POSTDOCTORAL POSITION 1
G Protein Signaling: Mechanism of Activation
The University of North Carolina, Schools of Medicine and Arts and Sciences

Post Doctoral Positions in Cell Biology are immediately available for highly-motivated individuals to study in vivo spatial and temporal changes in signaling elements of the heterotrimeric G-protein pathway in Arabidopsis. Arabidopsis has become the most tractable model system for study of the G-protein signal pathway in a multicellular eukaryote. The candidate will have available a large set of genetic and microscopy tools to address a novel signaling mechanism within a classic signaling paradigm. **The candidate must have experience in fluorescence microscopies, including FRET analysis.** Knowledge of or experience with Arabidopsis is not necessary but useful. Excellent verbal, written, and interpersonal skills are essential. The candidate must be fluent in English. Salaries start at $48,000/yr plus benefits commensurate with experience. Please email cover letter and curriculum vitae to Dr. Alan Jones, alan_jones@unc.edu. The University of North Carolina is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION 2
G Protein Signaling: Mechanism of Activation
The University of North Carolina, Schools of Medicine and Arts and Sciences

Post Doctoral Positions in Cell Biology are immediately available for highly-motivated individuals to study activation of the heterotrimeric G-protein pathway in Arabidopsis. Arabidopsis has become the most tractable model system for study of the G-protein signal pathway in a multicellular eukaryote. The candidate will have available a large set of genetic and microscopy tools to address a novel signaling mechanism within a classic signaling paradigm. **The candidate must have experience in biochemistries.** Knowledge of or experience with Arabidopsis is not necessary but useful. Excellent verbal, written, and interpersonal skills are essential. The candidate must be fluent in English. Salaries start at $48,000/yr plus benefits commensurate with experience. Please email cover letter and curriculum vitae to Dr. Alan Jones, alan_jones@unc.edu. The University of North Carolina is an Equal Opportunity/Affirmative Action Employer.

POSTDOCTORAL POSITION 3
Systems Biology of G Protein Signaling
The University of North Carolina, Schools of Medicine and Arts and Sciences

Heterotrimeric G proteins serve as a signaling nexus in a myriad of normal and diseased cell states. Many extracellular signals (e.g. hormones, peptides, cytokines, lights) are perceived by 7-transmembrane receptors, often referred to as G protein coupled receptors (“GPCR” in figure), that stimulate the activation state of the cytoplasmic G protein
complex. Interestingly, the majority of non-animal cells (protists, fungi, plants, amoeba and many others) bind GTP without the need for a GPCR. This recent discovery opens up new opportunities to find novel mechanisms that regulate G protein signaling. This project tightly integrates experimental investigations with mathematical modeling to discover and characterize novel signaling motifs that regulate pathway activity in the glucose sensing system of Arabidopsis. The project is a continuation of a well established collaboration between the labs of Dr. Alan Jones (Fu, et al 2014 Cell 156:1084-1095). The ideal applicant will have experience with deterministic and stochastic modeling methods, and a willingness to learn the experimental techniques needed to test their mathematical models. Interested individuals should contact Alan Jones (alan_jones@unc.edu).