

Curriculum vitae

Personal Information

Name and Last name: Stefano Mona
Date and Place of Birth: July 05, 1979, Bitonto (Bari), Italy
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Language skills: Italian (native), English (fluent), French (fluent), Spanish (basic knowledge)

Professional Experience

2023- Directeur d'Etudes, EPHE-PSL (Ecole Pratique des Hautes Etudes – Paris Sciences & Lettres), ISYEB (UMR7205), Muséum National d'Histoire Naturelle, Paris, France.
2010-2023 Maitre de Conference (Assistant/Associate professor Tenured), EPHE (Ecole Pratique des Hautes Etudes), ISYEB (UMR7205), Muséum National d'Histoire Naturelle, Paris, France.
2009-2010 Post-doctoral fellow, Institute of Ecology and Evolution, University of Bern.
(Supervisor: Prof. Laurent Excoffier).
2007-2009 Post-doctoral fellow, Department of Biology and Evolution, University of Ferrara.
(Supervisor: Prof. Giorgio Bertorelle).

Education

2018 HDR (Habilitation à diriger des recherches): “Population structure: how much should we worry?”.
2007 Ph.D. in Genetics and Molecular Evolution, University of Bari.
(Supervisor: Prof. Mila Tommaseo-Ponzetta. Thesis: Men and Pigs: different molecular approaches to uncover the peopling of New Guinea.).
2002 Degree in Natural Sciences at University of Bari, with final mark 110/110 cum laude.
(Supervisor: Prof. Mila Tommaseo-Ponzetta. Thesis (in Italian): Nuovo approccio statistico allo studio della variabilità craniometrica in Nuova Guinea e Melanesia).

Visiting position

01/05–06/05 Research student at the Department of Forensic and Molecular Biology at the Erasmus University, Rotterdam. (Supervisor: Prof. Manfred Kayser)
04/17–09/17 Invited Professor at the University of Bari (Italy)

Teaching: classes given in 2024/2025 (representative of each year)

Diplôme/autre	Institution	Intitulé UE	Formation	Effectifs	HETD	Role
IMAGHE	EPHE-PSL	Génétique des populations (Niveau I)	M1	~15	33	Responsable
IMAGHE	EPHE-PSL	Génétique des populations (Niveau II)	M2	~10	30	Responsable
IMAGHE	EPHE-PSL	Introduction à R	M1	~12	15	Participant
IMAGHE	EPHE-PSL	Les données sous R: gestion, transformation et visualisation	M1	~18	4.5	Participant
Diplôme	EPHE-PSL	Analyse statistique des données niveau 1	FC	~3	10	Participant
Licence SMD	PSL	Sciences de la conservation	L3	~18	12	Co-responsable
EVOGEM	ENS/EPHE/SU/SACLAY/CITE	Génétique des populations- GPOP	M2	~15	4.5	Participant
EVOGEM	ENS/EPHE/SU/SACLAY/CITE	Projet transversal	M2	~10	35	Co-responsable
EVOGEM	ENS/EPHE/SU/SACLAY/CITE	INFO0	M2	~10	15	Participant
FC	EPHE-PSL	Apprentissage du Logiciel R – Niveau I	FC	~5	18	Responsable (this year however hold by an ATER)

Teaching: organization and perspectives

Besides giving classes (something more than ~144 HET), in the last years I also participated to organize a novel M2 program, I re-organized my teaching at the Master IMAGHE, and I am organizing an “Ecole d’Hiver” which will take place in December 2025, as well as a series of digital modules within ATLASea. Hereafter more details on these four points:

