



***21st ADSA Discover Conference:***  
**Improving Reproductive Efficiency of Lactating Dairy Cattle**

May 9-12, 2011

Eaglewood Resort and Spa

Itasca, IL

Sponsored by the American Dairy Science Association®

**Monday May 9<sup>th</sup>, 2011**

4:00 - 6:00 PM Registration, Red Oak Lobby

6:00 - 7:00 PM Posters and Cocktail Hour, Red Oak Lobby

Posters will be set up by 5:45 PM. Discussion of Posters during cocktail hour. Posters will be up for the entire duration of the Conference. Cash bar reception.

7:00 PM Dinner

8:00 PM Welcome: Larry Miller (DISCOVER) and DC21 Co-chairs (Milo Wiltbank and Bill Thatcher)

After dinner presentation: William Thatcher: *Historical Developments and Challenges in the Evolution of Reproductive Management Programs for Dairy Cattle*

**Tuesday May 10<sup>th</sup>, 2011**

Continental-type Breakfast provided by Discover Conference

Discussion of Posters from 7:30 to 8:00 AM

**Theme of the Day: What Are the Problems of Reproductive Efficiency in Dairy Cattle?**

**8:00-9:30 AM - Economic value of 21-day Pregnancy Rate in Dairies**

**Moderator: Paul Fricke**

Victor Cabrera – The economic value of changes in 21-day pregnancy rate and what controls this value

Albert DeVries - The economic value of changes in 21-day pregnancy rate and what controls this value

Panel Discussion on Economics of Reproduction - Moderator: Paul Fricke

Participants: Cabrera, DeVries, Galvão, Neil Michael

**9:30-10:00 - Break**

**10:00-12:00 PM - Anovulation and Role of Progesterone**

**Moderator: Milo Wiltbank**

Group Discussion and Activity on Anovulation in Dairy Cattle – Milo Wiltbank

Scott McDougall - New Zealand Perspective on Anovular Dairy Cows

Jose Santos - Treatment of Anovular Dairy Cows

Panel Discussion of Physiology and Treatment of Anovulation in Dairy Cattle – Moderator: Milo Wiltbank  
Participants: McDougall, Santos

*12:30-1:30 PM Lunch*

**Early PM Theme: Factors underlying Low Reproductive Efficiency**

**1:30-3:15 PM - Reproductive Tract Health & Fertility**

**Moderator: Jose Santos**

Klibs Galvão - Uterine Inflammation and Fertility  
Stephen LeBlanc - Diagnosis and Treatment of Uterine Infections

Panel Discussion on Reproductive Tract Health and Fertility – Moderator: Jose Santos

Participants: Galvão, LeBlanc, Doug Hammon

*3:15-3:45 PM Break*

**3:45 - 5:00 PM - Role of Milk Production in Low Reproductive Efficiency in Dairy Cattle**

**Moderator: Paul Fricke**

Milo Wiltbank - Effects of Milk Production on Reproductive Physiology  
Stephen LeBlanc - Lack of Association of Milk Production with Reproduction

Panel Discussion – Moderator: Paul Fricke  
Participants: Wiltbank, LeBlanc, Ron Butler

**PM Theme: SOLUTIONS to Improve Reproductive Efficiency in Dairy Cattle: Genetics**

**5:00-6:45 PM - Genetic Selection for Reproductive Efficiency in Dairy Cattle**

**Moderator: Pete Hansen**

Kent Weigel - Genetic Selection to Improve Reproduction  
Pete Hansen - Use of Genomics to Improve Reproduction  
Donald Bennink- Producers Perspective on Importance of Health and Reproduction Traits

Panel Discussion of Improving Reproduction using Selection – Moderator: Pete Hansen

Participants: Weigel, Hansen, Ray Nebel, Alexandre Souza, Glen Gilbert, Don Bennink

**Wednesday May 11th, 2011**

Continental-type Breakfast provided by Discover Conference  
Discussion of Posters from 7:30 to 8:00 AM

