**Biomedical Explorations: Bench to Bedside**
**Summer Institute: July 15 – July 27, 2012**

| **Sunday, July 15, 2012** | **Keys Residential Housing check-in 2-4pm**  
**Evening 5pm-9pm**  
**Location: Biomedical Sciences Building**  
**van shuttle departs at 4:45pm; parking also available at building**  
• Welcome, introductions and dinner  
• Presentation: *Benchtop to Bedside Research* by Dr. Greg Schultz  
• Program overview  
• Visit HHMI Undergraduate Laboratory |
| **Monday, July 16, 2012** Stem Cells | **All day 8:30am-5:00pm**  
**Location: Biomedical Sciences Building Conference Room JG32 and HHMI Undergraduate Laboratory**  
• Campus computing orientation  
• HIPPA training/Intro to e-learning  
• Activity: Pipetting by Design (TfB)  
• Activity: Stem Cell Crossword Puzzle  
• Presentation: *Current Topics in Stem Cell Research* by Dr. Houda Darwiche  
• Activity: Science TakeOut – Stem Cells (TfB)  
• Web Activity: Create a Stem Cell Line/Webquest  
• TEDMED Talks: *Regenerative Medicine and Bioengineering* by Dr. Anthony Atala |
| **Tuesday, July 17, 2012** Genetics | **Morning 8:00am-9:00am**  
**Location: HPNP Auditorium**  
• Presentation in conjunction w/ Student Science Training Program: *Viruses – Friend or Foe?* By Dr. Grant McFadden  
**All day 9:30am-5:00pm**  
**Location: Biomedical Sciences Building Conference Room JG32 and HHMI Undergraduate Laboratory**  
• Activity: A Tree of Genetic Traits  
• Presentation: *Huntington’s Disease* by Dr. Aaron Rising (TfB)  
• Activity: Science TakeOut – Huntington’s Disease  
• Lab Experiment: Nature’s Dice – Genetic Screening  
• Presentation: *The Age of Cloning* by Dr. Houda Darwiche  
• Web Activity: Click and Clone (TfB)  
• Web Activity: NCBI BLAST and Disease Genes  
• Lab Experiment: pGLO Bacterial Transformation and Green Fluorescent Protein  
**Evening 7pm-9pm**  
**walking distance**  
**Location: Rhines Hall (Materials Science and Engineering)**  
• Share-A-Palooza – Best Practices |
| **Wednesday, July 18, 2012** DNA and PCR | **All day 8:30am-5:00pm**  
**Location: Biomedical Sciences Building Conference Room JG32 and HHMI Undergraduate Laboratory**  
• Action Research Session – Drs. Marianne and Lehman Barnes  
• Web Activity: Virtual PCR  
• Presentation: *The Age of Cloning* by Dr. Houda Darwiche  
• Activity: Click-n-Clone (TfB) |
| (lunch provided) | • Lunch Presentation: *Viral Quest* with Dr. Troy Sadler  
• Lab Experiment: PCR for GFP  
• Presentation: *A Tour of Human Genetics* by Dr. Peggy Wallace  
• Presentation: *UF Junior Honors Medical Program* Dr. Colin Sumners  
• Activity: PCR Dash (TfB)  
• Reflective Journaling: Prompt #1 |
| (dinner on own) |  |
|  | **Evening 7pm-9pm** |
|  | • Free! |

| Thursday, July 19, 2012 | All day 8:30am-5:00pm  
*Microarrays/Gene Chips*  
8:30am–5:00pm  
7:00pm–9:00pm  
Coffee in Atrium 8:15-9:00am  
(lunch on own)  
(dinner on own) | **Location:** Biomedical Sciences Building Conference Room JG32 and HHMI Undergraduate Laboratory  
• Action Research Session – Drs. Marianne and Lehman Barnes  
• Presentation: *Microarrays: From the basic sciences to clinical treatments and prognosis* by Dr. Kassidy Chauncey  
• Web Activity: Microarray Virtual Lab  
• Presentation: by Dr. Henry Baker  
• Presentation: *Classroom Simulations* by Dr. Charles Lawrence  
• Activity: DNA Chips – From Gene to Disease  
• Presentation: B2B 2011 Alumna Vanessa Lopez  
• Action Research Proposal Debrief/Brainstorm  
  |
|  | **Evening 7pm-9pm**  
  | **Location:** Biomedical Sciences Building  
  | • Action Research Work Session with Drs. Barnes and B2B Staff  
 |

