

# Beniamino Caputo

## Curriculum Vitae

Roma, ~~1991~~ 1970 (Italy)

### Part I – General Information

Full Name	Beniamino Caputo
Date of Birth	
Place of Birth	
Citizenship	
Permanent Address	
Mobile Phone Number	
E-mail	
Spoken Languages	

### Part II – Education

#### IIA – University Degrees

Type	Year	Institution	Notes (Degree, Experience,...)
Medical Speciality (Scuola di Specializzazione)	2011	Faculty of Medicine and Surgery University of Rome "Sapienza".	<b>Medical Specialization degree course (Scuola di Specializzazione) in "Microbiology and Virology"</b>
PhD	2008	University of Rome "Sapienza".	<b>Phd in Pasteurian Science (Scienze Pasteuriane)</b> . Thesis title: "Distribution and polytene chromosome analysis of <i>Anopheles gambiae</i> molecular forms in the extreme West of their geographical range" (Supervisor Prof. M Coluzzi).
Graduation	2004	University of Rome "Sapienza".	<b>Degree in Biology (Laurea in Scienze Biologiche, 110 e lode/110)</b> Thesis title: "Qualitative and quantitative analysis of epicuticular lipids in <i>Anopheles gambiae</i> complex" (supervisor: Prof. Vincenzo Petrarca)

## IIB – Additional Training

Type	Year	Institution	Notes (Degree, Experience,...)
Training Course	2012	FP7-COORDINATION EDENext project and Euro-AE-GIS.	Spatial Data and GIS Training Program. Bruxell (Belgio)
Post-Doctoral Training Course	2007	Società Chimica Italiana, Divisione di Spettrometria di Massa	11° Corso di Spettrometria di Massa presso la Certosa di Pontignan
Training Course	2006	WHO/TDR, African Center for Training in Functional Genomics of Insect Vectors of Human Diseases (AFRO VECTGEN), Malaria Research and Training Center (MRTC, Bamako, Mali)	III Training Course on Functional Genomics of Insect Vectors of Human diseases" (Bamako, Mali)

## Part III – Appointments

### IIIA – Academic Appointments

Start	End	Institution	Position
2017	2018	Department of Infectious Disease and Public Health. University of Rome "Sapienza"	<b>1 year PostDoc position VET/06 (Assegno di Ricerca Annuale) funded by fondi di Ateneo 2016 Università "Sapienza" (Project PI Dott. Angelo Solimini).</b> Title: "Studio dei parametri entomologici inerenti a modelli di rischio di trasmissione di arbovirosi esotiche trasmesse da zanzare in regioni non endemiche".
2012	2017	Department of Infectious Disease and Public Health. University of Rome "Sapienza"	<b>Assistant Professor VET/06 (Ricercatore a tempo determinato tipologia A-t.pieno , art. 24 c.3-a L. 240/10) funded by MIUR- FUTURO IN RICERCA 2010 (RBFR106NTE)</b> Principal Investigator: B. Caputo Title: "Investigating the role of reproductive barriers in an emblematic case of incipient speciation"
2011	2011	Department of Infectious Disease and Public Health. University of Rome "Sapienza"	<b>1 year PostDoc position VET/06 (Assegno di Ricerca Annuale) funded by European project FP7-HEALTH-2010-EDENext (Project N. 261504; Principal Investigator: Prof. R Lancelot, CIRAD, Montpellier, France; coordinatore Unità di Ricerca "Sapienza": Dr. A. della Torre).</b> Title: "Approcci traslazionali al monitoraggio

			ed al controllo di Culicidi vettori di patogeni umani e zoonotici”
2009	2010	Department of Infectious Disease and Public Health. University of Rome “Sapienza”	<b>2 year PostDoc position VET/06 (Assegno di Ricerca Biennale) co-funded by I Faculty of Medicine &amp; Surgery of “Sapienza” University and by European project FP7-HEALTH-2010-MALVECBLOK (Project N. 223601, PI: Dr. E Levashina, CNRS, Strasburg, France; coordinatore Unità di Ricerca “Sapienza”: Dr. A. della Torre) Title: “Population biology and molecular genetics of vectorial capacity in <i>Anopheles gambiae</i>: targeting reproductive behaviour and immunity for transmission-refractory interventions”</b>
2008	2008	Department of Infectious Disease and Public Health. University of Rome “Sapienza”	<b>1 year PostDoc position VET/06 (Assegno di Ricerca Annuale) funded by PRIN-2006 project (PIs: Prof. Stefano Turillazzi &amp; Prof. Mario Coluzzi). Title: “Proteins involved in chemical communication in malaria vectors of the <i>Anopheles gambiae</i> complex, with particular reference to candidate proteins possibly involved in host-seeking and host-choice behaviors”.</b>

#### **Part IV – Teaching experience**

Year	Institution	Lecture/Course
2018-2019	<b>Corso Formazione e informazioni per gli studenti degli Istituti Comprensivi del Municipio III-Comune di Roma- Anno scolastico 2018-2019. Servizio manutenzione Territorio ed Ambiente</b>	13 courses entitled: “Il contrasto alla infestazione della zanzara tigre” in “scuola primaria” and “secondaria di I grado” of the following school: IC Uruguay, IC Carlo Levi, IC Montessori.
2012-2017	<b>Corso di Laurea in Tecniche di Laboratorio Biomedico “C” sede di Latina, presso la Facoltà di Farmacia e Medicina, Università di Roma “Sapienza”.</b>	Corso Integrato di “Metodologie Diagnostiche di Microbiologia”. Titolare del Modulo di “Parassitologia diagnostica e antrozzoososi” (2 CFU+1 CFU ADE)
2011-to date	<b>Corso di Laurea specialistica/magistrale in Biologia Applicata alla ricerca Biomedica Facoltà di Scienze Matematiche, Fisiche e Naturali dell’Università di Roma “Sapienza”.</b>	Membro effettivo della Commissione di Esame del corso: “Ecologia delle Malattie Parassitarie dell’uomo” (6 CFU).

2011- to date	<b>Corso di Laurea in Scienze Biologiche</b> , Facoltà di Scienze Matematiche, Fisiche e Naturali dell'Università di Roma "Sapienza".	Membro effettivo della Commissione di Esame del corso: "Parassitologia" (3 CFU).
2010- to date	<b>Facoltà di Scienze Matematiche, Fisiche e Naturali</b> dell'Università di Roma "Sapienza"	<b>Supervision and tutoring of undergraduate students:</b> Laurea Triennale in Scienze Biologiche (AM Ienco, V Pichler, CM De Marco); Laurea Magistrale in Ecobiologia (AM Ienco, Chiara Malandruccolo); Laurea Magistrale in Genetica e Biologia Molecolare (V Pichler);
2014- 2015	<b>Dottorato di ricerca in "Malattie Infettive, Microbiologia e Sanità Pubblica"</b> dell'Università di Roma "Sapienza".	<b>Supervision and tutoring of 3 PhD students in "Malattie Infettive, Microbiologia e Sanità Pubblica":</b> Giordano Bottà (XXIX Ciclo, Sanità Pubblica), Verena Pichler e Mattia Manica (XXX Ciclo Sanità Pubblica).
2013- to date	<b>Master II livello "Virologia Molecolare"</b> , Università di Roma "Sapienza". Direttore Prof. Guido Antonelli. Codice 16122	<b>Insegnamento SSD-VET06 :</b> "Arbovirus trasmessi da Culicidi", " Vettori di trasmissione dei virus".
2010- 2011	Università dell'età libera aperta a tutti e a tutte le età presso il Comune di Lucca (UNIDEL Lucca )	<b>Invited lecture:</b> "Culicidi d'Italia e il loro ruolo vettore di patogeni".

**Part V - Society memberships, Awards and Honors, reviewing activity, member of scientific congress committee, scientific working group in national/international projects, academic spin-off.**

Year	Title
2018- 2019	Member of working group (Membro coadiutore) of "Tavolo tecnico intersettoriale sulla malattie trasmesse da vettori" Ministero della Salute Direzione Generale della Prevenzione Sanitaria Ufficio, 5 Prevenzione delle malattie trasmissibili e profilassi internazionale.-
2017	Member of scientific committee of: "Nuove sfide e prospettive nel controllo e nel monitoraggio delle zanzare in Italia" nell'ambito del progetto Filas del DSPMI, Regione Lazio. "Nuove metodologie nella diagnosi e prevenzione di infezioni batteriche, virali, fungine e parassitarie" sessione b - 13 aprile 2018. Edificio di Igiene "Giuseppe Sanarelli". Aula Celli - Aula B
2017	Member of scientific committee of: "Chikungunya 2017: dati, risposte, azioni e criticità". Venerdì 10 novembre 2017, 09:00. Aula Celli Edificio di Igiene "Giuseppe Sanarelli" - Piazzale Aldo Moro 5, Roma
2017- to date	Member of working group of "Global Mosquito Alert Consortium: A Roadmap Towards a Common Protocol and Platform for Citizen Science Vector monitoring". <a href="https://www.wilsoncenter.org/global-mosquito-alert">https://www.wilsoncenter.org/global-mosquito-alert</a>

2017	Member of Scientific committee of congress: "Chikungunya 2017: Data, response, actions & critical aspects" Dip. Public Health and Infectious Diseases, University of Rome Sapienza (10-November) <a href="http://dspmi.uniroma1.it/notizie/eventi/conclusi/chikungunya-2017">http://dspmi.uniroma1.it/notizie/eventi/conclusi/chikungunya-2017</a>
2017	Founding member, scientific member and business partner of <b>START-UP "OSMES"</b> applied research in olfaction. <b>ACADEMIC SPIN OFF</b> of University of Florence in date 28/10/2016. Main goal: develop a new repellents against mosquitoes and other <i>hematophagous</i> insect. <a href="http://www.osmes.it/">http://www.osmes.it/</a>
2016- to date	Member of working group of national mosquito project called "Zanzamapp". <a href="http://www.zanzamapp.it/">http://www.zanzamapp.it/</a>
2014	Member of Scientific committee of the congress of Italian Society of Parasitology (SOIPAXXVIII edition) (24-29 June, Roma)
2007- to date	Member of the Italian Malaria network IMN.
2012	Membership of American Society of tropical Medicine & Hygiene
2014- to date	Member of Partner Working group" del international project: "Anopheles gambiae 1.000 genomes project". <a href="http://www.malariagen.net/projects/vector/ag1000g">http://www.malariagen.net/projects/vector/ag1000g</a> -Wellcome Trust Sanger Institute, Oxford
2012	<b>Best Poster Award</b> during the II Annual meeting EDENext EU FP7-HEALTH 2010 project, Itzmir, Turchia, 27-29 Marzo 2012. Poster title: "Auto-dissemination" approach: a novel concept to fight <i>Aedes albopictus</i> in urban areas in Italy".
2008- to date	Member of the Italian Society of Parasitology (SOIPA)
2009- to date	Reviewing activity: PLoS Neglected Tropical Diseases, Plos One, Malaria Journal, Parasites & Vectors, Journal of Vector Ecology, Medical & Veterinary Entomology, Medical Entomology, F1000Research, Annali dell'Istituto Superiore di Sanità, Insect biochemistry and insect molecular biology

