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October 12, 2022

Dear Agriculture Experiment Station Directors,

I am writing in support of the National Research Support Project (NRSP) proposal focused on developing capacity to apply genomics-enabled technologies to animal industries.

By way of introduction, I currently serve as the Vice President and General Manager of Innovasea’s Land-Based Aquaculture Division. Innovasea is a global leader in technologically advanced aquatic solutions for aquaculture and fish tracking.

I understand that the overall objective of this proposal is to develop resources to support the application of genomics technologies to agriculture animal industries. I understand that the aims of this proposal include developing resources and support for genomic analyses; integrating this with other data types collected by producers in my industry; and linking with industry partners to help train a data savvy workforce for US agriculture—and aquaculture is agriculture.

I look forward to working with State Agricultural Experiment Station personnel via workshops and community discussions as they arise and that this NRSP intends to inform partners and members on new genomic developments and technologies.

Sincerely,

Marc J. Turano, PhD
Vice President and General Manager of Land-Based Aquaculture
Innovasea
Dear Station Directors,

I am writing in support of the National Research Support Project (NRSP) proposal focused on developing capacity to apply genomics-enabled technologies to animal industries.

By way of introduction, I am Debbie Plouffe and I work with the Center for Aquaculture Technologies. The mission of my company is to lead the aquaculture industry in the delivery of genomics technologies through a variety of innovative applications. We are particularly interested in ensuring that the products and outcomes of genomics research are applied in a pragmatic and cost-effective way to facilitate uptake across the broad array of stakeholders and markets characteristic of the global aquaculture industry. In addition, we are invested in developing effective communication tools and learning opportunities that will support the commercialization of genomics technology by engaging with consumers and other stakeholders in the farmed seafood supply chain.

I understand that the overall objective of this proposal is to develop resources to support the application of genomics technologies to animal industries. I understand that the aims of this proposal include developing resources and support for genomic analyses; integrating this with other data types collected by my industry; and linking with industry partners to help develop a data savvy workforce for US agriculture. These aims will support my company/my industry by ensuring that our organization is able to maintain a leadership position in the field of applied genomics in aquatic species including development of a skilled workforce and knowledgeable stakeholder base to support our company growth.

I look forward to working with State Agricultural Experiment Station personnel via our participation in workshops, surveys, community discussions and training opportunities.

We are excited about collaboratively working to improve or enhance the future of agriculture genomics.

Regards,

Debbie Plouffe, PhD
Vice President, Business Development
The Center for Aquaculture Technologies
July 25, 2018

Dear Station Directors,

I am writing in support of the National Research Support Project (NRSP) proposal focused on developing capacity to apply genomics-enabled technologies to animal industries.

By way of introduction, I am Kyle Martin, senior geneticist for Hendrix Genetics, with direct responsibility for our Trout and shrimp breeding programs. The mission of my company is to support the global food challenge by providing high quality animal genetics to commercial farms. As part of that mission, we utilize the latest advances in technology to increase efficiency of animal production. The improvement, and expansion of genetic technologies in animal breeding will help our company, and the broader animal breeding industry to better meet the global food challenge.

I understand that the overall objective of this proposal is to develop resources to support the application of genomics technologies to animal industries. I understand that the aims of this proposal include developing resources and support for genomic analyses; integrating this with other data types collected by my industry; and linking with industry partners to help develop a data savvy workforce for US agriculture.

I look forward to working with State Agricultural Experiment Station personnel via workshops revolving around common goals.

We are excited about collaboratively working to improve or enhance the future of agriculture genomics.

Regards,

Kyle Martin
Senior Geneticist
Kyle.Martin@hendrix-genetics.com
October 24, 2022

Dr. Benjamin J. Reading  
North Carolina State University  
Department of Applied Ecology  
Raleigh, NC 27695-7617

RE: National Research Support Project (NRSP) proposal focused on developing capacity to apply genomics-enabled technologies to animal industries

Dr. Reading:

On behalf of Riverence, a group of privately-owned aquaculture companies based in Washington and Idaho, I am writing to express our support for the National Research Support Project (NRSP) proposal focused on developing capacity to apply genomics-enabled technologies to animal industries that you are coordinating. We enthusiastically support the proposal and, with this letter, indicate the intent of Riverence Holdings LLC to engage with you and the project cooperators to fully leverage the project’s value to US aquaculture, should the proposal be funded.

