



Neogen International Genomics Symposium

Accelerating Progress In Beef
Improvement



The importance of the Beef Improvement Federation



**BEEF IMPROVEMENT FEDERATION 8TH GENETIC PREDICTION WORKSHOP
"MOLECULAR APPROACHES TO GENETIC IMPROVEMENT"**
Embassy Suites – KCI Airport, 7640 NW Tiffany Springs Parkway
Kansas City, Missouri
December 4-6, 2003


December 4 (Thursday)
7:30 PM to 9:30 PM - NCR 199 Technical Committee Meeting

December 5 (Friday)
Chairman – Larry Cundiff, MARC, ARS, USDA
8:00 AM Molecular approaches to genetic improvement. Mark Thallman, MARC, ARS, USDA, Clay Center, NE
9:00 AM Integrating quantitative and molecular genetics- Daniel Pomp, University of Nebraska
9:45 AM Break
Chairman – Craig Huffhines, American Hereford Assoc.
10:15 AM Examples of marker assisted selection in sheep and dairy improvement in New Zealand. Dorian Garrick, Colorado State University
11:00 AM Validation of genetic tests for QTL. Richard Quaas, Cornell University
12:00 Lunch
Chairman – Robert Williams, American International Charolais Association
1:00 PM Sequencing the bovine genome - Steve Kappes, MARC, ARS, USDA, Clay Center, NE
1:30 PM Industry Panel on Currently Available Genetic Tests and Future Plans – Moderator, Ronnie Green, NPS, ARS, USDA
Jay Hetzel - Genetic Solutions
Jim Gibb -Frontier Beef Systems and Geneseeek
Sue Denise - Metamorphics
Stewart Bauck and Leigh Marquess – Merial/Quantum
3:00 PM Break

December 6, (Saturday)
Chairman – Ronnie Green, NPS, ARS, USDA
8:00 AM Report on carcass
9:00 AM Examples of using Iowa State University
9:45 AM Break
10:15 AM Statistical issues in meat
11:00 AM Panel Discussion of Statistical development and application
Moderator - Rob Tempelman
Daniel Gianola - University
Steve Kachman - University
Ignacy Misztal - University
Rohan Fernando - Iowa State
12:00 Lunch

Effects predicted from parental estimates and progeny marker data
Recombination
Tenderness
Red/Black

AMERICAN HEREFORD ASSOCIATION
DNA GENETIC MARKER TEST
FOR PULLED HAIR SAMPLES

BAR CODE ID:  AHA43189454-01

NAME: CL 1 DOMINETTE 1187Y SEX: Cow


TATTOO: 1187 DOB: 02/21/2011 REGISTRATION #: 43189454

DAM'S HERD ID: 7166T DAM'S NAME: CL 1 DOMINETTE 7166T

ADDITIONAL ID INFO?

