



EVOLUZIONE  
2017

---

*7° Congresso della Società Italiana  
di Biologia Evoluzionistica*

Programme

Rome, 28-31 August 2017

*Department of Sciences, Roma Tre University, viale G.Marconi 446*

---



SAPIENZA  
UNIVERSITÀ DI ROMA



UNIVERSITÀ DI ROMA  
TOR VERGATA



### ***Organising Committee***

GABRIELE GENTILE (Coord.)

*Roma Tor Vergata*

GIULIANA ALLEGRUCCI

*Roma Tor Vergata*

MARCO ALBERTO BOLOGNA

*Roma Tre*

MONICA CAROSI

*Roma Tre*

DONATELLA CESARONI

*Roma Tor Vergata*

ALESSIO DE BIASE

*Roma Sapienza*

ANDREA DI GIULIO

*Roma Tre*

EMILIANO MANCINI

*Roma Tre*

MARCO OLIVERIO

*Roma Sapienza*

LEONARDO VIGNOLI

*Roma Tre*

### ***Organising Secretariat***

CRISTINA COMPAGNO

*Management of Tourism and*

*Biodiversity - Elly Travel srl*

[info@sibe2017.uniroma2.it](mailto:info@sibe2017.uniroma2.it)

### ***Scientific Committee***

MARCO PASSAMONTI (Coord.)

*Bologna*

GIULIANA ALLEGRUCCI

*Roma Tor Vergata*

GIORGIO BERTORELLE

*Ferrara*

MAURIZIO CASIRAGHI

*Milano Bicocca*

PAOLO CIUCCI

*Roma Sapienza*

GIUSEPPE FUSCO

*Padova*

GABRIELE GENTILE

*Roma Tor Vergata*

SILVIA GHIROTTI

*Ferrara*

ALESSANDRO MINELLI

*Padova*

TELMO PIEVANI

*Padova*

ANDREA PILASTRO

*Padova*

OMAR ROTA STABELLI

*Edmund Mach Foundation (TN)*

### ***Sponsors***



*Monday, 28 August 2017*

	<p><b><i>SIBE Crash Course in Phylogenetics</i></b>  <i>Organisers: OMAR ROTA STABELLI AND ANDREA LUCHETTI</i></p> <p>9:00 Gathering and softwares check</p> <p>9:30 The Genesis: In the beginning the selection created the ortholog and the paralog</p> <p>10:30 The Phylogentic Trinity: Distance, Parsimony, Likelihood</p> <p>12:00 The Bayesian Reform and the Revelation of time</p> <p>13:00 Mortal sins and final confession</p>
<p>12:00 ..... ..... ..... ..... 14:45</p>	<p><b><i>EVOLUZIONE 2017 - Registration</i></b></p>
<p>14:45</p>	<p><b><i>WELCOME ADDRESS</i></b></p>
<p>15:00</p>	<p><b><i>Opening lecture</i></b>  <b>ALESSANDRA DELLA TORRE</b> - Sapienza University of Rome          Cryptic divergence and sympatric speciation in the main Afrotropical malaria vector species of the <i>Anopheles gambiae</i> complex</p>

