

**S5-2 (Room Great Hall East) Symposium: Movers and Shakers: The Evolution and Development of Mesoderm**

**08:30 S5-2.1** DUBOC, V., RÖTTINGER, E., LAPRAZ, F., BESNARDEAU, L., LEPAGE, T.; Role of Nodal in establishment of sea urchin larva body plan

**09:00 S5-2.2** HINMAN, Veronica, F, DAVIDSON, Eric, H; Evolution of Mesoderm Specification in Echinoderms: Gene Regulatory Network Architectural Reorganization Across Immense Periods of Evolutionary Time

**09:30 S5-2.3 (DEDB)** DAVIDSON, Brad; Ascidian mesoderm specification and the emergence of the chordate body plan

**10:30 S5-2.4** XAVIER-NETO, Jose, SIMÕES-COSTA, Marcos S; The evolutionary origins of cardiac chambers

**11:00 S5-2.5 (DEDB)** SHOOK, David, KELLER, Ray; Evolution of Vertebrate Mesoderm Morphogenesis

**11:30 S5-2.6** HEASMAN, Janet, TAO, Qinghua, YOKOTA, Chika, KOFRON, Matt, LIN, Xinhua; The canonical Wnt pathway and axis formation in *Xenopus laevis*

**13:30 S9-1.2 (DIZ)** O'CONNOR, M. P., SIEG, A. E., DUNHAM, A. E.; Linking physiological effects on activity and resource use to population level effects

**14:00 S9-1.3 (DCPB)** HARRISON, J.F., FEWELL, J.H., GRAYSON, D.L., HUNT, G.J., BARND, B.D.; An Environmental Physiologist Perspective on the Invasion of the Americas by Africanized Honey Bees

**14:30 S9-1.4** BROWER, L.P., FINK, L.S., RAMIREZ, I.R., WEISS, S.B., SLAYBACK, D., PERAULT, D.R.; The physiological ecology of overwintering Monarch butterflies

**S6-2 (Room Emerald) Symposium: Recent Developments in Neurobiology**

**08:00 S6-2.1B (DNB)** CAIN, Shaun D., CHRISTIE, Andrew E.; Distribution of NOS-like immunoreactivity within the Nudibranchia

**08:00 S6-2.1 (DNB)** MURRAY, JA; Advances in the neural bases of orientation & navigation

**09:00 S6-2.2B** TUBLITZ, NJ; Mechanisms underlying peptide mediated neuroplasticity: A spineless approach in moths, flies and cephalopods.

**09:00 S6-2.2** LOI, Poh Kheng/, TUBLITZ, Nathan/J, GASTON, Michelle/R; Neural control of body patterning in the European cuttlefish *Sepia officinalis*. P.K. Loi\*, N.J. Tublitz & M.R. Gaston. Institute of Neuroscience, University of Oregon.

**10:30 S6-2.3B** LOWE, CJ, ARONOWICZ, J, TERASAKI, M, KIRSCHNER, M, GERHART, J; Hemichordate development and the evolution of chordate nervous system

**10:30 S6-2.3** ARONOWICZ, J., LOWE, C.J.; The midbrain-hindbrain gene expression profile in *Saccoglossus kowalewskii*

**S7-1 (Room Great Hall West) Symposium: Metamorphosis: A Multi-Kingdom Approach**

**08:00 S7-1.1 (DEDB)** BISHOP, C.D., PECHENIK, J, HADFIELD, M.G.; Metamorphosis: under stimulatory or inhibitory control?

**08:30 S7-1.2** DEGNAN, S.M., DEGNAN, B.M.; The origin of the metazoan biphasic life cycle: new insights

from an ancient phylum.

**09:00 S7-1.3** HE, Y, TANG, R, HAO, Y, STEVENS, R. D., PEI, Z-M; Nitric Oxide Represses Arabidopsis Flowering

**09:30 S7-1.4** GEORGIU, C.D.; Sclerotial morphogenesis in fungi is induced by oxidative stress

**10:30 S7-1.5** SANTELICES, B., ALVARADO, J.L.; Applying the concept of metamorphosis to the crustose-to-erect thallus transition of macroalgae

**11:00 S7-1.6** HODIN, Jason; Expanding networks: a hypothesis for the evolution of metamorphosis

### **S8-1 (Room Scotland A) Symposium: Genomic and Proteomic Approaches in Crustacean Biology**

**13:00 S8-1.1** CHAPMAN, Robert, JENNY, Matt; EcoGenomics: analysis of complex systems

**13:30 S8-1.2** COLBOURNE, J.K., LINDQUIST, E., BAUER, D., BROKSTEIN, P., THOMAS, W.K., ANDREWS, J.; Gene discovery in *Daphnia* by expressed sequence tag sequencing

**14:00 S8-1.3** (*DCPB*) TOWLE, David W.; Functional Genomics of Environmental Adaptations in Marine Crustaceans

**14:30 S8-1.4** (*DCPB*) STILLMAN, Jonathon H, TERANISHI, Kristen S; Transcriptome changes during thermal acclimation, acclimatization, and stress in porcelain crabs

### **S9-1 (Room Scotland B) Symposium: EcoPhysiology and Conservation: The Contributions of Energetics**

**13:00 S9-1.1** GOLDSTEIN, J. L., HEPPELL, S., BRAULT, S., LUTCAVAGE, M. E.; Reproductive Status and Body Condition of Atlantic Bluefin Tuna in the Gulf of Maine, 2000-02: Conservation Implications