

**EUROPEAN  
CURRICULUM  
VITAE  
FORMAT**



**PERSONAL INFORMATION**

Name

**BABBI GIULIA**

Address

**Via Aldini 16, Cesena (FC), 47521 ITALY**

Website

<https://www.unibo.it/sitoweb/giulia.babbi>

<http://www.biocomp.unibo.it/>

Nationality

Italian

Sex

Female, she/her

**EDUCATION AND TRAINING**

• Dates

2015 – 2019

• Title of qualification awarded

**PhD in Earth, Life and Environmental Science – Curriculum Biology**

**Subject: Computational Biology**

(SSD BIO/10 now BIOS-07/A)

Supervisor: Prof. Pier Luigi Martelli

• Organization providing  
education and training

School of Science (Dept. of Biological, Geological and Environmental sciences)

Alma Mater Studiorum – University of Bologna

• Thesis Title

The biological complexity of the genotype-phenotype relation: from genes and proteins to phenotypes and diseases

• Dates

2013 – 2015

• Title of qualification awarded

**Master's Degree in Bioinformatics – LM-06**

• Final Evaluation

110/110 cum laude

• Organization providing  
education and training

Alma Mater Studiorum – University of Bologna

• Thesis Title

Analysing the association between protein variants and human diseases  
(SSD BIO/10 now BIOS-07/A)

• Dates

2010 – 2013

• Title of qualification awarded

**Bachelor's Degree in Biotechnology – L-2**

• Final Evaluation

110/110 cum laude

• Organization providing  
education and training

Alma Mater Studiorum – University of Bologna

• Thesis Title

Annotation of the human membrane proteome with BAR+  
(SSD BIO/10 now BIOS-07/A)

## WORK EXPERIENCE

- Dates
- Occupation or position held
  - From February 2023
  - Junior assistant professor (RTD-A)** (SSD BIO/10 now BIOS-07/A)
  - Supervisor: Prof. Pier Luigi Martelli
  - Department of Pharmacy and Biotechnology (FaBiT) – University of Bologna, Via Belmeloro, 6, 40126 Bologna (BO), ITALY
  - Name and address of employer
  - Project
    - “National Center for HPC, Big Data and Quantum Computing”, code: CN00000013, CUP: J33C22001170001. Funded by the European Union - NextGenerationEU, PNRR - Mission 4 - Component 2 - Investment 1.4
    - "Strengthening research structures and creation of "national R&D champions" on some Key Enabling Technologies" D.D. 3138 of 12/16/2021 corrected with D.D. 3175 of 12/18/2021.
  - Main activities and responsibilities
    - Development of computational tools for integrated analysis of omics data and the structural and functional characterization of biological macromolecules
- Dates
- Occupation or position held
  - From December 2020 to January 2023
  - Junior assistant professor (RTD-A)** (SSD BIO/10 now BIOS-07/A)
  - Supervisor: Prof. Pier Luigi Martelli
  - Department of Pharmacy and Biotechnology (FaBiT) – University of Bologna, Via Belmeloro, 6, 40126 Bologna (BO), ITALY
  - Name and address of employer
  - Project
    - European project H2020-CIRCLES: “Controlling mlcRobiomes CircuLations for bEtter food Systems”.
  - Main activities and responsibilities
    - Implementation of a computational infrastructure for the management of omics data produced with "high throughput" tools, development of bioinformatics tools for data analysis, integration and interpretation.
- Dates
- Occupation or position held
  - January 2020-November 2020
  - Research Fellow** (SSD BIO/10 now BIOS-07/A)
  - Supervisor: Prof. Castrense Savojardo
  - Department of Pharmacy and Biotechnology (FaBiT) – University of Bologna, Via Belmeloro, 6, 40126 Bologna (BO), ITALY
  - Name and address of employer
  - Project
    - PRIN 2017, project: “Protein Bioinformatics for Human Health”
  - Main activities and responsibilities
    - Curation of databases and tools devoted to the elucidation of the relations between protein variations, diseases and phenotypes. Implementation of novel computational tools for large-scale prediction/annotation of protein function and features.
- Dates
- Occupation or position held
  - April 2018 – July 2018
  - Bioinformatic Researcher - Internship as PhD student** (SSD BIO/10 now BIOS-07/A)
  - GRIB – IMIM, PRBB, C/Dr. Aiguader, 88, 08003 – Barcelona, SPAIN
  - Name and address of employer
  - Supervisor
    - Prof. Laura I. Furlong, - Pompeu Fabra University (UPF)
  - Main activities and responsibilities
    - Updating online webserver, integration of platforms for the analysis of high volume of data, development of new tools and feature for existing resources in the field of gene-disease associations studies, with a specific interest in

DisGeNet database.