*Monday, 28 August 2017*

***SYMPOSIUM Advanced models and technologies  
for the study of Evolution***

*Chair: MARCO PASSAMONTI*

- |       |  |
|-------|--|
| 15:30 | <b>JAMES MCINERNEY</b> - University of Manchester<br>The importance of mergers and acquisitions in evolution   |
| 16:00 | <b>ANDREA POZZI, FEDERICO PLAZZI, LILIANA MILANI, FABRIZIO GHISELLI AND MARCO PASSAMONTI</b> - SmithRNAs: could mitochondria “bend” nuclear regulation?  |
| 16:15 | <b>MARIANGELA IANNELLO, GUGLIELMO PUCCIO, FEDERICO PLAZZI, FABRIZIO GHISELLI AND MARCO PASSAMONTI</b> - Comparative transcriptome analysis in species with different mechanism of mitochondrial inheritance  |
| 16:30 | <b>CHRISTOPHER CREEVEY, MARK WILKINSON AND JAMES MCINERNEY</b> - The Likelihood Decay Index: Branch support for the phylogenomics era  |
| 16:45 | <b>GIOVANNI FORCINA, MIGUEL CAMACHO-SANCHEZ, SACRAMENTO MORENO AND JENNIFER ANN LEONARD</b> - Large-scale screening of genetic diversity of spatially isolated and taxonomically diverse small mammal communities by intron markers  |
| 17:00 | <b><i>Coffee Break</i></b>   |
| 17:30 | <b>ALESSIO IANNUCCI, MARTINA JOHNSON POKORNÁ, MARIE ALTMANOVÁ, MICHAEL ROVATSOS, LUKÁŠ KRATOCHVÍL, IVAN REHÁK, PETR VELENSKÝ, JORGE CLAUDIO PEREIRA, MALCOLM FERGUSON-SMITH AND CLAUDIO CIOFI</b> - Description of a molecular cytogenetic integrative approach to investigate the evolution of Komodo dragon genome |
| 17:45 | <b>LORENZA RUGNINI, LAURA BRUNO, ROBERTA CONGESTRI, ANDREA ANDREUCCI, MONICA RUFFINI-CASTIGLIONE AND LUIGI SANITÀ DI TOPPI</b> - Looking at the present to gain knowledge on the past: what might be the primeval function of the phytochelatin synthase enzyme?   |
| 18:00 | <b>KAREN SIU-TING, MARY O'CONNELL, MARIA TORRES-SÁNCHEZ, DIEGO SAN MAURO, MARK WILKINSON AND CHRISTOPHER CREEVEY</b> - The impact of orthology selection in assessing the phylogenetic relationships of the living lineages of amphibians  |
| 18:15 | <b>GIULIA FASSIO, EMILY LAU, JULIETTE GORSON AND MANDÉ HOLFORD</b> - Investigating diet diversity and venom evolution of the family Terebridae (Gastropoda)  |
| 18:30 | <b>GLORIA GONZALEZ-FORTES, EPIE RUTH JONES, ANDREA MANICA AND MICHİ HOFREITER</b> - Paleogenomic evidence for multi-generational mixing between Neolithic farmers and Mesolithic hunter-gatherers in the Lower Danube basin  |

18:45 ***WELCOME COCKTAIL***

*Tuesday, 29 August 2017*

***SYMPOSIUM Biogeography and Systematics***

*Chair:* OMAR ROTA STABELLI

*Co-chair:* GIULIANA ALLEGRUCCI

- |       |   |
|-------|---|
| 9:30  | <b>NICOLA SEGATA</b> – University of Trento<br>Microbial population structure and biogeography from metagenomic data  |
| 10:00 | <b>YOSHAN MOODLEY, ANDREA BRUNELLI, SILVIA GHIROTTI, VERA CHELYSHEVA, ANDREY KLYUBIN, AYAAS MAADY, KUVAT MOMINYALEV, BODO LINZ AND MARK ACHTMAN</b> - The genetic diversity of <i>Helicobacter pylori</i> in Siberia  |
| 10:15 | <b>VALERIA RUSSINI, GIULIA FASSIO, MARIA VITTORIA MODICA AND MARCO OLIVERIO</b> - A biogeographic analysis of loss of planktotrophy in caenogastropod molluscs (Gastropoda, Nassariidae)  |
| 10:30 | <b>GIULIA FURFARO, EMILIANO MANCINI, DANIELE SALVI AND PAOLO MARIOTTINI</b> - Unraveling the evolutionary history of Mediterranean Flabellinidae and Piseinotecidae species (Heterobranchia, Gastropoda)  |
| 10:45 | <b>LUDMILA SROMEK, DIDIER FORCIOLI, RAFAL LASOTA, PAOLA FURLA AND MACIEJ WOLOWICZ</b> - Population genomics and species-level differentiation in <i>Cerastoderma glaucum</i> (Bivalvia) determined using restriction-site associated DNA-sequencing                         |
| 11:00 | <b>Coffee Break</b>   |
| 11:30 | <b>VERENA PICHLER, PANAGIOTA KOTZAKIOTSI, BENIAMINO CAPUTO, GISELLA CACCONE AND ALESSANDRA DELLA TORRE</b> - Genomic insights on the biogeography of the Tiger Mosquito, <i>Aedes albopictus</i> , in Italy   |
| 11:45 | <b>ANTONIO CARAPELLI, CHIARA LEO, PIETRO PAOLO FANCIULLI AND FRANCESCO FRATI</b> - Revealing the genetic diversity of Antarctic springtails   |
| 12:00 | <b>IGHOR ZAPPES, ANNA FABIANI, PAOLA RUMOLO AND GIULIANA ALLEGRUCCI</b> - Ecological genetics and diet composition of Weddell seal ( <i>Leptonichotes weddellii</i> ) from the Ross sea   |
| 12:15 | <b>LUCIO BONATO, ANDREA CORBETTA, EMINA ŠUNJE, CRISTIANO VERNESI, ENRICO ROMANAZZI AND BARBARA CRESTANELLO</b> - Peripheral populations of <i>Salamandra atra</i> at the southern fringe of the Alps: genetic differentiation and evolutionary history                      |
| 12:30 | <b>GABRIELE SENCZUK, JAMES HARRIS, RICCARDO CASTIGLIA, VICTORIA LITZI, PAOLO COLANGELO, DANIELE CANESTRELLI AND DANIELE SALVI</b> - The evolutionary history of the insular endemic <i>Podarcis wagneriana</i> revealed glacial expansions followed by asymmetric gene flow |

