

Student and faculty expectations:

- Student contacts the faculty mentors to discuss project background, specific aims, and role of the medical student.
- After selecting a R&D project and faculty mentor, the medical student and mentor will submit a brief R&D pre-proposal.
- Students submit a final R&D proposal signed by both mentor and student.
- Student will submit a final report of the 10-week R&D activity.
- Student will present a poster on the R&D activity at Medical Student Celebration of Research Poster Day.
- Mentor and students will ensure addition of student to mentor's IRB or IACUC (even if participating in an external MSRP projects, including international projects) and work with UF mentor to ensure UF's IRB/IACUC office approves the research too, otherwise research may be invalid.

STUDY I. TITLE: Left Eye Dominance and Dyslexia**FACULTY MENTOR: Kenneth M. Heilman MD****email=heilman@neurology.ufl.edu; Phone 352-376-1611 Extension 6898****FACULTY MENTOR DEPARTMENT: Neurology****RESEARCH PROJECT DESCRIPTION**

We have research that suggests each eye, in addition to sending information to both hemisphere's primary visual cortex, sends more information to the contralateral than ipsilateral colliculus. Activation of the colliculus induces activation of the ipsilateral hemisphere. About 20 % of the population is left eye dominant. It is possible that some people are phonologically dyslexic because they are left eye dominant and when reading I activate their right hemisphere? Phonological dyslexics have impairments in reading non-words. To test this hypothesis healthy young participants will read non-words (e.g., "fligbif") as rapidly as possible with the left eye, their right eye and both eyes. The finding the participants were slower and made more errors when reading with their left versus right eye would support this hypotheses. Stronger support would come from the observation that the people who are left (versus right) eye dominant have more problem reading with both eyes open. This study may have important implications about preventing and treating developmental dyslexia.
