

**Draft Program**  
**UC DAVIS TRANSGENIC ANIMAL RESEARCH**  
**CONFERENCE VII**

<http://conferences.ucdavis.edu/transgenic>

**Monday, August 17**

- 2:00 – 5:00 pm**      **Registration**
- 6:30 pm**              **Get-acquainted Reception and Light Buffet – Garden Deck**
- 8:30 pm**              **No-host bar – Garden Deck**

**Tuesday, August 18**

- 7:00 – 8:00 am**      **Breakfast – Granhall (each morning Monday - Thursday)**

**ALL PLENARY SESSIONS - LAKE/BAY ROOM**

- 8:00 – 8:10 am**      **Welcome, James Murray, University of California Davis, USA**

**SESSION 1**              **Session Chair – Louis-Marie Houdebine, BioProtein Technologies**

- 8:10 – 8:30 am**      Louis-Marie Houdebine, BioProtein Technologies  
*From DNA microinjection to iPS and ZFN*

- 8:30 – 9:10 am**      Stefan Moisyadi, University of Hawaii  
*Transgenesis with Transposase enzymes*

- 9:10 – 9:45 am**      Dan Carlson, University of Minnesota  
*Using transposons to increase the efficiency of embryo and cellular transgenesis*

- 9:45 – 10:15 am**      **Tea/Coffee – Mountain Deck**

**SESSION 2**              **Session Chair – Gary Anderson**

- 10:15 – 10:50 am**      Eric Schulze, University of Southern California  
*27 Years in the Making: Germline Competent Rat Embryonic Stem Cells*

- 10:50 – 11:25 am Jorge Piedrahita, North Carolina State University  
*Progress toward the development of stable porcine induced pluripotential stem cells (iPS)*
- 11:25 – 12:00 pm Paul Verma, Monash University, Australia  
*Preliminary observations on inducing pluripotency in cattle*
- 12:00 – 4:00 pm Lunch/Free Time - Garden Deck**
- 4:00 – 5:00 pm POSTER SESSION I - Mountain Room**
- 6:00 pm Dinner - Garden Deck**
- SESSION 3 Session Chair –**
- 8:00 – 8:35 pm Ran Zhang, China Agriculture University, Beijing  
*Biosafety assessment of selectable markers in transgenic large animals*
- 8:35 – 9:10 pm Imre Kacs Kovics, Hungary  
*Antibody production in FcRn transgenic animals*
- 9:10 – 9:45 pm Justin Jones, University of Wyoming  
*Transgenic goats producing spider silk protein in their milk; behavior, protein purification and obstacles*

### **Wednesday, August 19**

- SESSION 4 Session Chair – Luciana Bertolini, University of Fortaleza, Brazil**
- 8:00 – 8:40 am Eric Hallerman, VPI  
*Environmental risk assessment parameters for growth hormone transgenic Atlantic salmon, *Salmo salar**
- 8:40 – 9:20 am Matthew Wheeler, Illinois  
*Risk analysis of alpha-lactalbumin transgene transfer to non-transgenic control pigs during rearing, breeding and lactation*
- 9:20 – 10:00 am Elizabeth Maga, Davis  
*Human lysozyme transgenic goats show normal growth, reproduction and lactation*
- 10:00 – 10:30 am Tea/Coffee - Mountain Deck**

**SESSION 5                      Session Chair – Goetz Laible, AgResearch Ltd, New Zealand**

10:30 – 11:15 am            Reinhard Huber, Roslin Institute, UK  
*Developing welfare protocols for transgenic large animals*

11:15 – 12:00 pm            Cassandra Tucker, U.C. Davis  
*Cloned bulls in the first year of life: behavior and growth*

**12:00 – 1:30 pm              Lunch - Garden Deck**

**SESSION 6                      Session Chair – Alison Van Eenennaam**

1:30 – 2:10 pm                Bruce Draper, University of California, Davis  
*Using transgenics to study the mechanism of oocyte production in zebrafish*

2:10 – 2:50 pm                Andrew Wong, U.C Davis  
*Cre/loxP and FLP/FRT site-specific recombination systems for the biological containment of transgenic fish*