## Part VI - Funding Information

### Part VIA – Grants as PI-Principal Investigator

Year	Title	Program	Grant value
2018	Attività di studio ricerca e divulgazione inerenti la zanzara " <i>Aedes albopictus</i> " tra DSPMI/Sapienza e la riserva natural statale "Isole di Ventotene e Santo Stefano"	Conto Terzi to DSPMI "Sapienza" (Funded by Comune di Ventotene, Ente Gestore Area marina Protetta-Riserva Naturale statale "Isole di Ventotene e Santo Stefano")	3.500 €

2017-2019	Exploring the hidden GENomic diversity of <i>Anopheles gambiae</i> and <i>A. coluzzii</i> species pair to account for spatial differences in MALARIA transmission (ExGenMal)	Research Project Actions Concertees Interpasteuriennes ACIP, funded by Institut Pasteur, Paris (France)	50.000
2017-2012	"Investigating the role of reproductive barriers in an emblematic case of incipient speciation".	Research Project "FUTURO IN RICERCA" 2010 (Linea di intervento 1; Codice RBFR106NTE). Funded by MIUR	340.000€
2016-2019	"Develop new Repellents for <i>hematophagous</i> insect"	Project funded by VEBI Istituto Biochimico to academic Spin-off of University of Florence	100.000€
2012	"Ruolo delle barriere riproduttive in un caso emblematico di speciazione incipiente"	"Contributo integrativo dall'Ateneo" al progetto FIRB 2010 (CA, 12 Ottobre 2010) -Università di Roma "Sapienza"	28.000€
2015	"Sperimentazione del prodotto vernice e/o insetticida con carbonio contro le zanzare".	Conto Terzi to DSPMI "Sapienza" (Funded by Isolpaint International srl)	100.000 €
2015	"Investigation of chromosome and nuclear lamina contacts in malaria mosquitoes <i>Anopheles labranchiae</i> "	Research collaborative agreement with National Research Tomsk State University (Russia)	1.830 €

#### Part VIB – Grants as co-PI or Coordinator of Research Unit

Year	Title	Program	Grant value to DSPMI (SAPIENZA University)
2017-2018	Estimating the outbreak risk of Dengue, Chikungunya and Zika virus: epidemiological, immunological and environmental factors	Progetti di ricerca medi - "Sapienza" University. (PI: Dr. A. Solimini)	31700 €
2013-2015	"Mosquito borne USUTU virus infection: dissecting virus molecular epidemiology and in vitro and ex-vivo characterization of innate immune responses".	Research Project Actions Concertees Interpasteuriennes ACIP, funded by Institut Pasteur, Paris (France) (PI: Dr C Scagnolari)	7.632 € (total amount 64.000 €)
2011-2012	"Environmental, immunological and socio-economic factors associated to the risk of Chikungunya outbreaks transmitted by the Tiger Mosquito in urban areas: an analysis at different levels of biological organization."	Progetti di ricerca under 45 - "Sapienza" University. (PI: Dr. A. Solimini)	32.000 €

2012	"La malaria, ieri e oggi, nell'Agro Romano"	<b>Progetti per iniziative culturali e tecnico-scientifiche</b> per la salvaguardia del patrimonio ambientale ed ecologico nella riserva del litorale romano – <b>Comune di Fiumicino</b> (PI: Alessadra della Torre)	<b>16000€</b>
2011	"Attività di networking a livello Europeo per lo sviluppo di modelli di previsione del rischio di epidemia da virus emergenti basati su tecnologie diagnostiche innovative."	<b>"Sapienza" University FARI 2011 project</b> (PI: Dr. A. Solimini)	<b>6.500 €</b>

### Part VIC – Grants as I-investigator

Year	Title	Program	Grant value to DSPMI (SAPIENZA University)
2017-2022	Empowering functional genomics of <i>An. gambiae</i> through inversion genotyping	<b>National Institute of Health (NIH)</b> National Institute of Allergy and Infectious Diseases (NIAID) University of Notre Dame (PI Prof. Nora Besansky) Project N°1R01AI125360-01A1	<b>Support 1 year</b> <b>\$150.000</b>
2014-2016	"Population genomics of the malaria mosquito <i>Anopheles gambiae</i> "	<b>Istituto Pasteur–Fondazione Cenci Bolognetti</b> " (PI: Prof. A. della Torre)	<b>60.000 €</b>
2011-2016	<b>EDENext—Biology and Control of Vector-Borne Infections in Europe.</b>	<b>EC-FP7-HEALTH-2010-COORDINATION</b> (Project N°261504, coordinator Dr. R Lancelot, CIRAD, France; Coordinator of Sapienza Research Unit, Dr. A della Torre)	<b>250.800 €</b>
2013-2014	"Population genomics of the malaria mosquito <i>Anopheles gambiae</i> ".	<b>Sapienza University AWARD 2013</b> (PI: Prof. A. della Torre)	<b>60.000 €</b>
2011-16	<b>AVECNET—African Vector Control: New Tools</b>	<b>EC-FP7-HEALTH-2010-COORDINATION</b> (Project N°265660, coordinator Prof. H. Ranson, Liverpool School of Tropical Medicine, UK Coordinator of Sapienza Research Unit Dr. A della Torre)	<b>508.000 €</b>
2012	"Sorveglianza e controllo virologico della zanzara tigre"	X Dipartimento Tutela Ambientale e del Verde, <b>ROMA CAPITALE</b> (PI: Dr. A. della Torre)	<b>30.000 €</b>

2010-2012	Telesorveglianza vettoriale	Ministero della Difesa (conto Terzi, PI: Alessandra della Torre)	726000 €
2009-2012	INFRAVEC - Research capacity for the implementation of genetic control of mosquitoes"	EC-FP7-HEALTH-2007-INFRASTRUCTURES (Project N° 228421, coordinator Prof. A. Crisanti, Imperial College London, UK; Coordinator of Sapienza Research Unit: Dr. A della Torre)	155.000 €
2011	"Development of high-resolution polytene chromosome map of larval stage of <i>Anopheles gambiae</i> complex (Diptera: Culicidae)"	Sapienza University Research Project 2010 (PI Dr. Marco Pombi)	5.000 €
2009-2012	Genetic and phenotypic characterization of species and "molecular forms" of the <i>Anopheles gambiae</i> complex (Diptera: Culicidae), afrotropical malaria vectors	"Istituto Pasteur-Fondazione Cenci Bolognetti" (PIs: Dr. A. della Torre & Prof. V. Petrarca,)	60.000 €
2009-2011	"MALVECBLOK - Population biology and molecular genetics of vectorial capacity in <i>Anopheles gambiae</i> : targeting reproductive behaviour and immunity for transmission-refractory interventions"	EC-FP7-HEALTH-2007-COORDINATION (Project N° 223601, coordinator Prof. E Levashina, CNRS, Strasburg, France; Coordinator of Sapienza Research Unit: Dr. A della Torre)	314.342 €
2007-2008	"Analisi di peptidi e proteine coinvolte nella comunicazione chimica in vespe sociali, api e <i>Anopheles</i> mediante tecniche avanzate di Spettrometria di Massa".	PRIN-2006 project (PIs: Prof. Stefano Turillazzi, Coordinator of Sapienza Research Unit: Prof. Mario Coluzzi).	50.000 €
2005-2006	"Analisi molecolare di taxa e popolazioni di <i>Anopheles gambiae</i> (Diptera :Culicidae) per la valutazione di parametri genetici, fisiologici, e comportamentali rilevanti nell'epidemiologia e nel controllo della malaria umana in zona Afro tropicale, con particolare riferimento allo studio di lipidi epicuticulari.	PRIN-2005 project (PI: Dr. Alessandra della Torre).	19.000 €



**Part VII – Research Activities**

Keywords	Brief Description	Publications (see list below)
<p><b>Afrotropical malaria vectors, malaria transmission, population genetics &amp; genomics</b></p>	<p>This main line of research including studies on population genetics, ecology and behaviour of Afrotropical malaria vector species and their impact on malaria transmission initiated with Phd studies. Studies exploiting neutral molecular markers (e.g. microsatellites and SNPs) as well as on markers under selection (e.g. paracentric inversion) on ad hoc field collected samples have been carried out in strict collaboration with African partners such as: Medical Research Council (The Gambia); Institute Pasteur, Dakar (Senegal); Centre National de Recherche et de Formation sur le Paludisme, Ougadougou, and IRSS/DRO (Burkina Faso), National Institute of Public Health, INASA (Guinea Bissau). The discovery of an hybrid zone between the two major malaria vector species in the western extreme of their sympatric range, gave rise to a new original line of research developed in the frame of the "Futuro in Ricerca" project entitled "Investigating the role of reproductive barriers in an emblematic case of incipient speciation". This project principal aim is to understand the role of hybridization in the genetic divergence of <i>An. gambiae</i> and <i>An. coluzzii</i> populations and the impact of introgression in gene and phenotype relevant for malaria transmission. Moreover, the research line is presently taking advantage from the participation of BC to the Partner Working group of the "Anopheles gambiae 1.000 genomes project" - <a href="http://www.malariaqen.net/projects/vector/aq1000a">http://www.malariaqen.net/projects/vector/aq1000a</a> - coordinated by the Wellcome Trust Sanger Institute, Oxford University and Liverpool School of Tropical Medicine. (Researches supported by "Futuro in Ricerca" 2010 MIUR, Istituto Pasteur-Fondazione Cenci Bolognetti", Institut Pasteur of Paris, University Sapienza, AVECNET and MALVEBLOCK EU-FP7 projects).</p>	<p>43, 41, 39, 37, 32, 24, 22, 21, 20, 12, 11, 3</p>
<p><b>Arbovirus mosquito vectors, Europe, biology, monitoring, vector control, outbreak diseases, insecticide resistance</b></p>	<p>Eco-Epidemiological studies on Culicidae species, vectors of human arbovirolosis and zoonotic pathogens, with particular reference to <i>Aedes albopictus</i>. These research activities focused on: i) analysis of behavioral parameters relevant in determining the mosquito vectorial capacity, such as anthropophily/zoophily, endophily/exophily, population size, dispersion, longevity and insecticide resistance funded by University of Rome; ii) development of methods to evaluate the effectiveness of control strategies and of new tools to control <i>Ae. albopictus</i> population in urban area supported by FP7-EDENext project ; iii) analysis of human innate immune response (such as interferon) against antroponotic and zoonotic virus (i.e. Chikungunya, West Nile and Usutu virus) supported by Institute Pasteur Paris "ACIP" programs. Since 2016 BC was founding member of ZANZAMAPP digital app "zanzamapp" (<a href="http://www.zanzamapp.it/">http://www.zanzamapp.it/</a>) and collaborated to the Global Mosquito Alert initiative.</p>	<p>47,46,45,44,42, 40, 35,34,35,33, 31,30, 29, 28, 26, 25, 23, 19, 18, 16,14, 13, 9, 8, 4</p>