- M2 EVOGEM. EVOGEM is a new M2 cursus which was created in Paris to fill the gap of a specialized offer in modeling for evolutionary biology. EVOGEM was created under a bottom-up approach by a group of researchers from different Parisian institutions: ENS-PSL, EPHE-PSL (me and Pierre de Villemereuil), SU, Paris-Saclay, Paris Cité. We built EVOGEM all together and students can enroll from all the above mentioned institution. Evogem started in 2022-2023, the academic year 2025-2026 will be the 4th year. Since the beginning I have been part of the boarding team, building up the whole cursus with the colleagues. This also means that we regularly meet every year (~4 times per year) to solve problems, to improve the cursus, and discuss future directions. Moreover, I participate every year to the final M2 jury, being the reviewer for ~2 internships per year.
- IMAGHE. Given the need to re-organize the cursus (I am part of the CF), together with Erwan Delrieu-Trottin we merged our evolutionary biology /population genetics teaching. The idea is to provide a new offer more adapted to the IMAGHE public, which is generally more interested in applied science. The population genetics teaching will be integrated with phylogenetics and environmental DNA approaches. This lead to the birth of two new UE which replace “Genetique des populations I & II”: “Approches moleculaire pour la conservation” (Erwan sera le responsable) et “Génomique de la Conservation” (je serai le responsable). Moreover, with Nicoals Navarro and Pierre de Villemereuil we will propose in September 2025 two additional days for the “Introduction à R” in order to provide students basic concept of statistical inference with practical applications.
- ECOLE D’HIVER (ATLASea). I represent PSL within the PEPR ATLASea, where I am responsible with Stéphanie Bertrand (SU) of the teaching duties. We are organizing a winter school which will take place in Banyuls/mer (<https://www.atlasea.fr/en/atlasea-winter-school-2025-en/>) the week of the 8th December. We already established the program and we are now reviewing students’ application. We received more the 50 applications from all over the world, but we have only 20 places available.
- ATLASea Digital Modules. We are building digital modules within ATLASea covering all steps of genomic studies: sampling, data production, assembly and annotation, use of reference genomes for evolutionary and applied studies. To this end, we are currently hiring to IE: one to help researchers to

build their digital teaching (for two types of public: graduate/researchers and high school/general public), and the second one to practically create the webplatform and translate in a numerical format all the created contents. The first IE should start working in October 2025 (we are currently finishing the recruitment process)

Student supervision

- *M1 student*

- Mordret Ernest, AgroParisTech (2012), then phd student at the Weizmann Institute of Science, Israel.
- Camargo Livia, AgroParisTech (2013).
- Tran-lu-y Adrien, IMAGHE EPHE, (2017), now post-doc at the University of Zurich.
- Lesturgie Pierre, IMAGHE EPHE (2019), now post-doc at the University of Lisbon.
- Ramborum Jonas, BEE Université Lyon (2019)
- Ducancel Joshua, BEE Université Lyon (2022) now phd student in my team
- Gouspy Jeanne, IMAGHE EPHE (2024), now phd student at the University of Montpellier
- Louna Cohu Puel, SEP MNHN (2024), now phd student with Pierre de Villemereuil (EPHE-PSL)
- Théophile Thomas, AgroParisTech (2025)
- Alice Murigneux, SEP MNHN (2025)

- *M2 student*

- Dieng Jiddou, IMAGHE EPHE (2015)
- Boursier Typhaine, (2017) (50% of time with Claudie Doums).
- Tran-lu-y Adrien, IMAGHE EPHE (2018), now post-doc at the University of Zurich.
- Lesturgie Pierre, IMAGHE EPHE (2019), now post-doc at the University of Lisbon.
- Samama Charles, IMAGHE EPHE (2022)
- Brejon Lamartiniere Etienne, AgroParisTech (2022), now phd at the University of Bielefeld
- Le Gouellec Maël, AGRO Toulouse (2023), now phd student in my team
- Brisset Olivier, BEE Paris Saclay (2023), now phd student in my team
- Golding Carlyne (50% of time with Claudie Doums), ENS Lyon (2024), now phd student at the ENS Lyon
- Hugo Deshayes, BEE Toulouse (2025), will start the phd in my team October 2025

- *Phd student*

- Benazzo Andrea (phd: 2009-2012, 30%), now associate professor at the University of Ferrara
- Ghirotto Silvia(phd: 2009-2012, 30%), now associate professor at the University of Ferrara
- Marra Annamaria (phd: 2011-2015, 30%)
- Bouiges Axelle (phd: 2011-2014, 20%)
- Lesturgie Pierre (phd: 2020-2023, 100%) now post-doc at the University of Lisbon.
- Taupenot Antoine (phd: 2021- 2024, 30%), Agrégé SVT
- Dwivedi Nisha (phd: 2022- , 50%, with Guillaume Achaz, Collège de France)
- Nieto-Heredia Alba (phd: 2022- , 50%, with Oscar Lao, CSIC, Barcelone)
- Le Gouellec Maël (phd: 2023- , 100%)
- Ducancel Joshua (phd: 2023-, 50%, with Claudie Doums, EPHE-PSL)

