

CURRICULUM VITAE ET STUDIORUM

NAME and SURNAME

GREGORIO OXILIA

PLACE AND DATE OF BIRTH

VERONA (VR) 14/01/1988

CITIZENSHIP

Italian

POSITION

Senior Assistant Professor (Tenure-track) in Human Anatomy



PROFESSIONAL PROFILE

I am an anatomist-morphologist and evolutionary osteologist specializing in evolutionary biology and medicine. My teaching activities focus on the study of human anatomy and topographic anatomy through both traditional and digital approaches. My work centers on the anatomical and morphological study of human organs and tissues, both hard and soft, combining traditional methods, such as anatomical cadaveric dissection, with advanced digital methodologies to analyze and interpret structural variations and evolutionary adaptations. I trained at prestigious institutions, including the Max Planck Institute in Leipzig and the Senckenberg Research Institute in Frankfurt, and earned a Ph.D. in Evolutionary Biology (Anthropology and Primatology) from the University of Florence. I further specialized in human anatomy at Monash University (Melbourne, Australia), focusing on cranial and post-cranial skeletons, cadaveric dissection, and dental tissue analysis using Geometric Morphometric techniques.

I apply digital analysis to the study of human tissues, particularly teeth, combining multidisciplinary approaches for both research and education. I have coordinated research projects, educational activities, and third mission initiatives, with results published in high-impact international journals. Fluent in English and experienced as a Project Manager in the biomedical and healthcare sectors, I have successfully managed research teams, complex projects, and international collaborations, demonstrating versatility and leadership in both academic and corporate settings.

NATIONAL SCIENTIFIC QUALIFICATIONS

Achievement of the national scientific qualification for the role of Associate Professor in the following academic sectors:

- 05/H1 – **Human Anatomy** - BIO16
Call D.D. 553/2021, from 12/19/2023 to 12/19/2034
- 05/B1 – **Zoology and Anthropology** – BIO08
Call D.D. 553/2021, from 02/03/2022 to 02/03/2034
- 10/A1 **Archaeology** - LANT01
Call D.D. 553/2021, from 12/27/2023 to 12/27/2034
- Registered in the list of Cultural Heritage Professionals recognized by the Ministry of Cultural Heritage and Activities: Professional profile: **Physical Anthropology**, CATEGORY 1, pursuant to Article 9-bis of the Code, Law No. 110 of July 22, 2014, and Ministerial Decree of May 20, 2019, No. 244.

POSITION

Current Position

- November 2024 - Present
Senior Assistant Professor (Tenure-track) in Human Anatomy
Department of Medicine and Surgery - LUM Giuseppe Degennaro University

Previous Academic Positions

- September 2018 to September 2023
Junior Assistant Professor (RTDa) within the ERC project no. 724046 (SUCCESS)
Osteology and Paleoanthropology laboratory (BONES Lab; Director: Prof. Stefano Benazzi),
University of Bologna
- November 2017 to August 2018
Postdoctoral Fellow within the ERC project no. 639286 (HIDDEN FOODS)
DANTE Lab – Department of Oral and Maxillofacial Sciences, Sapienza University of Rome

EDUCATIONAL QUALIFICATIONS

- March 16, 2018
PhD in Biology (XXX cycle, BIO/08 Anthropology and Primatology)
Department of Biology, University of Florence
Thesis in Evolutionary biology, medicine and anthropology, title: “Human dental tissues: Advancement in virtual dental analysis.”
Supervisor: Prof. Jacopo Moggi Cecchi and co-supervisor: Prof. Stefano Benazzi
- November 22nd, 2024
MASTER I Level
Biomedical Project Management UNICUSANO University
110 cum laude/110
- July 16, 2014
Master's Degree in Quaternary, Prehistory and Archaeology - LM-2 Archaeology (DM 270/04)
Department of Human Sciences – University of Ferrara
Thesis in Evolutionary biology, medicine and anthropology, title: Reconstruction of Parafunctional Masticatory and Paleonutritional Activities of the Villabruna Man
110 cum laude/110
- November 29, 2011
Bachelor's Degree in Cultural Heritage - L1 Archaeology (DM 270/04)
Department of Cultural Heritage - University of Verona
Thesis in Evolutionary anthropology and absolute dating.