**Mosquito vectors of diseases, chemical communication, biochemical approaches**

Analysis of chemical communication in mosquitoes. This line of research began during a undergraduate training period at Department of Biological Sciences, Staffordshire University Stoke on Trent, UK at was later developed in synergy with Centro Interdipartimentale di Spettrometria di Massa (CISM, University of Florence). Biochemical approaches have been applied to study: 1) epicuticular lipid profiles in *An. gambiae* taxa, at different physiological stages by GC-MS; 2) antennal peptides and proteins involved in chemical communication in *An. gambiae* by MALDI profiling, Imaging Mass Spectrometry (IMS), LC-MS/MS, with particular focus on soluble proteins (Odorant Binding proteins) involved in olfaction; iii) protein and peptides as candidate biomarkers for mosquito age-grading. These researches have been carried out in the frame of "PRIN" Italian Project and EDENEXT EU-FP7 projects.

[38, 36, 27, 17, 15, 10, 5, 2, 1].

**Part VIII– Summary of Scientific Achievements to the total amount of publications**

Product type	Number	Data Base (authorhip)	Start	End
Papers [international]	52			

**Scopus Database**

Total Impact factor	
Total Citations	
Average Citations per Product	
Hirsch (H) index	
H-index negli ultimi 10 anni	

**ABILITAZIONE SCIENTIFICA NAZIONALE:**

Settore Concorsuale 07/H3 - - MALATTIE INFETTIVE E PARASSITARIE DEGLI ANIMALI. II Fascia - Primo Quadrimestre Dal 04/04/2017 al 04/04/2023

Settore Concorsuale 05/B1 - - ZOOLOGIA E ANTROPOLOGIA. II Fascia - Primo Quadrimestre. Dal 28/03/2017 al 28/03/2023

## Part X–Total Publications

### PUBBLICAZIONI SCIENTIFICHE IN EXTENSO \*=corresponding author

#### 2019

- 52 Love RR, Redmond SN, Pómbi M, Caputo B, Petrarca V, Della Torre A; Anopheles gambiae 1000 Genomes Consortium, Besansky NJ. In Silico Karyotyping of Chromosomally Polymorphic Malaria Mosquitoes in the Anopheles gambiae Complex. *G3 (Bethesda)*. 2019 Oct 7;9(10):3249-3262. doi: 10.1534/g3.119.400445. PubMed PMID: 31391198; PubMed Central PMCID: PMC6778791.
- 51 Bonneau M, Caputo B, Ligier A, Caparros R, Unal S, Perriat-Sanguinet M, Arnoldi D, Sicard M, Weill M. Variation in Wolbachia cidB gene, but not cidA, is associated with cytoplasmic incompatibility mod phenotype diversity in Culex pipiens. *Mol Ecol*. 2019 Nov;28(21):4725-4736. doi: 10.1111/mec.15252. Epub 2019 Oct 15. PubMed PMID: 31550397.
- 50 Caputo B, Moretti R, Manica M, Serini P, Lampazzi E, Bonanni M, Fabbri G, Pichler V, Della Torre A, Calvitti M. A bacterium against the tiger: preliminary evidence of fertility reduction after release of Aedes albopictus males with manipulated Wolbachia infection in an Italian urban area. *Pest Manag Sci*. 2019 Oct 11. doi: 10.1002/ps.5643. [Epub ahead of print] PubMed PMID: 31603613
- 49 Marini F, Caputo B, Pombi M, Travaglio M, Montarsi F, Drago A, Rosà R, Manica M, Della Torre A. Estimating Spatio-Temporal Dynamics of Aedes Albopictus Dispersal to Guide Control Interventions in Case of Exotic Arboviruses in Temperate Regions. *Sci Rep*. 2019 Jul 16;9(1):10281. doi: 10.1038/s41598-019-46466-4. PubMed PMID: 31311945; PubMed Central PMCID: PMC6635400.
- 48 Pichler V, Malandrucolo C, Paola S, Bellini R, Severini F, Toma L, Di Luca M, Montarsi F, Ballardini M, Manica M, Petrarca V, Vontas J, Kasai S, Della Torre A, **Caputo B\***. Phenotypic and genotypic pyrethroid resistance of Aedes albopictus, with focus on the 2017 chikungunya outbreak in Italy. *Pest Manag Sci*. 2019 Feb 6. doi: 10.1002/ps.5369. [Epub ahead of print] PubMed PMID: 30729706.
- 47 Kasai S, **Caputo B**, Tsunoda T, Cuong TC, Maekawa Y, Lam-Phua SG, Pichler V, Itokawa K, Murota K, Komagata O, Yoshida C, Chung HH, Bellini R, Tsuda Y, Teng HJ, Filho JLL, Alves LC, Ng LC, Minakawa N, Yen NT, Phong TV, Sawabe K, Tomita T. First detection of a Vssc allele V1016G conferring a high level of insecticide resistance in Aedes albopictus collected from Europe (Italy) and Asia (Vietnam), 2016: a new emerging threat to controlling arboviral diseases. *Euro Surveill*. 2019 Jan;24(5). doi: 10.2807/1560-7917.ES.2019.24.5.1700847.
- 46 Manica M, Guzzetta G, Filipponi F, Solimini A, **Caputo B**, Della Torre A, Rosà R, Merler S. Assessing the risk of autochthonous yellow fever transmission in Lazio, central Italy. *PLoS Negl Trop Dis*. 2019 Jan 10;13(1):e0006970. doi: 10.1371/journal.pntd.0006970. eCollection 2019 Jan.

#### 2018

- 45 Solimini AG, Manica M, Rosà R, Della Torre A, **Caputo B**. Estimating the risk of Dengue, Chikungunya and Zika outbreaks in a large European city. *Sci Rep*. 2018 novembre, 8 (1): 16435. doi: 10.1038 / s41598-018-34664-5.
- 44 Russo G, **Caputo B**, Di Lascio A, Gatto G, Solimini AG. Awareness towards Chikungunya virus infection risk by general practitioners in Rome: a questionnaire based survey before the 2017 outbreak. *Infect Dis Trop Med* 2018; 4 (1): e451.
- 43 Thailayil J, Gabrieli P, **Caputo B**, Bascuñán P, South A, Diabate A, Dabire R, della Torre A, Catteruccia F. Analysis of natural female post-mating responses of Anopheles gambiae and Anopheles coluzzii unravels

similarities and differences in their reproductive ecology. *Sci Rep.* 2018 Apr 26;8(1):6594. doi: 10.1038/s41598-018-24923-w.

- 42 Tisseuil C, Velo E, Bino S, Kadriaj P, Mersini K, Shukullari A, Simaku A, Rogozi E, **Caputo B**, Ducheyne E, Della Torre A, Reiter P, Gilbert M. Forecasting the spatial and seasonal dynamic of *Aedes albopictus* oviposition activity in Albania and Balkan countries. *PLoS Negl Trop Dis.* 2018 Feb 12;12(2):e0006236. doi: 10.1371/journal.pntd.0006236. eCollection 2018 Feb. PubMed PMID: 29432489; PubMed Central PMCID: PMC5825170.
- 41 Pichler V, Bellini R, Veronesi R, Arnoldi D, Rizzoli A, Lia RC, Otranto D, Montarsi F, Carlin S, Ballardini M, Antognini E, Salvemini M, Brianti E, Gaglio G, Manica M, Cobre P, Serini P, Velo E, Vontas J, Kioulos I, Pinto J, della Torre A, **Caputo B\***. First evidence of resistance to pyrethroid insecticides in Italian *Aedes albopictus* populations after 26 years since invasion. *Pest Manag Sci.* 2018. un;74(6):1319-1327. doi: 10.1002/ps.4840. Epub 2018 Feb 21.