*Tuesday, 29 August 2017*

14:30 ..... .....	<b><i>POSTER SESSION</i></b>
15:45	<b><i>Coffee Break</i></b>
16:00	<b><i>SYMPOSIUM Evo-Devo</i></b> <i>Chair: ALESSANDRO MINELLI</i> <i>Co-chair: GIUSEPPE FUSCO</i>
16:00	<b>PAOLO SORDINO</b> - Stazione Zoologica Anton Dohrn, Napoli The fin-to-limb transition
16:30	<b>EMANUELE RIGATO AND GIUSEPPE FUSCO</b> - Effects of phenotypic robustness on adaptive evolutionary dynamics
16:45	<b>PAOLO COLANGELO, DANIELE VENTURA, PAOLO PIRAS, JACOPO PAGANI GUAZZUGLI BONAIUTI AND GIANDOMENICO ARDIZZONE</b> - Do ontogenetic changes trigger the evolution of eco-morphological traits in demersal fishes?
17:30	<b><i>SOCIAL DINNER</i></b>  <b><i>Villa dei Quintili</i></b> <i>(via Appia Nuova, 1092 - Roma)</i>  <b><i>Alfonso Bucci - Ristorante ROMA - Amatrice</i></b>

*Wednesday, 30 August 2017*

***SYMPOSIUM Evolutionary and behavioral ecology***

*Chair:* ANDREA PILASTRO

*Co-chair:* LISA LOCATELLO

- |       |   |
|-------|---|
| 9:30  | <b>TOMMASO PIZZARI</b> – University of Oxford<br>The Polyandry revolution: from societies to genes  |
| 10:00 | <b>GIOVANNI POLVERINO, FRANCESCA SANTOSTEFANO, CARLOS DÍAZ-GIL AND THOMAS MEHNER</b> - Life-history strategies and pace-of-life syndrome hypothesis: unmatched predictions and varying correlation structures |
| 10:15 | <b>GIACOMO MARIA PAGANOTTI</b> - Human cytochrome P450 2B6 genetic variability in Botswana: a case of haplotype diversity and convergent adaptation   |
| 10:30 | <b>CALOGERO MONTEODORO, HANS VAN DYCK, MARIE-CLAUDE HUYNEN, ZARIN MACHANDA AND RICHARD WRANGHAM</b> - Play behaviour in wild juvenile chimpanzee ( <i>Pan troglodytes</i> )                                   |
| 10:45 | <b>CRISTIANO BERTOLUCCI, ELENA FRIGATO, GIUSEPPE DI MAURO, ELISA MORBIATO, NICHOLAS FOULKES AND SILVIA FUSELLI</b> - The atypical circadian clock of cavefish   |
| 11:00 | <b><i>Coffee Break</i></b>  |
| 11:30 | <b>VITO SCICCHITANO, FRANCK DEDEINE, BARBARA MANTOVANI AND ANDREA LUCETTI</b> - Reproductive strategies and breeding systems in <i>Reticulitermes</i> subterranean termites (Isoptera, Rhinotermitidae)       |
| 11:45 | <b>ELISABETTA VERSACE AND BENJAMIN L. DE BIVORT</b> - How light and genes affect social behaviour in <i>Drosophila</i> dyads  |
| 12:00 | <b>DANIELE D'AGOSTINO, BEN CHAPMAN, JOHN BURT, VERONICA SANTINELLI AND DAVID FEARY</b> - Behavioural plasticity and extreme thermal variation: a story from the world's warmest sea                           |
| 12:15 | <b>GIANLUCA CHIMETTO, SOFIA RIZZI, MARTINA MAGRIS AND ANDREA PILASTRO</b> - "Pay to play": costs of phenotypic plasticity of sexual traits in guppies   |
| 12:30 | <b>MAURIZIO MUZZI AND ANDREA DI GIULIO</b> - A morphological approach to study the evolution of explosive defensive systems in Coleoptera   |