EDUCATION AND TRAINING:

- May 4, 2025
Cadaver Lab (ATS Course) - Full Trunk - Anatomical Dissection (Milan)
- May 3, 2025
Cadaver Lab (ATS Course) - Upper Limb and Head - Anatomical Dissection (Milan)
- May 2, 2025
Cadaver Lab (ATS Course) - Lower Limb - Anatomical Dissection (Milan)
- March 28 to May 10, 2023
Quantitative methods course – University of Bologna
- July 10 to 15, 2023
Workshop in Anthropology and Osteology – LABANOF under the expert guidance of Prof.

Cristina Cattaneo from the University of Milan and Prof. Robert Mann from the University of Hawaii

- July 3, 2023
Forensic Anthropology – Skeletal Analysis - Udemy
- November 30, 2022
Data Analysis and Applied Statistics in R – Udemy
- August 24 to 28, 2020
Workshop in 3D Geometric Morphometrics
- October 20-21, 2016
Workshop in "Virtual Reconstruction and Computational Biomechanics" – Department of Anatomy and Developmental Biology of **Monash University**, located at Clayton Campus in Melbourne, Australia
- September – December 2016
Anatomical dissection at the Monash University - School of Biomedical Sciences - Faculty of Medicine Nursing and Health Sciences (Clayton VIC 3800, Australia)

PROJECT ACTIVITIES

The research activity described below focuses on morphometric anatomy of the human body, addressing medical, osteological, pathological, paleodemographic, and molecular aspects. These studies are conducted using a variety of methodological approaches, both traditional and virtual, within the BIO/16 and BIO/08 Scientific Sectors.

Principal investigator of the following funded project activities:

- PRIN: Nationally Significant Research Projects – 2022 call
Principal Investigator of the project “HABITS - Life-histories of prehistoric human groups in South America: a tale on environmental adaptations and subsistence economies”
Duration: 24 months. Ministerial funding: €208,334.
Since September 2023, due to the expiration of my contract with the University of Bologna, I had to relinquish the direction of the project.
- Three-year ministerial scholarship (€13,638.47 gross per year) - PhD in Biology 2015-2018 for the project: “Human dental tissues: Advancement in virtual dental analysis.”

Projects submitted as PI to competitive calls under review:

- FIS (Fondo Italiano per la Scienza) for the project: “PROSTH - Personalized Restoration and Optimization of Stomatognathic Tissue Health”

Collaborator of the following funded project activities:

- PRIN n. 2015WPHSCJ_002 (KARST project; 2017-2020) – University of Florence
- H2020 ERC n. 639286 (HIDDEN FOODS; 2015-2021) - Sapienza University of Rome
- H2020 ERC no. 724046 (SUCCESS; 2017-2022) – University of Bologna

Projects submitted as PI to competitive calls but not funded:

- Global Marie Curie (Proposal ID 101154537) for the project: “IMPACT - The impact of biological variables on dental implant success.”
- Global Marie Curie (Proposal ID 101066014) for the project: “ROOTS - Unravelling how social determinants affect teeth, facial asymmetry, and basicranial morphology.”
- Global Marie Curie (Proposal ID 101031286) for the project: “ASYMMETRY - The relationship between occlusion and postural control: a holistic approach to studying skeletal asymmetries in Homo sapiens.”

PARTICIPATION IN NATIONAL AND INTERNATIONAL RESEARCH GROUPS

Active participation in multidisciplinary research groups, both nationally and internationally, focusing on physical anthropology and human anatomical studies within the BIO/16 and BIO/08 Scientific Sectors.

- **BONES Lab – University of Bologna**

From September 2018 to September 2023, I played an active role in the research and study of morphological asymmetries in the skull, dental tissues (hard tissues) and body (soft tissues) using advanced digital techniques. The project involved the analysis of human remains from different periods, including individuals from the Plio-Pleistocene. My main responsibility was developing innovative virtual methods that effectively integrated traditional laboratory methodologies. The main goal was to improve accuracy in identifying morphological anomalies in human tissues, with a specific focus on teeth and bones. Additionally, I contributed to the creation of new R scripts to quantify asymmetrical anomalies in the human skeletal structure.

- **Paleoanthropology Lab (University of Florence)**

Between 2017 and 2020, I participated as a PhD student in the PRIN project n. 2015WPHSCJ_002 (KARST project) at the Department of Biology, University of Florence. The project, titled "Rediscovering Altamura: advanced multidisciplinary investigations on the skeleton from the Lamalunga cave, Italy," was coordinated by Prof. Giorgio Manzi. As part of this project, I served as a physical and evolutionary anthropologist, contributing my expertise in both traditional and virtual analysis.