## 2017

- 40 Manica M, Guzzetta G, Poletti P, Filippini F, Solimini A, **Caputo B**, Della Torre A, Rosà R, Merler S. Transmission dynamics of the ongoing chikungunya outbreak in Central Italy: from coastal areas to the metropolitan city of Rome, summer 2017. *Euro Surveill.* 2017 Nov;22(44). doi: 10.2807/1560-7917.ES.2017.22.44.17-00685. IF=5.244 (IF5years=7.202)
- 39 Miles, A., Harding, N. J., Botta, G., Clarkson, C., Antão, T., Kozak, K., Schrider, D., Kern, A., Redmond, S., Sharakhov, I., Pearson, R., Bergey, C., Fontaine, M. C., Troco, A., Diabaté, A., Costantini, C., Rohatgi, K., Elissa, N., Coulibaly, B., Dinis, J., Midoga, J., Mbogo, C., Mawejje, H., Stalker, J., Rockett, K., Drury, E., Mead, D., Jeffreys, A., Hubbard, C., Rowlands, K., Isaacs, A., Jyothi, D., Malangone, C., Vauterin, P., Jeffrey, B., Wright, I., Hart, L., Kluczynski, K., Cornelius, V., MacInnis, B., Henrichs, C., Giacomantonio, R., Ayala, D., Bejon, P., Besansky, N., Burt, A., **Caputo, B.**, della Torre, A., Godfray, C., Hahn, M., Neafsey, D. E., O'Loughlin, S., Pinto, J., Riehle, M., Vernick, K., Weetman, D., Wilding, C., White, B., Lawniczak, M., Donnelly, M. & Kwiatkowski, D. 2017. Natural diversity of the malaria vector *Anopheles gambiae*. In: *Nature*. p. 1-40. doi: <https://doi.org/10.1101/096289> IF=40.137 (IF5years=43.769) (<https://www.uniroma1.it/it/notizia/dalla-genomica-nuovi-strumenti-la-lotta-alla-malaria-africa>)
- 38 Iovinella I, **Caputo B**, Calzetta M, Zwiebel LJ, Dani FR, della Torre A. Profiles of soluble proteins in chemosensory organs of three members of the afro-tropical *Anopheles gambiae* complex. *Comp Biochem Physiol Part D Genomics Proteomics.* 2017 Aug 2;24:41-50. doi: 10.1016/j.cbd.2017.07.005. IF=2.857 (IF5years=2.5)
- 37 Vicente JL<sup>1</sup>, Clarkson CS<sup>1</sup>, **Caputo B<sup>1</sup>**, Gomes B, Pombi M, Sousa CA, Antao T, Dinis J, Bottà G, Mancini E, Petrarca V, Mead D, Drury E, Stalker J, Miles A, Kwiatkowski DP, Donnelly MJ, Rodrigues A, della Torre A, Weetman D, Pinto J. Massive introgression drives species radiation at the range limit of *Anopheles gambiae*. *Sci Rep.* 2017 Apr 18;7:46451. doi: 10.1038/srep46451. (¹equal contribution) IF=4.847 (IF5years=4.259)
- 36 Iovinella I, **Caputo B**, della Torre A, Dani FR. Wide-scale analysis of protein expression in head and thorax of *Aedes albopictus* females. *J Insect Physiol.* 2017 May;99:33-38. doi: 10.1016/j.jinsphys.2017.03.005. IF=2.227 (IF5years=2.556)
- 35 Manica M, Rosà R, della Torre A, **Caputo B\***. From eggs to bites: do ovitrap data provide reliable estimates of *Aedes albopictus* biting females? *PeerJ.* 2017 Mar 16;5:e2998. doi: 10.7717/peerj.2998. eCollection 2017. IF=2.177 (IF5years=2.354)
- 34 Scagnolari C, **Caputo B**, Rezza G, Antonelli G. Antiviral Activity of the Combination of Interferon and Ribavirin Against Chikungunya Virus: Are the Results Conclusive? *J Infect Dis.* 2017 Feb 1;215(3):492-493. doi: 10.1093/infdis/jiw579. IF=6.273 (IF5years=5.724)

33. Manica M, Cobre P, Rosà R, **Caputo B\***. Not in my backyard: effectiveness of outdoor residual spraying from hand-held sprayers against the mosquito *Aedes albopictus* in Rome, Italy. *Pest Manag Sci*. 2017 Jan;73(1):138-145. doi: 10.1002/ps.4315. IF=3.253 (IF5years=3.338)
- 2016**
32. **Caputo B\***, Pichler V, Mancini E, Pombi M, Vicente JL, Dinis J, Steen K, Petrarca V, Rodrigues A, Pinto J, Della Torre A, Weetman D. The last bastion? X chromosome genotyping of *Anopheles gambiae* species pair males from a hybrid zone reveals complex recombination within the major candidate 'genomic island of speciation'. *Mol Ecol*. 2016 Sep 23. doi: 10.1111/mec.13840. IF=6.086 (IF5years=6.644)
31. Manica M, Filipponi F, D'Alessandro A, Screti A, Neteler M, Rosà R, Solimini A, Della Torre A, **Caputo B\***. Spatial and Temporal Hot Spots of *Aedes albopictus* Abundance inside and outside a South European Metropolitan Area. *PLoS Negl Trop Dis*. 2016 Jun 22;10(6):e0004758. doi: 10.1371/journal.pntd.0004758. IF=3.834 (IF5years=4.253)
30. **Caputo B\***, Manica M, D'Alessandro A, Bottà G, Filipponi F, Protano C, Vitali M, Rosà R, della Torre A, Assessment of the Effectiveness of a Seasonal-Long Insecticide-Based Control Strategy against *Aedes albopictus* Nuisance in an Urban Area. *PLoS Neglected Tropical Diseases* 10 (3) 134. March 2016. IF=3.834 (IF5years=4.253)
29. Velo E, Kadriaj P, Mersini K, Shukullari A, Manxhari B, Simaku A, Hoxha A, **Caputo B**, Bolzoni L, Rosà R, Bino S, Reiter P, Della Torre A. Enhancement of *Aedes albopictus* collections by ovitrap and sticky adult trap. *Parasit Vectors*. 2016 Apr 21;9(1):223. doi: 10.1186/s13071-016-1501-x. IF=3.035 (IF5years=3.225)
- 2015**
28. Cacciotti G, **Caputo B**, Selvaggi C, La Sala A, Diallo D, Ceianu C, Antonelli G, Scagnolari C. Variation in interferon sensitivity and induction between Usutu and West Nile (lineages 1 and 2) viruses. *Virology*. 2015 Nov; 485:189-98. IF=3.2 (IF5years=3.164)
27. Iovinella I, **Caputo B**, Michelucci E, Dani FR, della Torre A. Candidate biomarkers for mosquito age-grading identified by label-free quantitative analysis of protein expression in *Aedes albopictus* females. *J Proteomics*. 2015 Oct 14;128:272-9. doi: 10.1016/j.jprot.2015.08.002. IF=3.8867 (IF5years=3.926)
26. **Caputo B\***, Ienco A, Manica M, Petrarca V, Rosà R, della Torre A. New adhesive traps to monitor urban mosquitoes with a case study to assess the efficacy of insecticide control strategies in temperate areas. *Parasite & Vectors*, 8: 134. doi: 10.1186/s13071-015-0734-4. IF=3.035 (IF5years=3.225)
25. Baldacchino F, **Caputo B**, Chandre F, Drago A, della Torre A, Montarsi F, Rizzoli A. Control methods against invasive *Aedes* mosquitoes in Europe: a review. *Pest Management Science*. doi: 10.1002/ps.4044. IF=3.253 (IF5years=3.338)
24. Mancini E, Spinaci MI, Gordicho V, **Caputo B**, Pombi M, Vicente JL, Dinis J, Rodrigues A, Petrarca V, Weetman D, Pinto J, della Torre A (2015) Adaptive Potential of Hybridization among Malaria Vectors: Introgression at the Immune Locus TEP1 between *Anopheles coluzzii* and *A. gambiae* in 'Far-West' Africa. *PLoS One*, 10(6):e0127804. IF=3.057 (IF5years=3.394)
23. Cianci, D, Hartemink, ., Zeimes CB, Vanwambeke SO, Ienco A, **Caputo B** (2015) High Resolution Spatial Analysis of Habitat Preference of *Aedes albopictus* (Diptera: Culicidae) in an Urban Environment. *Journal of Medical Entomology*, 52(3), 329-335. IF=1.712 (IF5years=1.824)
22. Santolamazza F, **Caputo B**, Nwakanma DC, Fanello C, Petrarca V, Conway DJ, Weetman D, Pinto J, Mancini E, della Torre A (2015) Remarkable diversity of intron-1 of the para voltage-gated sodium channel gene in an *Anopheles gambiae*/*Anopheles coluzzii* hybrid zone. *Malaria Journal*, 14: 9 doi:10.1186/s12936-014-0522-1 IF=3.079 (IF5years=3.027)

## 2014

21. **Caputo B\***, Nwakanma D, Caputo FP, Jawara M, Oriero EC, Hamid-Adiamoh M, Dia I, Konate L, Petrarca V, Pinto J, Conway DJ, della Torre A (2014) Prominent intraspecific genetic divergence within *Anopheles gambiae* sibling species triggered by habitat discontinuities across a riverine landscape. *Molecular Ecology*, 23(18): 4574-89. DOI: 10.1111/mec.1286. IF=6.086 (IF5years=6.644)
20. Gordicho V, Vicente JL, Sousa CA, **Caputo B**, Pombi M, Dinis J, Seixas G, Palsson K, Weetman D, Rodrigues A, della Torre A, Pinto J (2014) First report of an exophilic *Anopheles arabiensis* population in Bissau city, Guinea-Bissau: recent introduction or sampling bias *Malaria Journal*, 13: 423. DOI: 10.1186/1475-2875-13-423. IF=3.079 (IF5years=3.027)
19. Pombi M, Jacobs F, Verhulst NO, **Caputo B**, della Torre A, Takken W (2014) Field evaluation of a novel synthetic odour blend and of the synergistic role of carbon dioxide for sampling hostseeking *Aedes albopictus* adults in Rome, Italy. *Parasites & Vectors*, 7: 247. DOI: 10.1186/1756-3305-7-247. IF=3.035 (IF5years=3.225)

## 2013

18. Scagnolari C, **Caputo B**, Trombetti S, Cacciotti G, Soldà A, Spano L, Villari P, della Torre A, Nowotny N, Antonelli G. (2013) Usutu virus growth in human cell lines: induction of and sensitivity to type I and III interferons. *Journal of General Virology*, 94: 789-95  
IF=3.529 (IF5years=2.902)
17. Mastrobuoni G, Qiao H, Iovinella I, Sagona S, Niccolini A, Boscaro F, Caputo B, Orejuela MR, della Torre A, Kempa S, Felicioli A, Pelosi P, Moneti G, Dani FR. (2013) A proteomic investigation of soluble olfactory proteins in *Anopheles gambiae*. *PLoS ONE*, 8(11):e75162.  
IF=3.057 (IF5years=3.394) Comunicato stampa AGI - Agenzia Giornalistica Italia, 3-2-2014 e Comunicato stampa del 05-02-2014 Sapienza" Università di Roma dell'articolo ".
16. Cianci D, Van Den Broek J., **Caputo B**, Marini F, della Torre A, Heesterbeek H, Hartemink N (2013) Estimating Mosquito Population Size from Mark-Release-Recapture Data. *Journal of Medical Entomology*, 50(3): 533-542.  
IF=1.712 (IF5years=1.824)
15. Iovinella I, Bozza F, **Caputo B**, della Torre A, Pelosi P (2013). Ligand-Binding Study of *Anopheles gambiae* Chemosensory Proteins *Chemical Senses*, 38 (5): 409-419.  
IF=3.278 (IF5years=2.917) Articles Highlighted. Ligand binding to *Anopheles gambiae* chemosensory proteins. Highlighted in *Chem. Senses* 38: 377, 2013; doi:10.1093/chemse/bjt025.

