RNA silencing, also known as RNA interference (RNAi), is a deeply conserved, sequence-specific regulatory mechanism that operates in diverse eukaryotes to regulate the activity of genes, transposable elements, and invading viruses. Starting with an introduction to the short history of the field, this course will cover our current understanding on the biogenesis and function of microRNA (miRNA) and other classes of endogenous small RNAs in a variety of model systems. Through lectures, presentations and class discussions on the milestone works, this course will expose graduate and upper division undergraduate students to the cutting-edge development in this exciting and fast-moving frontier of cell & molecular biology. Students with an interest in cell & molecular biology, biochemistry, genetics, and other related areas are all welcome to take this opportunity.
Why should you consider taking this course?

- One of the most exciting and fast-moving frontiers in biology
- An excellent example showing the importance of "junk DNAs"
- Important role of RNA silencing in processes such as developmental timing, tissue patterning, transposon taming, and antiviral defense
- Coverage of this topic in your current molecular & cell biology textbooks is either very thin or most likely obsolete
- Better prepare you for graduate school, medical school, or undergraduate research positions

Questions? Please feel free to contact or meet the instructor