Trainee Career Outcomes Tracking: Postdoctoral Fellows at MD Anderson as a Case Study

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Summary
Cancer Research Training and Education Coordination components or CRTECs (previously Cancer Research Career Enhancement or CRCEs) are responsible for reporting overall outcomes of research education and training programs at NCI-designated cancer centers. This includes tracking the career trajectories of alumni over multiple years, as they progress professionally. This is a highly time-consuming and labor-intensive process. This effort includes tracking the CRTECs’ journeys with, as they balance meeting many other mandates, often with limited resources. We report on our strategy of leveraging institutional resources available at The University of Texas MD Anderson Cancer Center in order to track our postdoc alumni at one-, five- and ten-year timepoints after they complete their training. Using a combination of approaches ranging from alumni surveys, to social media scraping, to cyber sleuthing, we located a combination of approaches ranging from alumni surveys, to social media scraping, to cyber sleuthing, we located.

Research Trainee Populations
As of Sept. 1, 2022

<table>
<thead>
<tr>
<th>Career/Stage</th>
<th>Description</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduate Students (GSBS)</td>
<td>Students from nine PhD and one MD program who have joined laboratories of MD Anderson faculty members</td>
<td>258</td>
</tr>
<tr>
<td>Graduate Students (Non-GSBS)</td>
<td>Students from PhD and masters programs of UTSPH, BCM, Rice, UT, Houston/TMC institutions, and others</td>
<td>111</td>
</tr>
<tr>
<td>Postdoctoral Fellows</td>
<td>In both institutional training programs (i.e., extramural training grants, internal funding) and practices of individual faculty</td>
<td>461</td>
</tr>
<tr>
<td>GME Trainees on T32a</td>
<td>Residents or clinical fellows in research years of graduate medical education program who are supported by T32 grants</td>
<td>22</td>
</tr>
</tbody>
</table>

Success Rates for Locating Former Postdocs

- **One Year Out**
  - 2011: 101 / 197 (51.3%)
  - 2012: 174 / 318 (54.7%)
  - 2013: 190 / 312 (60.9%)
  - 2014: 150 / 191 (78.5%)
  - 2015: 145 / 227 (63.9%)
  - 2016: 114 / 221 (51.8%)
  - Total: 841 / 1,466 (57.4%)

- **Five Years Out**
  - 2011: 100 / 197 (50.8%)
  - 2012: 182 / 318 (57.2%)
  - 2013: 182 / 312 (58.3%)
  - 2014: 114 / 191 (59.7%)
  - 2015: 146 / 227 (64.3%)
  - 2016: 117 / 221 (52.9%)
  - Total: 641 / 1,466 (57.4%)

Ten Years Out

- 2011: 72 / 151 (47.7%)
- 2012: 96 / 186 (52.7%)
- 2013: 119 / 188 (63.8%)
- 2014: 100 / 197 (51.0%)
- 2015: 126 / 312 (40.3%)
- 2016: 138 / 312 (43.9%)
- Total: 414 / 827 (50.1%)

Data Elements Collected

Demographics
- Sex
- Residency
- URM status
- Doctoral degree and institution
- Length of postdoc

Career Outcomes
- Job title
- Employer
- City
- State/Country
- One-, five-, and ten-year timepoints

Coding Career Outcomes

Job Sector
- Academic Government
- For profit
- Other

Career Type
- Primarily research
- Primarily teaching
- Science-related
- Not related to science
- Further training or education

Job Function
- Twenty-five different job functions, including:
  - Faculty titles
  - Statisticians/technical directors
  - Postdoctoral training
  - Healthcare providers
  - Clinical research
  - Business-related
  - Analytics
  - Legal and regulatory
  - Further education and training

Extramural Funding
As of Sept. 1, 2022

<table>
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<th>Funding Source</th>
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<tr>
<td>T32 with other institutions</td>
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<tr>
<td>T32 equivalent training grants with participating MD Anderson faculty</td>
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<tr>
<td>Research experience R25s</td>
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Summary of Career Outcomes of Former Postdocs

- **One Year Out**
  - Academics: 343 (17.6%)
  - Gov’t: 15 (1.1%)
  - For Profit: 130 (7.8%)
  - Non-Profit: 6 (0.4%)
  - Other: -
  - Total: 794

- **Five Years Out**
  - Academics: 374 (15.3%)
  - Gov’t: 6 (0.2%)
  - For Profit: 76 (3.2%)
  - Non-Profit: 4 (0.2%)
  - Other: -
  - Total: 962

- **Ten Years Out**
  - Academics: 197 (7.3%)
  - Gov’t: 5 (0.2%)
  - For Profit: 85 (3.0%)
  - Non-Profit: 2 (0.1%)
  - Other: -
  - Total: 251

Counts above reflect preliminary results. We are in the process of reviewing and reconciling counts against source data. Preliminary counts of jobs vs. job type for one-, five-, and ten-year timepoints have been completed. At least 67.8% of former postdocs who were found are employed in one of these three job functions: Faculty (28.3-39.6%), Scientist, technical director or group leader (21.5-28.5%) and Healthcare provider (10.6-13.8%). Former MD Anderson postdocs who pursue additional postdoctoral training falls from 220 (17.2% of those found) to 41 (4.9%) to 10 (2.4%) at the one-, five-, and ten-year timepoints.

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