

SIBE 2019 CONFERENCE PRELIMINARY PROGRAMME

SUNDAY 1ST SEPTEMBER, 2019

ORTO BOTANICO - VIA ORTO BOTANICO 15, 35123 PADOVA

10:00 – 13:00	SIBE-IRSAE crash course in Bridging Phylogeny and Population genetics <i>Organizers: OMAR ROTA-STABELLI, FRANCESCA CAGNACCI</i>
10:00 – 13:00	REGISTRATION
13:00 – 13:15	WELCOME ADDRESS
13:15 – 14:00	OPENING LECTURE – SCOTT GILBERT - Swarthmore College, University of Helsinki - Selectable units of evolution: the importance of developmental symbioses <i>Lecture dedicated to NICOLA SAINO</i>

SYMPOSIUM

PHYLO3: PHYLOGENETICS, PHYLOGENOMICS & PHYLOGEOGRAPHY

ORGANIZERS: OMAR ROTA-STABELLI, EMILIANO TRUCCHI, LINO OMETTO

14:00 – 14:30	DANIELE SILVESTRO – University of Gothenburg, University of Lausanne - Inferring macroevolutionary processes from phylogenies and fossils
14:30 – 14:45	IGNACIO QUINTERO, MICHAEL LANDIS - Interdependent Phenotypic and Biogeographic Evolution Driven by Biotic Interactions
14:45 – 15:00	SAVERIO VICARIO, MARIA ADAMO, CRISTINA TARANTINO, PALMA BLONDA - Correlating phenology dynamics estimated via Landsat collection with observed avian phylogenetic diversity in the national Park of Peneda-Gerês in northern Portugal
15:00 – 15:15	GIOBBE FORNI, ANGELO ALBERTO RUGGERI, FEDERICO PLAZZI, BARBARA MANTOVANI, ANDREA LUCHETTI - BASE: overcoming constraints & limitations of the ω in a phylogenomic framework
15:15 – 15:30	FEDERICA VALERIO, FRANCESCA SCOLARI, LUDVIK GOMULSKI, MARIANGELA BONIZZONI, LINO OMETTO - “Melons and mangos for my friend and just olives for me, please”: the evolution of food choice in Bactrocera fruit flies
15:30 – 16:00	Coffee break
16:00 – 16:15	S FUSELLI, M GERDOL, C MCDOUGALL, R BIELLO, D.J. SCHMIDT, A MANCIA, S GRECO, S PALMITESSA, D.T. ROBERTS, T ESPINOZA, A PALLAVICINI, G BERTORELLE - Transcriptome structure and evolution when the size of the genome is 50 gigabases: some preliminary data for the Australian lungfish lineage (<i>Neoceratodus fosteri</i>)

16:15 – 16:30	ANDREA SILVERJ, OMAR ROTA-STABELLI - Codon usage indicates that amphibians, reptiles and birds are major hosts for Zika and other arboviruses: implications for epidemiology and surveillance
16:30 – 16:45	MICHELE MARCONCINI, LUIS HERNANDEZ, VINCENT HOUÉ, FEDERICA VALERIO, UMBERTO PALATINI, ELISA PISCHEDDA, LINO OMETTO, FEDERICO FORNERIS, ANNA-BELLA FAILLOUX, MARIANGELA BONIZZONI - Polymorphism analyses and protein modelling inform on functional specialization of Piwi clade genes in the arboviral vector <i>Aedes albopictus</i>
16:45 – 17:00	NICOLA ZADRA, ANNAPAOLA RIZZOLLI, OMAR ROTA STABELLI – Phylogeny and divergence of Aedini mosquitoes: evolutionary scenarios and genomic perspectives
17:00 – 17:15	ALESSANDRO ROSSI, LAURA TREU, HENRIKE ZSCHACH, BAS DUTILH - Evolutionary study of the crAssphage virus at gene level
17:15 – 17:30	MICHELE CASTELLI, MARZIEH KASHKOULI, YAGHOUB FATHIPOUR, ANNA MARIA FLORIANO, FABIO SPAIRANI, CLAUDIO BANDI, MOHAMMAD MEHRABADI, DAVIDE SASSERA - Convergent genome reduction patterns in bacterial symbionts of stink bugs
17:30 – 17:45	ANNA MARIA FLORIANO, EMANUELA OLIVIERI, MICHELE CASTELLI, STEFANO GAIARSA, EMANUELA CLEMENTI, AMRITA VIJAY, BENJAMIN MAKEPEACE, CATHERINE HARTLEY, VALENTINA SERRA, EDWARD KARIUKI, BERSISSA KUMSA, KATERINA KYBICOVA, LAURA RINALDI, ANA MARIA PALOMAR URBINA, ATLE MYSTERUD, CLAUDE RISPE, OLIVIER PLANTARD, NATHAN LO, AARON JEX, CLAUDIO BANDI, LIONEL GUY, DAVIDE SASSERA - Towards the understanding of the evolution of intramitochondrial tropism in ticks symbionts
17:45 – 18:00	ANTONIO CARAPELLI, CHIARA LEO, FRANCESCO NARDI, FRANCESCO FRATI - Molecular phylogenetics of early diverging hexapod lineages
18:00 – 18:15	ANANYA JANA, PRAVEEN KARANTH - Multilocus nuclear markers provide new insights into the origin and evolution of the blackbuck, <i>Antilope cervicapra</i>
18:15 – 19:30	BOTANICAL GARDEN FULL VISIT
19:30 – 20:30	APERITIVE + SIBE'S GOT TALENT