By way of introduction, my name is Jesse Trushenski. I am the Chief Science Officer for the Riverence group. In this role, I shape and lead our R&D initiatives, including our selective breeding programs. Before joining the private sector, I was a tenured Associate Professor at Southern Illinois University (SIU) and Fish Pathologist Supervisor for the Idaho Department of Fish and Game (IDFG). At SIU, I established my research team as one of the leading aquaculture research groups in the country, publishing more than 160 peer-reviewed articles, essays, and lay summaries of our work in fish nutrition and physiology. During my time with IDFG, I led the Eagle Fish Health Laboratory, responsible for surveillance and diagnostics throughout the state of Idaho, to become the first in the country to be recognized by the American Fisheries Society (AFS) Fish Health Section via its laboratory accreditation program. I am also a Past President and Fellow of the American Fisheries Society, the oldest and largest professional society representing fisheries scientists worldwide.

As you know, Riverence Provisions LLC and Riverence Farms LLC—our farms and processing operations—are collectively the largest producer of Rainbow Trout and Steelhead in the Americas. Riverence Brood LLC—our breeding operation—is a producer of premium Rainbow Trout genetics and the only domestic commercial supplier of Atlantic Salmon and Coho Salmon eggs. As both breeders and farmers of trout and salmon, we recognize the significant challenges that face aquaculture, including the need for innovation in the breeding space.

Our vision is to retain wild-type vigor while shaping the attributes of trout and salmon to meet the demands of modern aquaculture. Selective breeding is a powerful tool, but traditional approaches have been limited by the ability of humans to accurately predict and pursue the right characteristics while being mindful of unintended consequences. Using the best available science, we strive to continuously improve the performance of our broods and bring new technologies within reach. Our ongoing research to identify more robust selection tools and translate advances in terrestrial crop and livestock production to aquaculture are particularly suited to the goals outlined in your proposal.
I understand that the overall objective of your proposal is to develop resources to support the application of genomics technologies to agriculturally relevant animal species. The aims of this proposal—including developing resources and support for genomic analyses; integrating this with other data types collected by producers in my industry; and linking with industry partners to help train a data-savvy workforce for US agriculture—are well-aligned with Riverence’s goals and industry-wide needs in aquaculture breeding. Aquaculture is agriculture, and it is a strength of this proposal that it draws upon the technologies, knowledge, and expertise of multiple agricultural sectors.

In closing, we applaud you and the project cooperators for proposing work that has a high potential to improve US seafood sustainability and security, as well as advancement of domestic aquaculture. We strongly support your NRSP proposal and encourage full funding for this project. Thank you for the opportunity to comment, and we look forward to engaging with you and State Agricultural Experiment Station personnel to conduct meaningful, actionable science and technology transfer in the aquaculture breeding space.

Best,

Jesse Trushenski, PhD
Chief Science Officer
July 25, 2022

Dear Station Directors,

I am writing in support of the National Research Support Project (NRSP) proposal focused on developing capacity to apply genomics-enabled technologies to animal industries.

By way of introduction, I am Matthew McClure and I am the Lead Dairy Geneticist at ABS-Global, where the company’s mission is “Pioneering animal genetic improvement to help nourish the world”. We use genetic data to continuously develop better cows for farmers by selecting animals with desirable characteristics that help them to produce higher quality meat and milk in a sustainable manner. We are particularly interested in more effective applications of genetics and genomics data to improve our understanding of bovine performance.

I understand that the overall objective of this proposal is to develop resources to support the application of genomics technologies to animal industries. I understand that the aims of this proposal include developing resources and support for genomic analyses; integrating this with other data types collected by my industry; and linking with industry partners to help develop a data savvy workforce for US agriculture. These aims will support my company by helping to develop the critical talent needed in livestock genomics and breeding required to continue advancing animal agriculture.

I look forward to working with State Agricultural Experiment Station personnel via collaborations, community discussions, internship opportunities for students, and scientific discussions.

We are excited about collaboratively working to improve or enhance the future of agriculture genomics.

Sincerely,

Matthew McClure, PhD
Lead Geneticist, Dairy
ABS-Global
1525 River Road
Deforest, WI
July 19th, 2022

Dear Station Directors,

I am writing in support of the National Research Support Project (NRSP) proposal focused on developing capacity to apply genomics-enabled technologies to animal industries.

By way of introduction, I am Casey Droscha and I direct Research & Development at CentralStar Cooperative in Lansing, Michigan. The mission of my company is to enhance producer profitability through integrated services. Within the R&D laboratory, we utilize large volumes customer dairy records, diagnostic results and DNA extracts from milk, blood, and feces to develop phenome/genome comparisons to gain novel insights of the impact disease incurs on production and thus profitability in the context of genomic selection.

