**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

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| **Day 1**  **Tuesday**  **July 19** | 7:00-8:00 AM | | Breakfast at hotel  Meet 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 Differentiation  Lecture 4: Clean Room Gowning  Hands-on Lab: Mouse Myoblast Culture and Differentiation   * Gowning * Subculture C2C12 | |
|  | 4:30 PM | | Adjourn  Return to hotel | |
| **Day 2**  **Wednesday**  **July 20** | | 7:00-8:00 AM | | Breakfast at hotel  Meet 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 | | Adjourn  Return to hotel |
| **Day 3**  **Thursday**  **July 21** | | 7:00-8:00 AM | | Breakfast at hotel  Meet in lobby for transportation to ACC |
|  | | 8:30 AM | | Lecture 6: Identity Analysis of Stem Cells and Products  Hands-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 Materials  Hands-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 |