**Agenda**

**Mini-BIOMAN 2016: Stem Cells in a Regulated Environment**

July 19-21, 2016

Alamance Community College, Graham, North Carolina

Hosted by: Professor Bill Woodruff, Co-Principal Investigator NBC2

|  |  |  |
| --- | --- | --- |
| **Day 1****Tuesday****July 19** | 7:00-8:00 AM | Breakfast at hotelMeet in lobby for transportation to Alamance Community College (ACC) |
|  | 8:15 AM | Welcome and Conference Overview* Introductions
* Information on NBC2 — Dr. Maggie Bryans, Principal Investigator NBC2
* Review agenda
 |
|  | 8:30 AM | Lecture 1: Overview * History: "What are Stem Cells"
* Current technology and applications
* Looking to the future
 |
|  | 9:30 AM | Lecture 2 : Stem Cells in the Regulated Environment* Current state of the industry
* What does "Stem Cell Production" mean?
* Overview of mESC culture and differentiation
 |
|  | 10:15 AM | Break  |
|  | 10:30 AM | Hands-on Lab: mESC Culture and Differentiation: * Analysis of pluripotent mESC
* Transfer of embryoid bodies (EB)
* Initiation of differentiation
 |
|  | 12:00 PM | Lunch — Presentation by BIFP Fellow Tandeka Boko |
|  | 1:30 PM | Lecture 3: Overview of Mouse Myoblast (C2C12) Cell DifferentiationLecture 4: Clean Room GowningHands-on Lab: Mouse Myoblast Culture and Differentiation* Gowning
* Subculture C2C12
 |
|  | 4:30 PM | AdjournReturn to hotel |
| **Day 2****Wednesday****July 20** | 7:00-8:00 AM | Breakfast at hotelMeet in lobby for transportation to ACC |
|  | 8:30 AM | Lecture 5: Regenerative Medicine and Stem Cell Therapies |
|  | 10:00 AM | Break |
|  | 10:15 AM | Hands-on Lab: Subculture E14 mESC * Subculture into non-binding petri dish
* Form embryoid bodies
 |
|   | 12:00 PM | Lunch: Presentation by Bio-Rad Representative Sherri Andrews |
|  | 1:30 PM | Industry Tour: Wake Forest Institute for Regenerative Medicine*Transportation provided* |
|  | 5:00 PM  | AdjournReturn to hotel |
| **Day 3****Thursday****July 21** | 7:00-8:00 AM | Breakfast at hotelMeet in lobby for transportation to ACC |
|  | 8:30 AM | Lecture 6: Identity Analysis of Stem Cells and ProductsHands-on lab: Analysis of Pluripotent and Differentiated Cells* Immunofluorescence
* Alkaline phosphatase activity
 |
|  | 12:00 PM | Lunch  |
|  | 1:30 PM | Lecture 7: Group Discussion of Teaching MaterialsHands-on Lab: Continue analysis of mESC and C2C12 cells* Review work done on Tuesday and Wednesday for aseptic technique and changes
 |
|  | 4:00 PM | Adjourn |