We are particularly interested in disease resilience, susceptibility and the genetic mechanisms that confer a given phenotype. We employ broad range of sequencing technologies to investigate host-pathogen interactions, epigenetic mechanisms, and immunogenetic relationships. We continually seek more effective applications for analysis of genomic data, utilizing education and training opportunities when possible, to generate valued-added information for our producers and the greater dairy industry.

I understand that the overall objective of this proposal is to develop resources to support the application of genomics technologies to animal industries. I understand that the aims of this proposal include developing resources and support for genomic analyses; integrating this with other data types collected by my industry; and linking with industry partners to help develop a data savvy workforce for US agriculture. These aims will support my company and industry by integrating resources and ideas into actionable domains for maximum utility for industry stakeholders while bolstering the next generation of agricultural data scientists.

I look forward to working with State Agricultural Experiment Station personnel via virtual training events, workshops, and offering internships in my laboratory.

We are excited about collaboratively working to improve or enhance the future of agriculture genomics.

Regards,

Casey Droscha
Casey Droscha Ph.D
Associate Director of Research & Development
CentralStar Cooperative

800.631.3510
P.O. Box 23157, Lansing, MI 48909-3157 • P.O. Box 191, Waupun, WI 53963-0191
www.mycentralstar.com

Inspire. Innovate. Integrate.
July 20, 2022

Dear Agricultural Experimental Station Directors,

I am writing in support of the National Research Support Project (NRSP) proposal focused on developing capacity to apply genomics-enabled technologies to animal industries.

By way of introduction, I am João Dürr and I am the CEO of the Council on Dairy Cattle Breeding (CDCB). The mission of my company is "To drive global dairy cattle improvement by using a collaborative database to deliver state-of-the-art genetic merit and performance assessments for the herd decision making". We use genetic data to provide accurate and transparent genetic and genomic evaluations for a multitude of traits and dairy cattle breeds, offering dairy farmers the information they need to make sound breeding decisions. We are particularly interested in informing rural communities and youths about the opportunities around genomic technologies.

I understand that the overall objective of this proposal is to develop resources to support the application of genomics technologies to animal industries. I understand that the aims of this proposal include developing resources and support for genomic analyses; integrating this with other data types collected by my industry; and linking with industry partners to help develop a data savvy workforce for US agriculture. These aims will support the dairy industry by preparing producers and service providers to make optimal use of the genomic tools that CDCB provides.

I look forward to working with State Agricultural Experiment Station personnel via workshops and training events.

We are excited about collaboratively working to improve or enhance the future of agriculture genomics.

Sincerely,

João Dürr
Chief Executive Officer
Dear Station Directors,

I am writing in support of the National Research Support Project (NRSP) proposal focused on developing capacity to apply genomics-enabled technologies to animal industries. This proposal is very important because it addresses long-term infrastructure needs that benefit the entire community. Public investment in this area makes a lot of sense because the alternative is that individual organizations reinvent the wheel over and over again, with varying degrees of quality and success, and the rate of scientific progress is slowed because of disparities in access to resources and barriers to communication which result from the use of different vocabularies.

URUS Group LP is the largest supplier of bovine genetics in the world through our Alta, GENEX, and Jetstream brands, and international partnerships with CRV, Masterrind, and other leading companies. My research and development team is responsible for the ongoing development of our proprietary bull fertility evaluations, as well as other genetics tools that provide value to our customers. Almost all livestock genetics companies routinely make use of genomic information (single nucleotide polymorphisms and whole-genome DNA sequence data) to improve the accuracy of genetic predictions and develop insight into important biological processes. The broad portfolio of resources provided by NRSP-8 (AnimalQTLdb, trait ontologies, FAANG, etc.) has been very valuable for our past research efforts and will continue to be important. The success of this project underscores the value of community-based projects that avoid needless duplication and provide a common vocabulary for communications.

I understand that the overall objective of this proposal is to develop resources to support the application of genomics technologies to animal industries. This includes developing resources and support for genomic analyses; integrating this with other data types collected by our industry; and linking with industry partners to help develop a data savvy workforce for US agriculture. These aims will support our mission by ensuring the availability of high-quality, curated community resources; sharing resources to make the most of the funding and personnel available for research using large-animal models; and training the next generation of scientists and technicians in the data skills that are essential in all areas of the genetics industry today.

We at PEAK Genetics will continue to work with State Agricultural Experiment Station personnel in a variety of ways, including participation in workshops and training events, providing internship opportunities, and sharing feedback through surveys, community discussions, and one-on-one interactions.
We are excited about collaboratively working to improve or enhance the future of agriculture genomics.