**AM Theme: SOLUTIONS to Improve Reproductive Efficiency: Estrus and Timed AI**

**8:00-9:00 AM - Improving Programs for Detection of Estrus**

**Moderator: Ray Nebel**

Nadav Galon - Israeli Methods used for Optimizing Detection of Estrus

Panel Discussion for Improving Detection of Estrus in Dairy Cattle - Moderator: Ray Nebel Participants: Nadav Galon, Leblanc, Fricke, Bilby

**9:00-10:30 AM - Improving Timed AI Programs**

**Moderator: Bill Thatcher**

**Physiological Focus Points:**

Jose Santos - Follicle Dominance - 5-Day Ovsynch Program  
Milo Wiltbank - Follicle Turnover/Endogenous Progesterone - Double Ovsynch  
Jeff Stevenson - Strategies for Presynchronization before Ovsynch  
Paul Fricke - Strategies of Presynchronization before Resynchronization Program  
Todd Bilby - Supplementation with Progesterone in Timed AI Programs

Panel Discussion of Improving Timed AI Programs – Moderator: Bill Thatcher

Participants: Santos, Wiltbank, Stevenson, Fricke, and Bilby

***10:30-11:00 AM Break***

**11:00-12:00 PM - Economic comparison of reproductive management programs**

**Moderator: Paul Fricke**

Albert DeVries – Timed AI vs. Natural Service  
Scott McDougall – Estrous Detection vs. Timed AI  
Victor Cabrera – Timed AI with or without Estrous Detection

Panel Discussion on Economic comparison of reproductive management programs – Moderator: Paul Fricke

Participants: DeVries, Cabrera, McDougall, and Industry Representatives (Neil Michael)

***12:30-1:30 PM Lunch***

**PM Theme: Physiology & Solutions: Embryo Development & Pregnancy**

**1:30-3:15 PM - Fertilization and Early Embryo Development**

**Moderator: Peter Hansen**

Roberto Sartori - Effects of Lactation on Fertilization and Embryonic Development in Lactating Dairy Cows  
Pat Lonergan - Maternal Regulation of Embryonic Development

Panel Discussion on Improving Fertilization and Early Embryo Development – Moderator: Peter Hansen

Participants: Lonergan, Sartori

***3:15-3:45 PM Break***

**3:45 - 5:15 PM - Pregnancy Loss and Pregnancy Diagnoses Programs - Moderator – Paul Fricke**

Jose Santos - Epidemiology of Pregnancy Loss in Dairy Cattle  
Matt Lucy - Technologies for Early Pregnancy Diagnosis  
Paul Fricke - Optimization of Nonpregnancy/Pregnancy Diagnoses for Reproductive Management

Panel Discussion on Pregnancy Loss and Pregnancy Diagnosis Programs – Moderator: Paul Fricke

Participants: Santos, Lucy

**Thursday May 12th, 2011**

Continental-type Breakfast provided by Discover Conference  
Discussion of Posters from 7:30 to 8:00 AM

**AM Theme - SOLUTIONS to Improve Reproductive Efficiency: Transition and Nutrition**

**8:00-9:30 AM - Transition Management and Reproduction**

**Moderator: Ron Butler**

Tom Overton - Impact of Transition Cow Nutrition and Management on Postpartum Health

Elliot Block - Effects of Nutrition in the Transition Period on Reproduction

Panel Discussion of Transition Management on Reproduction – Moderator: Ron Butler

Participants: Overton, Block

***9:30-10:00 - Break***

**10:00-11:45 AM - Nutritional and Metabolism Effects on Reproduction in Dairy Cattle**

**Moderator: Matt Lucy**

Ron Butler - Role of Energy Metabolism in Early Lactation on Reproduction

Bill Thatcher - Role of Fatty Acids and Other Nutraceuticals on Reproduction

Panel Discussion of Nutrition and Reproduction Interactions – Moderator: Matt Lucy

Participants: Butler, Thatcher, Overton, Block

**11:45-12:00 PM - Summary and Closing Remarks - Milo Wiltbank**