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Science Research Conferences

The Mobile DNA Conference: Evolution, Diversity, and Impact

Organizer Bio: Victoria P. Belancio, PhD

Associate Professor, Structural & Cellular Biology, Tulane University, New Orleans, LA, USA

Dr. Belancio was trained in cytology and genetics at Novosibirsk State University, Russia, medical genetics at the University of Alabama at Birmingham, and molecular and cellular biology at Tulane University. Her research focuses on mechanisms regulating amplification of transposable elements such as the LINE-1 retrotransposon. Dr. Belancio has been investigating genetic and environmental factors influencing L1 mRNA and protein expression and function using *in vitro*, tissue culture, and animal model approaches. Some key findings stemming from this effort include discovery of novel forms of L1 mRNA attenuation, L1 mRNA expression in normal human tissues and L1's ability to trigger cellular senescence, as well as regulation of L1 mobilization by the host circadian system.

To overcome the shortage of reagents and approaches tailored to studies of repetitive sequences, Dr. Belancio's team developed several L1-specific antibodies, methods for detection of L1 mRNA expression at a single locus resolution, and transgenic mouse models of L1 retrotransposition. Her team is interested in basic science and translational research that aids our understanding of the impact transposable elements have on human health through their contribution to the mammalian aging process and age-associated diseases.

Dr. Belancio was an Ellison Medical Foundation Scholar in Aging research and a Kavli Fellow sponsored by the National Academy of Sciences and Alexander von Humboldt Foundation. Dr. Belancio is dedicated to the education and training of next-generation scientists. She is a member of the Emmy Noether Scholar program that supports high school students interested in STEM research.