MONDAY 2ND SEPTEMBER, 2019
ORTO BOTANICO - VIA ORTO BOTANICO 15, 35123 PADOVA
SYMPOSIUM

UNITS OF DIVERSITY: TOOLS, STRATEGIES & CASE-STUDIES TO DEFINE SPECIES LIMITS

ORGANIZERS: CHIARA PAPETTI, LUCIO BONATO

9:00 – 9:40	BIRGIT SCHLICK-STEINER – University of Innsbruck - Integrative taxonomy: interface of systematics and evolutionary biology
9:40 – 9:55	LEONARDO PLATANIA, RALUCA VODĂ, VLAD DINCA, GERARD TALAVERA, ROGER VILA, LEONARDO DAPPORTO – Integrative analyses on western palearctic lasiommatata reveal a mosaic of nascent butterfly species
9:55 – 10:10	FRANCESCO MARTONI, GARY TAYLOR, SIMON R. BULMAN, ANDREW PITMAN, KAREN F. ARMSTRONG - Species delimitation and integrative taxonomy applied to the New Zealand psyllids (Hemiptera: Psylloidea)
10:10 – 10:25	KATIA SCIUTO, MARION WOLF, ISABELLA MORO - Systematic revision of the genera Pleurastrum and Chlorococcum (Chlorophyta) based on molecular and climate data
10:25-10:40	GIULIA MAGOGA, MATTEO BRUNETTI, DIEGO FONTANETO, MATTEO MONTAGNA - Factors affecting the accuracy of molecular species delimitation: evidences from the species-rich beetle family of Chrysomelidae
10:40 – 11:10	Coffee break
11:10 – 11:25	GIULIA AGOSTINETTO, ADAM CHAHED, MARZIA DI FILIPPO, ANNA SANDIONIGI, DARIO PESCINI, MAURIZIO CASIRAGHI - ExTaxsI: Exploration Taxonomies Informations, a tool to build and visualize amplicon database
11:25 – 11:40	ANTONIA BRUNO, ANNA SANDIONIGI, DAVIDE MAGNANI, ANTONELLA PANIO, MARZIA BERNASCONI, MASSIMO LABRA, MAURIZIO CASIRAGHI - Mining the microbial word of a drinking water treatment plant: unexplored biodiversity revealed

SYMPOSIUM MISCELLANEOUS TOPICS

ORGANIZERS: CHIARA PAPETTI

11:40 – 11:55	PAOLO FRANCHINI, CARMELO FRUCIANO, NIDAL KARAGIC, ANDREAS F. KAUTT, ALEXANDER NATER, RALF SCHNEIDER, MELISA OLAVE, C. DARRIN HULSEY, AXEL MEYER - Dissecting the genetic basis of pharyngeal jaw parallelism in sympatric Midas cichlid fish radiations
11:55 - 12:10	VICTORIA CABRERA, NICOLAI NÜRK, COLIN HUGHES - The interplay between trait, ecology and diversification in Lupinus