- **Paleodiet Research Lab and Evans EvoMorph Lab (Monash University – Australia)**

From September 2016 to December 2016, I participated as a guest PhD student in the research activities of these labs. During my stay, I contributed to the analysis of human and non-human primates using innovative approaches. Activities included cadaver studies, dissections, dental wear analysis, and research on the masticatory apparatus and dental biomechanics.

- **Max Planck Institute for Evolutionary Anthropology**

Between September 2013 and January 2014, I participated as a Master's student in the research activities of the Department of Human Evolution (Director: J.J. Hublin) under the supervision of Prof. Stefano Benazzi. During this experience, I worked on the study and virtual analysis of human remains (both fossil and recent).

- **Senckenberg Research Institute and Natural History Museum**

Between September and October 2013, I participated as a Master's student in the research activities of the "Senckenberg Research Institute and Natural History Museum" Palaeoanthropology Section (Head of Division: Prof. Dr. Ottmar Kullmer), located at Senckenberganlage 25, 60325 Frankfurt am Main, Germany, in the Department of Paleontology. During this experience, I conducted analysis on the occlusal surface (wear facets) by using the Occlusal Fingerprint Analysis, examined hard tissues, identified dental pathologies, and processed data obtained through occlusal compasses, as well as studied human and non-human skeletal remains.

UNIVERSITY TEACHING ACTIVITIES

Teaching activities related to university education for subjects and topics within the BIO/16 and BIO/08 sector at the LUM University and University of Bologna:

2024-2025

- **Theoretical and Practical Course on Sectional Anatomy for Medical and Surgery Students (1 CFU- 12 hours).** ICLO Teaching and Research Center.
- **Integrated Course in Human Anatomy (module in Splanchnology– 1 cfu – 12 hours)**
Master's Degree Program in Medicine and Surgery, Single-Cycle, A.Y. 2024/2025.
Department of Medicine and Surgery, LUM University
- **Integrated Course in Human Anatomy (module in Human Anatomy - 4 cfu – 48 hours)**
Master's Degree Program in Dentistry and Dental Prosthetics, Single-Cycle, A.Y. 2024/2025.
Department of Medicine and Surgery, LUM University
- **Foundation Course (18 hours)**
Lecturer in Evolutionary Biology (Scientific & Technological Area)
Department of Medicine and Surgery, LUM University
- **Integrated Course of Cytology, histology, and developmental biology (module in Microscopic Structure of Organs and Developmental Biology 1 cfu – 12 hours)** Master's Degree Program in Dentistry and Dental Prosthetics, Single-Cycle, A.Y. 2024/2025. Department of Medicine and Surgery, LUM University

- **Integrated Course in Morphofunctional Basics of the Human Body (3 cfu – 36 hours)**
Master's Degree Program in Medicine and Surgery, Single-Cycle, A.Y. 2024/2025. Department of Medicine and Surgery, LUM University

2022-2023 (98 total hours):

- **Archaeological Research Methodology (Module 2 - 26 hours)** (*I explained how hard tissues, such as teeth, should be collected and studied to achieve the maximum informational yield at a medical level*). Master's Degree in Conservation and Restoration of Cultural Heritage (qualification pursuant to Legislative Decree no. 42/2004) Department of Cultural Heritage – University of Bologna.
- **Lectures on Anthropology and Biology Applied to Cultural Heritage (Module 1 - 48 hours)** (*I explained the structure of the human body, focusing on the identification of hard tissues, the entire human skeleton, and, in particular, the detailed study of teeth*)
Master's Degree in Conservation and Restoration of Cultural Heritage (qualification pursuant to Legislative Decree no. 42/2004) Department of Cultural Heritage – University of Bologna.
- **Lectures on Anthropology and Biology Applied to Cultural Heritage (Module 2 - 24 hours)** (*I explained the structure of the human body, focusing on the identification of hard tissues, the entire human skeleton, and, in particular, the detailed study of teeth*)
Master's Degree in Conservation and Restoration of Cultural Heritage (qualification pursuant to Legislative Decree no. 42/2004) Department of Cultural Heritage – University of Bologna.

2021-2022 (72 total hours):

- **Lectures on Anthropology and Biology Applied to Cultural Heritage (Module 1 - 48 hours)** (*I explained the structure of the human body, focusing on the identification of hard tissues, the entire human skeleton, and, in particular, the detailed study of teeth*)
Master's Degree in Conservation and Restoration of Cultural Heritage (qualification pursuant to Legislative Decree no. 42/2004) Department of Cultural Heritage – University of Bologna.
- **Lectures on Anthropology and Biology Applied to Cultural Heritage (Module 2 - 24 hours)** (*I explained the structure of the human body, focusing on the identification of hard tissues, the entire human skeleton, and, in particular, the detailed study of teeth*)
Master's Degree in Conservation and Restoration of Cultural Heritage (qualification pursuant to Legislative Decree no. 42/2004) Department of Cultural Heritage – University of Bologna.

