

# XXIX Congresso AIOL "Shaping aquatic science for the future we envision"

## **PROGRAMMA**













































## PROGRAMMA XXIX CONGRESSO AIOL 3-6 Giugno 2025 – Mole Vanvitelliana, Ancona

Presentazioni orali				
Martedì 3 Giugno 2025				
14:00 - 15:00	Registrazione Soci partecipanti			
15:00	Cerimonia di Apertura			
15:00 - 15:30	Saluti istituzionali			
15:30 -16:30	0 -16:30 Massimo Labra: <i>Biodiversity is the solution: nature's answer to a sustainable future</i>			
16:30 -17:00	Coffee break & Poster Session			
	Chair: Deborah D'Angelo e Vincenzo Manna			
17:00 -18:00	Celussi M. Size does matter: tiny microbes slipping out 0.2 µm pores may alter standard biodiversity assessment			
	Doni L. Deciphering the hidden ecology and connectivity of Vibrio in the oceans			
	Petrucciani A. Diatoms: Future challenges in a changing ocean			
	Colombo L. Tracking <i>Silurus glanis</i> with eDNA tools in Italian subalpine lakes			
	Coppari M. The undisclosed interaction between habitat formers and their associated fauna			
18:00	Fine lavori			

	Mercoledì 4 Giugno 2025	
09:00 - 10:00	Daniela Zeppilli: <i>Making visible the invisible: a new era for benthic diversity studies</i>	
	Chair: Marco Basili e Martina Austoni	
10:00 - 11:15	Mercanti I. Antarctic ice melting shapes virus-host interactions and microbial diversity in ice and seawater	S
	Tenci M.V. Physical constraints on periphyton growth in proglacial lakes	<del>Q</del>
	Pezzolesi L. Consequences of floods on coastal waters and planktonic communities: the case of the 2023 Romagna event	
	Fumanti A. Microbiomes of marine calanoid copepods in Mediterranean coastal ecosystems	S
	Obertegger U. Under-ice zooplankton communities of Lake Tovel, a long-term perspective	
	Bruno M.C. Population structure and dynamics of two co-occurring invasive alien crayfish species in a small subalpine lake in Trentino: implications for Invasive Alien Species management	
11:15 - 11:45	Coffee break & Poster Session	
	Chair: Cecilia Satta e Manuela Coci	
11:45 - 13:15	Bellino A. From ecophysiology to ecosystem restoration of <i>Posidonia</i> oceanica meadows – a mechanistic modelling journey	Э
11:45 - 13:15		a 2
11:45 - 13:15	oceanica meadows – a mechanistic modelling journey	2
11:45 - 13:15	oceanica meadows – a mechanistic modelling journey  Buono A. Host preference of epizoic bdelloid rotifers  Bellavere E. Learning and memory through photoreception in non-	<u>2</u>
11:45 - 13:15	oceanica meadows – a mechanistic modelling journey  Buono A. Host preference of epizoic bdelloid rotifers  Bellavere E. Learning and memory through photoreception in nonmarine ostracods  Coco S. Preliminary observations from a transplant experiment of	2
11:45 - 13:15	oceanica meadows – a mechanistic modelling journey  Buono A. Host preference of epizoic bdelloid rotifers  Bellavere E. Learning and memory through photoreception in non-marine ostracods  Coco S. Preliminary observations from a transplant experiment of fouling assemblages from non-impacted areas to marinas  Corona S. The Marine Strategy Framework Directive contribution to the mapping of the non-indigenous copepod	<u>Q</u>

13:15 - 14:30	Lunch break		
14:30 - 15:30	Antonio Cattaneo: What's the meaning of 10 cm of sediment? Implications in space and time variability of the sedimentary record		
	Chair: Maria Vittoria Tenci e Monica Tolotti		
15:30 - 16:30	Morino L. From recycling to retention: nitrogen fate in the sediments of deep meromictic Lake Idro	Ö	
	Dezuanni P. Nutrient loads vs NANI/NAPI indices: evolution over time of nutrient pollution and land use in the catchments of the main tributaries of the Italian deep subalpine lakes	Я	
	Gambarotto E. Dissolved and particulate phosphorus loads and their transfer to rivers in three watersheds located in a highly productive agricultural area	Ö	
	Cavallini E. Anthropogenic autotrophy/heterotrophy and hydrological factors differentially influence river N and P exports from watersheds	Ö	
	Massi L. Chemical characterisation of Arctic marine sediments in Kongsfjorden	Ö	
16:30 - 17:00	Coffee break & Poster Session		
17:00 - 18:00	Assemblea Soci		
18:00	Fine lavori		
20:00	Cena Sociale		

Cena Sociale presso ristorante <u>MaWay – Al Passetto</u>, Piazza IV Novembre 1, Ancona



### Giovedì 5 Giugno 2025

Marco Cantonati: Healthy and biodiversity-rich aquatic 09:00 - 10:00 ecosystems starting from their origins: Springs' science and the silent global crisis of spring demise

#### Chair: Gabriele Consoli e Chiara Pennesi

Cerasino L. Cyanobacterial toxins in the largest Italian lake: what we have learned in fifteen years of scientific monitoring in Lake Garda

Copetti D. Phytoplankton community evolution in Lake Como (2000-2022): climate change effects under stable trophic conditions

Vulcano M.C. Periphyton in alpine and subalpine streams: a focus on biomass and nutritional quality.



