
A Semester of Immunoregulation in Review

In the University of Kansas Biotechnology program, we recognize the importance of ensuring that our graduates are able to adequately breakdown and digest complex scientific research articles. To prepare students for this, the program requires that students enroll in a Selected Topics class where they are divided into small groups and take turns breaking down and explaining different research articles to the class (through Power Point presentations). To make this activity more engaging, each article is selected to chronologically simulate the progression of exemplary publications on a single topic. For the 2022 spring semester, students were introduced to a novel putative co-stimulatory molecule in the immunoglobulin superfamily, CTLA-4 through the 1987 Brunet, J.F. et al., paper. Week by week, new discoveries about T cell interactions through their co-stimulatory molecules were explained to the class by these groups, culminating with research on the immunoreceptor TIGIT by Johnston, R. J. et al., from 2014. This format allows students to practice both breaking down research articles and presenting them in a clear and concise manner. As a final project, students are instructed to select a recently (within the past five years) published article on the same topic and write a review article that not only summarizes the topics discussed that semester, but informs the reader how this new research adds to the existing knowledge on the subject. The following papers are exemplary examples of those written by students enrolled in the course.
