
We have a newly funded postdoctoral position that will blend the study of repeat-induced heterochromatin formation with studies on regulation of gene expression in heterochromatic domains. The work will be done in Drosophila melanogaster, an ideal system for the purpose. Gene silencing can be achieved by packaging the DNA into heterochromatin, a form relatively inaccessible to the transcription machinery. Repetitious sequences can trigger the formation of heterochromatin; the targeting mechanism is unknown. Here we will analyze silencing induced by tandem repeats, including the triplet repeat mutations observed in humans, and explore silencing induced in heterochromatic, repeat-rich domains. We will use both molecular/genetic manipulations and a bioinformatics approach (in conjunction with the faculty and students of the Genomics Education Partnership) to look for defining characteristics. Candidates must have familiarity with DNA manipulation; familiarity with Drosophila would be a plus. While the emphasis will be on basic research, the position will entail some participation in the GEP - a long-term interest in undergraduate education is preferred. The position is available immediately. Applications will be considered until the position is filled. NIH postdoc pay scale with Washington University benefits. For further information see our website ([http://wubio.wustl.edu/elgin](http://wubio.wustl.edu/elgin)) and the GEP website ([http://gep.wustl.edu](http://gep.wustl.edu)). Please send a CV (detailing experience and past research success), names and contact information of two references, and a statement of long-term interests, detailing your motivation and interest in this position, to Sarah C R Elgin, Dept. Biology, Washington University in St Louis ([selgin@biology.wustl.edu](mailto:selgin@biology.wustl.edu)).