12:30-13:30	LUNCH (not included)
SYMPOSIUM EVOLUTION IN MARINE ENVIRONMENTS	
<i>ORGANIZERS:</i> LISA LOCATELLO, MARIA VITTORIA MODICA, MARCO MUNARI	
13:30-14:00	LLOYD PECK - British Antarctic Survey (UK) - Life in cold extremes: adaptations of Antarctic marine species
14:00 – 14:15	DAVIDE ASNICAR , MARCO MUNARI, MARIA GABRIELLA MARIN - Can prolonged parental exposure to seawater acidification result in different responses of <i>Paracentrotus lividus</i> offspring?
14:15 – 14:30	JESSICA VETTESE, STEFANIA PUCE, FEDERICO DOMINICHELLI, STEFANO GRIDELLI, CAMILLA ROVETA, TOMAS VEGA FERNÁNDEZ, LUIGI MUSCO - Together or alone? Protocooperative predation may be an evolutionary driver promoting gregarism in cnidarian polyps
14:30 – 14:45	TERESA ROMEO , VALENTINA ESPOSITO, MARCELLA DI BELLA, SIMONEPIETRO CANESE - Life adaptation to extreme conditions in the hydrothermal system of Panarea: case study of basiluzzo islet
14:45 – 15:00	FABIO GASPARINI , VIRGINIA VANNI, CHIARA ANSELMI, LUCIA MANNI - Stem cell based survival strategies in the marine environment: alternative developmental and regenerative pathways in star ascidians
15:00 – 15:15	VALERIA RUSSINI, GIULIA FASSIO, MARIA VITTORIA MODICA, MARCO OLIVERIO - First evidence of poecilogony in the Neogastropoda
15:15- 15:30	GIULIA FASSIO , MARIA VITTORIA MODICA, LOU MARY, PAUL ZAHARIAS, ALEXANDER E. FEDOSOV, JULIETTE GORSON, YURI I. KANTOR, MANDE HOLFORD, NICOLAS PUILLANDRE - Venom diversity and evolution of the most divergent cone snail genus Profundiconus
15:30 – 16:00	Coffee break
16:00 – 16:15	RACHELE CESARONI , FIORELLA FLORIAN, ALBERTO PALLAVICINI, SERGIO STEFANNI - A glimpse into the genome of the deep-sea fish <i>Chauliodus sloani</i>
16:15 – 16:30	MARCO GERDOL , FEDERICO ANSALONI, VALENTINA TORBOLI, PIERO GIULIO GIULIANINI, MARIA ROSARIA COSCIA, GIANFRANCO SANTOVITO, FRANCESCO BUONOCORE, GIUSEPPE SCAPIGLIATI, ALBERTO PALLAVICINI - Comparative transcriptomics sheds new light on peculiar cold adaptation strategies in the gills of Cryonotothenioidea
16:30 – 16:45	CHRISTINA EGGER , CYMON COX, BASTIAN BRENZINGER, BARBARA BUGE, KATHARINA JÖRGER - Molecular phylogeny of Caecidae micro snails (Truncatelloidea, Caenogastropoda) and the evolution of a tubular shell
16:45 – 17:00	RUS HOELZEL - Vertical evolution across deep water boundaries in the genus <i>Coryphaenoides</i>

17:00 – 17:15	PAOLO MOMIGLIANO, HENRI JOKINEN, ANTOINE FRAIMOUT, ANN-BRITT FLORIN, ALF NORKKO, JUHA MERILÄ - Extraordinarily rapid speciation in a marine fish
17:15 – 17:30	IMMACOLATA CASTELLANO, MARCO GERDOL, MARCO SOLLITTO, ALBERTO PALLAVICINI - Unveiling the evolutionary history of sulfoxide synthase OvoA in metazoans
17:30 – 17:45	FEDERICO PLAZZI, MARCO PASSAMONTI - SmithRNAs: a new arena for mito-nuclear interaction and coevolution
17:45 – 19:30	SIBE GENERAL MEETING
19:30 – 21:00	DINNER (not included)
21:00 – 22:30	EVENING SHOW (Botanical garden)