- Dates January 2015 – July 2015
- Occupation or position held **Bioinformatic Researcher – Master Thesis Internship**  
(SSD BIO/10 now BIOS-07/A)  
Bologna Biocomputing Group – University of Bologna  
Via S.Giacomo 9/2 – 40126 Bologna (BO), ITALY
- Name and address of employer Prof. Rita Casadio, University of Bologna
- Supervisor
- Main activities and responsibilities Bioinformatics for the annotation of genomic variations data; implementation of a platform for genome analysis and SNPs annotation. Integration of different bioinformatics tools to annotate genomic variations in terms of molecular consequence, with proteomic and transcriptomic data. Mapping of diseases-related variations on the human genome, and statistical validation of the outcomes.

- Dates January 2013 – July 2013
- Occupation or position held **Biotechnology Researcher – Bachelor Thesis Internship**  
(SSD BIO/10 now BIOS-07/A)  
Bologna Biocomputing Group – University of Bologna  
Via S.Giacomo 9/2 – 40126 Bologna (BO), ITALY
- Name and address of employer Prof. Rita Casadio, University of Bologna
- Supervisor
- Main activities and responsibilities Analysis of the outcomes of BAR+, the Bologna Annotation Resource tool developed by the Bologna Biocomputing Group. Comparison among the curated BAR+ annotation with other databases to demonstrate the increasing quality of the data obtained with the implemented annotation in comparison with not curated experimental data. Modelling of protein complexes of particular interest.

## RESEARCH ACTIVITY

### **BIBLIOMETRICS**

- Identifiers ORCID 0000-0002-9816-4737  
SCOPUS 57190161567
- Dates Research activity from 2016 – year of first publication  
Leave of absence: 16th March – 15th August 2019 (maternity)  
23rd May – 22nd October 2022 (maternity)
- Indicators relating to scientific production in relation to the ASN thresholds **H-index: 12**, as to Scopus 14<sup>th</sup> July 2025  
**Citations: 388** by 326 documents, as to Scopus 14<sup>th</sup> July 2025  
**Publications: 38**, as to Scopus 14<sup>th</sup> July 2025  
ASN threshold of the SC 05/E1: H-index 10, citations 278, publications 10  
**In the SC 05/E1 - BIOCHIMICA GENERALE E BIOCHIMICA CLINICA, complying with thresholds qualifying as an associate professor**  
**The list of publications and contributions in scientific conferences is reported at the bottom of this document.**
- Other indexes Cumulative Impact Factor 2024: 165.2 as to Web of Science 14<sup>th</sup> July 2025  
Cumulative Impact Factor Five Year: 194 as to Web of Science 14<sup>th</sup> July 2025

## PARTICIPATION IN PROJECTS

- Dates February 2023- ongoing
  - International project **National Center for HPC, Big Data and Quantum Computing**", code: CN00000013, CUP: J33C22001170001. **Funded by the European Union - NextGenerationEU, PNRR** - Mission 4 - Component 2 - Investment 1.4 "Strengthening research structures and creation of "national R&D champions" on some Key Enabling Technologies" D.D. 3138 of 12/16/2021 corrected with D.D. 3175 of 12/18/2021
- Occupation or position held Junior Researcher responsible of the development of computational methods for i) the annotation of structural and functional characteristics of genes, proteins and their variants; ii) the characterization of complex biological processes through the integration of heterogeneous data, including genomic, transcriptomic, proteomic, metabolomics and metagenomics; iii) the characterization of the association between variants genes and diseases.
- Related publications 2 publications
- Dates November 2019 – ongoing
  - International project **CIRCLES “Controlling mIcRobiomes CircuLations for bETter food Systems“** funded by the **European Union’s Horizon 2020** research and innovation programme
- Occupation or position held Junior Researcher responsible of the development of bioinformatics tools for data analysis, integration and interpretation and of the management of a computational infrastructure for omics data produced with "high throughput" tools
- Related publications 3 publications
- Dates July 2020 – October 2020
  - International project **Collaboration with NASA** Ames Research Center, Space Biosciences Branch for the Human Research Program
- Occupation or position held Collaboration for the analysis and annotation of human and mouse genetic variations for the investigation of markers of sensitivity to radiation
- Related publications Cekanaviciute E et al. Mouse Genomic Associations with Ex Vivo Sensitivity to Simulated Space Radiation”, Life Sciences in Space Research, 2023, 36, pp. 47–58
- Dates July 2020 – ongoing
  - International experiment **CAFA**, The Critical Assessment of protein Function Annotation algorithms <https://biofunctionprediction.org/cafa/>
- Occupation or position held Participant making computational predictions contributing to CAFA, an experiment designed to provide a large-scale assessment of computational methods dedicated to predicting protein function
- Dates February 2019 – ongoing
  - International project **ELIXIR**, an intergovernmental organisation that brings together life science resources from across Europe <https://elixir-europe.org/>
- Occupation or position held Part of the Bioschemas and Rare Diseases communities supported by ELIXIR,