## 2012

14. **Caputo B**, Ienco A, Cianci D, Pombi M, Petrarca V, Baseggio A, Devine GJ, della Torre A (2012) The "auto-dissemination" approach: a novel concept to fight *Aedes albopictus* in urban areas. *PLoS Neglected Tropical Diseases*, 6: e1793  
IF=4.569 (IF5years=4.253)
13. Drago A, Marini F, **Caputo B**, Coluzzi M, della Torre A, Pombi M (2012). Looking for the gold standard: assessment of the effectiveness of four traps for monitoring mosquitoes in Italy. *Journal of Vector Ecology*, 37: 117-123.  
IF=1.227 (IF5years=1.481)

## 2011

12. **Caputo B**, F. Santolamazza, JL. Vicente, DC. Nwakanma, M. Jawara, K. Palsson, Jaenson T, BJ. White, E. Mancini, V. Petrarca, DJ. Conway, NJ. Besansky, J. Pinto, A. della Torre (2011) The "far-west" of *Anopheles gambiae* molecular forms. *PLoS ONE*, 6:e16415.  
IF=4.092 (IF5years=3.394)
11. Santolamazza F, **Caputo B**, Calzetta M, Vicente JL, Mancini E, Petrarca V, Pinto J, della Torre A. (2011) Comparative analyses reveal discrepancies among results of commonly used methods for *Anopheles gambiae* molecular form identification. *Malaria Journal*, 10: 215.  
IF= 3.191(IF5years=3.027)
10. Qiao H, He X, Schymura D, Ban L, Field L, Dani FR, Michelucci E, **Caputo B**, della Torre A, Iatrou K, Zhou JJ, Krieger J, Pelosi P. (2011) Cooperative interactions between odorant-binding proteins of *Anopheles gambiae*. *Cellular and Molecular Life Sciences*: DOI 10.1007/ s00018-010-0539-8  
IF=6.57 (IF5years=6.455)

## 2005-2010

9. Marini F, **Caputo B**, Pombi M, Tarsitani G, A. della Torre (2010) Study of *Aedes albopictus* dispersal in Rome, Italy, using sticky traps in mark-release-recapture experiments. *Medical & Veterinary Entomology*, 24 (4): 361-368.  
IF= 1.895(IF5years=2.215)
8. Valerio L, Marini F, Bongiorno G, Facchinelli L, Pombi M, **Caputo B**, Maroli M, della Torre A. (2009) Host-Feeding Patterns of *Aedes albopictus* (Diptera: Culicidae) in Urban and Rural Contexts within Rome Province, Italy. *Vector Borne Zoonotic Diseases*, 10 (3): 291-294  
IF=2.733 (IF5years=2.29)
7. Pombi M, **Caputo B**, Simard F, Di Deco MA, Coluzzi M, della Torre A, Costantini C, Besansky NJ, Petrarca V. (2008) Chromosomal plasticity and evolutionary potential in the malaria vector *Anopheles gambiae* sensu stricto: insights from three decades of rare paracentric inversions. *BMC Evolutionary Biology*,10: 309. IF=3.221 (IF5years=3.628)
6. **Caputo B**, Nwakanma D, Jawara M, Adiamoh M, Dia I, Konate L, Petrarca V, Conway DJ, della Torre A. (2008) *Anopheles gambiae* complex along The Gambia River, with particular reference to the molecular forms of *An. gambiae* s.s. *Malaria Journal*, 7:182.  
IF=2.913 (IF5years=3.027)
5. Dani FR, Francese S, Mastrobuoni G, Felicioli A, **Caputo B**, Simard F, Pieraccini G, Moneti G, Coluzzi M, della Torre A, Turillazzi S. (2008) Exploring proteins in *Anopheles gambiae* male and female antennae through MALDI Mass Spectrometry Profiling. *PLoS ONE*, 3(7): e2822.  
IF=4.351 (IF5years=3.394)
4. Valerio L, Marini F, Bongiorno G, Facchinelli L, Pombi M, **Caputo B**, Maroli M, della Torre A. (2008). Blood-feeding preferences of *Aedes albopictus* (Diptera: Culicidae) in urban and rural settings within the province of Rome, Italy. *Parassitologia*, 50(1-2):103-104.
3. Coulibaly MB, Pombi M, **Caputo B**, Nwakanma D, Jawara M, Konate L, Dia I, Fofana A, Kern M, Simard F, Conway DJ, Petrarca V, della Torre A, Traoré S, Besansky NJ. (2007) PCR-based karyotyping of *Anopheles gambiae* inversion 2Rj identifies the BAMAKO chromosomal form in Mali, West Africa. *Malaria Journal*, 6:133. IF= 2.473 (IF5years=3.027)
2. **Caputo B**, Dani FR, Horne GL, N'Fale S, Diabate A, Turillazzi S, Coluzzi M, Costantini C, Priestman AA, Petrarca V, della Torre A. (2007) Comparative analysis of epicuticular lipid profiles of sympatric and

allopatric field populations of *Anopheles gambiae* s.s. molecular forms and *An. arabiensis* from Burkina Faso (West Africa). *Insect Biochemistry and Molecular Biology*, 37: 389-398.  
IF=2.827 (IF5years= 3.668)

1. Caputo B, Dani FR, Horne GL, Petrarca V, Turillazzi S, Coluzzi M, Priestman AA, della Torre A. (2005) Identification and composition of Cuticular Hydrocarbons of the major Afrotropical malaria vector *Anopheles gambiae* s.s. (Diptera: Culicidae) and analysis of sexual dimorphism and age-related changes. *Journal of Mass Spectrometry*, 40: 1595-604. IF =3.574 (IF5years= 2.438)

## **ABSTRACTS A CONGRESSI**

### **2018**

- A1. Marini F, Caputo B, Pombi M, Travaglio M, Montarsi F, Drago A, Rosà R, Manica M, della Torre A. Estimating dispersal of *Aedes albopictus* females to guide control interventions in case of autochthonous arbovirus transmission in temperate areas. E-serve
- A2. Manica M, Guzzetta G, Poletti P, Filipponi F, Solimini A, Caputo B, Della Torre A., Rosà, R.; Merler, Modelling vector dynamic and arbovirus outbreaks in Europe S. XI European Congress of Entomology, Naples 2-6 July 2018

### **2017**

- A3. Solimini A, Manica M, Rosà R, della Torre A, Caputo B. Estimating the probability of arbovirus outbreaks in non-endemic countries highly infested by *Aedes albopictus*: the case study of Rome. Pavia, Italy, April 10-12, 2017. Poster see *Pathogens and Global Health*. 10.1080/20477724.2017.1333560.
- A4. Manica, M, Solimini, A.G., Rosà, R., della Torre, A., Caputo B. Monitoring *Aedes albopictus* and the risk of arbovirus transmission in Rome, Italy. B. ISTISAN Congressi 17/C3 III Seminar - PhD Day. Interdisciplinary approaches in Health Sciences: a bridge to the future. Istituto Superiore di Sanità, Rome, June 5, 2017.
- A5. Manica, M., Solimini, A.G.; Rosà, R, della Torre, A, Caputo. Arbovirosi trasmesse da *Aedes albopictus* (DENV, CHIKV, ZIKAV) a Roma. Preparatevi, l'outbreak sta arrivando, o no? 1° Convegno di Primavera, Associazione Italiana di Epidemiologia 2017 Roma 5-6 Giugno, 2017.
- A6. Estimating the probability of arbovirus outbreaks in large southern European city infested by *Aedes albopictus*. Solimini, A.G.; Manica, M.; Rosà, R.; della Torre, A.; Caputo, B. ESCAIDE: European Scientific Conference on Applied Infectious Disease Epidemiology 2017, 6-8 November 2017, Stockholm, Sweden.
- A7. Angelo Solimini, Mattia Manica, Roberto Rosa', Alessandra Della Torre and Beniamino Caputo. Stima del rischio di epidemie di arbovirosi tropicali trasmesse dalla zanzara tigre: il caso di Roma. AIE associazione italiana di epidemiologia. 25-27 ottobre Mantova 2017. Partecipazione: comunicazione orale.
- A8. Pichler V, Kotzakiotsi P, Caputo B, Caccone G, A della Torre. Genomic insights on the biogeography of the Tiger Mosquito, *Aedes albopictus*, in Italy. 7th Congress of the Italian Society for Evolutionary Biology (SIBE). Roma 2017, Italia. Partecipazione: comunicazione orale.

### **2016**

- A9. Mattia Manica, Roberto Rosa, Alessandra della Torre, Beniamino Caputo Estimating human/mosquito contact and risk of exotic arbovirus transmission from eggs counts in ovitrap: a case study for *Aedes albopictus* in Rome (Italy) **65th Annual Meeting American Society of Tropical Medicine & Hygiene**, Atlanta USA, November 13-17, 2016. Partecipazione: comunicazione orale BC.
- A10. Mattia Manica, Federico Filipponi, Roberto Rosa', Markus Neteler, Angelo Solimini, Alessandra della Torre, Beniamino Caputo. Ecoclimatic drivers of spatio-temporal hot spots of *Aedes albopictus*



abundance in a south european urban area. **65th Annual Meeting American Society of Tropical Medicine & Hygiene**, Atlanta USA, November 13-17, 2016. Partecipazione: poster

- A1. **Caputo B**, Manica M, Cobre P, Filipponi F, Bianchi C, della Torre A. Development of novel non-conventional approaches to monitor *Aedes albopictus* abundance and biting rates. International Conference "FACING THE INVASION OF ALIEN ARTHROPODS SPECIES: ecology, modelling and control of their economic impact and public health implications" Trento, Italy, 7 – 9 November 2016 Partecipazione comunicazione orale BC.
- A2. Manica M, **Caputo B**, Rosà R, della Torre A. Estimating *Aedes albopictus* biting females by ovitrap surveillance data in an area at high-risk of exotic arbovirus introduction. **International Conference "FACING THE INVASION OF ALIEN ARTHROPODS SPECIES: ecology, modelling and control of their economic impact and public health implications"** Trento, Italy, 7 – 9 November 2016 Partecipazione: comunicazione orale
- A3. Pichler V, Manica M, Cobre P, Pinto J, della Torre A, **Caputo B**. Susceptibility of Italian *Aedes albopictus* and *Culex pipiens* populations to insecticides most widely used in interventions against adult mosquitoes. International Conference "FACING THE INVASION OF ALIEN ARTHROPODS SPECIES: ecology, modelling and control of their economic impact and public health implications" Trento, Italy, 7 – 9 November 2016 Partecipazione: comunicazione orale
- A4. Pichler V, Manica M, Cobre P, della Torre A, Pinto J, Caputo B. A preliminary assessment of the insecticide resistance status of *Aedes albopictus* and *Culex pipiens* populations from Rome. **XXIX CONGRESS of Soipa & European Veterinary Parasitology College: Parasites, Poverty and Social commitment** Bari, Italy, 21-24 June 2016 Partecipazione: comunicazione orale
- A5. Bottà G, Miles A, **Caputo B**, della Torre A. High Resolution Populations Genomics Reveals An Extremely Complex Dynamics Of Early Speciation In Afrotropical Malaria Vectors. **VII Seminario di studio. Salute globale e scenari attuali: nuovi contributi di ricerca Istituto Superiore Sanità**. Rome, Italy, 1 June 2016 Partecipazione: comunicazione orale
- A6. Manica M, **Caputo B**, Rosà R, della Torre A. Population monitoring of *Aedes albopictus* to assess of the effectiveness of insecticide-based control strategies and the risk of arbovirus transmission. **VII Seminario di studio. Salute globale e scenari attuali: nuovi contributi di ricerca Istituto Superiore Sanità**. Rome, Italy, 1 June 2016 Partecipazione: comunicazione orale
- A7. Pichler V, Pombi M, Guelbeogo WM, Sagnon N, Ranson H, della Torre A, **Caputo B**. Studio Temporale Del Flusso Genico E Della Resistenza Agli Insetticidi Nei Due Principali Vettori Afrotropicali Di Malaria In Una Zona Di Simpatia Del Burkina Faso. **VII Seminario di studio. Salute globale e scenari attuali: nuovi contributi di ricerca Istituto Superiore Sanità**. Rome, Italy, 1 June 2016 Partecipazione: comunicazione orale.