Regards,

John B. Cole, Ph.D.
PEAK Senior VP, Research & Development
URUS Group LP
2418 Crossroads Dr., Suite 3600
Madison, WI 53718
john.cole@peakgenetics.com

Adjunct Professor
Department of Animal Science
North Carolina State University

Sustaining Courtesy Faculty
Department of Animal Sciences
University of Florida
Dear Station Directors,

I am writing in support of the National Research Support Project (NRSP) proposal focused on developing capacity to apply genomics-enabled technologies to animal industries.

By way of introduction, I am Mehdi Sargolzaei, Director of Genetic Research and Technology, and I work with Select Sires Inc. company. The mission of my company is to enhance the productivity and profitability of dairy and beef producers, Select Sires Inc. is committed to be the premier provider of highly fertile, superior genetics accompanied by effective reproductive- and herd-management products and services. We use/intend to use genetic data to develop elite genetics for higher production while making genetic progress on resiliency to climate change, reducing carbon footprint of the animals and preserving genetic diversity in cattle populations. We are particularly interested in activities to develop more effective applications of genetics and genomics data. As well as education and training efforts for students and producers to make full use of this information.

I understand that the overall objective of this proposal is to develop resources to support the application of genomics technologies to animal industries. I understand that the aims of this proposal include developing resources and support for genomic analyses; integrating this with other data types collected by my industry; and linking with industry partners to help develop a data savvy workforce for US agriculture. These aims will support my company/my industry by better understanding the genetic architecture of current traits using larger data set and better genomic tools and by helping to develop potential novel traits which can bring more profitability to US producers.

I look forward to working with State Agricultural Experiment Station personnel via workshops, internships or other training events that effectively transfers this developing technology to those that can best make use of it.

We are excited about collaboratively working to improve or enhance the future of agriculture genomics.

Sincerely,

Mehdi Sargolzaei
Director of Genetic Research and Technology
Select Sires Inc.
msargolzaei@selectsires.com
July 15, 2022

Dear Dr. Bellone and Station Directors,

I am writing in support of the National Research Support Project (NRSP) proposal focused on developing capacity to apply genomics-enabled technologies to animal industries including the horse.

As the registrar of the Arabian Horse Association (AHA), I have the responsibility of working closely with our 15,500 members and registering 3,400 horses annually with our association. We utilize genetic testing for parentage verification and many of our members use genetic testing for mate selection to avoid producing foals with one of the four known recessive health traits in our breed. One of these traits was the first genetic defect discovered in horses in 1997, namely, severe combined immunodeficiency syndrome. There is no doubt that genetic testing has enabled the production of healthier horses for our breed over the last two and a half decades. Our association is committed to advancing the understanding and application of genetics as it relates to the Arabian Horse, and we are excited to partner with the researchers around the globe to further advance our knowledge of the Arabian horse.

I understand that the overall objective of this proposal is to develop resources to support the application of genomics technologies to animal industries. I am pleased to see that the aims of this proposal include developing resources and support for genomic analyses; integrating this with other data types collected by the equine industry; and particularly your goal of linking with industry partners to help develop a data savvy workforce for US agriculture. These aims will more greatly support the objectives of the AHA.

I look forward to working with State Agricultural Experiment Station personnel via continued engagement with genetics researchers and through community discussions, surveys and survey feedback.

We are enthusiastic about collaboratively working to improve or enhance the future of agriculture genomics.

Regards,

[Signature]

Deborah Fuentes
Registrar and Senior Director of Registry Services
Arabian Horse Association
July 11, 2022

Veterinary Genetics Laboratory
University of California
PO Box 1102
Davis, CA 95617

Dear Dr. Bellone and Station Directors:

I am writing in support of the National Research Support Project (NRSP) proposal focused on developing capacity to apply genomics-enabled technologies to animal industries including the horse.

As the registrar of the American Quarter Horse Association (AQHA), I have the responsibility of working closely with our members and registering horses with our association. We have been using genetic testing since the beginning of DNA testing for parentage exclusion in the early 1990s. Our organization registers 75,000 horses annually. We require that all stallions registered with the AQHA be tested for five known genetic diseases before any of their foals can be registered, with a sixth disease being added in 2023. Our members actively utilize genetic testing for both coat color and disease traits for marker assisted selection. Our organization is currently in the process of developing many educational materials to assist our members to better utilize the genetic testing that is available. All that to say our association is committed to advancing the understanding and application of genetics as it relates to the American Quarter Horse and as outlined in your proposal.