	that is a European life sciences infrastructure, bringing together scientists from 24 countries and over 250 research institutes.
• Related publications	Licata L et al, Resources and tools for rare disease variant interpretation. Front Mol Biosci. 2023 May 10;10:1169109.
• Dates	November 2016 – ongoing
• International experiment	<b>CAGI</b> , Critical Assessment of Genome Interpretation <a href="https://genomeinterpretation.org/">https://genomeinterpretation.org/</a>
• Occupation or position held	Participant making computational predictions, with the overarching goal of establishing the state of the art in the field of interpreting genomic variation recognizing best prediction strategies, highlighting innovation and identifying bottlenecks that prevent the field from advancing. This is the aim of the CAGI experiment, pursued through periodic editions and extensive dissemination of its outcomes.
• Related publications	20 publications
• Dates	2019-2023
• National project	National project: <b>PRIN 2017: “Protein Bioinformatics for Human Health”</b>
• Occupation or position held	Research fellow involved in the analysis of the relations between protein variations, diseases and phenotypes, contributing in the implementation of novel computational tools for large-scale prediction/annotation of protein function and features.
• Related publications	6 publications

## EDITORIAL ACTIVITIES

• Occupation or position held	Guest Associate Editor
• Dates	2022-2023
• Journal	Frontiers in Genetics
• Topic	Omics Integration and Network Medicine to Decipher Human Complex Diseases
• Number of articles	9 articles
• Link	<a href="https://www.frontiersin.org/research-topics/30112/omics-integration-and-network-medicine-to-decipher-human-complex-diseases/magazine">https://www.frontiersin.org/research-topics/30112/omics-integration-and-network-medicine-to-decipher-human-complex-diseases/magazine</a>
• Occupation or position held	Review Editor
• Dates	2022-2025
• Journal	Frontiers in Molecular Diagnostics and Therapeutics Frontiers in Translational Medicine
• Link	<a href="https://loop.frontiersin.org/people/1296204/overview">https://loop.frontiersin.org/people/1296204/overview</a>

## PRIZES AND AWARDS

• Dates	2025
• National award	Winner of the Heritage SIB Award - Protein group, Italian Society of Biochemistry and Molecular Biology (SIB)

• Dates	2024
• National award	Winner of the Italian Society of Biochemistry and Molecular Biology (SIB) scholarship “Participation grant to the 48 <sup>th</sup> FEBS Congress”
• Dates	2021
• National award	Winner of the Italian Society of Biochemistry and Molecular Biology (SIB) scholarship “Participation grant to the 45 <sup>th</sup> Virtual FEBS Congress”
• Dates	2017
• National award	Second classified at the 3 Minutes Thesis (3MT) competition, University of Bologna
• Dates	2017
• International award	The image of the article “Benchmarking predictions of allostery in liver pyruvate kinase in CAG14” has been selected as Cover Image for the Human Mutation Special Issue: the Critical Assessment of Genome Interpretation (CAGI)

## MEMBERSHIPS

• Occupation or position held	Member of the Italian Society of Biochemistry and Molecular Biology (SIB) from 2015
• Occupation or position held	Member of the International Society for Computational Biology in 2016

