Online Tool to Facilitate Student/Physician Mentoring

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Disclosures:

I do not have conflicts of interest to disclose for this learning session.
Overview

1. Tool conception and development
2. Identifying and utilizing existing institutional resources
3. Constructing and tailoring an interface
4. Promoting database usage
5. Evaluating utility
6. Limitations and improvements
7. Database maintenance
8. Future directions
Tool Conception and Development

- Student driven initiative
- Partnership between students and Office of Medical Education to develop database
- Needs analysis: surveys and focus groups
  - Who is the tool for?
  - From whom do you need input?
  - Does what you need exist in some form at your institution?
  - Do you need to purchase a system? Create a system?
  - What do you anticipate is the biggest challenge?
Needs Analysis: Goals and Objectives

Goal
- ISMMS students will have access to a diverse and large group of excellent faculty mentors

Objectives
- Create an online database of faculty mentors
  - Numerous faculty
  - Diverse characteristics
  - Mentoring-specific information
  - Online and Searchable
  - Easy to make contact
Stakeholders: Faculty Recruitment

- Questionnaire assessing student and faculty mentorship needs and preferences
Building the Database

► Utilization of existing institutional resources
  – eRAP Rapid Database Generator
  – Integration with other institutional clinical systems

► Faculty Recruitment
  – Teaching Faculty
  – Program Directors
  – Student Organization Advisors
  – Departmental Rec’s
  – Peer recommendations

► Delivery
  – Electronic Resource Application portal via Blackboard + Learn System
## Database Delivery

**Search Criteria**

<table>
<thead>
<tr>
<th>Department</th>
<th>--All Departments--</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current State</td>
<td>--All States--</td>
</tr>
<tr>
<td>Residency State</td>
<td>--All States--</td>
</tr>
<tr>
<td>Alumni of ISMMS</td>
<td>--Select--</td>
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</tbody>
</table>

**Type of Work**

- Clinical In-patient
- Clinical Out-patient
- Clinical Procedural / Surgical
- Research: Basic Science
- Research: Clinical / Translational
- Research: Health Services / Public Health
- Health IT
- Hospital Safety and Quality
- Administration
- Education
- Advocacy
- Community Health
- Global Health
- Other

**Mentoring Opportunities**

- Career Advising
- General Mentoring & Relationship Building
- Residency Application
- Research
- Shadowing for Pre-Clinical Students
- Other

**Personal Interests**

- Mentoring students with disabilities
- Mentoring underrepresented minority students
- Mentoring LGBTQ+ students
- Part-time careers
- Race/Ethnicity
- Religion and spirituality in medicine
- Women in medicine
- Work/Life balance
- Other

**Residency Mentoring (Alumni willing to host/advise)**

- Available to Host
- Residency Advising

[Search] [Cancel]
Database Delivery

Search → Medical Education

<table>
<thead>
<tr>
<th>First Name</th>
<th>Last Name</th>
<th>Department</th>
<th>Academic Appointment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anu</td>
<td>Anandaraja</td>
<td>Medical Education</td>
<td>Assistant Professor</td>
</tr>
<tr>
<td>Rachael</td>
<td>Bedard</td>
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<tr>
<td>Robert</td>
<td>Fallar</td>
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<tr>
<td>Suzanne</td>
<td>Garfinkle</td>
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<tr>
<td>Peter</td>
<td>Gliatto</td>
<td>Medical Education</td>
<td>Associate Professor</td>
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<tr>
<td>Reena</td>
<td>Karani</td>
<td>Medical Education</td>
<td>Professor</td>
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<tr>
<td>David</td>
<td>Muller</td>
<td>Medical Education</td>
<td>Professor</td>
</tr>
<tr>
<td>Ann-Gel</td>
<td>Palermo</td>
<td>Medical Education</td>
<td>Assistant Professor</td>
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# Database Delivery

