



IMMUNITY+® Q **A** &

with Dr. Steven Larmer, Semex Senior Manager, Genomics Program



O: WHY IS SELECTING FOR IMMUNITY IMPORTANT?

Disease frequency in the global dairy population has been increasing each year since 1996. Selection of traits with low heritability that do not directly measure an animal's ability to resist diseases has not provided a significant change in health of the dairy population.

Q: HOW CAN IMMUNITY+ HELP SOLVE THIS PROBLEM?

Immunity+ sired animals have genetics which have been proven to provide robust immune systems capable of dealing with a large variety of potential immune challenges, both viral and bacterial in nature, encompassing nearly all major diseases that have an economic impact on farm.

O: WHY IMMUNITY+ INSTEAD OF SELECTING DIRECTLY AGAINST INDIVIDUAL DISEASES?

The immune system is hugely complex, and selecting for one disease like mastitis can leave animals more susceptible to other potential diseases such as Johne's or viral pneumonia. Immunity+ provides a robust resistance to all disease, plus the heritability is significantly higher than any individual disease incidence.

Q: WHAT IS HERITABILITY AND WHY DOES IT MATTER?

Heritability is the proportion of total variance in a trait that can be explained by genetics. This means that traits with low heritability are more difficult to make genetic progress in relation to the total amount of variation in the population. High heritability traits are usually easily and directly measured, and genetics have a larger impact on the difference observed between animals.

O: ARE THERE ANY BENEFITS OTHER THAN LESS DISEASE?

Immunity+ sired animals also respond better to commercial vaccinations and produce higher guality colostrum than animals sired by any other bull.

O: HOW MUCH REDUCTION IN DISEASE CAN I EXPECT FROM SELECTING AN IMMUNITY+ SIRE?

It varies by trait, but selecting Immunity+ sires should lead to anywhere from 5-20% reduction in disease in just one generation. More generations of selection will continue to decrease disease frequency even further. Continued on page 2...

CALL FOR DIRECTOR **AND DELEGATE** NOMINATIONS

EastGen members in the following zones are invited to submit nominations for Directors and Delegates for a three-year term. Early nomination forms have been mailed and have been posted at www.eastgen.ca.

All nominations must be submitted prior to Friday, October 29, 2021, at 5:00 p.m.

Zone 1

Newfoundland-Labrador, P.E.I., New Brunswick

Zone 4

Frontenac, Grenville, Lanark, Leeds, Renfrew

Zone 7

Simcoe, Northern Ontario

Zone 10

Oxford, Region of Niagara, Brant, Haldimand, Norfolk, Wentworth

Please note that due to the COVID-19 pandemic virtual zone meetings will be held for EastGen's entire service area. Please watch your November Update for more information on these meetings.

Q: WHAT DO I HAVE TO GIVE UP TO SELECT FOR IMMUNITY?

Nothing! Immunity+ bulls on average have higher genetic merit for all other major traits than the rest of the bulls. No matter what you usually select for, there is an Immunity+ bull that fits your herd.

Q: IF IMMUNITY+ IS BETTER IN BULLS THAT HAVE HIGHER GENETIC MERIT, CAN'T I JUST SELECT HIGH GENETIC MERIT BULLS AND ASSUME I'M GETTING IMMUNITY+ TOO?

No, there are always exceptions, and the only way to be sure you are getting high immune responding daughters is to select Immunity+ sires. Although Immunity+ sires are high genetic merit sires, not all high genetic merit sires for other traits have genes that will provide the robust, effective response to disease that comes from Immunity+ sires.

Q: HAS THIS DATA BEEN VALIDATED IN A REAL COMMERCIAL SETTING?

Yes, we have taken data from over 35 large commercial herds, and analyzed data from over 30,000 cows and 75,000 heifers. The results have been astonishing. Reductions in every major disease have been seen, and range anywhere from 5 to 20% reduction in animals sired by Immunity+ sires compared to all others. Mastitis, lameness and mortality saw especially large decreases in frequency.