## TEACHING EXPERIENCE

### COURSES

• Dates	AA 2025-2026 AA 2024-2025 AA 2023-2024
• Occupation or position held	<b>Professor of the course PROTEOMES, INTERACTOMES AND BIOLOGICAL NETWORKS</b> (module 1 and module 2, 62 hours, (SSD BIO/10 now BIOS-07/A) at the first cycle degree programme in Genomics (L-2)
• Name and address of employer	Department of Pharmacy and Biotechnology (FaBiT) – University of Bologna, Via Belmeloro, 6, 40126 Bologna (BO), ITALY
• Main activities and responsibilities	By the end of the course, the student has the basic knowledge of the experimental techniques for analyzing at large proteins expressed in a biological systems and their interactions. The student is familiar with the publicly available databases collecting proteomics and interactomics data and knows how to represent and analyze the structural complexity of interactions with the Network theory.
• Dates	AA 2022-2023
• Occupation or position held	<b>Professor of the course PROTEOMES, INTERACTOMES AND BIOLOGICAL NETWORKS</b> (module 2, 22 hours, (SSD BIO/10 now BIOS-07/A) at the first cycle degree programme in Genomics (L-2)
• Name and address of employer	Department of Pharmacy and Biotechnology (FaBiT) – University of Bologna, Via Belmeloro, 6, 40126 Bologna (BO), ITALY
• Main activities and responsibilities	By the end of the course, students have the basic knowledge of the experimental techniques for analysing proteins expressed in a biological system and their

interactions. Among the others, activities include Bash scripting and Python programming; information retrieval in web available databases; analysis of protein structure and protein-protein complexes; analysis and visualization of biological networks.

## TUTORING

- Dates AA 2020-2021
- Occupation or position held **Teaching tutor of Laboratory of Bioinformatics 2** (SSD BIO/10 now BIOS-07/A) at the Second cycle degree programme in Bioinformatics (LM-06)  
Department of Pharmacy and Biotechnology (FaBiT) – University of Bologna, Via Belmeloro, 6, 40126 Bologna (BO), ITALY
- Name and address of employer
- Main activities and responsibilities The main topics of the course include simple linear classifiers and machine learning approach, and their interpretation/evaluation.  
It requires knowledge of the libsvm package for SVM development, of cross-validation procedure, of scoring indices like confusion matrix, sensitivity, specificity, accuracy, Matthews correlation coefficient.
- Dates AA 2018 – 2019  
AA 2017 - 2018  
AA 2016 - 2017  
AA 2015 - 2016
- Occupation or position held **Teaching tutor of Laboratory of Bioinformatics 1** (SSD BIO/10 now BIOS-07/A) at the Second cycle degree programme in Bioinformatics (LM-06)  
Alma Mater Studiorum – University of Bologna  
School of Science (BiGeA), Via Selmi 3 – 40126 Bologna (BO), ITALY
- Name and address of employer
- Main activities and responsibilities The main topics are the problems of protein 3D-structure modelling following the building by homology approach, tools for the analysis of protein sequences, sequence alignments, Hidden Markov Models for the recognition and modelling of protein domains. The lectures required the knowledge of programming language (Python) and many software packages (RasMol, Procheck, jCe, Modeller, HMMER).

## THESIS SUPERVISION

- Supervisor Giulia Mengoni, 2024-2025, first cycle degree program in Genomics (L-2) (ongoing)  
Aidana Kaukenova, 2024-2025, first cycle degree program in Genomics (L-2) (ongoing)  
“A human liver reference quantitative transcriptome map created by meta-analysis with TRAM (Transcriptome Mapper) software”, Tatiana Nassar, 2023-2024, first cycle degree program in Genomics (L-2)
- CoSupervisor “Analysis of miRNAs expression in cervical cancer patients, pre and post clinical treatment”, presented by Maria Aurora Murgia, 2023- 2024, at the first cycle degree programme in Genomics (L-2)
- CoSupervisor “Toolkit for differential analysis of microbiome data” (SSD BIO/10 now BIOS-07/A), presented by Óscar San José Rodríguez, 2021-2022, at the Second cycle degree programme in Bioinformatics (LM-06)

## INSTITUTIONAL ACTIVITIES

### DEPARTMENTAL ACTIVITIES

- From 1/02/2024 to 15/05/2025 : Member of Com4Fabit, the FABIT Department Communications Group, as elected representative of Young Researchers.
- From 1/02/2024 to 15/05/2025: Responsible for FABIT Departmental Seminars

