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“Visual receptor cells as a model system to understand how cells target gene products to the correct locations” (Feb 1, 2010 – Aug 31, 2011) was part of an ongoing collaboration with Prof JCEissenberg, Biochemistry, SLU that started June 20, 2008. While the main thrust of the PRF Seed Grant concerned GGA, a protein Prof Eissenberg was studying because of its involvement in intracellular traffic, many related data were collected. My contribution to Prof Eissenberg was to enable the project to address the visual receptor system of *Drosophila*. There have been some interesting constraints, since I answered to Prof Eissenberg and he, in turn, answered to several collaborators from Germany on the part of the project that addressed RNAi (RNA interference) knockdown of GGA.

A formidable amount of work during the entire period has been communicated in chronological form in a web site (<http://starklab.slu.edu/JCE/JCE.htm>). My research interests in *Drosophila* vision since 1969 were multidisciplinary: electrophysiology, photochemistry, optics, and microscopy. My publications starting in the mid 1970s introduced the strategies of vitamin A deprivation and replacement to investigate deployment and turnover of the visual pigment, rhodopsin; also, I introduced and led in the application of *Drosophila* as a model for retinal degeneration.

With what I brought to the table, I was able to introduce Prof Eissenberg’s lab to pseudopupil techniques for optical investigation and to serve as an advisor and coworker in histological and electron microscopic studies. For the latter, the availability of a centralized microscope resource in Pathology run by very talented workers, Jan Ryerse and Barbara Nagel, was instrumental, as I predicted in my PRF application. Also I was able to re-open my lab to students for unique contributions in electrophysiology, confocal microscopy, and quantitative photometric measurements. Finally, I was able to introduce a talented plant molecular biologist, my PhD student Shan Luan, to *Drosophila* research in order to mobilize her for her efforts in Prof Eissenberg’s lab to rescue the GGA mutant; she needed to change mentors, and, in so doing, changed her entire research area. Student research experiences were another focus of my PRF application, and George Denny won the outstanding senior award (Collins award) for the Biology Department for 2011.