*Wednesday, 30 August 2017*

	<p><b><i>SYMPOSIUM Coevolution and symbiosis</i></b> Chair: MAURIZIO CASIRAGHI</p>
14:30	<b>FRANCIS JIGGINS</b> – University of Cambridge Symbionts and genes: the coevolution of <i>Drosophila</i> and it's viruses
15:00	<b>ANNA MARIA FLORIANO, MICHELE CASTELLI, FRANZISKA SZOKOLI, ELENA SABANEYEVA, SASCHA KRENEK, MARTINA SCHRALLHAMMER, THOMAS ULRICH BERENDONK, CHIARA BAZZOCCHI, GIULIO PETRONI AND DAVIDE SASSERA</b> - Evolutionary investigations on “Candidatus Midichloriaceae” endosymbionts of the ciliate <i>Paramecium</i>
15:15	<b>MARCO BAZZICALUPO</b> - Patterns of evolution and functional differentiation in the multipartite genome of a bacterial facultative symbiont
15:30	<b>GHERARDO BOGO, JOAN RABASSA JUVANTENY, CATERINA MACCELLI, ALESSANDRO FISOGNI, LAURA BORTOLOTTI, MASSIMO NEPI AND MARTA GALLONI</b> - Nectar chemistry is not only a plant's affair
15:45	<b>ANNA SANDIONIGI, ANTONIA BRUNO, SAVERIO VICARIO, LORENZO BERNABOVI, GIULA AGOSTINETTO AND MAURIZIO CASIRAGHI</b> - Follow the flow: hypothesis of symbiotic interactions between ultra-small bacteria and stable community in drinking water treatment plant
16:00	<b>Coffee Break</b>
16:30	<b>GIACINTO LIBERTINI</b> - Allergic and autoimmune diseases in the interpretation of Evolutionary Medicine
16:45	<b>MATTEO VECCHI, IRENE NEWTON, AGNESE FERRARI, LORENA REBECCHI AND ROBERTO GUIDETTI</b> - Water-bears as holobionts: tardigrades select their microbiota
17:00	<b>GIULIA SCARPARO, PATRIZIA D'ETTORRE AND ANDREA DI GIULIO</b> - Functional morphology and chemical strategy of <i>Microdon mutabilis</i> (Diptera, Syrphidae), a nest parasite of <i>Formica cunicularia</i>
17:15	<b>MICHELE CASTELLI, ELENA SABANEYEVA, OLIVIA LANZONI, ANNA MARIA FLORIANO, NATALIA LEBEDEVA, KONSTANTIN BENKEN, ALEXEY POTEKHIN, DAVIDE SASSERA AND GIULIO PETRONI</b> - Characterisation of a novel epibiotic bacterium of <i>Paramecium</i> showing distinctive features
17:30	
.....	
.....	
18:45	<p><b><i>ROUND TABLE Popularization of Evolution</i></b> <b><i>(Divulgazione dell'Evoluzione)</i></b> Chair: TELMO PIEVANI</p>