### ACTIVITIES IN SCIENTIFIC SOCIETIES

- From 2022 to 2025: Representative of the Young Section Committee for the Group Computation and System Biology in the Italian Society of Biochemistry and Molecular Biology (SIB)
- From 2015 to 2017: Ambassador of the Italian Regional Student Group of the International Society For Computational Biology (ISCB-RSG)

### CONFERENCE ORGANIZATION

- Occupation or position held
  - Events

#### Member of the scientific committee of:

Young Minds at Work: Blending Biochemistry and Bioinformatics, 2nd edition, online-workshop - 10-12 December 2024 (The Italian Bioinformatics Society (BITS), the Italian Society of Biochemistry and Molecular Biology SIB))

- Occupation or position held
  - Events

#### Member of the local organizing committee of:

National Conference on: BioProSys - Biotechnology Proteins System Biology Groups of Italian Society of Biochemistry and Molecular Biology SIB) - Naples 18-19 May 2023

National Conference on: WebPro - Proteins on the Web 2021- on line conference, Protein Group of SIB (Italian Society of Biochemistry and Molecular Biology), 20-21 May 2021

- Occupation or position held
  - Events

#### Member of the local committee of:

- Advanced school: Bologna Winter School 2025 "The latest on the RNA world" - On Line Event, February 19 - March 3, 2025
- Advanced school: Bologna Winter School 2024 "Artificial Intelligence, Deep Learning and protein functional annotation: the state-of-the-art" – Online event, February 8-22, 2024
- Advanced school: Bologna Winter School 2023 "Bioinformatics and Deep learning for biodata analysis" – Online event, February 14-27, 2023
- Advanced school: Bologna Winter School 2022: "Structural Bioinformatics in the era of AlphaFold2" - on line event, February 9-25, 2022
- Advanced school: Bologna Winter School 2021: "Bioinformatics for Discovery in Structural and Functional Biology" - on line event, February 9-19, 2021
- Advanced one week-school: Bologna Winter School 2020: "What can we learn from protein structure?" – Bologna, February 17-21, 2020
- Advanced one week-school: Bologna Winter School 2019 "Data Science for Bioinformatics" - Bologna, February 18-22, 2019
- Advanced one week-school: Bologna Winter School 2018: "Big Data and Bioinformatics" – Bologna, February 12-16, 2018



- Advanced one week-school: Bologna Winter School 2017: “Revisiting Bioinformatics Foundations” - Bologna, February 13-17, 2017
- National Conference on: Proteins 2016: “Dissecting the Biological Complexity at the Molecular level” – Bologna, March 30- April 1, 2016
- Advanced one week-school: Bologna Winter School 2016: “In Silico Markers for Precision Medicine” – Bologna, February 22-26, 2016

## ATTENDED COURSES

### ADVANCED COURSES

International Course: "Training on strategies to foster solutions of undiagnosed rare disease cases", organized by the European Joint Programme on rare Diseases, 13-15 March 2024, ISS, Rome.

Advanced school: Bologna Winter School 2024

“Artificial Intelligence, Deep Learning and protein functional annotation: the state-of-the-art” – Online event, February 8-22, 2024

Advanced school: Bologna Winter School 2023

“Bioinformatics and Deep learning for biodata analysis” – Online event, February 14-27, 2023

Advanced school: Bologna Winter School 2022

“Structural Bioinformatics in the era of AlphaFold2” – Online event, February 9-25, 2022

Advanced school: Bologna Winter School 2021

“Bioinformatics for Discovery in Structural and Functional Biology” – Online event, February 9-19, 2021

Advanced one week-school: Bologna Winter School 2020

“What can we learn from protein structure?” – Bologna, February 17-21, 2020

Advanced one week-school: Bologna Winter School 2018

“Big Data and Bioinformatics” – Bologna, February 12-16, 2018

Advanced one week course: “Protein modelling and docking” – Bologna, February 5-9, 2018

Prof. Allegra Via – University of Bologna

Advanced course: "Cracking the disease code: mapping genomes to pathogenesis pathways"– Bologna, May 29 - June 1, 2017

Prof. Yana Bromberg -Department of Biochemistry and Microbiology - Rutgers University, New Brunswick, NJ (USA)

Advanced one week-school: Bologna Winter School 2017:

“Revisiting Bioinformatics Foundations” – Bologna, February 13-17, 2017

Advanced one week course: “Protein protein interaction and docking” – Bologna,

February 2-10, 2017  
Prof. Allegra Via – University of Bologna

Prof. Ugur Sezerman – Acibadem University – Advanced Course: Network based analysis of omics data to study the affected pathways in disease aetiology – Bologna, February 29 - March 4, 2016

Advanced one week-school: Bologna Winter School 2016:  
“In Silico Markers for Precision Medicine” – Bologna, February 22-26, 2016

Advanced one week training course: “Protein Network and System Biology” – Bologna, December 14-18, 2015, ELIXIR-ITA

Advanced course: "Cracking the disease code: mapping genomes to pathogenesis pathways" – Bologna, May 28 - June 5, 2015  
Prof. Yana Bromberg - Department of Genetics - Rutgers University, New Brunswick (NJ, USA)

Advanced course: "Omics & multi-omics" – Bologna, March 2-5, 2015  
Dr. Christine Nardini - Department of Molecular Systems Biology - CAS-MPG Partner Institute for Computational Biology, Shanghai

Advanced one week-school: Bologna Winter School 2015:  
“NGS data, Bioinformatics and New Molecular Scenarios” – Bologna, February 2-6, 2015

Advanced Course in NGS data analysis: "Nucleotide Sequences Homology Modelling in the Next Gen Sequencing Era", September 22-26, 2014  
Prof. Cédric Notredame - Centro de Regulacio Genomica - Barcelona.

Advanced course: "Pattern Recognition in Bioinformatics", May 5-9, 2014  
Prof. Hong-Bin Shen - Computational and Systems Biology Group - Shanghai Jiao Tong University.

Advanced one week-school: Bologna Winter School 2014:  
“Bioinformatics for Biological Complexity” – Bologna, February 10-14, 2014

Advanced course: "Introduction to Bioinformatics" – Bologna, February 3-7, 2014  
Prof. Arthur Lesk - Biochemistry and Molecular Biology - PennState University

## **SEMINARS**

Webinar: EMA’s Orphan Medicines Office on Rare Disease Day, online event, 29 February 2024 – Organized by EMA

Seminar: Towards the application of quantum computing in computational biology, online event, May 13, 2021  
Prof. Pier Luigi Martelli – Organized by University of Pisa

Webinar: Introducing the new UniProt Disease Portal, 19 October, 2020

Galaxy-ELIXIR webinar series: FAIR data and Open Infrastructures to tackle the COVID-19 pandemic

“Introduction to Galaxy and the Galaxy workflows for SARS-CoV-2 data analysis”

April 30, 2020

“Galaxy-ELIXIR webinar series: Genomics/Variant Calling” May 7, 2020

Seminars: Biomedical Informatics Research Programme - Retreat IMIM

“RNA sequencing of archived neonatal dried blood spots from extremely preterm newborns” – Prof. Robert Castelo

“The human endogenous metabolome as a pharmacology baseline for drug Discovery” – Prof. Jordi Mestres

“Text mining of clinical notes from PSMAR electronic health records” – Prof Laura Furlong

“The role of RNA processing alterations in disease” – Prof. Eduardo Eyra

“Signaling bias in GPCR drug discovery” – Prof. Jana Selent

IMIM, PRBB Barcelona, July 4, 2018

Seminar: “Dementia” Prof. Miguel Angel Mayer

IMIM, PRBB Barcelona, May 15, 2018

Seminar: “DisGeNET: A discovery platform to support translational research on human diseases” – Prof Laura Furlong

ECTB 2018, PRBB Barcelona, April 17, 2018

Seminar: “Towards a structure/function simulation of a cancer cell”

Bologna, September 26, 2017

Prof. Trey Ideker – Institute for Genomic Medicine, UCSD USA

Workshop: Workshop of the SIB group “Computational and Systems Biology”, Bologna, June 28, 2017

Advanced seminar: “Evolution of the metabolic biodiversity in plant organisms”, Bologna, May 11, 2017

Prof. Annalisa Tassoni – Organized by the Department of BiGeA, University of Bologna

Advanced seminar: “The self-consistency test for measuring bias in prediction protein destabilization upon mutation. Finding multi-dimensional epistasis in high-throughput data”, Bologna, April 21, 2017

Prof. Dmitry Ivankov – Center for Genomic Regulation, Barcelona (ES)