10:00 - 11:00

Ruocco M. Adaptive potential of a Mediterranean zooxanthellate coral to ocean acidification: insights from a naturally acidified habitat

Auciello C. First assessment of diatom community diversity and dynamics on Saudi Arabian Gulf seagrass

Neri F. Metabarcoding versus microscopy: phytoplankton diversity and quantification challenges in three stations in the Northern Adriatic Sea



11:00 - 11:30

#### Coffee break & Poster Session

#### Chair: Paolo Dezuanni e Michela Rogora

Rotta F. Thermal stratification as a driver of microplastic accumulation in the euphotic zone of a deep lake.

Manna V. Biofilms on plastic, metabolically fantastic: functional dynamics of the microbial plastisphere

Leoni F. Investigation of tetrodotoxins occurrence in marine gastropods of the Adriatic Sea

11:30 - 13:00

Girolametti F. Tracing mercury exposure from sea to humans: preliminary findings on Adriatic mantis shrimp (Squilla mantis) and human hair samples from the Ancona population (Central Italy)

Mosconi M. Are eco-labeled sunscreens actually safe for tropical corals (Acropora spp.)?



Di Cesare a. Anthropogenic pollution plays a significant role in shaping the composition and spread of antibiotic resistance genes in aquatic ecosystems

Buschi E. Innovative in-situ eco-technologies for the bioremediation of contaminated marine sediments: insights from the LIFE SEDREMED project

13:00 - 14:30	Lunch break	
14:30 - 15:30	Emanuela Fanelli: <i>Under pressure: shifting Baselines and silent declines of elasmobranch populations in the Mediterranean Sea</i>	
	Chair: Maria Chiara Vulcano e Alessandro Bellino	
15:30 - 16:40	Da Ros Z. Trophic ecology of mesopredator elasmobranchs in the Northern Adriatic Sea	3
	Bellardini D. Plankton food webs as indicators of the ecosystem statu to support the Marine Strategy Framework Directive: a case study from Campania region (Italy)	IS
	Premici A. Spatial variations in assemblage and food web structure of megazoobenthic communities of the Northern Adriatic Sea	2
	Avanzato G. Integrating multibeam and scientific echosounder data to investigate fish aggregations at a Mediterranean seamount	2
	Virgili M. Engaging fishers in sea turtle conservation in the Mediterranean Sea	
16:40 - 17:00	Coffee break & Poster Session	
17:00	Fine lavori	
17:30 - 19:00	Escursione	

Escursione al <u>Parco del Cardeto</u>, ritrovo presso la Caserma Villarey (Facoltà di Economia UNIVPM), Piazzale Martelli Raffaele, Ancona alle ore 17:30.



Venerdì 6 Giugno 2025
-----------------------

#### Chair: Emanuela Buschi e Mauro Celussi

Riccioni G. Conservation genomics of a freshw water neglected fish: can we assist the management of the endangered Lisbon archedmouth nase?

Sabatino R. Dynamics of antibiotic resistance genes in the water column of aquatic environments

Varrella S. Assessing changes of marine prokaryotic assemblages in response to past anthropogenic activities and natural events

Corso D. At the beach with beta-lactamases: Chitinophagaceae as important carriers of antibiotic resistance genes in beach sand

09:00 - 10:30 Sbaffi T. Intrinsic and accessory antimicrobial resistome characterization of *Klebsiella pneumoniae* from sand and seawater along the Abruzzo Region shoreline

Varchetta R. Multi-Omics insights into chemoautotrophic carbon fixation in deep Antarctic water masses



Ferra C. Update of bottom trawl fishing grounds for deep-water red shrimp fisheries in the Eastern-Central Mediterranean Sea (GSAs 12-16, 18-27)

Caserta V. Integrating key environmental variables into stock assessment models. A case study for the stock of European anchovy (*Engraulis encrasicolus*) in the Adriatic Sea

10:30 - 11:00

#### **Coffee break & Poster Session**

#### Chair: Zaira Da Ros e Domenico D'Alelio

Bullo R. PCSI: Plastic Crime Scene Investigation. The Citizen Science approach to sea surface microplastic research

Vianson G. Characterization of the Italian recreational bottom longline fisheries through social media platforms



11:00 - 12:00

Riccardi A. Public attitudes and social license towards marine protection: insights from a case study in the Northwestern Adriatic Sea



Russo L. Topics and trends in marine ecosystem services research over the long term

### **Poster**

## Martedì 3 Giugno – Mercoledì 4 Giugno 2025

Bardone F.G. Influence of temperature, pH and salinity on the biometry and skeletal properties of the Adriatic clam *Chamelea gallina* 