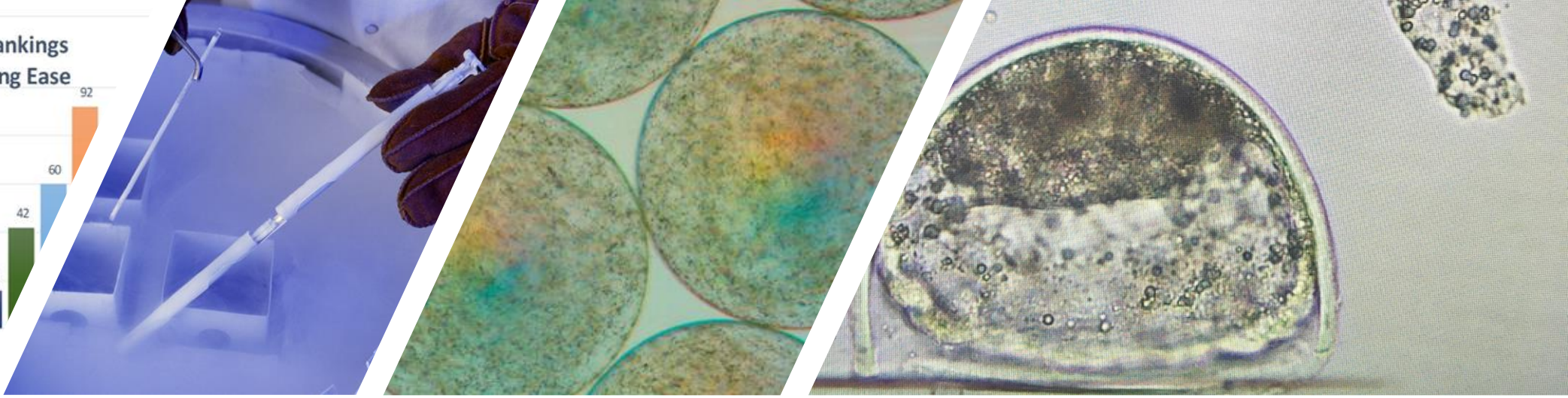
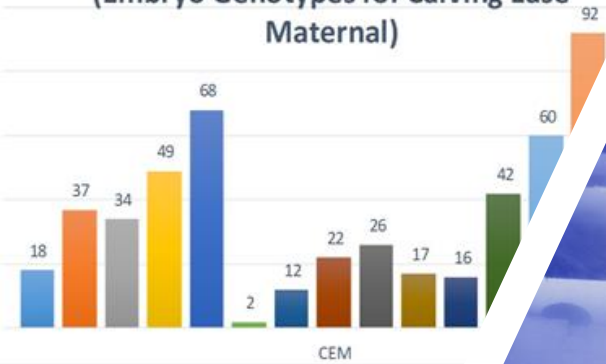
SAMPLE SECTION: (D) 1187

HAIR ROOTS HERE
(20-25 hairs)



We have come a long ways

Angus Genetics Percentile Rankings
(Embryo Genotypes for Calving Ease
Maternal)

