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