## 2015

- A8. **Caputo B**, "Monitoring and control of the mosquito *Aedes albopictus* in urban area" Research and Innovation Centre, Fondazione Edmund Mach, San Michele all'Adige, TN – Italy. Invited speaker
- A9. Iovinella I, **Caputo B**, Michelucci E, Dani FR, A. della Torre. A proteomic-based "shotgun" approach opens new perspectives to mosquito age-grading. **64th Annual Meeting American Society of Tropical Medicine & Hygiene**, Philadelphia USA, October 25-29, 2015. Partecipazione: comunicazione orale
- A10. della Torre A., Bottà G, Miles, **Caputo B**, K Rockett, Donnelly, Kwiatkowski D, Ag1000G Consortium. Speciation, hybridisation and introgression in natural *Anopheles gambiae* and *A. coluzzii* populations from the Ag1000G phase-1 data. **64th Annual Meeting American Society of Tropical Medicine & Hygiene**, Philadelphia USA, October 25-29, 2015. Partecipazione: poster

- A11. Miles A, Ag1000G Consortium. Deep sequencing of *Anopheles gambiae* from natural populations spanning sub-Saharan Africa – a resource for vector control research. **64th Annual Meeting American Society of Tropical Medicine & Hygiene**, Philadelphia USA, October 25-29, 2015. Partecipazione: comunicazione orale
- A12. Solimini A, Caputo B, Manica M, Rizzo F, della Torre A. A pilot exercise to assess population vulnerability to diseases transmitted by the tiger mosquito in Rome. **9th European Congress on Tropical Medicine and International Health**, Basel, Switzerland 6 - 10 September 2015 Partecipazione: poster
- A13. della Torre A, Bottà G, Miles, Caputo B, K Rockett, Donnelly, Kwiatkowski D, Ag1000G Consortium. Preliminary insights on genome variation in natural *Anopheles gambiae* and *A. coluzzii* populations from the Ag1000G phase 1 data. **EMBO conference: Molecular and Population Biology of Mosquitoes and Other Disease Vectors**, Kolymbari, Greece 24 – 29 July 2015. Partecipazione: comunicazione orale
- A14. Miles A, Ag1000G Consortium. 765 *Anopheles gambiae* genomes from natural populations spanning sub-Saharan Africa - the Ag1000G phase-1 data resources. **EMBO conference: Molecular and Population Biology of Mosquitoes and Other Disease Vectors**, Kolymbari, Greece 24 – 29 July 2015. Partecipazione: comunicazione orale
- A15. Gomes B, Clarkson CS, Caputo B, Pombi M, Mancini E, Vicente JL, Sousa CA, Dinis J, Rodrigues A, Donnelly MJ, Ag1000g consortium, Weetman D, della Torre A, Pinto J. Population structure and hybridisation between *Anopheles coluzzii* and *An. gambiae* may affect malaria epidemiology and control in Guinea Bissau **EMBO conference: Molecular and Population Biology of Mosquitoes and Other Disease Vectors**, Kolymbari, Greece 24 – 29 July 2015. Partecipazione: poster
- A16. Caputo B, Manica M, Petrarca V, Rosà R, della Torre A. Assessment of the efficacy of insecticide control strategies in Rome (Italy) using novel monitoring and statistical approaches. **Genes, Ecosystems and Risk of Infection (GERI 2015) conference**, Heraklion, Crete, Greece, 21-23 April 2015. Partecipazione: comunicazione orale BC
- A17. Manica M, Caputo B, Rosà R, della Torre A. Metodi statistico-matematici per il controllo integrato di zanzare vettrici di patogeni. **VI Seminario di studio. Salute globale e scenari attuali: nuovi contributi di ricerca Istituto Superiore Sanità**. Rome, Italy, 16 April 2015 Partecipazione: comunicazione orale
- A18. Bottà G, Miles A, Caputo B, della Torre A. Malaria Vectors, Speciation Processes And Evolutionary Dynamics: Tackling A Devastating Public Health Issue While Studying Biological Phenomena. **VI Seminario di studio. Salute globale e scenari attuali: nuovi contributi di ricerca Istituto Superiore Sanità**. Rome, Italy, 16 April 2015 Partecipazione: comunicazione orale
- A19. Pichler V, Caputo B, della Torre A. Studio del differenziamento genomico e flusso genico tra i principali vettori afrotropicali di malaria all'estremo occidentale del loro areale di distribuzione e valutazione dell'impatto sulla trasmissione di *Plasmodium falciparum*. **VI Seminario di studio. Salute globale e scenari attuali: nuovi contributi di ricerca Istituto Superiore Sanità**. Rome, Italy, 16 April 2015 Partecipazione: comunicazione orale

#### 2014

- A20. Caputo B, Nwakanma D, Caputo FP, Jawara M, Oriero EC, Adiamoh MH, Dia I, Konate L, Petrarca V, Pinto J, Conway DJ, della Torre A. Unexpected strong reduction of gene-flow within *Anopheles gambiae* in an area of hybridization. **63rd Annual Meeting American Society of Tropical Medicine & Hygiene**, New Orleans, Louisiana USA, November 2-6, 2014.
- A21. Caputo B, V Pichler, Mancini M, Pombi M, Vincente J, Rodrigues A, Dinis J, Petrarca V, Pinto J, della Torre A, Weetman D. X-chromosome localized recombination hotspots undermine existing molecular diagnosis of *Anopheles gambiae* and *An. coluzzii* under high hybridization. **63rd Annual Meeting American Society of Tropical Medicine & Hygiene**, New Orleans, Louisiana USA, November 2-6, 2014.

- A22. Vicente JL, **Caputo B**, Pombi M, Sousa CA, Dinis J, Rodrigues A, Weetman D, della Torre A, Pinto J Population subdivision within *Anopheles gambiae* may impact malaria transmission in Guinea Bissau. **63rd Annual Meeting American Society of Tropical Medicine & Hygiene**, New Orleans, Louisiana USA, November 2-6, 2014.
- A23. **Caputo B**, Pichler V, Mancini E, Pombi M, Vicente J, Rodrigues A, Dinis J, Petrarca V, Pinto J, della Torre A, Weetman D. Does hybridization promote degradation of the chromosome-X island of genomic divergence between *Anopheles gambiae* and *An. coluzzii*? **Genomic Epidemiology of Malaria Meeting**, Wellcome Trust Genome Campus Hinxton, Cambridge UK, 8-11 June 2014. Partecipazione: poster
- A24. Pichler V, Weetman D, Mancini E, Pombi M, Vicente J, Rodrigues A, Dinis J, Petrarca V, Pinto J, della Torre A, **Caputo B**. First evidence of recombination in the X-chromosome centromeric region of the malaria mosquitoes *Anopheles gambiae* and *An. coluzzii* (Diptera: Culicidae). **XXVIII Congresso Società Italiana di Parassitologia**, Roma, Italia, June 24-27. Partecipazione: comunicazione orale
- A25. **Caputo B**, Ienco AM, Manica M, Rosà R, Petrarca V, della Torre A. Evaluation of insecticide treatments against *Ae. albopictus* in the campus of University of Rome SAPIENZA. **XXVIII Congresso Società Italiana di Parassitologia**, Roma, Italia, June 24-27. Partecipazione: comunicazione orale BC

### 2013

- A26. **Caputo B**, "Genetic analyses of *Anopheles gambiae* M and S populations from the "far-west" reveal habitat segregation and further population structure". 6th International Congress of the Society for Vector Ecology (SOVE) La Quinta, at California, USA): September 22-27, 2013. Invited speaker BC
- A27. Weetman D, **Caputo B**, Vicente JL, Pombi M, Rodrigues A, Mancini E, Maslen G, MacInnis B, Kwiatkowski D, della Torre A, Pinto J, and Donnelly MJ. Genomes in flux: 'real-time' variation in incipient speciation in *Anopheles gambiae*. **62nd Annual Meeting American Society of Tropical Medicine & Hygiene**, Atlanta, USA, November 11-15, 2012. Da control
- A28. Pichler V, Weetman D, Mancini E, Pombi M, Vicente J, Rodrigues A, Pinto J, della Torre A, **Caputo B**. Evidence of recombination on the "speciation island" X-chromosome centromeric region between the malaria mosquitoes *Anopheles gambiae* and *An. coluzzii*. **Meeting "Italian Society for Evolutionary Biology"**, Trento 2013. Partecipazione: comunicazione orale
- A29. Mancini E, Spinaci MI, **Caputo B**, Pichler V, Vicente JL, Rodrigues A, Pombi M, Petrarca V, Pinto J, della Torre A Allelic variation at the immunity gene TEP1 in an area of hybridization between the malaria mosquitoes *Anopheles gambiae* and *An. coluzzii*. **Meeting "Italian Society for Evolutionary Biology"**, Trento 2013. Partecipazione: comunicazione orale
- A30. José L. Vicente, Weetman D, **Caputo B**, Pombi M, Sousa CA, Dinis J, Rodrigues A, Calderón I, della Torre A, Pinto J Spatial analysis of a hybrid zone between incipient species of *Anopheles gambiae* s.s. in Guinea Bissau. **EMBO conference: Molecular and Population Biology of Mosquitoes and Other Disease Vectors**, Kolymbari, Greece 15 – 19 July 2013. Partecipazione: comunicazione orale
- A31. Weetman D, **Caputo B**, Vicente JL, Pombi M, Rodrigues A, Mancini E, della Torre A, Pinto J, and Donnelly MJ Temporal variation in incipient speciation in *Anopheles gambiae*. **Genomic Epidemiology of Malaria Meeting**, Wellcome Trust Genome Campus Hinxton, Cambridge UK, 8-11 June 2013. Partecipazione: poster
- A32. **Caputo B**, Mancini E, Pombi M, Petrarca V, della Torre A. *Firb-Futuro In Ricerca 2010*: "Investigating the role of reproductive barriers in an emblematic case of incipient speciation" **Annual Meeting "Italian Malaria Network"**, Torino, January 2013. Partecipazione: comunicazione orale