*Thursday, 31 August 2017*

***SYMPOSIUM Evolution and conservation***

*Chair:* PAOLO CIUCCI

*Co-chair:* GABRIELE GENTILE

- 9:30 **DAVID R.VIEITES** – Museo Nacional de Ciencias Naturales, Madrid  
Integrating evolution into conservation: from genes to ecosystems
- 10:00 **LIVIA DI GIAMBATTISTA** AND GABRIELE GENTILE - Unidirectional hybridization between *Amblyrhynchus cristatus* and *Conolophus subcristatus* in Galápagos: naturally driven or man-mediated?
- 10:15 **ALICE CHIODI**, ADRIANA BELLATI, GUIDO BERNINI, ANITA COLOMBO, PATRIZIA BONFANTI, ELENA RAIMONDI, ANGELICA CROTTINI AND MAURO FASOLA - Molecular detection of hybridogenetic pattern in the *Pelophylax esculentus* complex in Italy
- 10:30 **NINA SANTOSTASI**, OLIVIER GIMENEZ AND PAOLO CIUCCI - The dark side of hybridization: quantifying prevalence of anthropogenic introgression for conservation
- 10:45 **CLAUDIO FERRARI**, LAURA FILONZI, FEDERICA PICCOLI, ANDREA VOCCIA, ARMANDO PICCININI AND FRANCESCO NONNIS MARZANO - Conservation genetics of barbel species and ecological index inside Protected Area of Emilia Romagna
- 11:00 **Coffee Break**
- 11:30 **ISABELLA VANETTI**, SILVIA QUADRONI, ANTONELLA CAROSI, GIANANDREA LA PORTA, MASSIMO LORENZONI AND SERENA ZACCARA - Diversification and distribution of Barbel species in central Italy: a combined morphological and genetic approach
- 11:45 **BENOIT DIRINGER**, KRIZIA PRETELL, RICARDO AVELLAN, CESAR CHANTA, VIRNA CEDEÑO AND **GABRIELE GENTILE** - Genetic structure of *Anadara tuberculosa* from East Pacific as revealed by mtDNA: implications to conservation
- 12:00 **GIULIANO COLOSIMO**, MARK E. WELCH, STESHA A. PASACHNIK, CATHERINE L. MALONE, JACE HILTON, JUNE LONG, ANGELA H. GETZ, ALLISON C. ALBERTS AND GLENN P. GERBER - Molecular variation and population structure in critically endangered Turks and Caicos Rock Iguanas: identifying intraspecific conservation units and revising subspecific taxonomy
- 12:15 **ROBIN CRISTOFARI**, XIAOMING LIU, FRANCESCO BONADONNA, YVES CHEREL, PIERRE PISTORIUS, YVON LE MAHO, VIRGINIE RAYBAUD, NILS CHR. STENSETH, CÉLINE LE BOHEC AND **EMILIANO TRUCCHI** - Climate-driven range shifts in fragmented ecosystems
- 12:30 **TELMO PIEVANI**, LUCA PAGANI, FRANCESCO SUMAN, EUGENIO BORTOLINI AND ANDREA PARRAVICINI - Common patterns in “bio-cultural” diversity and the role of ecological barriers: putting E.O. Wilson’s hypothesis to the test
- 12:45 **BIANCA GUSTAVINO**, FEDERICA MARUCCIA, AMY WILLIAMS, CRISTINA DI GIACOMO, MAURIZIO FRAZIANO, LEOPOLDO PUCILLO, JORGE ENRIQUE CARRIÓN TACURI AND **GABRIELE GENTILE** - When PINK is a question: A possible evolutionary trade-off in the Galápagos Pink Land Iguana (*Conolophus marthae*)

*Thursday, 31 August 2017*

<p>14:30</p> <p>15:00</p> <p>15:15</p> <p>15:30</p> <p>15:45</p>	<p><b><i>SYMPOSIUM The effects of drift and selection on populations and genomes: expectations and observations</i></b>  <i>Chair: GIORGIO BERTORELLE</i>  <i>Co-chair: SILVIA GHIROTTI</i></p> <p><b>ANNA-SAPFO MALASPINAS</b> – University of Bern  A genomic history of Aboriginal Australia</p> <p><b>DIEGO FORNI, RACHELE CAGLIANI, CHIARA PONTREMOLI, UBERTO POZZOLI, JACOPO VERTEMARA, LUCA DE GIOIA, MARIO CLERICI AND MANUELA SIRONI</b> - Evolutionary analysis provides insight into the origin and adaptation of HCV</p> <p><b>EMMA FOX, ALISON WRIGHT, THORFINN KORNELIUSSEN, FILIPE G VIEIRA AND MATTEO FUMAGALLI</b> - Inference of population parameters from low-depth sequencing data</p> <p><b>VALENTINA DOMINICI, CINZIA BATTAGGIA, LUCA PAGANI, DAVIDE PETTENER, STEFANIA SARNO, ALESSIO BOATTINI, PAOLO FRANCALACCI, VINCENZA COLONNA, GIUSEPPE VONA, CARLA CALO', SERGIO TOFANELLI, GIOVANNI DESTRO BISOL AND PAOLO ANAGNOSTOU</b> - Genomic analysis reveals hidden heterogeneity within human population isolates</p> <p><b>MARCO FRACASSETTI AND YVONNE WILLI</b> - The determinants of genetic diversity across the whole-genome in <i>Arabidopsis lyrata</i></p>
	<p><b><i>PRIZE AWARD CEREMONY</i></b>  <i>with coffee break</i></p> <p><b><i>SIBE general meeting</i></b></p> <p><i>Arrivederci</i></p>