<table>
<thead>
<tr>
<th>Mentor Profile</th>
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<tbody>
<tr>
<td><strong>First Name</strong></td>
</tr>
<tr>
<td><strong>Last Name</strong></td>
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<tr>
<td><strong>Relevant Degrees</strong></td>
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<td><strong>Other Degrees</strong></td>
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<td><strong>E-mail</strong></td>
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<td><strong>Other Appoint</strong></td>
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<tr>
<td><strong>Primary Dept</strong></td>
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<tr>
<td><strong>Primary Site Affiliation</strong></td>
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<tr>
<td><strong>Other Site Affiliation</strong></td>
</tr>
<tr>
<td><strong>Non MSHS Affil</strong></td>
</tr>
<tr>
<td><strong>City</strong></td>
</tr>
<tr>
<td><strong>State</strong></td>
</tr>
<tr>
<td><strong>Icahn School Alum</strong></td>
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<tr>
<td><strong>Grad Year</strong></td>
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<tr>
<td><strong>School Attended</strong></td>
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<tr>
<td><strong>Residency Training</strong></td>
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<td><strong>Years in Practice</strong></td>
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<td><strong>Other Years in Practice</strong></td>
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<tr>
<td><strong>Additional Training</strong></td>
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<td><strong>Medical Center Residency</strong></td>
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<td><strong>City</strong></td>
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<tr>
<td><strong>Personal Interests</strong></td>
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<td><strong>Other Interests</strong></td>
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</table>
Database Faculty Characteristics

- 224 faculty members
- Representing 50 specialties and subspecialties
- Mentor Characteristics
  - 53% male, 47% female
  - 90% engaged in clinical medicine
  - 45% engaged in research

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Mentors</th>
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<tr>
<td>Medicine</td>
<td>67</td>
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<tr>
<td>Geriatrics</td>
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<tr>
<td>Pediatrics</td>
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<tr>
<td>Psychiatry</td>
<td>29</td>
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<tr>
<td>Surgery</td>
<td>22</td>
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<tr>
<td>EM</td>
<td>16</td>
</tr>
<tr>
<td>Radiology</td>
<td>11</td>
</tr>
<tr>
<td>OB/GYN</td>
<td>10</td>
</tr>
<tr>
<td>Anesthesia</td>
<td>10</td>
</tr>
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</table>
Assessing Usage and Utility

- Surveyed medical students in all years
  - Two years following launch of database
  - Response rate = 62%

- Assessed:
  - Database utilization
  - Perceived usefulness
  - Attributable mentoring activities
Assessing Usage: Results

- 62% response rate
- Usage:
  - Total: 54.2%
  - First year respondents: 70%
  - Usage by program:

<table>
<thead>
<tr>
<th>Program</th>
<th>Usage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MD only</td>
<td>57.90%</td>
</tr>
<tr>
<td>MD/MPH</td>
<td>57.10%</td>
</tr>
<tr>
<td>MD/MS in clinical research</td>
<td>41.20%</td>
</tr>
<tr>
<td>MD/PhD</td>
<td>16.70%</td>
</tr>
</tbody>
</table>
Assessing Utility: Results

Experiences Resulting from Database Usage (Number)

- Clinical/Shadowing: 82
- Research: 39
- Career: 38
- Residency: 17
- Personal: 8
Assessing Utility: Results

Student Opinions on Chart Utility

Ease of Use: 70%
Comfort in Contact: 60%
Helpful: 50%
Represents Specialties: 40%
Sufficient Info: 40%
Mentor Response: 30%
Sufficient Mentors: 20%
Limitations

Reasons for Non-Use of Database

- Utilized other avenues: 29%
- No time: 19%
- Usability issues: 13%
- Not seeking mentorship: 5%
- Mentor Issues: 6%
- No reason: 9%
- Discomfort: 11%
- Forgot about database: 8%
Solution: Database Promotion

- Class meetings for MS1 and MS2 students
- TV monitors throughout school
- Utilization in meetings with assigned faculty advisors
- MS1s required research project meetings
Solution: Opt In Faculty Participation

We send an email to all faculty in the database yearly and ask them to:

• Opt into the database - this ensures ongoing interest
• Review their profiles for accuracy

At the same time, we reach out to departmental heads:
• To get recommendations for new mentors
• Review who may have left institution
Lessons Learned

▶ Reflecting on success of the project
  – Defined goals and objectives
  – Dedicated team
  – In-house (free) IT resources with ongoing communication with design team

▶ Lessons learned
  – Strategic promotion
  – Database maintenance
  – Needs assessment: pre-clinical vs. clinical students
  – Longitudinal plan for assessment
Future Directions

- Promote database usage
- Expand and update database
- Solicit faculty feedback
- Provide faculty guidance in mentoring
- Assess mentorship relationships derived from database use
Acknowledgements

A BIG thank you to:

Katherine Hrebinko, MS4
Mark Finkelstein, MS3
Meredith Grossman, MD
Peter Gliatto, MD
Questions?

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