**2:50 – 3:15 pm                Tea/Coffee – Mountain Deck**

**SESSION 7                      Session Chair – Lluís Montoliu, CNB-CSIC, Spain**

3:15 – 3:50 pm                Scot Wolfe, Harvard University  
*Creating targeted genomic lesions in Zebrafish using Zinc Finger Nucleases*

3:50– 4:25 pm                Roland Buelow, OMT Inc.  
*Knockout rats produced via embryo microinjection of designed zinc finger nucleases*

**SPECIAL SESSION          Barbara Glenn, Biotechnology Industry Organization**

4:30 – 5:15 pm                BIO Guidance for Animal Biotechnology Stewardship

**5:30 – 6:30 pm                Hosted hospitality hour**

**6:30 pm                          Dinner – Granhall**

## **Thursday, August 20**

- SESSION 8**                      **Session Chair – Martina McGloughlin, UC Davis**
- 8:00 – 8:40 am                  Lars Bolund, Denmark  
*Degenerative disease models in genetically designed pigs*
- 8:40 – 9:20 am                  Eckhard Wolf, Germany  
*Genetically engineered pigs for diabetes research*
- 9:20 – 10:00 am                Peter Humphries, Ireland  
*Validation of Approaches to Molecular Therapy in RNAi-induced Murine Retinopathies*
- 10:00 – 10:30 am**              **Tea/Coffee – Mountain Deck**
- SESSION 9**                      **Session Chair – Stoyan Petkov, University of Copenhagen**
- 10:30 – 11:15 am                David Ayares, Revivicor  
Pigs for xenotransplantation
- 11:15 – 12:00 pm                Heiner Niemann, Germany  
*Production and characterization of multi-transgenic pigs for Xenotransplantation*
- 12:00 – 4:00 pm**              **Lunch/Free Time – Garden Deck**
- 4:00 – 5:30 pm**                **POSTER SESSION II - Mountain Room**
- 6:00 pm**                         **Dinner - Garden Deck**
- SESSION 10**                    **Session Chair – Bruce Whitelaw, Roslin Institute**
- 8:00 – 8:45                        Tim Doran, C.S.I.R.O., Australia  
*RNAi transgenes for disease resistance and modulation of production traits in chickens*
- 8:45 – 9:30 pm                  Robert Etches, Crystal Biosciences  
*Closing talk - What the future may hold*
- 9:30 – 10:00 pm**              **General Discussion**

## **Friday, August 21**

**7:00 – 8:00 am          Breakfast – Granhall**

### **U.S.-FDA/CVM Workshop on the Regulation of rDNA Constructs in Genetically Engineered Animals**

8:30 - 8:45 am          Introduction and Welcome (Jim Murray)

8:45 - 9:30 am          Overview of FDA's regulatory authority, statutes, regulations, and overview of Guidance (Larisa Rudenko)

9:30 - 9:45 am          Enforcement Discretion (Barry Hooberman)

9:45 - 10:15 am        Regulation of risks arising from the rDNA constructs and their incorporation into GE animals (Jeff Jones)

**10:15-10:30 am        Tea/Coffee – Mountain Deck**

10:30 - 10:45 am       Durability of genotypic and phenotypic changes in GE animals (Jay Cormier)

10:45 -11:05 am       Phenotypic characterization of GE animals; addressing risks to the health of the GE animal (Harlan Howard)

11:05 -11:25 am       FoodSafety Assessments (Kevin Greenlees/Kathleen Jones)

11:25 -11:45 am       Environmental Assessment (Eric Silberhorn)

11:45 - 12:00 am       Validating Claims (Evgenyj Evdokimov)

**12:00 - 12:30 pm       Question and Answers**

**12:30 - 1:30 pm       Lunch - Garden Deck**

**1:30 - 3:00 pm**          Panel Discussion  
Panelists: Jim Murray; Heiner Niemann; Bruce Whitelaw; Alison van Eenennaam.

## **Saturday, August 22**

**7:00 – 8:00 am          Breakfast – Granhall**

**8:00 am - ongoing      Shuttles depart for Reno and Davis**