Univerza *v Ljubljani* Fakulteta *za farmacij*o



## Vabilo na predavanje

Frank M. Scalzo, Ph.D.
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## The Utility of the Zebrafish Model in Behavioral Neuroscience and Toxicology

29. maj 2018 ob 14:30 v predavalnici P1 Fakulteta za farmacijo, Aškerčeva cesta 7, Ljubljana

## Outline of the talk

Prof. Scalzo's current research interests are focused on understanding the deleterious effects of drugs and chemicals on the development of motor behavior in the developing zebrafish. Currently two projects are underway, the first investigating the emergence of organized motor behavior in larval zebrafish in simple and complex environments, and the second, investigating the effects of nicotine on motor behavior in a complex environment. As part of this work, Prof. Scalzo and a student in his laboratory Brandon Chen, developed the Zebrafish Multi-Chambered Exploratory Test (ZEMCET; <a href="www.noldus.com/blog/how-measure-complex-exploratory-behavior-larval-zebrafish">www.noldus.com/blog/how-measure-complex-exploratory-behavior-larval-zebrafish</a>), a test capable of characterizing complex exploratory behavior in larval zebrafish under control conditions and during treatment with water soluble compounds. His current research, in collaboration with Prof. Blaz Zupan and his student Primoz Godec at the Faculty of Computer and Information Science, will attempt to model the movement patterns of larval zebrafish under a variety of conditions using the data mining and visual programming suite Orange, that Prof. Zupan and his colleagues have developed.

In his presentation, Prof. Scalzo will describe the utility of the zebrafish model in behavioral neuroscience and toxicology, and he will describe results from studies examining the effects of nicotine on larval zebrafish behavior. In addition, he will describe planned collaborative work to be conducted during his 2018 Fulbright scholarship.

## **Biographical Sketch and Current Research Interests**

Frank M. Scalzo, Ph.D. received his Ph.D. in Psychology from Binghamton University in 1985. He received post-doctoral training in developmental psychobiology at Columbia College of Physician's and Surgeons and the New York State Psychiatric Institute from 1985-1987. A second postdoc was conducted in Reproductive and Developmental Toxicology at the US Food and Drug Administration in 1987-1990. In 1990 he joined the Department of Pediatrics at the University of Arkansas for Medical Sciences and Arkansas Children's Hospital until 1999, when he joined the Faculty at Bard College. He served as chair of the psychology program at Bard College from 2003-2013. He continues to serve on the Bard College faculty today and is also the health Professions Advisor. He was awarded a Fulbright US Scholarship in 1995 to teach and conduct research in the Faculty of Pharmacy at the University of Ljubljana, Ljubljana, Slovenia. Prof. Scalzo was recently awarded a second Fulbright US scholarship to teach and conduct research in the Faculty of Pharmacy and the Faculty of Computer and Information Sciences at the University of Ljubljana in Spring 2018.