- Brisset Olivier (phd: 2023-, 33%, with Nathalie Macon & Paul Verdu, MNHN)
- *Post-doc student*
- Maisano Delsler Pierpaolo, (2014-2016) (now Senior Analytical Manager at NHS England).
- Delrieu-Trottin Erwan (2015) (now MCF EPHE-PSL).
- Eyer Pierre-André, (2017) (50% of time, now post-doc at the University of Texas, Austin).
- Khimoun Aurelie, (2017) (50% of time, now MCF at the University of Dijon, France)
- Bautisse Postaire (2022-2023) (50% of time, now post-doc at the Institut des Sciences de la Foret Temperee, Quebec)
- Laso-Jadart Romuald, (2021-) (50% of time now with Claudie Doums)
- *Others*
- Suany Quesada (2017), visiting phd student from University of Valdivia (Chile), now IR (University of Valdivia).
- Brisset Olivier (2021), L3 at the University of Saclay, now phd student in my team
- Ekaterina Kikodze (2021), Erasmus+ Student, now phd student at the University of Groeningen
- Léa Guichard (2023), L3 from the Licence SMD-PSL, now M2 at the master STPE.
- Victor Nguyen (2025), BTS Gennevilliers

Scientific Expertise

- Each year, reviewer for 4 articles on average for the following journals: *Annals of Human Genetics; Biological Journal of the Linnean Society; BMC Evolutionary Biology; BMC Genetics; Frontiers in Ecology and Evolution; Genetics; Heredity; International Journal of Anthropological Sciences; Journal of Human Genetics; Molecular Biology and Evolution; Molecular Ecology; Plos One; Proceedings of the Royal Society B, Sciences Advances, Evolutionary Applications, Molecular Ecology, Molecular Ecology Resources, Methods in Ecology and Evolution.*
- **Associated Editor** for *Frontiers in Genetics* (section Evolutionary and Population Genetics) since 2022
- External examiner for the Consolidator Grant of the **Swedish Research Council** (2022)
- **Member of the jury** for the MCF position "*Evolution et Informatique pour la Biodiversité*" at Sorbonne Université (2025)
- **Jury member of one HDR** (Pierre de Villemereuil, 2025)
- **Jury member of three phd thesis**: Thomas Vignaud (2015, Université de Perpignan, examiner); Simone Fernandes-Delgado (2016, MNHN examiner); Agathe Pirog (2018, Université de La Réunion reviewer)
- **External examiner of three foreign phd thesis** (2017, University of Padova, 2018 University of Bari, 2021 University of Ferrara)
- **Research committee of six phd thesis**: Nicolas Oury (2019-2022, Université La Réunion), Sebastien Bridel (2017-2020, Sorbonne Université), Batistin Marsouin (2022- , Université Dijon), Jeanne Rolland (2022-, EPHE), Jeanne Guibert (2023-, Université La Réunion), Abdelmajid Omarjee (2023-, Collège de France)
- Member of the **reviewing panel and jury for the ATM grant** (MNHN), 2022-2025. **Every year we distributed around ~300ky.** The maximum allowed for a project is 15kya and I reviewed ~4

projects per year (out of ~60) and participated to the final ranking. Every year we also met twice to establish the guidelines for project submission and the evaluation criteria.

- Member of the **reviewing panel and jury for the EMERGENCE grant** (Sorbonne Université), 2025. This year I reviewed two projects (max allowed: 120ky) and participated to the final ranking (**total amount of the grant: 500ky**).