## 2012

- A33. **Caputo B**, Weetman D, Mancini M, Pombi M, Vincente J, Rodrigues A, Donnelly M, Pinto J, della Torre A. Evidence of recombination in the X-chromosome centromeric region in *Anopheles gambiae* molecular forms from an area of putative secondary contact. **61st Annual Meeting American Society of Tropical Medicine & Hygiene**, Atlanta, USA, November 11-15, 2012. Da controll
- A34. Weetman D, **Caputo B**, Vincente J, Pombi M, Rodrigues A, Mancini M, Maslen G, MacInnis B, Kwiatkowski D, della Torre A, Pinto J, Donnelly M. Genomes in flux: 'real-time' variation in incipient speciation in *Anopheles gambiae*. **61st Annual Meeting American Society of Tropical Medicine & Hygiene**, Atlanta, USA, November 11-15, 2012.
- A35. Santolamazza F, Mancini E, **Caputo B**, Nwakanma DC, Conway DJ, Pinto J, della Torre A. New insights on an area of secondary contact between *Anopheles gambiae* M and S forms from polymorphism analysis of Intron-1 of the voltage-gated sodium channel gene. **61st Annual Meeting American Society of Tropical Medicine & Hygiene**, Atlanta, USA, November 11-15, 2012.
- A36. Weetman D, **Caputo B**, Vincente J, Pombi M, Rodrigues A, Mancini M, della Torre A, Pinto J, Donnelly M. Temporal variation in incipient speciation in *Anopheles gambiae*. **Genomic Epidemiology of Malaria Meeting**, Wellcome Trust Genome Campus Hinxton, Cambridge UK, 9-12 June 2012. Partecipazione: poster
- A37. **Caputo B**, Ienco A, Cianci D, Pombi M, Petrarca V, Baseggio A, Devine GJ, della Torre A. Wild mosquito females can contribute to the control of *Aedes albopictus* pre-imaginal stages in urban areas. **18<sup>th</sup> International Conference of European Society of Vector Ecology**, Montpellier, France 8-12 October 2012. Partecipazione: comunicazione orale BC
- A38. Pombi M, Colangelo P, Maetzke R, **Caputo B**, Vicente JL, Calzetta M, Guelbeogo WM, Petrarca V, Rodrigues A, Sagnon N'F, Pinto J, della Torre A. Shaping the differences: a phenotypic study of the wings of *Anopheles gambiae* molecular forms by geometric morphometrics. **18<sup>th</sup> International Conference of European Society of Vector Ecology**, Montpellier, France 8-12 October 2012. Partecipazione: comunicazione orale
- A39. **Caputo B**, Nwakanma DC, Caputo FP, Pinto J, Conway DJ, della Torre A. Genetic analyses of *Anopheles gambiae* M and S populations from the "far-west" reveal habitat segregation and further population structure. **18<sup>th</sup> International Conference of European Society of Vector Ecology**, Montpellier, France 8-12 October 2012. Partecipazione: poster
- A40. **Caputo B**, Ienco A, Cianci D, Pombi M, Petrarca V, Baseggio A, Devine GJ, della Torre A. The "auto-dissemination" approach: a novel concept to fight *Aedes albopictus* in urban areas. **XXVII Congresso Società Italiana di Parassitologia**, Alghero, Italia, 26-29 June 2012. Partecipazione: comunicazione orale BC
- A41. Santolamazza F, Mancini M, **Caputo B**, Conway DJ, Pinto J, della Torre A. Polymorphism analysis of Intron-1 of the sodium channel gene in species and molecular forms of the *Anopheles gambiae* complex. **XXVII Congresso Società Italiana di Parassitologia**, Alghero, Italia, 26-29 June 2012. Partecipazione: comunicazione orale

## 2011

- A42. **Caputo B**, Vincente J, Calzetta M, Calderón I, Nwakanama D, Adiamoh M, Dia I, Konate L, Pombi M, Canestrelli, Petrarca V, Rodrigues A, Conway D, Pinto J, della Torre A. Chromosomal and molecular characterization of *Anopheles gambiae* M and S molecular forms in a secondary contact zone at the westernmost extreme of their range. **60th Annual Meeting American Society of Tropical Medicine & Hygiene**, Philadelphia, PA, USA, 4-8 December 2011. Partecipazione: comunicazione orale

- A43. **Caputo B**, Ienco A, Cianci D, Pombi M, Petrarca V, Baseggio A, Devine GJ, della Torre A. The “auto-dissemination” approach: a novel concept to fight *Aedes albopictus* in Italy. **60th Annual Meeting American Society of Tropical Medicine & Hygiene**, Philadelphia, PA, USA, 4-8 December 2011.

#### 2003-2010

- A44. **Caputo B**, Nwakanama D, Oriero EC, Jawara M, Dia I, Konate L, Canestrelli D, Petrarca V, Conway D, della Torre A. The west-side story of *Anopheles gambiae* molecular form speciation. **59th Annual Meeting American Society of Tropical Medicine & Hygiene**, Atlanta, Georgia USA, 3-7 November 2010.
- A45. Marini F, **Caputo B**, Pombi M, Travaglio M, Tarsitani G, Montarsi F, Drago A, della Torre A. First data on *Aedes albopictus* dispersal in Italy. **59th Annual Meeting American Society of Tropical Medicine & Hygiene**, Atlanta, Georgia USA, 3-7 November 2010.
- A46. Dani FR, Michelucci E, Mastrobuoni G, Felicioli A, Piccolini A, **Caputo B**, Pelosi P, Moneti G, della Torre A. Novel mass spectrometry approaches for the Analysis of the expression of antennal soluble Olfactory proteins in *Anopheles gambiae*. **59th Annual Meeting American Society of Tropical Medicine & Hygiene**, Atlanta, Georgia USA, 3-7 November 2010.
- A47. **Caputo B**, Santolamazza F, Nwakanma D, Mancini E, White B, Petrarca V, Conway D, Besansky NJ, Pinto J, della Torre A. The Far-West of *Anopheles gambiae* Speciation. **Keystone Symposium on Vector-Borne Diseases**, Copper Mountain, Colorado, USA, 11-16 April 2010. Partecipazione: poster
- A48. Marini F, **Caputo B**, Pombi M, Travaglio M, Tarsitani G, Montarsi F, Drago A, della Torre A. Studying *Aedes albopictus* dispersal in Italy by mark-release-recapture experiments. **XXVI Congresso Società Italiana di Parassitologia**, Perugia, 22-25 giugno 2010. Partecipazione: comunicazione orale
- A49. Drago A, Marini F, **Caputo B**, della Torre A, Pombi M Looking for the golden standard: comparative evaluation of four traps for collecting host-seeking mosquitoes in Italy. **XXVI Congresso Società Italiana di Parassitologia**, Perugia, 22-25 giugno 2010. Partecipazione: poster
- A50. Marini F, Valerio L, **Caputo B**, Facchinelli L, Bongiorno G, Maroli M, Tarsitani G, Pombi M, della Torre A. Exploitation of a sticky-trap in studies on the biology of *Aedes albopictus* in Rome. **5th European Mosquito Control Association (EMCA)**, Torino, 9-13 marzo 2009 Partecipazione: comunicazione orale
- A51. della Torre A, Santolamazza F, **Caputo B**, Mancini E, Palsson K, Nwakanama D, Jawara M, Conway D, Tu Z, Petrarca V, Pinto J. High hybridization rate between *Anopheles gambiae* molecular forms at the western extreme of their range highlights possible gene-flow in the X-chromosome “speciation island”. **57th Annual Meeting American Society of Tropical Medicine & Hygiene**, New Orleans, Louisiana, USA., December 7-11, 2008.
- A52. Pombi M, **Caputo B**, Costantini C, Di Deco MA, Coluzzi M, della Torre A, Simard F, Besansky NJ, Petrarca V. Chromosomal plasticity and evolutionary potential in the malaria vector *Anopheles gambiae* sensu stricto: insights from three decades of rare paracentric inversions. **57th Annual Meeting American Society of Tropical Medicine & Hygiene**, New Orleans, Louisiana, USA., December 7-11, 2008.
- A53. Valerio L, Marini F, Bongiorno G, Facchinelli L, Pombi M, **Caputo B**, Maroli M, della Torre A. High rates of feeding on humans in the generalist biter *Aedes albopictus* in Rome (Italy). **57th Annual Meeting American Society of Tropical Medicine & Hygiene**, New Orleans, Louisiana, USA., December 7-11, 2008.
- A54. Santolamazza F, Pinto J, Mancini J, **Caputo B**, Pombi M, Simard F, Caccone A, Tu Z, Petrarca V, della Torre A. Analysis of genetic diversity within *Anopheles gambiae* s.s. M-form. **XXV Congresso Società Italiana di Parassitologia**, Pisa, 18-21 Giugno 2008. Partecipazione: comunicazione orale
- A55. Pombi M, **Caputo B**, Costantini C, Di Deco Ma, Coluzzi M, della Torre A, Besansky NJ, Simard F, Petrarca V. Three decades of rare paracentric inversions in the malaria vector *Anopheles gambiae* sensu stricto

