

## PRELIMINARY SCIENTIFIC PROGRAM

**Day 1** – breaks are not indicated hereunder (all oral given 15 min Q&A included)

Intro and Welcome	Local [University of Napoli] representative
Intro and Welcome (reasons to meet)	Scientific Organizing Committee
Invited intro lecture_1	Cephalopods and their relationship with other marine organisms (an evolutionary and 'zoological' perspective)
Cephs Scientific History and Naples	Kate Moore (JZ Young, family memories)
<i>Focus-on Session - Cephalopod Neurophysiology</i> main proposer: Dr L. Zullo, Italy	
Neurophysiology of Octopus vulgaris learning and memory	B. Hochner (Israel)
Insights into the connectome of the vertical lobe of Octopus vulgaris	F. Bidel (Israel & France)
Deciphering Octopus brain spiking activity	D. Boligin (Israel)
Unrestrained EEG recording in Cephalopods	T. Gutnick (Israel)
Visual coding and functional organization in the octopus optic lobe	J. Pungor (USA)
Octopus arm biomechanics	L. Zullo (Italy)
<i>Other Contributions</i>	
Genome skimming clarifies the evolutionary relationship of bobtail squid	G. Sanchez (Japan)
Molecular tools are contributing to the discovery of new cephalopod species in the northern Gulf of Mexico	J. Judkins (USA)
Deciphering cephalopods along south coasts of India using genetic markers	S. Vargheese (India)
Okinawan sepiolids and the newly described species Euprymna brenneri	J. Jolly (Japan)
Evolution of the hectocotylus in Sepiolinae (Cephalopoda: Sepiolidae), a sound base for generic revision	G. Bello (Italy)
<i>Poster Session_1</i> ~ <i>Special Welcome Session</i>	

**Day 2** – breaks are not indicated hereunder (all oral given 15 min Q&A included)

<b><i>Invited intro lecture_2 (Early Career)</i></b>	H. Schmidbaur (Austria)
Making sense of alien genomes – synhyeny and regulation in cephalopods	
The Cephalopod Citizen Science Project	G. Cooke (UK)
Establishment of a Model Association: Investigating the Squid-Vibrio Symbiosis Research from 1970s	S. Bayir (Germany)
"It just stares back at you!" The early history of psychophysiological experimentation on Octopus	F. De Sio (Germany)
<b><i>Focus-on Session</i></b> <i>Regeneration in cephalopods: past approaches, present trends and future directions</i> main proposer: Dr P. Imperadore, Italy	
Center and periphery. The early history of regeneration experiments on cephalopods (ca. 1900-1950).	F. De Sio (Germany)
Convergence between octopus arm regeneration and development	L. Zullo (Italy)
Whole body regeneration requires a rewired embryonic gene regulatory network logic	E. Rottinger (France)
Tissue crosstalk is required to induce a stem cell based regenerative response in the Anthozoa Cnidaria <i>Nematostella vectensis</i>	A. Amiel (France)
From injury to full repair: nerve regeneration and functional recovery in the common octopus, <i>Octopus vulgaris</i>	P. Imperadore (Italy)
<b><i>Other Contributions</i></b>	
A. dux genome: a search into cephalopod gigantism and key adaptations to deep-sea environments.	R. Fonseca (Denmark)
Adaptive evolution at mRNA editing sites in soft-bodied cephalopods	M. Moldovan (Russia)
Mapping location, projections, spatial arrangement and response properties of peripheral nociceptors.	R. Crook (USA)
Sex-biased role of the optic gland in Octopus maya: Transcriptomic analysis	C. E. Galindo-Sanchez (Mexico)
<b><i>Poster Session_2</i></b> ~ <b><i>Tours and social events</i></b>	

**Day 3** – breaks are not indicated hereunder ((all oral given 15 min Q&A included)

<b>Invited intro lecture_3 (Early Career)</b>	
	TBD
Neural control of skin patterning in two species of cephalopods	X. Liang (Germany)
A metabarcoding approach for assessing the diet of the glass squids (Oegopsida: Cranchiidae)	Fernando Ángel Fernández-Álvarez (Ireland)
The gastrophysics of squid	O. G. Mouritsen (Denmark)
Cephs&Chefs	L. Allcock (Ireland)
Cephalopods & Molluscs networking initiatives – aims, outcomes and future trends	G. Ponte (Italy) P. Katz (USA)
<b>Focus-on Session - Cephalopod developmental biology</b> main proposer: Dr Dr E. Seuntjens, Belgium	
Awareness of danger inside the egg: early behavioral competencies in the cuttlefish.	A-S. Darmaillacq (France)
Transcriptomic study of early developmental stages of <i>Octopus vulgaris</i>	M. Prado (Spain)
The octopus' solution to building a complex brain	A. Deryckere (Belgium)
Generation of Transgenic Lines in Cephalopods: Development of CRISPR-based tools in <i>Euprymna</i> spp. early embryos	M. Renard (Germany)
Observing cephalopod embryonic development: from Naef to now	E. Seuntjens (Belgium)
Molecular pathway of light photosensitivity in cuttlefish embryo	L. Bonnaud-Ponticelli (France)
Emergence of cephalopod genomic novelty in developmental and organismal expression modules	E. Ritschard (Austria)
<b>Other Contributions</b>	
Feeding rates of <i>Octopus aff. vulgaris</i> paralarvae fed with different prey types and densities	E. AG Vidal (Brasil)
Feeding ecology of the cephalopod <i>Octopus vulgaris</i> illustrated by a stable-isotope approach	S. Seixas (Mexico)
A. dux genome: a search into cephalopod gigantism and key adaptations to deep-sea environments.	R. Fonseca (Denmark)

**Day 4** – breaks are not indicated hereunder (all oral given 15 min Q&A included)

<b><i>Invited intro lecture_4</i></b>	
<b><i>Cephalopods – our view of other minds</i></b>	P. Godfrey-Smith (Australia)
A comprehensive review of early life stages in Cirrata (Cephalopoda: Octopodiformes)	A. Miller (Germany)
Enigmatic parasites from an uncommon habitat: Diversity of ciliates and mesozoon parasites of renal appendages of cephalopods	D. Souidenne (France)
Cephalopods under climate changes: from Palaeozoic to recent years	V. Laptikhovskiy (UK)
Influence of pH and diet on mercury bioaccumulation in cuttlefish	A. Minet (France)
Mercury concentrations and chemical speciation in cephalopods brains	T. Lacoue-Labathe (France)
Mapping and understanding the function of RNA in the Octopus brain	G. Zolotarov (Germany)
Spatial Transcriptomes: an outlook at brain complexity in cephalopods	G. Ponte (Italy)
Visual attack on the moving prey by cuttlefish	J. Juin-Shain Wu (Taiwan)
The evolution of intelligence in cephalopods	J. Mather (Canada)
Experiments exploring the limits of cognition and observational learning in <i>Octopus vulgaris</i> using mechatronics and video enrichment	W. Slany (Austria)
First indications of future-oriented behaviour in the common cuttlefish	L. Poncet (France)
Cephalopod Behavioral biology and cognition: current and possible future efforts	G. Fiorito (Italy)
Closing remarks	<i>Louise Allcock</i> <i>Rossella Digiaimo</i> <i>Giovanna Ponte</i> <i>Erica Vidal</i> <i>Graziano Fiorito</i>