I understand that the overall objective of this proposal is to develop resources to support the application of genomics technologies to animal industries. I am delighted to see that the aims of this proposal include developing resources and support for genomic analyses; integrating this with other data types collected by the equine industry; and particularly your goal of linking with industry partners to help develop a data savvy workforce for US agriculture. These aims will more greatly support the objectives of the AQHA.

I look forward to working with State Agricultural Experiment Station personnel via continued engagement with researchers and through workshops, surveys, and community discussions.

We are excited about collaboratively working to enhance the future of agriculture genomics.

Sincerely,

Tammy Canida
AQHA Registrar
July 12th, 2022

Dear Station Directors,

I am writing in support of the National Research Support Project (NRSP) proposal focused on developing capacity to apply genomics-enabled technologies to animal industries including the horse.

As the Education and Research Liaison at the Fenway Foundation for Friesian Horses, I have the responsibility of educating Friesian owners around the world and work closely with researchers to advance the knowledge Friesian horse genetics. The Fenway Foundation was founded in 2010 and was developed to improve the experience of both the Friesian Horse and their stewards. The focus of our foundation is Friesian horse rescue, genetic research, and education. As such, the proposal you are submitting supports the foundation’s vision and mission to preserve and enhance the longevity and quality of life of Friesian Horses. We have long been committed to genetic studies for Friesian horses and we therefor enthusiastically support your proposal.

I understand the overall objective of this proposal is to develop resources that support the application of genomics technologies to animal industries. I am delighted to see that the aims of this proposal include developing resources and support for genomic analyses as this will be very important to future genetic research involving Friesian horses.

We look forward to working with State Agricultural Experiment Station personnel via continued engagement with researchers and their efforts in genetic studies and support of the Fenway Foundation’s educational efforts.

The Fenway Foundation is excited about collaboratively working to improve or enhance the future of agriculture genomics.

Regards,

Angie DePuydt
Education & Research Liaison
July 11th, 2022

Dear Station Directors,

I am writing in support of the National Research Support Project (NRSP) proposal focused on developing capacity to apply genomics-enabled technologies to animal industries including the horse.

The Friesian Horse Association of North America (FHANA) is the sole representative in North America of the Koninklijke Vereniging ‘Het Friesch Paarden-Stamboek’ (KFPS). One of FHANA’s strategic goals is to become an industry leader in Friesian genetic research and equine wellness by collaborating with other agencies, universities, and non-profits to support their research. As such, the proposal you are submitting is well in line with our mission to promote and preserve the KFPS Friesian Horse in North America. We have long been committed to genetic studies for our breed and we therefore enthusiastically support your proposal.

FHANA understands that the overall objective of this proposal is to develop resources that support the application of genomics technologies to animal industries. We are delighted to see that the aims of this proposal include developing resources and support for genomic analyses as this will be very important to future genetic research involving Friesian horses.

We look forward to working with State Agricultural Experiment Station personnel via continued engagement with researchers and their efforts in genetic studies and support of FHANA’s educational events.

We are excited about collaboratively working to improve or enhance the future of agriculture genomics.

Regards,

Eric Smith
Eric Smith
FHANA President
July 18, 2022

Dear Dr. Bellone and Station Directors,

I am writing in support of the National Research Support Project (NRSP) proposal focused on developing capacity to apply genomics-enabled technologies to animal industries including the horse.

As the Executive Vice President and Executive Director of the Jockey Club, I have the responsibility of working closely with our board of directors, those in the industry, and many researchers conducting work on the Thoroughbred. We fully support advancing the knowledge of genetics and genomics to best assist the horse industry and enable the breeding of healthy and durable horses. We have been using DNA testing since its inception for parentage exclusion in the early 1990s. This has been vital to maintaining the integrity of our breed. We have also supported research endeavors to best understand genetic variation in our breed and how specific variants impact health.

I understand that the overall objective of this proposal is to develop resources to support the application of genomics technologies to animal industries. I am delighted to see that the aims of this proposal include developing resources and support for genomic analyses and integrating this with other data types collected by the equine industry. I am also very pleased to see the focus on linking with industry partners to help develop a data savvy workforce for US agriculture. These aims also support the objectives of our organization.

I look forward to working with State Agricultural Experiment Station personnel via continued engagement with researchers and through workshops, internships and broader discussions with the Thoroughbred industry.

We are excited about collaboratively working to improve or enhance the future of agriculture genomics.

Kind Regards,

Matt Iuliano
Executive Vice President & Executive Director
The Jockey Club
859-224-2721 (o)
859-227-1879 (c)

Dedicated to the improvement of Thoroughbred breeding and racing for over a century
Dear Station Directors,

I am writing in support of the National Research Support Project (NRSP) proposal focused on developing capacity to apply genomics-enabled technologies to animal industries.