## Poster session

Tuesday, 29 August 2017

14:30 - 16:00

### ***SYMPOSIUM Advanced models and technologies for the study of Evolution***

FABRIZIO GHISELLI, ALEKSEY KOMISSAROV, LILIANA MILANI, JOSEPH DUNHAM, SOPHIE BRETON, SERGEY NUZHIDIN AND MARCO PASSAMONTI - The draft genome of *Ruditapes philippinarum* (the Manila clam)

ELISABETTA PUNZI, LILIANA MILANI, FABRIZIO GHISELLI AND MARCO PASSAMONTI - Lose it or keep it: (how bivalves can provide) insights into mitochondrial inheritance mechanisms

WILLIAM MONTAIGNE, DANIEL SABATIER, GIORGIO BINELLI, CAROLINE SCOTTI-SAINTAGNE AND IVAN SCOTTI - Sisters, but not alike: ecological divergence with gene flow in Neotropical nutmeg tree species

FRANCESCO MESSINA, ANDREA FINOCCHIO, NEJAT AKAR, APHRODITE LOUTRADIS, EMMANUEL I. MICHALODIMITRAKIS, RADIM BRDICKA, CARLA JODICE AND ANDREA NOVELLETTO - Advanced models for the study of recent human evolution: application to forensic STRs

### ***SYMPOSIUM Biogeography and Systematics***

SAVERIO VICARIO - Algebra of Biodiversity

ARIANNA FULVO, MARILYN CRUZ, LEANDRO PATINO, SAVERIO VICARIO, JORGE E. CARRIÓN, VIRNA CEDEÑO, ANDREW CUNNINGHAM, SIMON GOODMAN AND GABRIELE GENTILE - Phylogeography, Phylogeny and Systematics of *Hepatozoon* from Galápagos Land Iguanas (*Conolophus* spp.)

GIOBBE FORNI AND BARBARA MANTOVANI - Turning chaos into Order: the phylogeny of Phasmida.

MASSIMILIANO CENTORAME, GABRIELE SENCZUK AND ALBERTO FANFANI - Phylogeographic pattern in *Cataglyphis italica* (Emery, 1906) (Hymenoptera: Formicidae): role of the plio-pleistocene marine transgression in the mediterranean basin

FAUSTO MOSCHELLA, ENZO COLONNELLI AND ALESSIO DE BIASE - Phylogeography of *Trichosirocalus horridus* (Panzer, 1801) (Coleoptera: Curculionidae, Ceutorhynchinae) in Europe: a preliminary approach

LUCIA PIEMONTESE, ILARIA GIOVANNINI, GIULIA PELLEGGRI, PARIDE DIOLI, LORENA REBECCHI, ROBERTO GUIDETTI AND MICHELE CESARI - Species delimitation problems in Miridae (Hemiptera: Heteroptera): the study of a hyperdiverse family through DNA barcoding and Integrative Taxonomy

CHIARA LEO, PIETRO PAOLO FANCIULLI, FRANCESCO FRATI AND ANTONIO CARAPELLI - The biogeography of the Antarctic springtail *Cryptopygus terranovus* explained using haplotype screening, Bayesian clustering and comparative mitogenomic analyses

ALESSANDRA RICCIERI, EMILIANO MANCINI AND MARCO BOLOGNA - Exploring the phylogeny of a megadiverse taxon: the case of *Hycleus* (Coleoptera, Meloidae)

CHIARA RIPA, GABRIELE SENCZUK, TIEDEMANN RALPH, VALENTINA MILANA, KATJA HAVENSTEIN AND RICCARDO CASTIGLIA - Genetic structure and gene flow analysis in the Italian wall lizard *Podarcis siculus* revealed a discordant pattern between mitochondrial and microsatellite markers in southern Italy.

