Program personnel:

Juanita Sharpe, MBRS-RISE Program Program Director
Warren Sherman, MBRS Programs Coordinator
Mark Erhart, TILT Director

Lucy Rong He, Training Project I Leader
Batool Al-fraihat, Training Project II Leader
Kevin Swier, Training Project III Leader
Chris Botanga, Training Project IV Leader

Andrew Maselli, Workshop Coordinator
Juanita Sharpe, Workshop Coordinator
Charlene Snelling, Library Workshop Coordinator
Jeff Fortman, Workshop Coordinator
Tina Perkins, TILT administrative and technical aide

Important Dates

May 31 (T)   TILT program begins
May 31 – June 29 (W)  Training projects I and II
June 30 (R)   Written Reports due from Training projects I and II
June 30 (R) – July 28 (R)  Training projects III and IV
July 4 (M)   Holiday (no sessions)
July 29    Powerpoint presentations for Training projects III and IV; TILT program ends

Training Project Guidelines

<table>
<thead>
<tr>
<th>Training Project</th>
<th>Leader</th>
<th>Dates</th>
<th>Project Name</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>He</td>
<td>5/31 – 6/29</td>
<td>SCI-216</td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>Al-fraihat</td>
<td>5/31 – 6/29</td>
<td>SCI-327</td>
<td></td>
</tr>
<tr>
<td>III</td>
<td>Swier</td>
<td>6/30 – 7/29</td>
<td>SCI-327</td>
<td></td>
</tr>
<tr>
<td>IV</td>
<td>Botanga</td>
<td>6/30 – 7/29</td>
<td>SCI-216</td>
<td></td>
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</table>

1. Project descriptions (authored by Faculty) should be posted on Moodle prior to the project start date.

2. Project Leader presentations are scheduled for the first day of the session (May 31 and June 30) at 1:00 PM. Presentations (preferably PowerPoint) should be 15 –20 minutes with time for questions. Students will cast written ballots to choose
project of their choice. This year, there will be five students assigned to each of the two concurrent projects.

3. Sessions are M – R; begin promptly at 1:00 PM and end before 5:00 PM.

4. Leaders are solely responsible for ensuring that students are engaged in meaningful work from 1-5 every afternoon.

5. Fridays may be used for off-campus assignments only if an objective assessment of work performance is applied. Assignments should take an estimated 3 – 4 hours to complete. Students will be paid for 4 hours of work only if the Project Leader receives assignment result at the specified time.

6. Leaders are primarily responsible for ensuring that final paper/presentation is well-defined and that weekly progress is being made toward the final paper/presentation. Adequate morning time will be set aside for proofing and editing of paper/presentation.

7. No equipment can be purchased for TILT training projects. If special equipment needs arise for projects, please work with ME to arrange for equipment.

8. Leaders for TP I and II are primarily responsible for approving final papers from their groups. We do not assign letter grades, but papers deemed to be below the standards of the program will be declared unacceptable and there will be consequences for the student.

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**Morning Guidelines**

<table>
<thead>
<tr>
<th>Type of morning activity</th>
<th>Typical duration</th>
<th>Faculty involved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technique Workshop</td>
<td>1 – 3 consecutive mornings; 2-3 hours per morning</td>
<td>Primary faculty member with 1-2 support persons (Perkins, Erhart)</td>
</tr>
<tr>
<td>Professional Skills Workshop</td>
<td>1- 2 consecutive mornings; 1-2 hours per morning</td>
<td>Primary faculty member, alone or with one additional person</td>
</tr>
<tr>
<td>Careers Workshop</td>
<td>1 morning (usually Friday); 1-2 hours</td>
<td>Usually guest speaker; all faculty invited to attend</td>
</tr>
<tr>
<td>Training Project Paper/presentation Preparation</td>
<td>As needed</td>
<td>Editing, consulting by Perkins, Erhart</td>
</tr>
</tbody>
</table>
Specific examples of morning activities:

Technique Workshops:

• DNA isolation (Erhart, Perkins)
• Analysis of DNA (Erhart, Perkins)
• PCR (Erhart, Perkins)
• Safety (Maselli, Erhart)
• Using rodents in biomedical research (Fortman, Erhart)
• Microscopy (Maselli, Perkins)
• Protein analysis (?)
• Instrumentation (?)
• NMR, GC-MS, Fluorescence (?)

Skills Workshops:

• Using on-line databases (Snelling)
• Powerpoint (Erhart)
• Photoshop (Maselli,)
• Digital Imaging (Maselli)
• Learning how to read a scientific article (Erhart, Perkins)
• Science ethics - Responsible Conduct of Research (Sharpe)
• Using off-campus library resources (Snelling)

Careers Workshops

• Guest seminars and career discussions by former TILT students (Friday mornings)
• PowerPoint presentation on a chosen biomedical career

1. Techniques Workshops are planned and implemented by a primary person with support from other staff

2. Library-based skills workshops will be designed and implemented by C. Snelling (Tuesday mornings, 9 – 11 AM)

3. Visits by guests and other career-related events will be scheduled on Friday mornings, when possible.

4. The schedule is fluid, whenever possible.