TUESDAY 3RD SEPTEMBER, 2019
ORTO BOTANICO - VIA ORTO BOTANICO 15, 35123 PADOVA

SYMPOSIUM

CONSERVATION AND EVOLUTION

ORGANIZERS: LEONARDO CONGIU, ELISA BOSCARI, GABRIELE GENTILE

9:00 – 9:30	CHRISTOPHER CLEMENTS – University of Bristol - Tracking traits to predict declines
9:30 – 9:45	GIACOMO ZILIO, LOUISE NOERGAARD, OLIVER KALTZ - Experimental evolution of parasite dispersal strategies in spatially dynamic landscapes
9:45 – 10:00	GERARDO FRACASSO, DIETER HEYLEN, ERIK MATTHYSEN - Individual variation and evolutionary potential of parasite traits in a songbird-tick system
10:00 – 10:15	ILARIA FRACASSO, ROBERTO CELVA, BARBARA CRESTANELLO, MATTEO GIRARDI, ALEXIS MARCHESINI, PIERGIOVANNI PARTEL, PAOLO PEDRINI, DAVIDE SCRIDEL, SIMONE TENAN, ALESSANDRO FORTI, MATTEO ANDERLE, CRISTIANO - Integrating individual genotyping and eDNA metabarcoding diet analysis for the study of an elusive bird, the hazel grouse (<i>Tetrastes bonasia</i>) Vernesi
10:15 – 10:30	ABIGAIL L. LIND, YVONNE Y.Y. LAI, YULIA MOSTOVLOY, ALISHA K. HOLLOWAY, ALESSIO IANNUCCI, ANGEL C.Y. MAK, MARCO FONDI, VALERIO ORLANDINI, WALTER L. ECKALBAR, MASSIMO MILAN, MICHAEL ROVATSOS, ILYA G. KICHIGIN, ALEX I. MAKUNIN, MARTINA JOHNSON POKORNÁ, MARIE ALTMANOVÁ, VLADIMIR A. TRIFONOV, ELIO SCHIJLEN, LUKÁŠ KRATOCHVÍL, RENATO FANI, PETR VELENSKÝ, IVAN REHÁK, TOMASO PATARNELLO, TIM S. JESSOP, JAMES W. HICKS, OLIVER A. RYDER,

	JOSEPH R. MENDELSON III, CLAUDIO CIOFI, PUI-YAN KWOK, KATHERINE S. POLLARD, BENOIT G. BRUNEAU - A high-resolution, chromosome-assigned Komodo dragon genome reveals adaptations in the cardiovascular, muscular, and chemosensory systems of monitor lizards
10:30 – 11:00	Coffee break
11:00 – 11:15	GIULIANO COLOSIMO, GABRIELE DI MARCO, ANGELO GISMONDI, ALESSIA D'AGOSTINO, GLENN GERBER, ANTONELLA CANINI, GABRIELE GENTILE - Effective reproductive isolation mechanism (RIMs) between <i>C. marthae</i> and <i>C. subcristatus</i> in Galápagos: the possible role of chemical signaling for species recognition
11:15 – 11:30	ROBERTO BIELLO, MAURO ZAMPIGLIA, EMILIANO TRUCCHI, ANNA LAURA MANCIA, GIULIA FABBRI, RODRIGO BAPTISTA, SILVIA FUSELLI, DANIELE CANESTRELLI, GIORGIO BERTORELLE - From conservation genetics to conservation genomics: the case of the endangered land tortoise <i>Testudo hermanni</i>
11:30 – 11:45	FEDERICA POLI, SIMONE IMMLER, CLELIA GASPARINI - Effects of ovarian fluid on sperm traits and its implications for post-mating sperm selection in the zebrafish
11:45 – 12:00	ALEXANDRA GLAVASCHI, SILVIA CATTELAN, ANDREA PILASTRO - Sexual selection under varying predation risk
12:00 – 12:15	MARCO CROTTI, COLIN ADAMS, KATHRYN ELMER - Evolutionary implications of translocation for whitefish in Scotland
12:15 – 13:00	LUNCH (offered by NaturaSi)
13:00 – 14:00	POSTER SESSION

**SYMPOSIUM
SOCIAL BEHAVIOUR: ECOLOGY AND EVOLUTION**

ORGANIZERS: MATTEO GRIGGIO, TYRONE LUCON-XICCATO

14.00 – 14:30	DANIELA CAMPOBELLO – University of Palermo - Evolutionary consequences of social transmission in avian brood parasitism systems
14:30 – 14:45	LAURA BUSIA, COLLEEN SCHAFFNER, FILIPPO AURELI - The danger within: Relationship quality affects vigilance in wild spider monkeys(<i>Ateles geoffroyi</i>)
14:45 – 15:00	STEFANO GRIGNOLIO, ALICE BRAMBILLA, MARCO APOLLONIO, FRANCESCA BRIVIO - A long-term study on social behaviour of a wild large herbivore
15:00 – 15:15	ADAM REDDON, CODY DEY, SIGAL BALSHINE - Submissive behaviour is mediated by sex, social status, relative body size, and shelter availability in a social fish

