protein Industries Canada, Humane Society International and BioAlberta to deliver Alternative Protein Virtual Pitch Events featuring Canadian alternative protein companies on February 1 & 8 (2pm ET). These events are specifically designed for investors. Entrepreneurs will deliver a short pitch on their business strategy and opportunity for investment, and answer questions from an investor panel and the audience. To submit a request to attend, click [here](#).

Manitoba Protein Summit – Feb 22-23, 2022

[Register now](#) for the third annual Manitoba Protein Summit, a virtual event chock-full of speakers across the value-chain and from around the globe (including our own Christina Connelly!). Learn more about the Manitoba Protein Advantage Strategy and Project ASPIRE: Accelerating Sustainable Protein Impact Results. Contact mbproteinadvantage@gov.mb.ca with any questions.