Q: WHAT ABOUT COLOSTRUM? Cows sired by Immunity+ sires had, on average, higher colostrum quality. A correlation of immune response status of their sire and colostrum quality of +0.55 was observed. More importantly, was that no HIR (High Immune Response) sires had daughters who had average colostrum quality below the 22% threshold recommended for use, compared to 27% of herd average sires having daughters whose colostrum, on average, was too poor to feed to their calves.

The 12 Immunity+™ sires below are featured in EastGen's Fall Semen Special and they average +3306 GLPI		
0200HO10661	Stantons ADAGIO-P	+3309
0200HO10372	Boldi V APTITUDE	+3399
0200HO10411	Claynook DEALMAKER	+3140
0200HO10845	Melarry FUEL	+3483
0200HO03913	Croteau Lesperron UNIX	+2897
0200HO11665	Westcoast ALMAMATER	+3710
0200HO11674	Brabantdale ALONGSIDE	+2951
0200HO11980	Westcoast LUGNUT	+3750
0200HO12061	Tappenvale MEDALIST	+3290
0200HO11652	Lebold Dreamview MILANO	+3163
0200HO11893	Progenesis REDDIT	+3481
0200HO11091	Westcoast SWINGMAN Red	+3104

Take this opportunity to gain the power of Immunity+®. Talk to your EastGen rep. today!

A virtual evening event created to engage and educate beef producers

Guest presenters: Dan Skeels - Alberta rancher & World Livestock Auctioneer Champion Brad Gilchrist - Semex Beef Marketing Manager

Beef semen/hockey ticket prize draw for webinar participants!! Thurs., November 4, 2021 7:00 - 9:00 p.m. EST



Dan Skeels



Brad Gilchrist

REGISTER FOR FREE NOW: find the GoToWebinar link on EastGen's website events page or social media. Contact 1-888-821-2150 x252 or tara.reynolds@eastgen.ca for further info.



Register Now

Melcome Aboard

EastGen Team!

EastGen welcomes **Carter Landman** as a **Regional Sales Representative for Western Ontario**. Carter joined our team on September 7th, replacing Pete Kaufman who has transitioned into a Dairy Solutions Specialist role.

Carter has a passion for agriculture and the dairy industry, having worked in various roles throughout his career. He completed an Agriculture Diploma from the University of Guelph-Ridgetown and was employed with Semex as an Animal Care Specialist prior to working in sales for another A.I. company. Carter can be reached via cell at 226-376-2022.





Carter Landman

Brent Sikma

EastGen is pleased to announce that **Brent Sikma** has accepted a contract position as a **Casual AI Technician**, assisting our team within the Eastern Central Region of Ontario. He joined EastGen on September 20th.

Brent has a strong passion for the industry, having worked in various roles, including herdsperson for Ferme Blondin and as a herd manager with Fricosons Holsteins. Brent has an Associate diploma in Agriculture from the University of Guelph – Ridgetown and completed the EastGen Al Training School in 2017.

In other EastGen staff news, congratulations to **Karter Kaufman** who accepted the Full-Time Vacation AI Technician role in the Western Ontario region replacing **Duane Swartzentruber** as he moves into the Swing AI Technician role in Western Ontario.



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Elamarc Alcove Dinastie GP-82-2YR-CAN Owner: Ferme Elamarc Inc., St. Charles, OC Photo | Carl Saucier

> +3794 GLPI \$3617 PRO\$ +2524 MILK +148 FAT +.41% +97 PROTEIN +.09% +10 CONFORMATION GEBV 21* AUG





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Westcoast ALCOVE is now in an absolute class of his own. This Fertility First[™] designated and A2A2 superstar is now Canada's #1 GLPI, #1 Pro\$, #1 Fat, and #1 Combined Fat & Protein sire and is +10 for Conformation! ALCOVE is literally redefining genetic excellence. With his rock-solid type and ground-breaking profit and production potential, we are all witnessing history in the making!