FRANCESCO DRAGO AND OMAR ROTA-STABELLI - Multiple sources of incongruence in *Wolbachia* phylogeny

### ***SYMPOSIUM Evo-Devo***

VIRGINIA BELLONI, ALESSIA GALEAZZI, GIULIA BERNINI, MAURO MANDRIOLI, ELISABETTA VERSACE AND ALBRECHT HAASE - Evolutionary compromises in ecological adaptation: urea and ammonia tolerance in *Drosophila suzukii* and *Drosophila melanogaster*

### ***SYMPOSIUM Evolutionary and behavioral ecology***

ROGER BUTLIN, KERSTIN JOHANNESSEN, SAMUEL PERINI AND ANJA WESTRAM - The contribution of size and ecotype variation to sexual isolation in *Littorina saxatilis*

GIUSEPPE DI MAURO, ELENA FRIGATO, SILVIA FUSELLI, NICHOLAS FOULKES AND CRISTIANO BERTOLUCCI - Evolution of DNA UV-damage repair mechanism and photoreception in fish

ISABELLA ZANATA, MARTINA MAGRIS AND ANDREA PILASTRO - Costs and benefits of phenotypic plasticity in sexually selected traits in *Poecilia reticulata*

ELISA MORBIATO, VIVIANA DI ROSA, WALTER CRISTIANO, ELENA FRIGATO, NICHOLAS FOULKES AND CRISTIANO BERTOLUCCI - Feeding entrainment of the circadian clock in zebrafish and cavefish

LISA LOCATELLO, LORENZO CATANI AND MARIA B. RASOTTO - Male and female sexual fluids and their interactions influence the outcome of sperm competition in the grass goby *Zosterisessor ophiocephalus*

GIONATA STANCHER, SILVIA DAMINI AND ELISABETTA VERSACE - Individual recognition in newborn unexperienced tortoises

MORGANA RAGUSA, ELISABETTA VERSACE, ELENA LORENZI AND GIORGIO VALLORTIGARA - Early social predispositions in chicks: inherited variability for animacy preferences

FEDERICA SPANI, MASSIMILIANO SCALICI AND MONICA CAROSI - A sexual selection framework in Primates: raising ossa genitalia again

### ***SYMPOSIUM Coevolution and symbiosis***

CARMINE CIFALDI, HELENA ARIÑO, ANDREA PECCI, FABRIZIO GHISELLI, MARCO PASSAMONTI, VALERIA FRANCESCHINI, MARIA GABRIELLA MAURIZII AND LILIANA MILANI - Level of mitochondrial heteroplasmy in a natural and stable heteroplasmic system

FRANCESCO DRAGO AND OMAR ROTA-STABELLI - Dating the impossible: the origin and divergence of the largest infection on Earth

***SYMPOSIUM Evolution and conservation***

NADIA MARRAS, CARLO RONDININI, LUIGI BOITANI AND NOEMI SPAGNOLETTI - Development of a landscape suitability model to assess the role of anthropogenic disturbance for conservation of tool use behavior in wild capuchin monkeys (*Sapajus libidinosus*): a pilot study

ROBERTO BIELLO, MAURO ZAMPIGLIA, EMILIANO TRUCCHI, GIULIA FABBRI, SILVIA FUSELLI, GIORGIO BERTORELLE AND DANIELE CANESTRELLI - Conservation genetics and genomics of the endangered tortoise *Testudo hermanni*

LORENZO TALARICO AND MARCO MATTOCCIA - Genetic characterization of MHC class II exon2 in *Bombina pachypus* populations across the entire range: preliminary results

RAQUEL PONTI, ANGEL ARCONES, XAVIER FERRER AND DAVID VIEITES - Productivity as the main driver of bird migratory behaviour at different evolutionary scales.

VANESSA DE SANTIS, SERENA ZACCARA, JOHN MUSINA, TIMOTHY MWINAMI, ESTER KIOKO AND GIUSEPPE CROSA - Genetic signature in peripheral populations of african greenbul in tropical forest ecosystem

WILLY RODRIGUEZ, PATRÍCIA SANTOS, OLIVIER MAZET AND LOUNÈS CHIKHI - Demographic inference using genomic data of endangered species

MARTA MARIA CIUCANI, DAVIDE PALUMBO, GLORIA RAVEGNINI, SABRINA ANGELINI, ROMOLO CANIGLIA, MARCO GALAVERNI AND ELISABETTA CILLI - Old wild wolves: ancient DNA unveils ancestral variability in the Italian wolf population

***SYMPOSIUM The effects of drift and selection on populations and genomes: expectations and observations***

ALESSANDRA MOZZI, DIEGO FORNI, RACHELE CAGLIANI, UBERTO POZZOLI, MARIO CLERICI AND MANUELA STRONI - Distinct selective forces and Neanderthal introgression shape genetic diversity at genes involved in neurodevelopmental disorders