2020-2021 (72 total hours):

- **Physical Anthropology (48 hours)** (*I explained the complete human anatomy, the evolutionary reasons behind our biological structure, and the cultural influences that have shaped it, along with the resulting pathological anomalies observed in recent years*)
Bachelor's Degree in Cultural Heritage, Department of Cultural Heritage – University of Bologna.
- **Lectures on Anthropology and Biology Applied to Cultural Heritage (Module 2 - 24 hours)** (*I explained the structure of the human body, focusing on the identification of hard tissues, the entire human skeleton, and, in particular, the detailed study of teeth*)
Master's Degree in Conservation and Restoration of Cultural Heritage (qualification pursuant to Legislative Decree no. 42/2004) Department of Cultural Heritage – University of Bologna.

2019-2020 (24 total hours):

- **Lectures on Anthropology and Biology Applied to Cultural Heritage (Module 2 - 24 hours)** (*I explained the structure of the human body, focusing on the identification of hard tissues, the entire human skeleton, and, in particular, the detailed study of teeth*)
Master's Degree in Conservation and Restoration of Cultural Heritage (qualification pursuant to Legislative Decree no. 42/2004) Department of Cultural Heritage – University of Bologna.

2018-2019 (24 total hours):

- **Lectures on Anthropology and Biology Applied to Cultural Heritage (Module 2 - 24 hours)** (*I explained the structure of the human body, focusing on the identification of hard tissues, the entire human skeleton, and, in particular, the detailed study of teeth*)
Master's Degree in Conservation and Restoration of Cultural Heritage (qualification pursuant to

Legislative Decree no. 42/2004) Department of Cultural Heritage – University of Bologna.

TEACHING ACTIVITIES WITHIN UNIVERSITY SPECIALIST TRAINING:

- **June 8-10, 2022 (Training School - Ravenna) (20 hours)**
Lecturer at the workshop titled: "Introduction to segmenting/visualizing image data from (micro)-CT scan" organized by Working Group 1 (Fossil data) of *Integrating Neandertal Legacy: From Past to Present – iNEAL* (CA19141).
- **June 17-19, 2019 (Summer School - Ravenna) (8 hours)**
Summer School: "Acquiring and post-processing 3D data in anthropology and archaeology" - Class 2 (Advanced). Lecture on geometric morphometrics, specifically "Application of the template to the target."
- **February 26, 2016 (8 hours):**
Lectures on Dental Anthropology and Virtual Anthropology at the School of Paleoanthropology (sixth edition). Department of Physics and Geology, University of Perugia.

OTHER ACADEMIC ACTIVITIES:

- **Member of the Scientific Committee** - Theoretical and Practical Course on Sectional Anatomy for Medical and Surgery Students (1 ECTS - 12 hours). ICLO Teaching and Research Center
- **Member of the Joint Committee (CPDS - Joint Student-Teacher Committees)** Department of Medicine and Surgery (MED): (CdS LM-46R); Department of Medicine and Surgery, LUM University.
- **Coordinator** of the Integrated Course in Human Anatomy in the Master's Degree Program in Dentistry and Dental Prosthetics, Single-Cycle, Academic Year 2024/2025. Department of Medicine and Surgery, LUM University.
- **Subject Expert** in the BIO/08 scientific disciplinary sector – Physical Anthropology and Paleoanthropology. Competitive sector 05/B1. Appointed by the Department of Cultural Heritage of the University of Bologna from 2015 to 2018.
- **2018-2023:** Member of the Scientific Committee of BONES Lab, University of Bologna
- **2018-2023:** Deputy Director of BONES Lab, University of Bologna
- **2018-2023:** Member of academic committees, University of Bologna
- **Member** of the selection committee for the PhD in Cultural and Environmental Heritage - University of Bologna.
- **Member** of the TOLC committee (2021-2023), University of Bologna.
- **Member** of the selection committee for a public competition for the position of Category D, Technical-Scientific Area - BONES Lab, University of Bologna.
- **Member** of the research grant committee, University of Bologna.

