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Lecture “Zebrafish: the vertebrate model system for the 21st Century”.

The zebrafish *Danio rerio* is a relative newcomer as far as model systems go. A group of researchers led by Dr. George Streisinger at the University of Oregon started working on zebrafish in the 1970's. Publication of two large-scale genetic screens performed in Boston and Tübingen in 1996 brought it to the forefront of developmental genetics. Over the past 25+ years, zebrafish have been used to study - and make major discoveries in - just about every aspect of vertebrate biology. In this lecture, I will use a diverse set of examples to illustrate the unique strengths of the zebrafish as a model system.

BioSketch

Darius Balciunas is an Associate Professor of Biology at Temple University. Since 2020, he also has a secondary appointment at the Life Sciences Center at Vilnius University. He received his undergraduate degree from Vilnius University and his PhD from Uppsala University. After postdoctoral training at the University of Minnesota, he established his laboratory at Temple University in 2007. His laboratory has been developing transposon-, integrase- and CRISPR/Cas9-based tools for transgenesis and insertional mutagenesis, including engineering of conditional mutants and epitope-tagged loci. These tools are being used to study molecular mechanisms of heart regeneration in the lab.