**XXV Congresso Società Italiana di Parassitologia**, Pisa, 18-21 Giugno 2008. Partecipazione:  
comunicazione orale

- A56. Valerio L, Marini F, Bongiorno G, Facchinelli L, Pombi M, **Caputo B**, Maroli M, della Torre A. Blood-feeding preferences of *Aedes albopictus* (Diptera: Culicidae) in urban and rural settings within the province of Rome, Italy. **XXV Congresso Società Italiana di Parassitologia**, Pisa, 18-21 Giugno 2008. Partecipazione: comunicazione orale
- A57. Valerio L, Marini F, Facchinelli L, Pombi M, **Caputo B**, della Torre A. Exploitation of a sticky trap to study biology of *Aedes albopictus* (Diptera: Culicidae) in Rome. **XXV Congresso Società Italiana di Parassitologia**, Pisa, 18-21 Giugno 2008. Partecipazione: comunicazione orale
- A58. **Caputo B**, Nwakanma D, Jaware M, Dia, I, Konate L, Petrarca V, Conway D, della Torre A. *Anopheles gambiae* s.s. M-molecular form shows Savanna chromosomal karyotypes in the western extremes of its geographical distribution. **55th Annual Meeting American Society of Tropical Medicine & Hygiene**, Atlanta, Georgia, USA, November 12-16, 2006.
- A59. Santolamazza F, Caputo B, Pombi M, Avellino P, Facchinelli L, Besansky NJ, Sagnon N'F, Costantini C, della Torre A. Temporal changes in the frequency of the knock-down resistance allele (kdr) in *Anopheles gambiae* molecular form S from central Burkina Faso. **54th Annual Meeting American Society of Tropical Medicine & Hygiene**, Washington, DC, USA, 11-15th December 2005.
- A60. Santolamazza F, Caputo B, Pombi M, Avellino P, Facchinelli L, Besansky NJ, Sagnon N'F, Costantini C, della Torre A. Knock-down resistance (kdr) in *Anopheles gambiae* S molecular form in Goundri village (Burkina Faso) between 1998 and 2003. **4th International Congress of Vector Ecology (SOVE)** Reno Nevada 2- 7th October 2005 Partecipazione: poster
- A61. **Caputo B**, Dani FR, Horne GL, Diabate A, Sagnon N'F, Costantini C. Cuticular hydrocarbons in *Anopheles gambiae*: preliminary results and future perspectives. **EMBO Workshop on "Molecular and Population Biology of Mosquitoes and Other Disease Vectors"**. Kolymbari, Crete, Greece, 24-31 July 2005. Partecipazione: comunicazione orale
- A62. **Caputo B**, Dani FR, Priestman AA, Horne GL, Costantini C, Sagnon N'F, Petrarca V, Turillazzi S, Coluzzi M, della Torre A. Epicuticular hydrocarbons analysis of adult *Anopheles arabiensis* and *An.gambiae* s.s. molecular forms from Burkina Faso. **53th Annual Meeting American Society of Tropical Medicine & Hygiene**, Miami, Florida, USA, November 7-11, 2004.
- A63. Dani FR, **Caputo B**, Priestman AA, Horne GL, Costantini C, Sagnon N'F, Petrarca V, Turillazzi S, Coluzzi M, della Torre A. Epicuticular lipids differ between *Anopheles arabiensis* and *A.gambiae* s.s. and between *A.gambiae* s.s. molecular forms (Insecta: Diptera: Culicidae): an application of gas chromatography-mass spectrometry in chemotaxonomy. **International Symposium on Mass Spectrometry**. Bari, Italy, 26-30 September 2004. Partecipazione: comunicazione orale
- A64. Priestman AA, **Caputo B**, Horne GL, Coluzzi M, della Torre A (2003). Characterisation and analysis of cuticular hydrocarbons from field collected and aged lab samples in *Anopheles gambiae*. **52nd Annual Meeting American Society of Tropical Medicine & Hygiene**, Philadelphia, December 2003.

#### Part XI – Invitation to national & international scientific seminars, international workshop

Year Title

2018

Invited speaker at: Corso ECM per personale ASL -dal titolo "Patologie Infettive emergenti e emergenze infettive ancora attuali" organizzato dal ASL di Roma 6, Villa Slaus Ariccia-Roma, 5-6 Dicembre. Title: "Trasmissione da vettori: le arbovirosi".

2018	Invited speaker at: Corso per personale ASL e per Amministrazioni Comunali ECM dal titolo: "Piano di monitoraggio di <i>Aedes albopictus</i> " organizzato dall' Istituto Zooprofilattico di Lazio e Toscana sede di Roma, Via Appia Nuova, 1411.– Roma, 18-19 giugno. Title: Fattori chiave nella trasmissione di arbovirus e determinazione del rischio epidemico". -
2017	Invited speaker at: "Harnessing Citizen Science to Tackle Mosquito-Borne Diseases: Towards a locally based, yet Global Platform" United Nations, Geneva, Switzerland. April 3rd & Tuesday April 4th. Title: "Zanzamapp: an Italian experience of citizen science"
2016	Invited speaker at: "International Workshop on "Insecticide resistance in vectors of emerging arboviruses: Challenge and prospects for vector control". 05–08 December 2016, Windsor Marapendi, Rio de Janeiro, BRAZIL. (cited in <a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5457540/">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5457540/</a> )
2016	Monitorare la diffusione di <i>Aedes albopictus</i> con la citizen science: ZANZAMAPP. 44° Congresso Nazionale della Società Italiana di Microbiologia. Pisa, 25-28 Settembre 2016
2015	Invited speaker at: "Research and Innovation Centre, Fondazione Edmund Mach" (San Michele all'Adige, TN – Italy): "Monitoring and control of the mosquito <i>Aedes albopictus</i> in urban area"
2013	Invited speaker at: 6th International Congress of the Society for Vector Ecology (SOVE) (September 22-27, 2013 in La Quinta, at California, USA): "Genetic analyses of <i>Anopheles gambiae</i> M and S populations from the "far-west" reveal habitat segregation and further population structure"

#### Part XII – Research activity in qualified national and international Institutions

Year	Research Institution	Research Activities	Joint Publications (see list below)
2014-2016	Liverpool School of Tropical Medicine, Liverpool, UK	Research activities in LSTMH were carried out to genotype field male <i>An. gambiae</i> samples collected in Guinea Bissau to study recombination and introgression in a low recombination centromeric region.	39, 37, 32
2005-2016	Università degli Studi di Firenze	Laboratory experiences were carried at Centro di Servizi di Spettrometria di Massa (CISM) to study chemical communication in mosquitoes. Biochemical techniques applied: Gas-Chromatography-Mass spectrometry, Liquid chromatography Mass spectrometry, Matrix Assisted Laser Desorption Ionization Time-of-Flight.	38, 36, 27, 17, 5, 1, 2
2012	Instituto de Higiene e Medicina Tropical, IHMT, Portugal	Training and research activity in genetic data analysis on microsatellite data of <i>An. gambiae</i> populations collected from The Gambia.	37, 33, 24, 22, 21, 20

2010

Instituto Nacional de  
Saúde Pública,  
Ministério da Saúde  
Pública, Bissau,  
Guinea-Bissau

entomological field surveys were carried out in the Republic of Guinea Bissau by a team of researchers and technicians of the Instituto Nacional de Saúde Pública (INASA, Guinea Bissau), Università di Roma "La Sapienza" (Italy) and Instituto de Higiene e Medicina Tropical (Portugal). The main objective was to evaluate the distribution of malaria vectors, in particular species belonging to the *Anopheles gambiae* complex. In addition, efforts were made to obtain samples for cytogenetic and molecular analysis and to conduct preliminary studies on larval ecology and insecticide resistance.

37,33,24,  
20



2008-2009	IRSS/Centre Muraz, Bobo-Dioulasso, Burkina Faso	Field studies were carried out in Burkina Faso by a team of researchers and technicians of IRSS/Centre Muraz, Bobo-Dioulasso, Burkina Faso Università di Roma "La Sapienza" and Imperial College (UK) in the frame of European project (MALVEBLOK). The main objective was to evaluate the degree of reproductive isolation between major malaria vectors studying swarms.	41
2005 and 2006	Medical Research Council, Banjoul, The Gambia	Entomological field surveys and laboratory analysis (molecular genotyping of microsatellites, and sequencing) were carried out in The Gambia during Phd to evaluate the genetic differentiation and habitat partitioning of <i>An.gambiae</i> species-pair.	22, 21, 12, 6, 3
2005 and 2006	l'Institut Pasteur, Dakar, Senegal	Entomological field surveys to evaluate the distribution of malaria vectors, in particular species belonging to the <i>Anopheles gambiae</i> complex in eastern part of Senegal. (Tambacounda, Kedougou regions).	21, 6, 3
2003	Centre National de Recherche et de Formation sur le Paludisme de Ouagadougou, Burkina Faso	Field studies and molecular genotyping of major malaria vectors with the aim to study phenotypic characters important for malaria transmission.	2
2003	Department of Biological Sciences, Faculty of Health and Sciences, Staffordshire University, Stoke-on-Trent, UK	Research activity at Staffordshire University School of Sciences (Biological and Biomedical Sciences) under supervision of Prof. Angela Priestman. Biochemical analysis of mosquito chemical cues by Gas-chromatography coupled by Mass Spectrometry,	1,2

### Part XIII – National and international collaborations

Collaborators	Institutions	Joint Publications (see list below)
D Conway	London School of Tropical Medicine & Hygiene UK	22, 21, 12, 6, 3
FR Dani & G Mastrobuoni	Centro Interdipartimentale di Spettrometria di Massa (CISM), Università di Firenze, FIRENZE	36, 38, 27, 17, 15, 10, 5, 2, 1
I Dia	Institut Pasteur, Dakar, SENEGAL	21, 6, 3
A T Offianan	Maître de Recherche Département Parasitologie Mycologie Institut Pasteur Côte d'Ivoire	na

D Kwiatkowski & A Miles	University of Oxford, UK	39, 37
F Catteruccia	Harvard School of Public Health	41
D Nwakanma & M Jawara	Medical Research Council, THE GAMBIA	22, 21, 12, 6, 3
P Pelosi & A Felicioli	Dipartimento di Anatomia, Biochimica e Fisiologia Veterinaria e di Chimica e Biotecnologie Agrarie, Università di Pisa, PISA	17, 15, 10
J Pinto	Instituto de Higiene e Medicina Tropical, Universidade Nova de Lisboa, PORTUGAL	39, 37, 33, 24, 22, 21, 20, 12, 11
A Rodrigues	National Institute of Public Health, INASA, GUINEA BISSAU	37,33 24, 20
R Rosà, AP Rizzoli	Fondazione Edmund Mach, San Michele all'Adige, TRENTO	40,35,32,31,30,29,26,25
N'Fale Sagnon	Centre National de Recherche et de Formation sur le Paludisme (CNRFP), Ouagadougou, BURKINA FASO	2
C Scagnolari & Guido Antonelli	Dipartimento Medicina Molecolare, Sapienza University, ROMA	34,28,18
D Weetman & M Donnelly	Liverpool School of Tropical Medicine, Liverpool, UK	39,37,33,24, 22, 20

Data: Roma 9/12/2019

Il dichiarante