



UNIVERSITÀ  
DEGLI STUDI  
DI PALERMO

*Dottorato di Ricerca in Biomedicina e Neuroscienze*

*Coordinatore: Prof. Felicia Farina*

Sede Amministrativa: Dipartimento di Biomedicina Sperimentale e Neuroscienze Cliniche

## AVVISO DI SEMINARIO

Lunedì 7 Luglio 2014, ore 15:00

Aula "E. Nesci", Sezione di Anatomia Umana

Dipartimento di Biomedicina Sperimentale e Neuroscienze Cliniche

Via del Vespro 129, Palermo

### Gianfranco Bellipanni, PhD\*

Assistant Professor

Head of the Developmental Biology Program

SHRO and Temple University,

Philadelphia, USA

### *“The zebrafish animal model: canonical-Wnt signaling from embryo D/V induction to neurogenesis“*

#### **Abstract.**

Proper embryo development requires the precise orchestration of the activity of signaling molecules and cell-autonomous factors. While there is clear evidence for the canonical-Wnt (c-Wnt) signaling pathway in regulating embryonic development, we have much to understand about this pathway. In response to c-Wnt signaling, the cytoplasmic pool of  $\beta$ -Catenin ( $\beta$ -Cat) is stabilized and translocates into the nucleus where binds to DNA-binding factors of the Lef/Tcf family and regulates transcription of Wnt target genes. I will present evidences of the involvement of c-Wnt/  $\beta$ -Cat pathway in the specification of embryo dorso-ventral (D/V) axis and in the ontogenesis of serotonergic neurons of the raphe. These studies will be beneficial for our understanding of birth defects disorders, the ontogenesis of S-neuronal type and the ability to regenerate this neuron type *in vitro*.

#### **Brief biosketch:**

Dr. Gianfranco Bellipanni is Assistant Professor at the Department of Biology and the Sbarro Institute for Cancer Research and Molecular Medicine (SHRO) at the College of Science and Technology, Temple University (USA). Dr. Bellipanni received his BS and Ph.D. in Cellular and Developmental Biology from the University of Palermo, Italy, working with Prof. Ida Albanese. He worked at the University of Pennsylvania with Prof. Eric Weinberg and at the GSF of Munich with Prof. Laure Bally-Cuif. Since 2008 Dr. Bellipanni is leading the Developmental Biology unit of the SBARRO Cancer Institute (SHRO) directed by Prof. Antonio Giordano and he is an Assistant Professor at Temple University.

Dr. Bellipanni is a scientific reviewer for Italian Ministry of Health Grants and for University of Milan. He is member of the international scientific committee of I.S.A.L. Foundation, <http://www.fondazioneisal.it/en/chi-siamo/comitato-scientifico-estero.html> and Head of the Developmental Biology Program at the SBARRO Cancer Institute at the College of Science and Technology, Temple University.