10 tips for Achieving Success in Clinical Research for the Trainee

Dr Karen Choong
Associate Professor
Dept of Pediatrics and Critical Care Medicine
1. Define “Success”

Why are YOU doing Research?

• Genuine Interest
• Education
  – Multifaceted clinician/scholar
  – Programme Requirement
• Career development/advancement
• Collaboration
2. Don’t be intimidated by “RESEARCH”

- Doing research need not be difficult
Research during pediatric residency: predictors and resident-determined influences.

Ullrich N, Botelho CA, Hibberd P, Bernstein HH; Acad Med. 2003 Dec;78(12):1253-8

- 98% reported doing research prior to residency
- Interest in research during residency is high, but participation in research is low (18%)
- The most commonly identified influences to conducting research were:
  - availability of time (97%)
  - personal interest in research (84%)
  - availability of opportunities (76%)
  - mentors on hand (72%)
3. Be opportunistic

- Always be on the lookout for potential research opportunities

“Research is to see what everybody else has seen, and to think what nobody else has thought”

Albert Szent-Gyorgi (Hungarian Biochemist, 1893-1986); 1937 Nobel Prize for Medicine.
4. Choose the right project

- Interesting to YOU
- A project that will help you
- Appropriately mentored
- Feasible
  - Realistic time line
  - Resources available – support, personnel and $$
5. Keep it Simple (Clinical Research)

- Case Report
- Case Series
- Review article
- Critical Appraisal
- Knowledge translation activities
  - Quality assurance, practice guidelines
- Observational study:
  - Retrospective chart review, cross sectional study

- Randomized controlled trial
- Too many projects
- Expensive Projects
6. Choose the right mentor

• one who will help you achieve “success”
  – http://fhs.mcmaster.ca/pediatrics/
• don’t be afraid to “use” them
• Choose the right team/collaborators
7. Utilize available resources

<table>
<thead>
<tr>
<th>Type of Award</th>
<th>Who is eligible</th>
<th>Deadline for application</th>
</tr>
</thead>
<tbody>
<tr>
<td>McMaster Resident research award</td>
<td>Pediatric residents</td>
<td>April 30</td>
</tr>
<tr>
<td>RMA Research Scholarship</td>
<td>All residents</td>
<td>August 31</td>
</tr>
<tr>
<td>Travel Awards</td>
<td>Pediatric residents</td>
<td>Any time</td>
</tr>
<tr>
<td>St. Louis Family Fund</td>
<td>Pediatric residents</td>
<td>March 1</td>
</tr>
<tr>
<td>Winnipeg Annual Resident and Fellow Research</td>
<td>2 candidates (1 resident and 1 fellow; 2 residents; or 2 fellows).</td>
<td>April 14, 2009</td>
</tr>
<tr>
<td>Competition</td>
<td></td>
<td></td>
</tr>
<tr>
<td>McMaster Child Health Research Day Award</td>
<td>Trainees (Residents, Fellows, medical students and Graduate students) who present at the Research Day</td>
<td>June</td>
</tr>
<tr>
<td>PSI Resident Research</td>
<td><a href="http://www.psifoundation.org/resident_research.htm">http://www.psifoundation.org/resident_research.htm</a></td>
<td>Sept 11, 2009 (See website)</td>
</tr>
<tr>
<td>CSCI/CIHR</td>
<td><a href="http://www.csci-sccrc.org/english/awards-csci-cihr.htm">http://www.csci-sccrc.org/english/awards-csci-cihr.htm</a></td>
<td>May 29, 2009 (See website)</td>
</tr>
<tr>
<td>PAIRO Trust Fund resident teaching award</td>
<td><a href="http://www.pairo.org/Content/Default.aspx?pg=1293">http://www.pairo.org/Content/Default.aspx?pg=1293</a></td>
<td></td>
</tr>
<tr>
<td>Numerous other funding and award opportunities are</td>
<td>Numerous other funding and award opportunities are available from the McMaster Office of Research services (<a href="http://www.mcmaster.ca/ors/">www.mcmaster.ca/ors/</a>)</td>
<td></td>
</tr>
</tbody>
</table>
8. Set realistic milestones

“If we knew what we were doing it wouldn't be research.”
Albert Einstein

- Have realistic expectations
- Milestones for project execution
- Manuscript preparation and submission
- Present and Publish during your training!
  - Get mileage from your research
  - Impressive, looks great on CV
8. Set realistic milestones
8. Set realistic milestones

Vasopressin (VIP) Multi-centred RCT
Patient Enrolment Rate

- Actual
- Anticipated
9. Future Goals

- **Formal Training**
  - Health Research Methodology
  - Medical Education
  - Combined residency/fellowship programmes

- **Clinician Investigator Programme**
10. Enjoy your Training

- Balance your lifestyle
  
  *(see “10 tips to Balancing Lifestyle”)*

- Research is Rewarding!