



# Singapore Developmental Biology Club



## SDBC Seminar:

Dr. Periklis Pantazis  
*ETH Zurich, Department of Biosystems  
Science and Engineering (D-BSSE),  
Basel, Switzerland*

23 May 2014, Friday  
IMCB Seminar Room 3-46, Level 3, Proteos  
2:00 PM – 3:00 PM

### **Advances in whole embryo imaging: a quantitative transition is underway**

With the advent of imaging probes and live microscopy, developmental biologists have markedly extended our understanding of the molecular and cellular details of embryonic development. To fully comprehend the complex mechanistic framework that forms the developing organism, quantitative studies with high fidelity in space and time are now required. Here, I will discuss how integrating established, newly introduced and future imaging tools with quantitative analysis will ensure that imaging can fulfill its promise to elucidate how new life begins.

Periklis Pantazis is Assistant Professor of Biosystems Analysis at the Department of Biosystems Science and Engineering (D-BSSE) at Eidgenössische Technische Hochschule (ETH) Zurich, Basel, Switzerland, since 2011. Previously, he pursued a Ph.D. degree in biology in the group of Marcos Gonzalez-Gaitan at the Max Planck Institute of Molecular Cell Biology and Genetics, Dresden, Germany, where he studied the mechanisms underlying the transport of a particular morphogen, the *Drosophila* TGF- $\beta$  homolog Decapentaplegic (Dpp), using the developing wing imaginal disc. He then joined the laboratory of Scott Fraser at the Biological Imaging Center at the California Institute of Technology, Pasadena, USA, where he developed a diverse imaging toolbox set required for the mechanistic dissection of stem cell and developmental biology problems. Currently, his laboratory continues to systematically apply advanced imaging tools and to develop a new class of imaging reagents to mechanistically dissect development, regeneration and disease using mouse and zebrafish as model systems.

*No registration required.*  
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