15:15 – 15:30	CRISTINA SARTORI, NADIA GUZZO, ENRICO MANCIN, ROBERTO MANTOVANI - Social dominance and fertility: indirect genetic effects and antagonistic relationships
15:30 – 15:45	DONATO A. GRASSO, D. GIANNETTI, C. CASTRACANI, A. MORI, M. NEPI, S. MANCUSO - A special case in ant-plant relationships: mutualism or partner manipulation mediated by extrafloral nectar?
15:45 – 16:00	BENIAMINO TULIOZI, ELISA LIGORIO, ETTORE CAMERLENGHI, MATTEO GRIGGIO Interactions between individual variation in behaviour and group performances in House Sparrow
16:00 – 16:30	Coffee break
	Session on Evolutionary Medicine Organizer: MARCO PASSAMONTI
16:30 – 17:00	ALFONSO TROISI – University of Roma Tor Vergata - Mr. Darwin incontra il Dr. House: i contributi della biologia evoluzionistica alla medicina e alla psichiatria
17:00 – 17:15	GIACINTO LIBERTINI - Importance and Meaning of Phenoptosis
17:15 – 17:30	Dr. Darwin Award
17:30 – 18:00	PRIZE AWARD AND CEREMONY
18:00 ...	SPECIAL GUIDED VISIT & SOCIAL DINNER

WEDNESDAY 4TH SEPTEMBER, 2019

AULA MAGNA "GALILEO GALILEI", PALAZZO BO - VIA VIII FEBBRAIO, 2, 35122 PADOVA

1ST JOINT SESSION SIBE + AAI

POPULATION GENETICS AND POPULATION GENOMICS

ORGANIZERS: GIORGIO BERTORELLE, LUCA PAGANI

9:00 – 9:40	MONTGOMERY SLATKIN - University of Berkeley - Genetic effects of range expansions
9:40 – 9:55	KUN HUANG, LINO OMETTO, NICOLA SEGATA , OMAR ROTA-STABELLI - Highly-resolved strain-level population dynamics of Wolbachia from large-scale metagenomes
9:55 – 10:10	SILVIA GHIROTTO, M. T. VIZZARI, F. TASSI, G. BARBUJANI, A. BENAZZO - Distinguishing among complex evolutionary models using unphased whole-genome data through Approximate Bayesian Computation
10:10 – 10:25	EMILIANO TRUCCHI, A. BENAZZO, M. LARI, A. IOB, S. VAI, L. NANNI, E. BELLUCCI, E. BITOCCHI, X. CHUNMING, S. JACKSON, L. S. VERÓNICA, B. PILAR, O. NURIT, A. GIL, G. MEME, T. MICHELI, M. DE

	LORENZI, L. CALCAGNILE, D. CARAMELLI, B. STAR, H. DE BOER, S. BOESSENKOOL, R. PAPA, G. BERTORELLE - Ancient genomes reveal early farmers selected common beans while preserving diversity
10:25 – 10:40	EUGENIA D'ATANASIO - Phenotype prediction from ancient low-coverage genomes
10:40 – 11:00	Coffee break
11:00 – 11:15	GUIDO ALBERTO GNECCHI RUSCONE - Polygenic adaptation to high altitude: insights from Tibetan and Sherpa genomes
11:15 – 11:30	CLAUDIA OJEDA-GRANADOS - Unravelling genetic adaptations of Mexican populations to their ancestral environments and the potential dis-adaptive loci influencing their present-day disease risk
11:45 – 13:00	CAVALLI SFORZA PRIZE AND LECTURE (open to the public) with FRANCESCO CAVALLI SFORZA <i>Prize awarded to Montgomery Slatkin</i>
13:00 – 14:00	LUNCH (offered by NaturaSì) <i>2nd joint session SIBE + AAI</i>
14:00 – 15:00	GARRETT HELLENTHAL - University College London - Defining contemporary "populations", and inferring their ancestral histories, using genome-wide DNA
15:00 – 15:30	Coffee break <i>3rd joint session SIBE + AAI</i>
15:30 – 16:30	COSIMO POSTH - Max Planck Institute - Paleolithic interactions: hunter-gatherer genetic history across European geo-temporal transects
16:30 – 18:00	ROUND TABLE ON SCIENCE COMMUNICATION (open to the public)