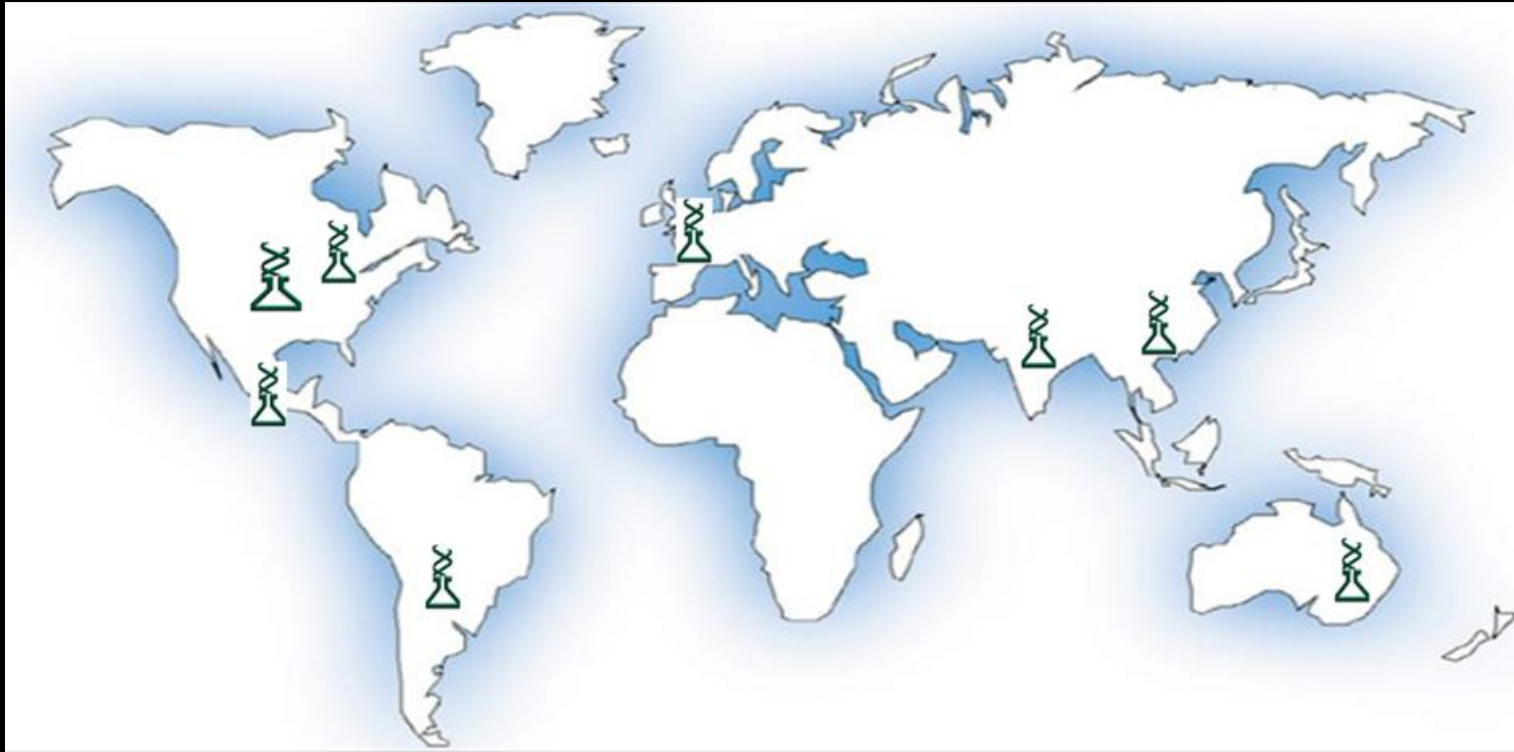


Exploring the genomic frontier

- Informing better decisions
- Saving you precious time

Continuous Innovation





Global Genomics Opportunity

- Growth in Australia – new lab opens this week
- Growth in Brazil – moving to a new lab
- Expanding services in Mexico
- Asian opportunities

Massive Capacity Growth

Best team in the world at
SNP selection and
product development

- 50+ custom arrays built



ANGUSGS
Powered by Neogen GeneSeek

GGPTM
Bos indicus



Igenity[®] ***Santa Gertrudis***

Igenity[®] ***Brangus***[®]

Igenity[®] ***Beefmaster***

The Rapid Growth
of Custom Partnering

The background of the slide is a close-up photograph of numerous white paper bags, likely evidence bags, scattered and overlapping. Each bag has a prominent, dark red, teardrop-shaped stain on its surface. Some of the bags also feature a black logo consisting of a DNA double helix and the word "NEED" in a bold, sans-serif font. The lighting is bright, creating sharp shadows and highlights on the paper's texture.