Research Animation and Administration

- **Member of the CSS EPHE** (commission scientifique de la section SVT EPHE, **2018-2022**). Approximately six meeting per year, mostly concerning evaluation of the AP EPHE, jobs opening demanded by each lab, and ATER positions.
- **Member of the CS EPHE** (Conseil Scientifique de l'Ecole Pratique des Hautes Etudes, **2019-2023**). Approximately six meetings per year, mostly recording decisions taken by the different committees.
- **Member of the GBR EPHE** (Groupe Budget et Recherche) of EPHE (**2020-2023**). The GBR evaluate the money request from each lab, allowing a total budget of ~600ky. We used to meet three times per year, between September and December.
- **Member of the CU ISYEB** (conseil d'unité, **2019-2025**). Our CU evaluates small internal applications for funding to finish/start small project, attend conferences, buy small equipment. The CU also evaluate and rank: jobs profiles demanded from the different teams of the ISYEB, phd subjects (for the ED 227), ATER positions. The CU also participates to all discussion within the UMR to help the DU to take decisions/actions. CU used to be once every two months, depending on the time of the year.
- **Member of the Scientific Board of the International PHD program "ENVIRONMENTAL SUSTAINABILITY AND WELL BEING"**, coordinated by the **University of Ferrara (2020-)**. I participated to ~4 online meetings with the whole board of the Doctoral School. Being an external member, my role is to evaluate phd when needed (I cannot ask fellowship).
- **Représentant EPHE-PSL pour le PNDB** (Pôle National de Données de Biodiversité) (**2020-2024**). I participated to ~4 online meetings per year. I was mostly taking care of administrative aspects (extremely light)
- **Représentant PSL pour le PEPR ATLASea** (**2021-**). Beside one meeting every two months, my involvement in the project concerns the training part. This is very intense and it is detailed in the teaching section.
- Member of the CF (**Conseil de Formation**) of the Master SdV EPHE-PSL (**2022-**). I participate to the regular meeting of the CF and also to the jury of M1 and M2 (which takes two full days in June and on average one in September), which involves reviewing two to four internship reports per year.
- Member of the **teaching team** (equivalent to "**Conseil de Formation**") of EVOGEM (**2022-**). Details are provided in the teaching section.
- **Local correspondent of the EPHE-PSL** (2024-). This duty involves two main tasks: taking care of our lab CR (together with Claudie Doums) and organizing interviews with our two BIATSS (Pascaline Chifflet-Belle, TEC; Elise Gay, IE).

* note: I will enter in the conseil de l'ED472 in September/October 2025.

Congress organizer

- 2024: **Co-organizer** of the **international conference**: "Conservgenomics : Conservation Genomics Paris" (<https://conservgenomics.sciencesconf.org/>), with Guillaume Achaz (Collège de France),

Simon Boitard (INRAE), Raphaël Leblois (INRAE), Dimitri Petrov (Stanford University), Tim Sackton (Harvard University). All of us selected evaluated the applications (the conference was held at the Grand Galerie de l'Evolution in Paris, limited to 120 attendants) and selected oral and abstract presentations. I also took care of the logistic, being at the MNHN.

- 2025: **Co-organizer** of the **international winter school**: "ATLASEa Winter School 2025: From Sampling to Reference Genome Acquisition" (<https://www.atlasea.fr/en/atlasea-winter-school-2025-en/>) with Stéphanie Bertrand (Sorbonne Université). Details are in the teaching section.

Grants

2013-2016: **ANR DEMOCHIPS** (Partner: total grant of 260,000€)
2014: Labex Corail CORALSHARK (PI: 25,000€)
2015: Labex Corail ROC (PI: one year post-doc to Erwan Delrieu-Trottin)
2016: ATM BULL-SEQ (PI: 6,500€)
2017: ATM DOLPH-KIN (PI: 7,000€)
2018: Labex Corail PocillopoRad (PI: 15,000€)
2018: ATM GRAYREEF (PI: 3,500€)
2019: Labex Corail CryptoCapture (PI: 20,000€)
2019: ATM CRYPTO_SEQ (PI: 10,500€)
2020-2023: **ANR Suscept-Ext** (WP leader. total grant of 521,000€)
2020-2023: **ANR Armagueddon** (Partner: total grant of 350,000€)
2021: OFB grant, co-PI, 30k.
2021: GEN-ANT (ATM), PI, 10.3 k.
2021: DEGE-AILE (ATM), participant, 10k.
2022: TRODIV (ATM), PI, 14.4 K
2022: HYBRIDUS (ATM), participant, 12 K
2022: MITOSHARK (ATM), participant, 15 K
2022: AI4theSciences (PSL grant), PI, phd fellowship (started September 2022)
2023-2027: **ANR FLORES** (Partner: total grant of ~1M)
2024-2027: **ANR SOGENANT** (WP Leader: total grant of 530k)