THESIS CO-SUPERVISOR (BIO/16 AND BIO/08):

I supervised and co-supervised multiple theses at the bachelor's and master's levels, focusing on topics ranging from dental anthropology to virtual restoration and bioarchaeological analyses, contributing to the academic growth of numerous students.

- **Thesis Co-supervisor (BIO/16) (2024-2025)**
Bachelor's Thesis Title: "Anthropometric Variations and Physical Performance in Young Taekwondo Practitioners: A Comparison of Different Training Intensities" conducted at LUM "Giuseppe Degennaro" in collaboration with the University of Ferrara, Department of Environmental and Prevention Sciences.
- **Thesis Co-supervisor (BIO/16 and BIO/08) (2016-2017)**
Bachelor's Thesis Title: "The Uluzzian within the framework of the transition complexes from the Middle to Upper Paleolithic in Europe. Anthropological and cultural aspects." Department of Cultural Heritage, University of Bologna.
- **Thesis Co-supervisor (BIO/16 and BIO/08) (2017-2018)**

- Master's Thesis Title: "A preliminary virtual study of maxilla and palatine bone morphology: sexual dimorphism and ontogeny." Department of Cultural Heritage, University of Bologna.
- Bachelor's Thesis Title: "From traditional to virtual: craniofacial reconstruction in bio-archaeological and forensic contexts." Department of Cultural Heritage, University of Bologna.
- **Thesis Co-supervisor (BIO/16 and BIO/08) (2018-2019)**
Master's Thesis Title: "Dental Macrowear and 3D Enamel Thickness: a Comparative Study Between Ancient Italians and Croatians." Master's in Skeletal Anthropology, Forensic and Paleopathology, University of Bologna.
- **Thesis Co-supervisor (BIO/16 and BIO/08) (2019-2020)**
 - Master's Thesis Title: "The use of radiological techniques as support for the analysis of paleoanthropological remains." Department of Morphology, Surgery, and Experimental Medicine, University of Ferrara.
 - Master's Thesis Title: "Taxonomic discrimination of anterior dental roots using machine learning algorithms." Department of Humanities, University of Ferrara.
 - Bachelor's Thesis Title: "Virtual restoration and morphometric analysis of a Mesolithic skullcap from the site of S'Omù e S'Orku." School of Humanities, University of Bologna.
 - Bachelor's Thesis Title: "Middle Pleistocene human fossils in Asia." Department of Cultural Heritage, University of Bologna.
 - Master's Thesis Title: "Virtual approach to the study of a human remain from a late Mousterian level at the Prince's Cave (Ventimiglia, Italy)." Department of Cultural Heritage, University of Bologna.
- **Thesis Co-supervisor (BIO/16 and BIO/08) (2020-2021)**
 - Bachelor's Thesis Title: "Italian sites that have yielded Neanderthal remains between 130,000–35,000 years ago." Department of Cultural Heritage, University of Bologna.
- **Thesis Co-supervisor (BIO/16 and BIO/08) (2020-2021)**
 - Bachelor's Thesis Title: "Leonardo and the study of the human body. Anatomical sheets and character faces." Department of Cultural Heritage, University of Bologna.
 - Master's Thesis Title: "Works of Art and Artificial Intelligence: the case of Nicolò Zen." Department of Cultural Heritage, University of Bologna.
 - Bachelor's Thesis Title: "Facial reconstruction in paleoanthropology and forensics." Department of Cultural Heritage, University of Bologna.
 - Master's Thesis Title: "Micro-stratigraphic excavation of the funerary urn and anthropological analysis of cremated remains: traditional and virtual approach." Department of Cultural Heritage, University of Bologna.
- **Thesis Co-supervisor (BIO/16 and BIO/08) (2021-2022)**
 - Master's Thesis Title: "Disability and accessibility to culture: 3D modeling as a valid tool for integration." Department of Cultural Heritage, University of Bologna.
- **Thesis Co-supervisor (BIO/16 and BIO/08) (2022-2023)**
 - Master's Thesis Title: "Histological Analysis of Enamel Dental Defects in Two Individual Plague Victims From Lazzaretto Vecchio (Venice, Italy)." Department of Cultural Heritage, University of Bologna.
 - Master's Thesis Title: "Virtual Restoration and Digital Analyses of Human Teeth from Riparo Dalmeri Site (Trento, Italy)." Department of Cultural Heritage, University of Bologna.
 - Bachelor's Thesis Title: "Review of studies on Homo naledi: from discovery to the latest research." Department of Cultural Heritage, University of Bologna.

