Medical Physics Education Across Continents
The Umass Lowell and Heidelberg University Coordination Effort

Introduction

Why is Such Coordination Needed?
- Research collaboration between institutions
  - Research practicum for students abroad
- Opportunity for students to take courses locally
  - Both didactic courses and clinical training
- Avoid duplication of requirements
  - Will the home university accept the courses from the host institution?
  - Will the accreditation agency accept these courses?
  - Will regulators accept the diploma?
- Allow graduates to practice in either country

Elements of Coordination

Memorandum of Understanding - MOU
- General agreement between institutions at the Chancellor/Provost level for academic and research collaboration
- Agreement on student exchange terms, including funding, number of students, language requirements, degrees, time lines, etc
- Particulars to Med Phys may be an addendum
- Legal document – may take months to prepare
Elements of Coordination

Medical Physics course comparisons

- Establish course equivalences
  - Equivalent versus complementary coverage
  - May be several overlapping courses
    - One 3-credit course vs three 1-credit courses
    - Partial versus full coverages
- Identify CAMPEP-required topical coverages
- List of CAMPEP core versus elective courses
  - “Safe list”

Course Comparison

<table>
<thead>
<tr>
<th>Course Comparison of courses offered by Heidelberg University and the University of Massachusetts Lowell in their degree program leading to MSc or PhD in Medical Physics</th>
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</thead>
<tbody>
<tr>
<td>Table: Courses and credits that have substantially similar or overlapping content</td>
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<tr>
<td>Subject Area</td>
</tr>
<tr>
<td>MCPEP Core Category 1</td>
</tr>
<tr>
<td>Radiation Therapy Physics</td>
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<tr>
<td>Radiation Physics</td>
</tr>
<tr>
<td>Medical Imaging</td>
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<tr>
<td>Physics of Imaging</td>
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<tr>
<td>Therapeutic Radiology</td>
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<tr>
<td>Additional Radiology</td>
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<tr>
<td>Total Credits</td>
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</table>
Learning with Purpose

CAMPEP accreditation

- Extend accreditation to equivalent courses at Heidelberg
  - Handle as though they are taught at UML
- Establish ABR acceptance of courses

Conclusions

- Painstaking but rewarding process
- Cross-equivalency
  - Relatively easy to establish at the University level
  - Difficult to establish at CAMPEP level
  - (Hopefully) automatic at ABR level
- Elements and steps that are similar across all such cooperation
  - MOU
  - CAMPEP acceptance criteria
- Course equivalencies are unique to each university