

IMET Distinguished Seminar

Wednesday, May 20, 2015

11:00am

**Using *Caenorhabditis elegans* to Elucidate Immune Response Pathways and to Identify Novel   
Anti-Infective and Immuno-Stimulatory Compounds**

**Fred Ausubel, Ph.D., Harvard Medical School**

**BioSketch**

Dr. Ausubel is a Professor of Genetics at Harvard Medical School and the Ernst Winnacker Distinguished Investigator in the Department of Molecular Biology at Massachusetts General Hospital.

Dr. Ausubel has used genetic approaches to conduct pioneering work that created new fields of study that have had significant impacts on agriculture and medicine. Recent work has demonstrated that *Caenorhabditis elegans* has an evolutionarily conserved innate immune system that shares features of both plant and mammalian immunity. Dr. Ausubel’s other important contributions include pioneering work on the evolution and regulation of *Rhizobium* genes involved in symbiotic nitrogen fixation; the regulation of *Rhizobium* genes by two-component regulatory systems; the establishment of A*rabidopsis* *thaliana* as a worldwide model system; the identification of a large family of plant disease resistance genes, and the identification of so-called multi-host bacterial pathogens. Dr. Ausubel’s achievements have been recognized by numerous awards and election to academies. He was elected to the National Academy of Sciences in 1994, the American Academy of Microbiology in 2002, and the American Academy of Arts and Sciences in 2003. In 2014 he was awarded the Thomas Hunt Morgan Medal by the Genetics Society of America. For his mentoring of young scientists was recently named the recipient of the 2014-2015 William Silen Lifetime Achievement Award at Harvard Medical School.

Ausubel lab webpage: <http://ausubellab.mgh.harvard.edu/>