Seminar: “La diffusione della disinformazione scientifica: l'eco della rete”, Bologna, April 11, 2017

Prof Pierluigi Contucci, Dott. Giuseppe Profiti, Prof. Marco Ciardi - Organized by “Accademia delle Scienze”, University of Bologna

Advanced seminar: “Towards the understanding of the genetic bases of complex adaptations in the human genome”, Bologna, 19 October 2016

Prof. Jaume Bertranpetit – Organized by the Department of BiGeA, University of Bologna

Advanced Lecture: “Biclustering Algorithms for Biomedical Data Analysis”, Bologna, June 14, 2016

Prof. Sara Madeira, Eurias Fellow

Advanced seminar: “Models of growth and population dynamics”,  
Bologna, June 14, 2016,  
Prof. Stefano Goffredo – Departement of BiGeA, University of Bologna

Advanced seminar: “The animal mitochondrial genome: adaptation and  
evolution”, Bologna, June 13, 2016,  
Prof. Marco Passamonti – Departement of BiGeA, University of Bologna

Advanced seminar: “Genomic approaches to the study of adaptation of  
populations in response to selective pressures”, Bologna, April 29, 2016,  
Prof. Marco Sazzini – Departement of BiGeA, University of Bologna

## PERSONAL SKILLS AND COMPETENCES

### RESEARCH FIELDS AND TECHNICAL SKILLS

I'm able to apply Bioinformatics/Computational-Biology techniques for the development of tools for data mining. In particular I have skills in the analysis of different kinds of biological data and in the integration/interpretation of results from a Systems Biology point of view. I implemented databases and computational infrastructures to store and analyse high volume of data; I collaborated in implementing predictors for the effect of protein variants, and I used these tools in international experiments. I have experience in building pipelines for the characterization of genes, proteins and biological processes, curating their annotation and integrating resources from other primary databases.

#### General informatics skills

Knowledge of:

- Windows and Ubuntu as Operative Systems;
- Office and OpenOffice suites.

#### Computational Biology

- Protein 3D modelling
- Protein sequence comparison and analysis
- Functional annotation of bio sequences and variants
- Modeller and PyMol for protein structure homology modelling and protein structure inspection
- Databases, standards and ontologies for bioinformatics (HGNC, dbSNP, OMIM, HPO, GO terms, ClinVar, Humsavar, DisGeNet, PDB)
- Database implementation with PostgreSQL, SQLite and MySQL for database management
- HMMER for biosequence analysis using profile HMM
- Cytoscape for graph analysis
- Chimera and Rasmol for protein model visualization
- Python and its libraries (such as Biopython and Web2Py)
- Java and its libraries for XML parsing
- Handling XML, OBO and OWL file
- JSON format and graph visualization with D3js

- DataTables plug-in for jQuery
- CSS and Javascript for HTML documents
- R for the analysis of biological data

#### Experimental skills

- Biochemical techniques such as protein extraction and purification, enzymatic activity measurement, electrophoresis and blotting
- Molecular Biology techniques such as DNA extraction and purification, PCR, electrophoresis, blotting, analysis of polymorphism (RFLP)
- Recombinant DNA technology for Plant/Industrial/Animal biotechnologies

#### Safety training

- General worker training on safety and health (module 1)
- Specific worker training on safety and health, low risk (module 2)
- The protection of personal data - training course

### TEACHING SKILLS

Certified courses followed at the University of Bologna:

#### Training course for teachers - 24 credits

- Anthropology, 6 credits, mark:30L
- General Teaching Methodologies and Technologies 6credits, mark: 30
- Pedagogy, Special Pedagogy and Inclusion Teaching, 6 credits, mark: 30L
- Psychology, 6 credits, mark: 30

#### MOTHER TONGUE OTHER LANGUAGES

- Reading skills
- Writing skills
- Verbal skills
- Certification

#### Italian

#### English

C1  
C1  
C1  
B2– Exam during bachelor's degree  
11/01/2013

#### French

B1  
B1  
A2  
B1 – Exam during bachelor's degree  
10/01/2013

•Social skills  
and competences

Activities carried out while researching, and participation to national and international projects gave me the opportunity to work in heterogeneous teams several times. These experiences gave me the possibility to establish relations with people with different backgrounds, acquiring knowledge and skills necessary for interdisciplinary communication, team working, and project planning.

