Informatics Practicums and Internships – Experience of OHSU

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“Informatics is not a spectator sport”

Randolph Miller, MD
Vanderbilt University
Outline

• Brief overview of OHSU informatics graduate program to set context
• OHSU practicum and internship programs
• Role of ONC funding (and challenges for its ending)
• Other challenges
## Overview of programs

<table>
<thead>
<tr>
<th>Masters</th>
<th>PhD</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Knowledge Base:</td>
<td>- Knowledge Base</td>
</tr>
<tr>
<td></td>
<td>- Advanced Research Methods</td>
</tr>
<tr>
<td></td>
<td>- Biostatistics</td>
</tr>
<tr>
<td>- Clinical Informatics</td>
<td>- Cognate</td>
</tr>
<tr>
<td>- Bioinformatics</td>
<td>- Doctoral Symposium</td>
</tr>
<tr>
<td>- Health Information Management</td>
<td>- Mentored Teaching</td>
</tr>
<tr>
<td>- Thesis (MS) or Capstone (MBI)</td>
<td>- Dissertation</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Graduate Certificate</th>
<th>10x10</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Clinical Informatics</td>
<td></td>
</tr>
<tr>
<td>- Health Information Management</td>
<td></td>
</tr>
</tbody>
</table>

- OHSU is on academic quarter system – 4 equal quarters
- MBI capstone can be a project or an internship
Enrollment, alumni, and current locations

### BMI Current Enrollment (Active & LOA) by Degree & Track

<table>
<thead>
<tr>
<th>Degree</th>
<th>BCB</th>
<th>CI</th>
<th>HIM</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCRT</td>
<td>0</td>
<td>85</td>
<td>26</td>
<td>111</td>
<td>53%</td>
</tr>
<tr>
<td>MBI</td>
<td>3</td>
<td>55</td>
<td>7</td>
<td>65</td>
<td>31%</td>
</tr>
<tr>
<td>MS</td>
<td>11</td>
<td>6</td>
<td>0</td>
<td>17</td>
<td>8%</td>
</tr>
<tr>
<td>PHD</td>
<td>6</td>
<td>10</td>
<td>0</td>
<td>16</td>
<td>8%</td>
</tr>
</tbody>
</table>

### BMI Graduates to Date by Degree & Track

<table>
<thead>
<tr>
<th>Degree</th>
<th>BCB</th>
<th>CI</th>
<th>HIM</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCRT</td>
<td>0</td>
<td>279</td>
<td>32</td>
<td>311</td>
<td>60%</td>
</tr>
<tr>
<td>MBI</td>
<td>4</td>
<td>119</td>
<td>0</td>
<td>123</td>
<td>24%</td>
</tr>
<tr>
<td>MS</td>
<td>6</td>
<td>65</td>
<td>0</td>
<td>71</td>
<td>14%</td>
</tr>
<tr>
<td>PHD</td>
<td>4</td>
<td>8</td>
<td>0</td>
<td>12</td>
<td>2%</td>
</tr>
</tbody>
</table>

[Map of the United States showing data points]
Details of practicum and internship programs

• Graduate Certificate
  – 24 credits (8 courses)
  – Practicum (3 credits)
    • Duration 1 quarter
    • Students have site and faculty mentors
    • Students log hours
    • Evaluations completed bi-weekly
    • Final evaluation
    • Final 4-6 page write-up

• Master’s degrees
  – 52/60 credits (MBI/MS)
  – Internship (6 credits) – same as practicum except
    • Duration 2 quarters
    • Another faculty serves as internship course leader
    • Students and course leader faculty meet (local or remote) at beginning, middle, and end of each quarter
    • Students make public (local or remote) presentation upon completion
    • Final 10-15 page write-up
Practicum/internship program enhanced by UBT funding

• Previously elective, decided to make a requirement in our proposal for ONC University-Based Training (UBT) grant

• Grant funding allowed
  – Hiring of Internship Coordinator
  – Development of database of opportunities and completed projects
  – Faculty time for mentoring and oversight
  – Use of E-value system already used by medical school
Practicum/internship process

• Student ultimately responsible for setting up – with help from internship coordinator and faculty
  – Can be in healthcare delivery organization, industry, professional association, public health agency, etc.
  – Student completes project agreement

• OHSU and organization complete affiliation agreement (if not already in place)

• Student monitored by internship coordinator and faculty – from start to end
Challenges

• Some organizations wanted to make unacceptable changes or did not want to sign affiliation agreement
• After start, project found to not be a fit for student
• Organizations had unrealistic expectations
  – Advised not to put students on mission-critical projects
  – Usually unable to meet acute needs of an organization
• UBT grant ending
  – We are committed to continuing program