High-Capacity, Cutting-Edge Science

High volume translates to elite expertise and technology for your needs



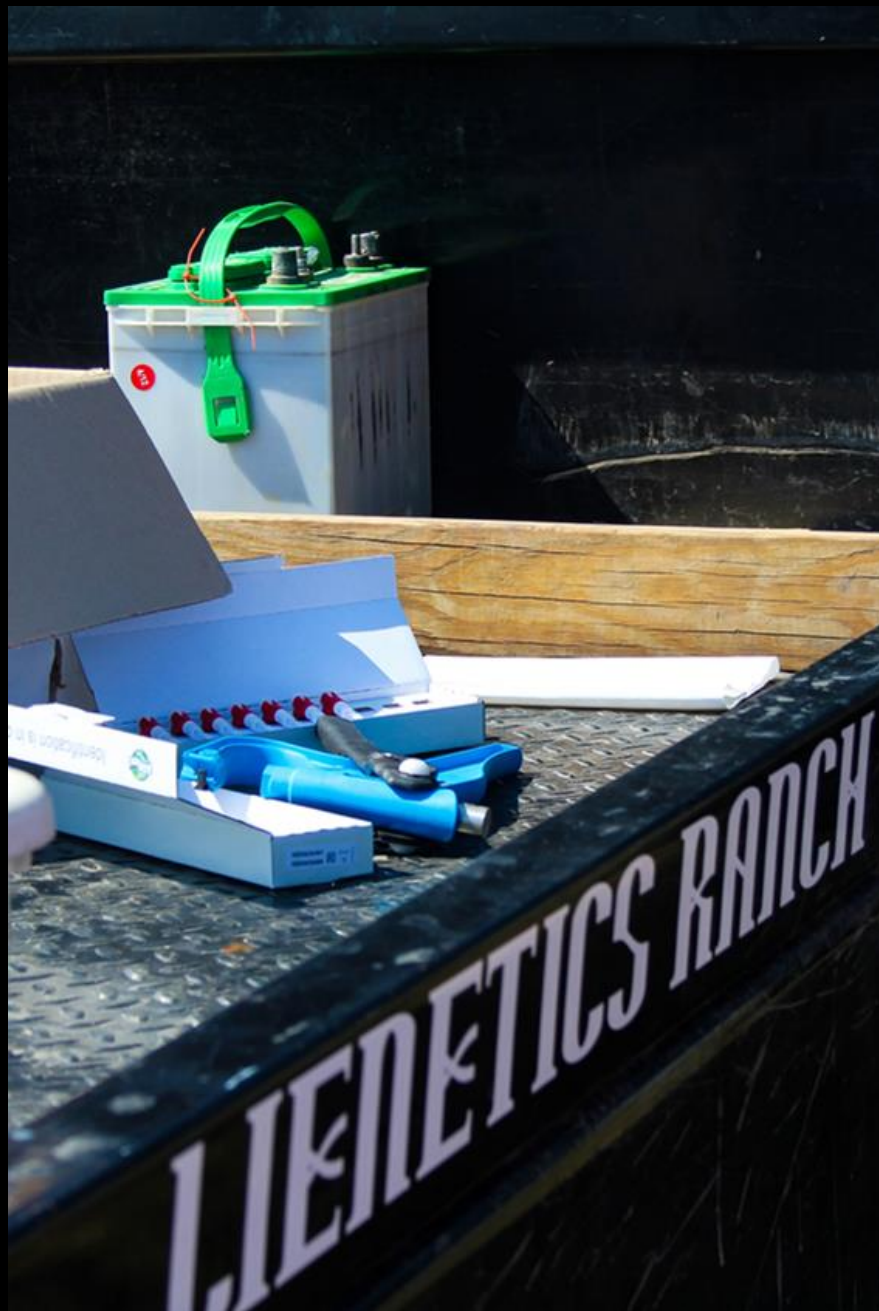
Local Service

Nine beef genomics specialists
across the U.S. to support you

Global Access

Get the help you need around the world,
backed by 150 scientists, technicians and
business professionals