SILVIA FUSELLI, GIUSEPPE DI MAURO, ELENA FRIGATO, NICHOLAS FOULKES AND CRISTIANO BERTOLUCCI - Molecular evolution of light-dependent DNA repair mechanism in the cavefish *Phreatichthys andruzzii*

ARIANNA LANDINI, YU SHAOBO, GUIDO ALBERTO GNECCHI RUSCONE, PAOLO ABONDIO, SARA DE FANTI, STEFANIA SARNO, EUGENIO BORTOLINI, DAVIDE GENTILINI, ANNA MARIA DI BLASIO, DONATA LUISELLI, DAVIDE PETTENER AND MARCO SAZZINI - Adaptive evolution of Asian populations in response to rice-based diets

GUIDO ALBERTO GNECCHI RUSCONE, PAOLO ABONDIO, CHOONGWON JEONG, SARA DE FANTI, STEFANIA SARNO, MICHELA TRANCUCCI, MINGMA G. SHERPA, PHURBA T. SHERPA, LUCA NATALI, DAVIDE PELUZZI, DAVIDE PETTENER, DONATA LUISELLI, ANNA DI RIENZO AND MARCO SAZZINI - Complex demography shaped the genomic landscape of Himalayan populations in addition to altitude-related selective pressures

ANDREA FINOCCHIO, FRANCESCO MESSINA, BENIAMINO TROMBETTA, EUGENIA D'ATANASIO, NEJAT AKAR, APHRODITE LOUSTRADIS, EMMANUEL MICHALODIMITRAKIS, FULVIO CRUCIANI AND ANDREA NOVELLETTA - The genetic legacy of ancient migrants to Southern Italy as revealed by high-throughput sequencing of the Y chromosome

FRANCESCA TASSI, STEFANIA VAI, SILVIA GHIROTTA, MARTINA LARI, ALESSANDRA MODI, ELENA PILLI, ANDREA BRUNELLI, ROBERTA ROSA SUSCA, ALICJA BUDNIK, DAMIAN LABUDA, FEDERICO SANCHEZ-QUINTO, FEDERICA ALBERTI, CARLES LALUEZA-FOX, DAVID REICH, DAVID CARAMELLI AND GUIDO BARBUJANI - The Kurgan migrations revisited: Genome diversity in the Globular Amphorae culture

ROBERTO BIELLO, ANDREA BRUNELLI, GIULIA SOZIO, ALESSIO MORTELLITI, VALERIO KETMAIER AND GIORGIO BERTORELLE - The effects of habitat loss and fragmentation in two species of small mammals (*Apodemus sylvaticus* and *Myodes glareolus*; Rodentia)

SILVIA GHIROTTA, MARIA TERESA VIZZARI, FRANCESCA TASSI, GUIDO BARBUJANI AND ANDREA BENAZZO - Distinguishing among complex models of modern humans evolution through a new ABC framework

SAVERIO VICARIO, MARIANGELA SANTORSOLA, GIUSEPPE GRECO AND MARCELLA ATTIMONELLI - Application of the constraint-based methods to analyse human mitonuclear co-evolution networks

### ***ROUND TABLE Popularization of Evolution (Divulgazione dell'Evoluzione)***

GRAZIANO CIOCCA, ALESSANDRA DELLA CECA, CHIARA FRANZERO, CATERINA LORENZI - Bingo! La lotteria dell'Evoluzione!

SOFIA RIZZI, SONIA CELESTINI, GIULIO MENEGUS, FRANCESCA DE GIORGI, FRANCESCA FAILLA, SILVIA PERNECHELE, MARCO SALVATORI, ANDREA SILVERJ, ELISA BARBAZZA, PAOLA BISACCIA, CARLOTTA BONALDI, LUDOVICA DAL BORGIO, LISA DE BIASIO, LAURA DRAGO, GIULIA FABBRI, JACOPO FABRELLO, ALESSANDRO FRANCESCHINI, SABRINA GALLO, SANDY GIONFRIDDO, JACOPO GREGO, CAROLA LEONARDI, GIULIO MARIA MENTI, LUDOVICA MOLINARO, STEFANO MONTEFORTE, CRISTINA OTTOCENTO, ANNA PAIOLA, PAOLO PANIZZON, BESTE BASAK SAVASCI, FEDERICA ZANCANELLA, GIUSEPPE FUSCO, OMAR ROTA-STABELLI, LINO OMETTO - 404 error: (evolutionary) page not found