

## **New publication from *Biomedical Research 10H* includes 276 student authors**

The UCLA Minor in Biomedical Research is excited to announce a publication in the journal *G3: Genes, Genomes, Genetics*, reporting data collected by 245 UCLA undergraduates and 31 high school students, all of whom are coauthors of the work. These students used a genetic technique called G-TRACE to conduct cell lineage analysis during the development of four different tissues in *Drosophila melanogaster*. In the course of this work, the students collectively analyzed expression patterns associated with several hundred genes and obtained over 50,000 microscopic images with a Zeiss Apotome microscope. Their data has been compiled into an online database (G-TRACE Expression Database) that serves as a resource for the *Drosophila* research community.

In addition to the scientific data, this paper also highlights the beneficial impact that course-based research experiences can have on student outcomes, including persistence in STEM. All students participating in this project were members of the Undergraduate Research Consortium in Functional Genomics (URCFG) and conducted their work through the class *Life Sciences 10H* (now listed as *Biomedical Research 10H*) under the instruction of Dr. John Olson and Dr. Cory Evans. The URCFG and *LS/BR 10H* course were developed by Professor Utpal Banerjee and supported by the Howard Hughes Medical Institute Professors Program.

*BR 10H* functions as a recruitment course for students to join the Minor in Biomedical Research, a free standing minor in which independent research is supported by an interdisciplinary curriculum that fosters critical thinking and an appreciation of the relationship between science and society. The Minor is housed within the Division of Life Sciences. The Chair and Director of the Minor in Biomedical Research is Professor Tracy Johnson; the Associate Director is Dr. Ira Clark.

Drs. John Olson and Cory Evans are the lead authors of the paper, "Expression-based cell lineage analysis in *Drosophila* through a course-based research experience for early undergraduates," [available online](#) at *G3* (doi: 10.1534/g3.119.400541).