

IMGC Workshop
October 18-19, 2010
UC Davis

Mammary Gland Biology and the Art and Science of RNA Sequencing

Oct 18, 2010

8:00 – 8:30 a.m. Opening Talk

8:30 – 9:15 Milk Composition

Major and minor components of milk: variation across species

Ian Mather, U Maryland

9:15 – 10:00 Developmental Anatomy, Histology

The mammary gland in the cow, pig, rodent and human

Russ Hovey, UC Davis

10:15 – 11:15 Cell Biology of Milk Secretion

Ian Mather, U Maryland

11:15 – 12:15 Milk Lipid Synthesis Informatic and histologic approaches

Peggy Neville, UC Denver

2:00 – 5:00 Laboratory

– Dissection of Cow Udder

– Biopsy of Cow Udder

Oct 19, 2010

8:30 – 9:00 a.m. Opening Talk

9:00 – 9:45 Hormonal Regulation Mammary development and milk secretion

Russ Hovey, UC Davis

9:45 – 10:30 Milk Composition and Mammary Evolution

Danielle Lemay, UC Davis

10:45 – 11:00 Milk Components and nutritional and bioactive significance

Bruce German, UC Davis

11:00 – 12:00 Special Guest Lecture Breast cancer and Mammary Biology

Sandy Borowski, UC Davis

2:00 – 6:00 p.m.

Introduction and Overview of RNA Sequencing

JF Medrano, UC Davis

RNA Extraction and Making Sequencing Libraries

Alma Islas, UC Davis

Sequencing and Data Pre-Processing
Charlie Nicolet, UCD Genome Center

Data Management and Analysis with Publically Available Software
Dawei Lin, UCD Genome Center

Data Analysis with CLC Biology Software
Gonzalo Rincon, UC Davis

RNA Sequencing and Bacterial Sequencing Applications
Gonzalo Rincon & David Sela, UC Davis

Conclusion
JF Medrano, UC Davis