THIRD MISSION ACTIVITIES:

Third Mission Committee - Department of Cultural Heritage, University of Bologna Between September 2021 and September 2023, I was part of the Third Mission Committee at the Department of Cultural Heritage, University of Bologna. In this role, I actively contributed to the implementation of activities and initiatives related to the university's third mission, which focuses on interaction with society and the dissemination of scientific and cultural knowledge beyond traditional academic settings. My responsibilities included supporting and promoting projects and initiatives that engage the community and transfer knowledge and skills from academic research outside the university. My work within the Third Mission Committee included proposing scientific dissemination initiatives, such as participation in the

Researchers' Night. Additionally, I contributed to organizing seminars and activities aimed at spreading scientific knowledge in a publicly accessible context. I had the honor of proposing and coordinating the first "Darwin Day" at the Department of Cultural Heritage, designed to promote awareness and understanding of the scientific aspects of anthropology, including disciplines such as physical and genetic anthropology. The goal was to share discoveries and research in these fields with the public, thus raising awareness about the importance of anthropological science in the context of cultural heritage.

UniJunior, Darwin Day, and Pint of Science

I have been invited as a speaker on several occasions to share my expertise in evolutionary anthropology. In 2020, I served as an invited speaker at UniJunior at the University of Bologna, Ravenna Campus, contributing to the education of young students. Additionally, I participated as a speaker at various scientific dissemination events, including Darwin Day in the 2014 edition in Frosinone, 2018 in Florence, 2019 in Ferrara, 2020 in Rimini, and 2022 in Ravenna, where I had the opportunity to communicate key concepts of evolution to the general public. In 2016, I also took part as a speaker at Pint of Science in Pisa, helping to make science accessible and engaging to a wider audience.

PRESENTATIONS AT NATIONAL AND INTERNATIONAL CONGRESSES AND CONFERENCES:

- **Invited Oral Presentation** (September 5, 2023 - Ancona) SIBE (Italian Society of Evolutionary Biology): "Exploring directional and fluctuating asymmetry in the human palate during growth."
- **Invited Oral Presentation** (October 29, 2021 - France) PACEA (From Prehistory to the Present: Culture, Environment, and Anthropology, University of Bordeaux): Workshop "Dental pathways through times: the mechanisms behind human dental reduction." Presentation: "Physiological and adaptive phenomenon of enamel reduction: a holistic view."
- **Invited Oral Presentation** (February 15, 2022 - Ravenna) DBC (Department of Cultural Heritage, University of Bologna): Darwin Day 2022 "SAPIENS - How the culture of the past shaped us."
- **Speaker** (August 15-19, 2022 - Frankfurt) ISDM (18th International Symposium on Dental Morphology): "New approach to assess the relationship between macrowear and enamel thickness in lower first molars."
- **Speaker** (September 22-24, 2021 - online) ESHE (European Society for Human Evolution): "Earliest western expansion of the Uluzzian groups and the late Neanderthal occupation in southern Italy."
- **Speaker** (September 25, 2019 - Turin) AISF (Italian Academy of Forensic Sciences): "Osteoarchaeology: Multidisciplinary Approaches to Investigating Human Tissues."
- **Poster** (September 19-21, 2019 (Liège) ESHE (European Society for Human Evolution): First author of the poster: "The most recent Neanderthal remains in Italy." Co-author of posters: "The ontogeny of bipedalism: insights from trabecular changes during growth" and "Elemental imaging of human teeth by laser ablation ICP-TOF-MS: fast acquisition and high-resolution."
- **Speaker** (September 4-6, 2019 - Padua) AAI (Italian Anthropologists Association): "Earliest evidence of Focal Cemento-Osseous Dysplasia in the Late Upper Paleolithic." Co-author of the mini-talk: "Assessing biological and cultural admixture in the Etruscan-Celtic population of Monterenzio Vecchio and Monte Bibele (Bologna, Italy)" and the poster: "Dental enamel proteins reveal the sex of the 'Lovers of Modena.'"
- **Poster** (November 28 – December 1, 2018 (Ravenna) AIAZ (Italian Archaeozoology Association): Co-author of the poster: "Humans, mammals, birds, and environment: an archaeozoological and quantitative perspective on the Middle to Upper Paleolithic transition in Northern Italy."
- **Speaker** (September 13-15, 2018 - Faro) ESHE (European Society for Human Evolution): Poster presentation: "A multidisciplinary approach to reconstruct Upper Paleolithic and Mesolithic dietary habits: human adaptation to Pleistocene-Holocene environmental change in northeastern Italy."
- **Poster** (April 11-14, 2018 (Texas) AAPA (American Association of Physical Anthropology): First author of the poster: "The physiological linkage between dental arch asymmetry, alveolar inclination, and dental macrowear pattern." Co-author of the poster: "Neonatal and postnatal mortality in Roccapelago through the study of human skeletal remains and parish records."
- **Speaker** (September 21-23, 2017 - Leiden) ESHE (European Society for Human Evolution): "The dawn of dentistry in the Late Upper Paleolithic: A deeper antiquity of biomedical care and surgical intervention." Co-author of posters: "Human deciduous teeth from the Middle Stone Age layers of Sibudu Cave (South Africa)" and "3D enamel thickness in Neanderthal and Homo sapiens permanent lower molars and premolars."

