Learning Assessment Worksheet

1. Please describe your program’s specific learning goals (list as many as appropriate; use 1-2 sentences to describe each):

   1. Design a well-designed research study in human or animal models
   2. Proficient in current practical and theoretical aspects of the field.
   3. Adept at reading primary literature in a critical manner
   4. Experience in writing and reviewing grant proposals
   5. Aware of issues and best practices in the responsible conduct of research
   6. Proficient in presenting scientific data in a public forum, orally and in writing
   7. Able to apply cultural and population diversity in clinical research design
   8. Able to conduct original and significant research
   9. Able to build a multidisciplinary team that matches the objectives of the research problem

2. Does your program have a process in place to assess whether the students meet the defined learning goals? If so, please describe this learning assessment process, including who is involved, frequency of the assessment, and how the information is used:

   Our learning assessment comprises of coursework with exams primarily in the first year; research in progress presentations; bi-annual progress reports submitted by the student, progress statements from the mentors, and meetings with program advisors to discuss student progress. These meetings may occur more frequently depending on the students’ needs. An advanced certificate is awarded once the student has passed all of the first year core curriculum. The final oral dissertation and written thesis assess the candidate’s overall qualifications for the MS degree, upon approval by the MS Thesis Chair.

3. Does your program currently systematically collect, store, and/or use for learning assessment at the program level any of the following outcome measures:

<table>
<thead>
<tr>
<th></th>
<th>Collect systematically (Y/N)</th>
<th>Electronically or paper stored (E/P)</th>
<th>Use for learning assessment (Y/N)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Direct measures:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Results of exams/tests for individual courses</td>
<td>Y</td>
<td>both</td>
<td>Y</td>
</tr>
<tr>
<td>• Results of Admission to Candidacy Exam</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>• Quality of dissertations (eg, by sampling identify trends)</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>• Number of student publications and abstracts</td>
<td>Y</td>
<td>E</td>
<td>Y</td>
</tr>
<tr>
<td>• Quality of students’ presentation skills</td>
<td>Y</td>
<td>E</td>
<td>Y</td>
</tr>
</tbody>
</table>
Clinical and Translational Investigation Program

- Program metrics (e.g., time to degree, completion rates) | Y | E | Y
- Other (please describe):
  - Honors and awards | Y | Y | Y
  - IND or IDES Patents and Inventions

Indirect measures:
- Student feedback
  - Student surveys | Y | E | Y
  - Focus groups | N | N/A | N
  - Exit interviews | Y | E | Y
- Alumni survey | Y | E | Y
- Career tracking | Y | E | Y
- Other (please describe):
  - Employment sector
  - Engagement in research
  - Engagement in research by type of research (Clinical and/or translational, multi-disciplinary, cross-institutional, team research)
  - Continued contact with Mentor(s)
  - Berk Mentorship Effectiveness Survey

4. Does your program regularly review and adjust (1) the program’s specific learning goals, and/or (2) the manner in which outcomes are measured and how the information is used? If so, please describe how this is done:

In an effort to prepare the next generation of investigators to conduct clinical and translational research, CTSA training programs such as ours at Weill Cornell have taken the lead to create an educational environment that will define the discipline of clinical and translational science. The overall goal is to create competency-based educational curricula for training clinician-scientists in clinical and translational science.

The National Center for Advancing Clinical Translational Sciences (NCATS), in collaboration with the CTSA Education and Career Development Key Function Committee, formed the Education Core Competency Work Group to define the training standards for core competencies in clinical and translational research. The work group’s final recommendations for core competencies include 14 thematic areas that should shape the training experiences of junior investigators by defining the skills,
attributes, and knowledge that can be shared across multidisciplinary teams of clinician-scientists.

Our learning goals were developed by the National Center for Advancing Clinical Translational Science and the Core competencies for Clinical and Translational Research. Our program leaders review bi-annual progress reports submitted by students along with reports from each trainees’ program advisor. We review student feedback and use course evaluations to allow curriculum changes and planning with core faculty. Trainees and alumni outcomes are collected via a web-based survey, bi-annually and annually respectively. Outcomes data are analyzed, reported on and presented to the NIH as well as to our External Advisory Board.