Making Genomics Easier
in the Real World



Teaching, Connecting, Inspiring

Training a new generation to continue our progress





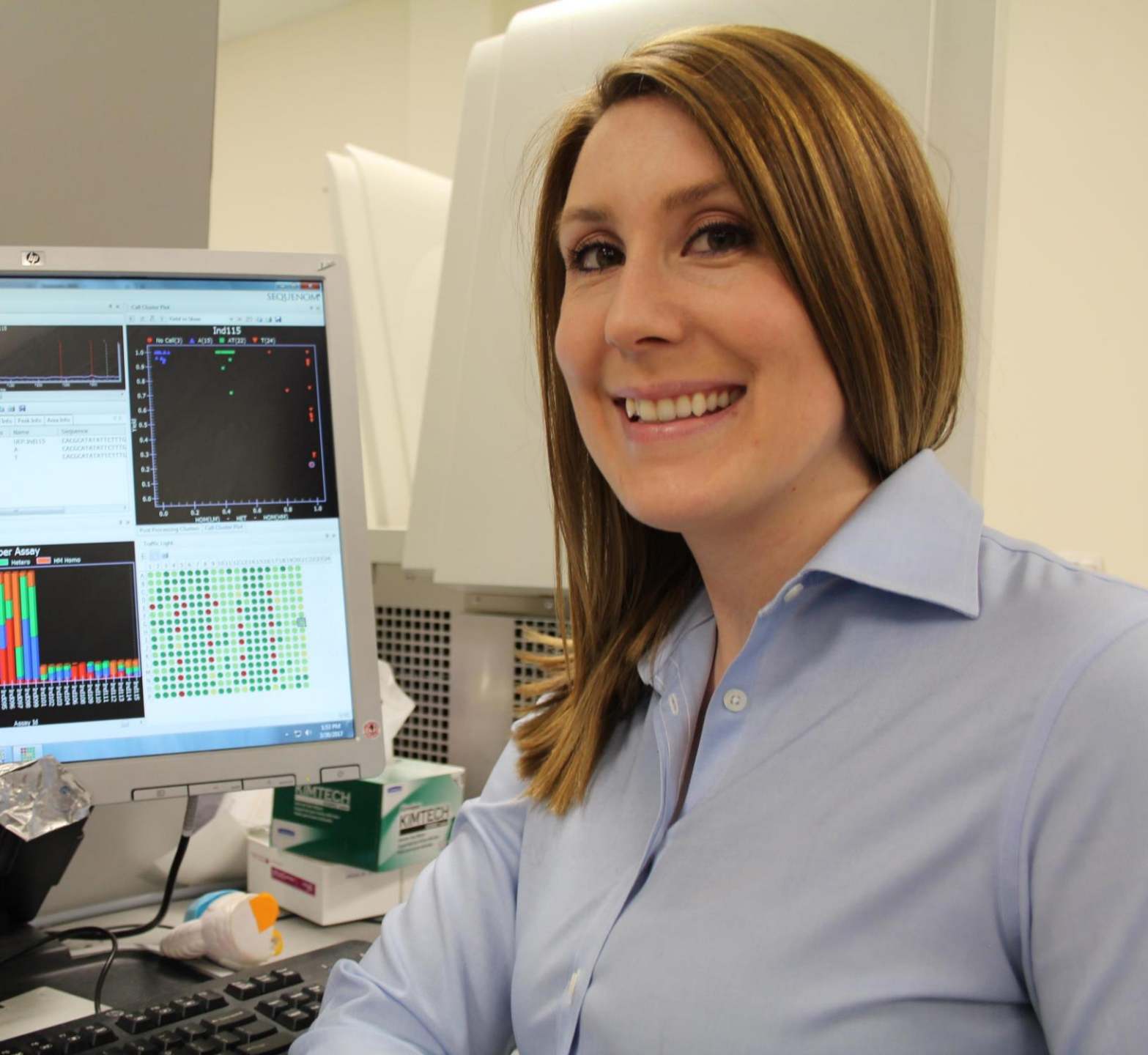
NEOGEN®

Proud to Partner

Powered by Neogen

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R07C01_1, Register Swath 1 ... R05C01_2, Register Swath 1 ...



High Quality Data

A major focus of our people and continuous improvements in your genotyping tools

250 million genotypes/day
7 billion/month



Fast Turn-Around

Innovators meeting our partners' data needs with speed and efficiency



Fair Pricing

Affordable products that add value in real-world cattle operations



Thanks for the Opportunities

Schedule

Opening Welcome – Accelerating Progress in Beef Improvement

Dr. Stewart Bauck, Vice President, Neogen

Gene Editing Is on The Forefront

Dr. Mitch Abrahamsen, Executive Vice President, Recombinetics

Selecting Seedstock at Minus 8 Months of Age

Matt Barten, Founder and President, Embruon

Speeding Improvement of Commercial Cattle Through DNA Profiling

Dr. JR Tait, Director of Genetics Product Development, Neogen



Executive Vice President, Chief Scientific Officer,
Recombinetics

Dr. Mitch
Abrahamsen

CEO and Co-Founder, Embruon

Matt Barten



Director of genetics product
development, Neogen

Dr. JR Tait





Time for a New Generation

2018 Neogen International Genomics Symposium