By way of introduction, I am Director of Research and Development at Aviagen Turkeys Inc, a primary breeder supplying day old parent stock turkey poults to the global turkey industry. We continually invest in research and development to produce the best performing turkeys to meet our customers' needs and expectations.

Aviagen Turkeys utilizes a diverse range of genetic lines for development of its turkey breeds. In addition, it holds a large gene pool capable of meeting future needs. The company uses a balanced breeding goal, including health and fitness traits, alongside selection for key production traits such as reproduction, growth, feed conversion, and yield.

To achieve consistent improvement in performance and to select the best pedigree birds requires accurate measurement and comprehensive analysis of phenotypic and genetic data, which will allow Aviagen to develop healthy and efficient breeds of turkeys. I have been closely associated with the USDA-led animal genomics community over a number of years and look forward to a continued association with the opportunities and collaborations these can bring for turkey industry.

I understand that the overall objective of this proposal is to develop resources to support the application of genomics technologies to animal industries. The aims of this proposal include developing resources and support for genomic analyses; integrating this with other data types; and linking with industry partners to help develop a data savvy workforce for US agriculture. These aims will support primary breeders like Aviagen Turkeys by developing framework that may be used within breeding programs, as well as providing education and training for the next generation of geneticists to support animal agriculture in the US.

I look forward to working with State Agricultural Experiment Station personnel via workshops, community discussions and surveys, and training events.

We are excited about collaboratively working to improve the future of poultry genetics.
Regards,

Paige Rohlf
Research and Development Manager
Aviagen Turkeys Inc.
June 30, 2022

Dear Station Directors,

I am writing in support of the National Research Support Project (NRSP) proposal focused on developing capacity to apply genomics-enabled technologies to animal industries.

By way of introduction, I am the Molecular Geneticist at Hy-Line International. Hy-Line International is a primary poultry breeding company dedicated to the development and distribution of superior egg layer varieties. Hy-Line International layers can be found in over 110 countries and account for over 40% of the world-wide commercial egg production for both white and brown shell eggs. Hy-Line International was the first layer genetics company to establish an in-house molecular genetics laboratory in 1996. We continually invest in Research and Development to produce the best performing layers to meet our customers' needs and expectations. We incorporate genomic information into our breeding program on a commercial scale, and to use it to develop and improve our extensive gene pools.

I have been closely associated with the USDA-led animal genomics community for many years and continually utilize the multiple tools and resources developed by USDA in all aspects of my work. The many interactions with scientists supported by the State Agricultural Experiment Stations have been invaluable in advancing both the genomics and genetic applications at Hy-Line International. This is evidenced by the many collaborative publications involving Hy-Line and Experiment Station supported scientists.

I understand that the overall objective of this proposal is to develop resources to support the application of genomics technologies to animal industries. I understand that the aims of this proposal include developing resources and support for genomic analyses, integrating this with other data types, and linking with industry partners to help develop a data savvy workforce for US agriculture. These aims will support my company and my industry by providing training for the next generation of geneticists, developing additional tools that allow breeding companies to access the novel genomic information being developed and provide opportunities for strong and interactive collaborations between industry and academia. Both groups of scientists have access to unique resources, and by working together we can create considerable synergy.

I look forward to continuing to work with State Agricultural Experiment Station personnel via regional meetings, workshops and training events to continually improve the future applications of genomics in commercial breeding program.

Sincerely,

Janet Fulton
Senior Molecular Geneticist
Hy-Line International
Dallas Center, Iowa, USA

www.hyline.com

Hy-Line International | PO Box 310 | Dallas Center, Iowa 50063 USA
voice +1 515-992-3736 | fax +1 515-992-3203
Dear Station Directors,

I am writing in support of the National Research Support Project (NRSP) proposal focused on developing capacity to apply genomics-enabled technologies to animal industries.

By way of introduction I am Karissa Isaacs, Director of Producer Resources for Superior Farms. Superior Farms is committed to providing leadership and a sustainable, successful future for the American lamb industry. As employee-owners, we are passionate about providing quality products and innovative solutions that delight consumers and exceed customer expectations.

We intend to use genetic data that can help commercial sheep producers increase productivity, efficiencies, and profitability. We are particularly interested in educational outreach and workshops to promote more effective applications of genetics and genomics for the sheep industry. Our industry needs to better understand the importance of genomics and the opportunities genetics and genomics can bring to an individual operations bottom line through genetic progress as well as the viability of the sheep industry in the U.S. as a whole by improving productivity.