Grants demanded or still under examination (2024-2025)

- ANR RecentDemo (Partener, PI: Raphaël Leblois and Guillaume Achaz). *2nd round but not financed.*
- ANR EVOCHAB (WP leader, PI: Erwan Delrieu-Trottin). *Still under review.*
- PSL GlobalSeedFound (PI). *Still under review.*

Contributed oral presentation (myself or my phd students)

- 2005. S. Mona. "Geography has shaped Y chromosome but not mtDNA diversity in West New Guinea". I Congresso dei biologi evuzionisti italiani, Ferrara (Italy).
- 2007. S. Mona and Tommaso-Ponzetta M. "Evolutionary history of the genus *Sus* and implications for its conservation genetics". Population Genetics for Animal Conservation, 2007, Monte Bondone (Italy).
- 2007. S. Mona, Crestanello B., Dronnet F., Bertorelle G. "Balancing selection and demography have shaped the genetic variability of the MHC class II DRB locus in *Rupicapra rupicapra*". Federazione Italiana delle Scienze della vita 2007, Riva del Garda (Italy).
- 2008. S. Mona, Benazzo A., Bertorelle G. "Bayesian evidence for an independent cattle domestication event in Italy". "III Congresso dei biologi evuzionisti italiani", Alghero (Italy).
- 2010. Mona S, 2010. "Genetic consequence of habitat fragmentation during a range expansion". IV congresso SIBE - MILANO, 2-4 settembre 2010.
- 2015. Mona S, 2015. "A shark tale: population genomics of *Carcharhinus melanopterus*". LabEx CORAIL 08.09.2015 – Paris.
- 2015. Mona S, 2015. "On the role played by the carrying capacity and the ancestral population size during a range expansion". Congresso SIBE – Bologna.
- 2017. Mona S. "Demographic inferences after a range expansion can be biased: the test case of the blacktip reef shark (*Carcharhinus melanopterus*)". IPFC Tahiti.
- 2019. Mona S. "Population structure and its consequences: an overview". XIX Jornada de Biologia evolutiva della società catalana di biologia nel 2019, Barcelona, Spain (*Invited speaker*)
- 2022. Mona S. "Population genomics in the wild: examples from some non-model species". From reads to genomes and populations, Paris (*Invited speaker*)
- 2023. **Lesturgie P.** "A Size-determining Supergene Hampers a Vulnerable Population Recovery". **SMBE 2023**, Ferrara, Italy.
- 2024. **Nieto-Heredia A.** "AI and demographic inference in structured populations". **SMBE 2024**, Puerto Vallarta, Mexico
- 2024. **Ducancel J.** "Supergenes and social antagonistic evolution in the ant *Myrmecina graminicola*". **IUSSI 2024**, Lausanne, Switzerland.
- 2025. **Nieto-Heredia A.** "The impact of population substructure on SMC-based inference tools analyzed through extensive demographic simulations on spatially complex demographic models". **ESEB 2025**, Barcelone.
- 2025. **Brisset O.** "Assessing the outcomes of assisted gene flow after 25-year monitoring of a plant mixed-source reintroduction program". **ESEB 2025**, Barcelone.
- 2025. **Nieto-Heredia A.** "Coupling AI and SMC-based algorithms: Inference of population structure from single genome sequencing analysis". **SMBE 2025**, Beijing, China (Graduate Student Excellence symposium)
- 2025. **Auclair L. & Brisset O.** " Genomic Consequences of Translocations: Lessons from the Critically Endangered Pyrenean Brown Bear". **SMBE 2026**, Copenhagen, Denmark

*note: **SMBE** (Society for Molecular Biology and Evolution) and **ESEB** (European Society for Evolutionary Biology) are the two most prestigious international congress of my research field(s). **IUSSI** (International Union for the Study of Social Insects) is the most prestigious congress on social insects.