Toolkit for Effective Research Project Mentoring

Research Mentorship comprised of (in descending order)

- Project Management
- Education/Training
- Career Mentoring

Research Mentorship as Research Project Management
3 Elements: (1) Scope, (2) Schedule, and (3) Budget

Research Project Management

Research Mentor's tasks: guide resident to establish the scope and schedule (and budget as needed); review these "controlling documents" with protégé regularly to track progress.

- **Scope**—what *must* be included in a research project (minimum)? What *can* be included in a research project (maximum)? What *should* be included in this project? (specific)
  - RACI: (ra' cee) Responsible, Approve, Consult, Inform

- **Schedule**—work from end date backwards
  - E.g. If a program goal to present a poster at the national conference in 18-24 months, work backwards together to determine feasible project
  - Timeline will determine milestones for a successful project
    - Tasks/ Milestones
      - Critical Path *must* be competed for project to be a success
        - e.g. submit poster to conference, COMIRB approval
        - Shorten by increasing resources?
      - Parallel Path has flexibility in timing
        - e.g. write up methods section, conduct lit review

- **Budget**—Track expenditures for each step in the scope, and assess towards conclusion.
- **Lessons Learned** document—a safe review of ways to improve; created and maintained throughout the project; perhaps shared with the research team as a peer mentoring tool

Notable element of successful mentoring: **Structure**
Research Mentorship Agreement

Part I: Learning Contract that describes the minimum elements to meet for a successful resident research project

- Research Mentor Agreement written and signed by both trainee and research mentor
- Can have a checklist under major skills/learning objectives
  - e.g. COMIRB application: HIPAA waiver and exempt protocol review; analytic plan: write up analytic protocol for analyst
- Can determine this minimal list for a research team and use the higher domains as a uniform standard across mentors, details specific to each trainee project
  - As a department or research group, experienced research mentors could initiate draft learning contract for comment/edit from all research faculty
  - Initiate with new trainees
  - Can be used for evaluations/annual review

Part II: Process Plan

First Meeting discuss: Regular meetings to review progress on schedule (milestones, surprises)

- Mentoring Style
  - How often will we meet, when, where?
  - Style discussion: Agenda? Documents ahead of time? Electronic docs?
  - Leave time for career discussions? Personal advice? Clinical consultation/training?

- Roles and Expectations
  - What is your role in this mentoring relationship?
  - What do I expect to do in this role?
  - How do I expect that you will help me fulfill the expectations of this role?

Note: self-knowledge is critical to a successful research mentor and leader