I understand that the overall objective of this proposal is to develop resources to support the application of genomics technologies to animal industries. I understand that the aims of this proposal include developing resources and support for genomic analyses; integrating this with other data types collected by my industry; and linking with industry partners to help develop a data savvy workforce for US agriculture. These aims will promote the viability of the American Sheep Industry and Superior Farms by enhancing genetics and genomics of the American Sheep Industry and increase overall industry profitability.

I look forward to working with State Agricultural Experiment Station personnel through sheep genomic educational, workshops, industry discussions and trainings.

We are excited about collaboratively working to improve or enhance the future of agriculture genomics.

Regards,
Karissa Isaacs
Director of Producer Resources
Superior Farms
karissa.isaacs@superiorfarms.com
September 29, 2022

Dear Station Directors,

I am writing in support of the National Research Support Project (NRSP) proposal focused on developing capacity to apply genomics-enabled technologies to animal industries.

By way of introduction, I am Tom Rathje and I work with DNA Genetics LLC, a swine breeding stock company. The mission of my company is to deliver improved swine genetics to the pork production industry. We use genetic data to select for and create improved performance in pig populations. We are particularly interested in more effective application of genetic and genomic data and applying large scale data to predict the behavior of complex agricultural systems. In addition, we are interested in training opportunities for our geneticists that will create new opportunities to apply this information.

I understand that the overall objective of this proposal is to develop resources to support the application of genomics technologies to animal industries. I understand that the aims of this proposal include developing resources and support for genomic analyses; integrating this with other data types collected by my industry; and linking with industry partners to help develop a data savvy workforce for US agriculture. These aims will support my company and the pork industry by providing the tools and talent required to continue to keep the production of pork highly sustainable and of benefit to people and our environment.

I look forward to working with State Agricultural Experiment Station personnel via workshops, providing internship opportunities, providing feedback through surveys and contributing to the ongoing engagement of stakeholders in these technologies.

We are excited about collaboratively working to improve and enhance the future of genomics applied to agriculture.

Regards,

[Signature]

Tom Rathje  
Chief Technical Officer
September 30, 2022

Dear Station Directors,

I am writing in support of the National Research Support Project (NRSP) proposal focused on developing capacity to apply genomics-enabled technologies to animal industries.

By way of introduction I am Global Director of Product Development and Technical Services for PIC, the global market leader in swine genetics. The mission of my company is to continuously develop improved swine genetics for farmers around the globe enabling them to produce a safe and nutritious protein product with maximum efficiency and sustainability. We aggressively utilize genetic data to guide our understanding of the opportunities for targeted improvement in key traits of interest as well as provide information to swine producers to maximize their success with realizing these benefits in their operations. We are particularly interested in continuing to develop more effective applications to aid genetic improvement including advancing genomic data and genetic analysis. We believe it is essential to continue to support broad and engaged discussions involving diverse groups of academics and industry as these create opportunities to stimulate ideas, cascade progress and engage and train students which are needed for our industries to have the future talent necessary to remain competitive. We believe this proposal is well aligned with all of those initiatives and creates extra capacity for advancement.

I understand that the overall objective of this proposal is to develop resources to support the application of genomics technologies to animal industries and that the aims of this proposal include developing resources and support for genomic analyses; integrating this with other data types collected by my industry; and linking with industry partners to help develop a data savvy workforce for US agriculture. These aims will support my company/my industry by providing collaboration on solving current questions and needs and developing skills and talent for future development.

I look forward to working with State Agricultural Experiment Station personnel via the wide range of excellent work supported by this proposal.

We are excited about collaboratively working to improve or enhance the future of agriculture genomics.

Regards,

Matt Culbertson, PhD
Global Director
PIC

NEVER STOP IMPROVING
October 3rd, 2022

Dear Station Directors,

I am writing in support of the National Research Support Project (NRSP) proposal focused on developing the capacity to apply genomics-enabled technologies to animal industries.

By way of introduction, I am Kent Gray, the General Manager of Smithfield Premium Genetics, which supplies breeding stock and oversees the genetic program for Smithfield Foods, the largest pig producer and pork processor in the United States. We use genetic data to run internal breeding and selection programs. We are particularly interested in more effective applications of genetics and genomics data to increase our genetic gain and achieve success at the commercial level.

I understand that the overall objective of this proposal is to develop resources to support the application of genomics technologies to animal industries. I understand that the aims of this proposal include developing resources and support for genomic analyses; integrating this with other data types collected by our industry; and linking with industry partners to help develop a data-savvy workforce for US agriculture. These aims will support our industry by ensuring long-term growth and profitability for shareholders.

I look forward to working with State Agricultural Experiment Station personnel via internship and community discussion.