- **Speaker** (September 6-8, 2017 - Rome) AAI (Italian Anthropologists Association): "The origin of dentistry in the Late Upper Paleolithic: the antiquity of biomedical care." Co-author of talks: "Neonatal and postnatal mortality in Roccapelago through the study of human skeletal remains and parish records" and "New deciduous teeth remains from the Middle Stone Age layers of Sibudu Cave (South Africa)."
- **Poster** (April 22, 2017 (New Orleans) AAPA (American Association of Physical Anthropology): First author of the poster: "The dawn of dentistry in the Late Upper Paleolithic."
- **Pecha Kucha** (September 9-14, 2016 (Madrid) ESHE (European Society for Human Evolution): Co-author of the Pecha Kucha: "Dental morphology and morphometrics of Upper Paleolithic human remains from Dzudzuana and Satsurblia caves, western Georgia."
- **Poster** (September 10-12, 2015 (London) ESHE (European Society for Human Evolution): First author of the poster: "Earliest evidence of proto-dental treatment in the Late Upper Paleolithic."
- **Speaker** (September 3-5, 2015 (Bologna/Ravenna – Emilia Romagna) AAI (Italian Anthropologists Association): "Earliest evidence of proto-dental treatment in the Late Upper Paleolithic."

ORGANIZATION OF CONFERENCES / EVENTS:

Member of the Scientific Committee for the following national and international conferences and workshops:

- II congresso SIRIO Puglia - 1-2 marzo 2025 - I nuovi approcci multidisciplinari teorico-pratici nella chirurgia semplice e complessa associata alla medicina estetica.
- Darwin Day 2022 - February 15, 2022 - Sponsored by the University of Bologna
- Summer school "Acquiring and post-processing 3D data in Anthropology and Archaeology." - June 27 - July 1, 2016 (Ravenna) In Ravenna (Italy), University of Bologna.

Member of the Organizing Committee for the following national and international conferences and workshops:

- Darwin Day 2022 - February 15, 2022 Sponsored by the University of Bologna.
- International workshop *Integrating Neandertal Legacy: From Past to Present – iNEAL* June 6- 10, 2022 - held at the University of Bologna.
- XXIII Italian Anthropologists Congress (AAI) - September 4-6, 2019 - titled "Anthropology: what are the next questions?" held at the university of Padua.
- Summer school "Acquiring and post-processing 3D data in Anthropology and Archaeology." - June 27 - July 1, 2016 (Ravenna), University of Bologna.

AWARDS AND RECOGNITIONS FOR RESEARCH ACTIVITY:

- **SIBE** (Italian Society of Evolutionary Biology) - September 5, 2022 (Ancona) "Doctor Darwin" Award for the best article (Oxilia et al. 2021, titled "Exploring directional and fluctuating asymmetry in the human palate during growth") presented by young members of SIBE in evolutionary medicine (1,000€).
- **ESHE** (European Society for the study of Human Evolution) - September 12, 2015 (London) "Award for best research", European Society for the Study of Human Evolution. Title: *Earliest evidence of dental caries manipulation in the Late Upper Palaeolithic* (1,500€).

PARTICIPATION IN ARCHAEOLOGICAL EXCAVATIONS:

I have had the privilege of participating in various archaeological excavations across Italy, contributing to the research and discovery of our past. My experiences include:

- June 1 to July 19, 2019: prehistoric archaeological excavation in Grotta di Uluzzo C, Puglia.
- July 11 to 22, 2016, and July 15 to August 8, 2015: prehistoric archaeological excavation in Grotta dell'Alma Veirana, Liguria.
- August 1 to 27, 2014; August 12 to September 2, 2013; and July 23 to August 11, 2012: prehistoric archaeological excavation in Grotta di Fumane, Veneto.
- July 22 to August 12, 2013: prehistoric archaeological excavation in Grotta del Rio Secco, Friuli.
- July 10 to 14, 2013, and March 23 to June 25, 2012: medieval emergency archaeological excavation in Mantua.

