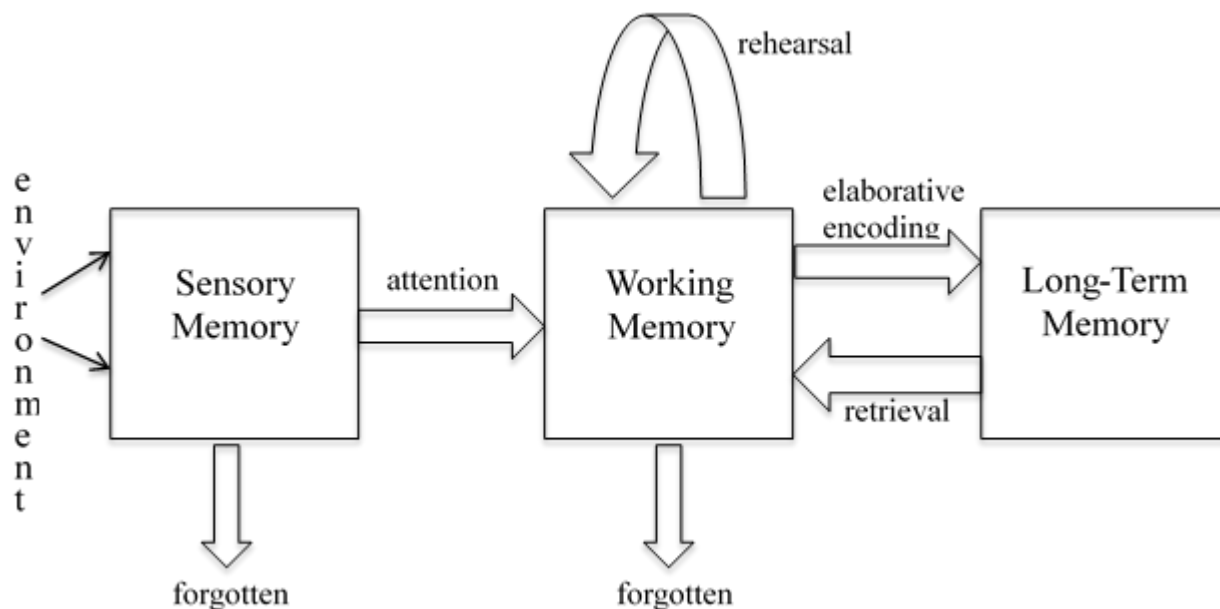


Words that represent the role of the mentor:

Advisor	Connector	Guru	Provocateur
Advocate	Director	Instructor	Reference
Ally	Employer	Leader	Sage
Champion	Exemplar	Listener	Shepherd
Coach	Facilitator	Mediator	Supporter
Collaborator	Friend	Parent	Teacher
Colleague	Guide		

How Learning Works



Discussion Question: What are things that do/don't work well when mentoring graduate students (and/or postdocs)?

Omer's 5 Tips for Effective Mentoring

- A Selecting the right students
- B Providing a good model
- C The importance of 5 minutes
- D Aligning your goals
- E Promoting your mentees

Other competencies for graduate students and postdocs¹:

- Effective communication
- Establishing and aligning expectations
- Research skills development
- Discipline-specific conceptual knowledge
- Addressing diversity
- Fostering mentee independence
- Leadership and management skill development
- Handling conflict

¹ See <http://www.nationalpostdoc.org/?CoreCompetencies> and Pfund, C., House, S., Spencer, K., Asquith, P., Carney, P., Masters, K. S., ... Fleming, M. (2013). *A Research Mentor Training Curriculum for Clinical and Translational Researchers*. *Clinical and Translational Science*, 6(1), 26-33. DOI: [10.1111/cts.12009](https://doi.org/10.1111/cts.12009)

Read this (slightly edited and anonymized) Postdoc Researcher Mentoring Plan and make note of things that stand out to you as particularly interesting/surprising/worthwhile/etc.

Postdoctoral Researcher Mentoring Plan

There will be one postdoctoral researcher funded on this project. The postdoc has been working in Dr. Inan's lab for the past two months on a separate, complementary project focusing on using wearable sensors and embedded systems concepts for real-time joint health rehabilitation status. This proposed project will allow the postdoc to expand on his skill set and knowledge in the area of biomedical circuits and systems, and provide a pathway for him to transition to an independent, successful academic career. In preparation for this transition to independence, we have set forth the below formal mentoring plan in addition to the other activities which we are already conducting: **planning and co-authoring** peer reviewed scientific journal and conference papers, **co-writing** grant proposals, **teaching and training** graduate students in the Inan Research Lab, and **disseminating the work** in the greater Atlanta Metropolitan area to broaden the impacts of the work.

Participation and Leadership in Collaborator Meetings: The postdoc will participate in meetings with physicians and physiologists at Georgia Tech and Emory, as well as via video conferencing with physicians at UCSF. These brainstorming and research discussions will provide him a forum to further develop his interdisciplinary research skills, as well as his ability to pursue scientific breakthroughs at the interface between embedded sensing systems and human physiology. By actively participating in these discussions, and leading some of the meetings, he will be well-prepared to start an interdisciplinary research program in his future academic position.

Co-Organization of Conference Special Sessions: The postdoc and Dr. Inan are also currently planning and organizing special sessions at the flagship Institute of Electrical and Electronics Engineers (IEEE) Engineering in Medicine and Biology Society (EMBS) conference in August 2015 focusing on "Clinically Translatable Physiological Monitoring Systems." This session will further the postdoc's visibility in the EMBS community which, at the 2014 EMB conference, awarded him as one of the top student researchers in the field, as the North American best student paper award finalist.

Formal Mentorship Opportunities: In addition to these research efforts, we have several mentorship and formal mentoring opportunities planned for the postdoc. These will include leading a Vertically Integrated Project (VIP) team focused on novel vascular health measurement technologies. VIP is an existing program at Georgia Tech that brings together a large interdisciplinary team of 10-15 undergraduate and several graduate students, as well as a postdoctoral researcher, for a long-term (multi-semester) and sustainable undergraduate research experience. In terms of formal mentoring opportunities, the postdoc will meet with Dr. Inan as well as other faculty mentors we have selected at least once per week. Georgia Tech as an institution is committed to the success of postdoctoral researchers in transitioning to independence, and thus has multiple opportunities available for career development consultations, mentoring programs, and seminars for disseminating research and preparing for the academic job interview.

Continuing Training and Ethical Responsibility: Finally, the postdoc will be trained on the responsible conduct of research, and has already completed CITI training for human subjects research. We are confident that with these activities and plans in place, at the end of the first two years of this project the postdoc will be well-positioned to take on an academic position at a leading international institution, and rapidly establish himself as an upcoming leader in the field.