Cappelletti C. Lake Garda: hotspot of xenodiversity

Castelli M. Effect of monoalgal diets on the reproductive performance of the copepod *Temora stylifera* 



Chemello A. Evaluating freshwater macroinvertebrates metrics for trout farming impacts on stream ecosystems



Coco S. Can a pest problem become a circular economic opportunity? The case of Tunicate Ascidians

D'Angelo D. Evaluating taxonomic sufficiency in macrozoobenthic biodiversity indices: a case study in the Adriatic Sea



Dezuanni P. Hydrology modelling of the retreat of Belvedere Glacier

Freddi A. Climate change impacts and anthropogenic pressures: integrated research and approaches to protect and preserve coastal environments

Gazzoldi L. Benthic metabolism and nitrogen cycling in a periodically connected river secondary channel



La Contana A. Natural silica substrates for tissue engineering: the potential of diatoms as green biomaterial



Mancuso A. Shell properties of the limpet *Patella vulgata* along a wide latitudinal gradient in Norway: responses to environmental conditions in arctic and sub-arctic waters



Moglia S. The role of climate warming and thermal stratification in the ecological success of *Diaphanosoma brachyurum* in Lake Maggiore



Morini L. Environmental stressors and sediment biogeochemistry: implications for deep lake ecosystems in Italy

Obertegger U. Diatom diversity in a mountain lake assessed by microscopy and metabarcoding, case study Upper Lake Balma

Satta C.T. Characterization of microalgal strains from Sardinian coasts (Italy) with potential applications in aquaculture: preliminary results

Tenci M.V. WATERWISE: co-designing suitable management solutions for resilient Alpine headwaters

Tolotti M. Mountain permafrost as a relevant water resource in the context of Alpine cryosphere degradation: an example from the practice

Tolotti M. Pro and cons of morphological and genomic approaches for the study of subfossil diatoms in Alpine lakes

Tosi A. Molecular, physiological and shell properties of cold-water molluscs (Patellogasteropoda, *Nacella spp.*) from the Southern Ocean under different environmental conditions: implications for resilience to future climate change



### Giovedì 5 Giugno – Venerdì 6 Giugno 2025

Bacchiani C. Integrated approach to study the pelagic food web of the Strait of Messina: stomach content and stable isotope analyses



Basili M. Effect of diets supplemented with commercial prebiotic blends combined with Chestnut and Quebracho tannin-rich extracts on gut histology and microbiome composition of gilthead seabream (*Sparus aurata*)



Bonacina L. A unique database of freshwater markers to address anthropogenic challenges threatening Alpine Lakes – The Interreg Alpine Space DiMark Project



Boscaini A. Preliminary results of genetic analysis of *Dreissena polymorpha* (zebra mussel) populations in Northern and Central Italy

Bruni M.C. Stakeholders perspectives on European riparian zones

Catta M.C. Fishing for litter: transforming plastic pollution into valuable resources



Cesarini G. Early warning systems for teratogenic risk in freshwaters: a biological approach beyond the Water Framework Directive

Coci M. From a marine station to an omics observatory: the case study of the Meda Senigallia (Adriatic Sea)

Colombo L. Unmasking the predator: a molecular approach to detect Silurus glanis

Consoli G. Integrating metabarcoding with biotic indices to detect point-source contamination in rivers: Insights from aquaculture effluents in Trentino in the frame of the project ASTRO

D'Alelio D. Figlie di Nettuno podcast

Fanelli M. A Two-Year assessment of Heavy Metal(loid)s variability in surface sediments of the Ancona Coast		
Greca T. Selection and characterization of cadmium-resistant microalgae from Calabrian Sea and Gulf of Taranto for potential phycoremediation applications		
Ivaldi J. Applying Digital Droplet PCR (ddPCR) in the monitoring of the effects of in situ technologies for the bioremediation of highly polluted marine sediments	Q	
Luzi B. Trapped but not gone: microplastics in the outlets of wastewater treatment line	Ö	
Massaccesi N. A mediterranean Perspective on Antimicrobial Resistance in Aquaculture		
Molari M. IMC's Molecular Ecology Lab: powering biomonitoring of Sardinia's marine ecosystems by environmental DNA (eDNA)		
Riccardi A. Molecular basis of light sensing in seagrasses: from photoreceptors to ecosystem function	)	
Rogora M. High frequency monitoring by limnological buoys as a support to long- term ecological research on lakes		
Roveta C. Ghost gears and citizen science: engaging divers to assess ALDFG impacts on Mediterranean coralligenous habitats	Ö	
Ruscelli C. Molecular and physiological acclimatization of the Mediterranean zooxanthellate coral <i>Balanophyllia europaea</i> at a natural CO2 vent		
Scozzafava S. Diatoms on Plastics and Bioplastics: Insights for a Sustainable Future of Coastal Ecosystems	Q	



Partecipa al premio Giuseppe Morabito, come miglior presentazione o poster