- August 1 to 19, 2011: Bronze Age archaeological excavation in Lucone di Polpenazze, Lombardy.

FORENSIC MEDICAL ANTHROPOLOGY REGISTRATIONS:

I am an expert in forensic anthropology and am registered in both the Italian Forensic Anthropology Register, with specific skills in skeletal identification, and the ACISF (Italian Cultural Association of Forensic Sciences) in the forensic anthropology sector. My experience also includes virtual anthropology, a field that uses advanced technology to analyze and reconstruct skeletal data accurately and in detail.

DIGITAL MEDICINE SKILLS AND SOFTWARE:

Thanks to my knowledge in the biological, anthropological, and medical fields, my research projects benefit from a holistic approach that allows me to enrich the interpretation of the results obtained. Additionally, my digital skills enable me to independently analyze human remains, from acquisition (surface scanning, CT, MicroCT, synchrotron) to data segmentation (using Avizo software) and post-processing (with Geomagic Design X). The application of digital and non-invasive approaches and methodologies, such as Geometric Morphometrics, also allows me to capture morphological and morphometric coordinates using Geomagic Design X, Rhinoceros, Viewbox, and OFA software. These are suitable for statistical analysis with R and Python, as well as for applying Artificial Intelligence methodologies, specifically Machine Learning. Moreover, my skills in human anatomy, including cadaveric dissection, are complemented by my specialization in virtual dissection using the Anatomage Table.

ANATOMICAL CADAVER DISSECTION COLLABORATION

- **ICLO Verona:** Ongoing collaboration in anatomical and morphological research and training.

PROFESSIONAL MEMBERSHIPS

- **GISN:** Italian Group for the Study of Neuromorphology
- **SIBE:** Italian Society for Evolutionary Biology
- **ESHE:** European Society for the Study of Human Evolution
- **AAI:** Association of Italian Anthropologists
- **SIAI:** Società italiana di anatomia e istologia

HEALTHCARE-RELATED VOLUNTEER ACTIVITIES:

From November 1, 2020, to February 9, 2025, I was an active volunteer with the Italian Red Cross (Ferrara operational branch), involved in various rescue and assistance activities. I obtained several qualifications, including Basic Life Support Defibrillation (BLSD) for adults and pediatrics, Health Transport Operator, Water Safety Certification, Ambulance Rescue Operator, and CRI Cross-Functional Trainer certification. In December 2022, I successfully completed the Emergency Medical Services training in collaboration with 118, earning certification for emergency response in 118 situations. Additionally, I obtained License 5, which qualified me to drive rescue ambulances, medical cars, neonatal ambulances, mobile intensive care units, and other vehicles used for medical emergencies. This additional qualification allowed me to take a more active role in rescue missions and significantly contribute to emergency response situations.

SPORTS ACTIVITIES:

Taekwondo WT: I am a Master of Taekwondo WT, holding a V Dan black belt. My dedication to this discipline is demonstrated by both my competitive experience and my commitment as an instructor. From 2012 to 2013, I served as the Regional President of CSEN in the Taekwondo WTF sector at the National Sports and Educational Center. In 2009, I founded the Taekwondo WT gym called "Accademia Oxilia" in Verona, creating a space for martial arts enthusiasts to train and develop their skills. Currently, Accademia Oxilia is active in Ferrara, where I continue to share my passion and knowledge with others, teaching and

promoting this discipline. Taekwondo is an integral part of my life, and I am proud to inspire and train the next generation of martial artists.

LANGUAGES SPOKEN: ENGLISH B2

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PUBLICATION

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- Gregorio Oxilia and Stefano Benazzi, "Similar, but different from us: Neanderthal men (and women)," XLVII seminar on biological evolution and the major problems of biology, human evolution and the origin of Homo sapiens, n. 141, 2021, contributions of the interdisciplinary Lincean center "Beniamino Segre."
- Gregorio Oxilia, Martina Lari, David Caramelli, Stefano Benazzi (in press), "The Homo genus in the Upper Pleistocene," in Luca Sineo, Jacopo Moggi Cecchi (eds.), *Manual of Anthropology: Human Evolution and Biodiversity* (pp. 347-357). UTET.
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Casamassima, April 2025

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