| Friday, July 20, 2012 | All Day 8:30am-3:30pm  
*Proteins and Structural Biology*  
8:30am–3:30pm  
(lunch on own) | **Location:** Biomedical Sciences Building Conference Room JG32 and HHMI Undergraduate Laboratory  
• Action Research Session – Drs. Marianne and Lehman Barnes  
• Intro: Proteins and Structural Biology  
• Activity: Amino Acid Starter Kit/Water Kit (TfB)  
• Lab Experiment: Crystallization of Lysozyme  
• Discussion: *The Ethics of Biomedical Research* by Dr. Ray Moseley  
  |

| Saturday, July 21, 2012 | No scheduled program activities. If in town, consider a visit to the UF Cultural Plaza (Florida Museum of Natural History and Harn Art Museum) |
| Sunday, July 22, 2012 | No scheduled program activities. If in town, consider a visit to the UF Cultural Plaza (Florida Museum of Natural History and Harn Art Museum) |
| Monday, July 23, 2012 | All day: 8:30am-5:00pm  
*Location:* Biomedical Sciences Building Conference Room JG32 and HHMI Undergraduate Laboratory  
• Presentation: *An Overview of Clinical Research* by Dr. Marian Limacher  
• Presentation: *Curing Type II Diabetes* by Dr. Bryon Petersen  
• Lab Tours  
• Patient Simulators: STAN and HARVEY  
• Presentation: *Glycogen Storage Disease – Lessons from a Rare Disease* by Dr. David Weinstein  
  |
|  | **Evening 5:15-7:15pm**  
  | **Location:** Biomedical Sciences Building  
  | • Working Dinner – Action Research Proposals Brainstorming Session  
<p>|</p>
<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Activities</th>
</tr>
</thead>
</table>
| Tuesday, July 24, 2012 | All day: 9:00am-5:00pm | **please drive self/carpool to Alachua**  
Location: Center of Excellence in Regenerative Health Biotechnology, Alachua  
- Please see attached schedule for details |
|                     | 9:00am-5:00pm | **dinner on own**                                                           |
|                     | 7:00pm-9:00pm | **(lunch provided)**                                                         |
| Wednesday, July 25, 2012 | Morning: 9:00am-12:00pm | **please drive self/carpool to Alachua**  
Location: Center of Excellence in Regenerative Health Biotechnology, Alachua  
- Please see attached schedule for details |
|                     | 9:00am – 12:00pm | **lunch on own**                                                            |
|                     | 3:00pm-8:00pm | **dinner provided**                                                          |
| Thursday, July 26, 2012 | Morning 8:30am-1pm | **Biomedical Sciences Building Conference Room JG32 and HHMI Undergraduate Laboratory**  
- Program Evaluation with Dr. Lou Ann Cooper  
- Classroom Extensions: CPET Teacher resources, simulations and online journaling  
- Reflective Journaling: Prompt 3  
- Working on action research proposals with peer and instructors’ support |
|                     | 8:30am – 4:00pm | **lunch on own**                                                             |
|                     | 5:30 – 7:30pm | **dinner provided**                                                          |
|                     | Coffee in Atrium 8:15-9:00am | **Optional 1pm-4pm**                                                          |
| Friday, July 27, 2012 | All day 8:30am-3pm | **TBA**                                                                     |
|                     | 8:30am –3:00pm | **lunch provided**                                                           |
|                     | Coffee available | **Presentation of Action Proposals**                                          |
|                     | | **Awards Ceremony**                                                         |
|                     | | **Program closing**                                                        |