We are excited about collaboratively working to improve or enhance the future of agriculture genomics.

Regards,

Sincerely,

Kent Gray  
General Manager  
Smithfield Premium Genetics  
kgray@smithfield.com
July 20, 2022

Dear Station Directors,

We are writing in support of the National Research Support Project (NRSP) proposal focused on developing capacity to apply genomics-enabled technologies to animal industries.

By way of introduction, we are the Director of Genetics Product Development (Genomics R&D) and former Agrigenomics Vice President and work for NEOGEN Corporation. The mission of our company is to ensure the safety of food production systems and specifically we work to empower genomic selection in animal protein production systems. We empower customers to use genomic data for augmenting pedigree relationships as well as selecting commercial animals which have inherited favorable versions of genes. As we look to deliver new genomic testing tools such as InfiniSEEK (low pass sequencing with imputation) to researchers and industry partners we are particularly interested in more effective applications of genetics and genomics data. Furthermore, we are also interested in applying large scale data to predict agricultural systems such as the outcomes of feedlot cattle.

We understand that the overall objective of this proposal is to develop resources to support the application of genomics technologies to animal industries. We also understand that the aims of this proposal include developing resources and support for genomic analyses; integrating this with other data types collected by our industry; and linking with industry partners to help develop a data savvy workforce for US agriculture. These aims will support our company by supporting development of best practices for using genomic data and creating new analytical models.

We look forward to working with State Agricultural Experiment Station personnel via workshops and community discussions.

We are excited about collaboratively working to improve or enhance the future of agriculture genomics.

Sincerely,

Rich Tait, Jr., Ph.D.     Stewart Bauck, DVM, MS
Director of Genetics Product Development  Senior Director, Special Projects
NEOGEN Genomics     NEOGEN Genomics
Dear Station Directors,

I am writing in support of the National Research Support Project (NRSP) proposal focused on developing capacity to apply genomics-enabled technologies to animal industries.

My name is Dan Carlson, Chief Scientific Officer of Recombinetics, gene editing and biotechnology company. The mission of my company is to lead the world in animal gene-editing for healthier people, healthier animals and a healthier planet. We use genetic and phenotypic data to identify high impact traits that can be delivered to livestock using gene editing technology. We are particularly interested in applying large scale data to predict agricultural systems, and to identify natural, beneficial gene variants that are absent or underrepresented in target animal populations.

I understand that the overall objective of this proposal is to develop resources to support the application of genomics technologies to animal industries. I understand that the aims of this proposal include developing resources and support for genomic analyses; integrating this with other data types collected by my industry; and linking with industry partners to help develop a data savvy workforce for US agriculture. These aims will support my company/my industry by creating a hub for genomic data that can be analyzed by our scientist to develop new traits.

I look forward to working with State Agricultural Experiment Station personnel via workshops and community discussions. Collaboration of this sort is not only critical our mission and will help improve the future of agriculture genomics.

Regards,

Daniel Carlson

Daniel F. Carlson, PhD
Chief Scientific Officer
Recombinetics
Dear Station Directors,

I am writing in support of the National Research Support Project (NRSP) proposal focused on developing capacity to apply genomics-enabled technologies to animal industries.

By way of introduction I am Joseph Deeb, Technical Director of Genetics and Genomics at STgenetics. STgen is a leader in applying cutting-edge technology to animal breeding. The mission of my company is to lead a global transformation in the production of more efficient, healthy, and environmentally responsible food animal protein. We use genetic and genomics data to support the Dairy, Beef and Pig industries to produce more efficient, sustainable, and healthier animals. Among many other things, we are particularly interested in improving the efficiency in which animals utilize nutrients and reduce the impact of our industries on the environment. We are utilizing high-density genotyping and whole-genome sequencing to improve on the accuracy of genomic predictions and to better understand the underlying molecular mechanisms controlling economically important traits.

I understand that the overall objective of this proposal is to develop resources to support the application of genomics technologies to animal industries. I understand that the aims of this proposal include developing resources and support for genomic analyses; integrating this with other data types collected by my industry; and linking with industry partners to help develop a data savvy workforce for US agriculture. These aims will support my company by providing better platforms to optimize the use of data collected across the industry and assist in maximizing the use of new genomic tools and technologies to increase the rate of genetic improvement.

I look forward to working with State Agricultural Experiment Station personnel via participating in workshops, discussions and training events or other ways that might contribute to the program.

We are excited about collaboratively working to improve or enhance the future of agriculture genomics. Regards,

Joseph Deeb, PhD.
Technical Director of Genetics and Genomics
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