## PUBLICATIONS

#### 2025

Chen Y, Lee K, Woo J, Kim DW, Keum C, **Babbi G**, Casadio R, Martelli PL, Savojardo C, Manfredi M, Shen Y, Sun Y, Katsonis P, Lichtarge O, Pejaver V, Seward DJ, Kamandula A, Bakolitsa C, Brenner SE, Radivojac P, O'Donnell-Luria A, Mooney SD, Jain S. Evaluating predictors of kinase activity of STK11 variants identified in primary human non-small cell lung cancers. Hum Genet. 2025, 144(2), pp. 127–142

DOI: 10.1007/s00439-025-02726-0.

Citations [Scopus]: 0

Subject Area [Scopus]: Medicine: Genetics (clinical)Biochemistry, Genetics and Molecular Biology: Genetics

Journal Impact Factor 2024 [web of science]: 3.6

Journal Impact Factor Five Year [web of science]: 4.5

Quartile and subject [web of science]: Q2 GENETICS & HEREDITY

Aspromonte MC, Conte AD, Zhu S, Tan W, Shen Y, Zhang Y, Li Q, Wang MH, **Babbi G**, Bovo S, Martelli PL, Casadio R, Althagafi A, Toonsi S, Kulmanov M, Hoehndorf R, Katsonis P, Williams A, Lichtarge O, Xian S, Surento W, Pejaver V, Mooney SD, Sunderam U, Srinivasan R, Murgia A, Piovesan D, Tosatto SCE, Leonardi E. CAGI6 ID panel challenge: assessment of phenotype and variant predictions in 415 children with neurodevelopmental disorders (NDDs). Hum. Genet. 2025., 144(2), pp. 227–242

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Zhang J, Kinch L, Katsonis P, Lichtarge O, Jagota M, Song YS, Sun Y, Shen Y, Kuru N, Dereli O, Adebali O, Alladin MA, Pal D, Capriotti E, Turina MP, Savojardo C, Martelli PL, **Babbi G**, Casadio R, Pucci F, Rooman M, Cia G, Tsishyn M, Strokach A, Hu Z, van Loggerenberg W, Roth FP, Radivojac P, Brenner SE, Cong Q, Grishin NV. Assessing predictions on fitness effects of missense variants in HMBS in CAGI6. Hum Genet. 2025, 144(2), pp. 173–189, 102152

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Quartile and subject [web of science]: Q2 GENETICS & HEREDITY

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Journal Impact Factor Five Year [web of science]: 4.5

Quartile and subject [web of science]: Q2 GENETICS & HEREDITY

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Subject Area [Scopus]: Medicine: Genetics (clinical)Biochemistry, Genetics and Molecular Biology: Genetics

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Quartile and subject [web of science]: Q2 GENETICS & HEREDITY

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Quartile and subject [web of science]: Q2 GENETICS & HEREDITY

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Citations [Scopus]: 7

Subject Area [Scopus]: Agricultural and Biological Sciences: Animal Science and Zoology, Veterinary: Veterinary (miscellaneous), Agricultural and Biological Sciences: Agricultural and Biological Sciences (miscellaneous), Medicine: Microbiology (medical)

Journal Impact Factor 2024 [web of science]: 4.4

Journal Impact Factor Five Year [web of science]: 4.9

Quartile and subject [web of science]: Q2 in MICROBIOLOGY and Q1 VETERINARY SCIENCES

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Journal Impact Factor 2024 [web of science]: 4.2

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Subject Area [Scopus]: Biochemistry, Genetics and Molecular Biology

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Subject Area [Scopus]: Biochemistry, Genetics and Molecular Biology

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Quartile and subject [web of science]: Q2 in GENETICS & HEREDITY

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Quartile and subject [web of science]: Q2 in GENETICS & HEREDITY

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Subject Area [Scopus]: Biochemistry, Genetics and Molecular Biology

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Quartile and subject [web of science]: Q2 in GENETICS & HEREDITY

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Subject Area [Scopus]: Biochemistry, Genetics and Molecular Biology

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Quartile and subject [web of science]: Q2 in GENETICS & HEREDITY

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Subject Area [Scopus]: Biochemistry, Genetics and Molecular Biology

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Quartile and subject [web of science]: Q2 in GENETICS & HEREDITY

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Citations [Scopus]: 7

Subject Area [Scopus]: Biochemistry, Genetics and Molecular Biology

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Quartile and subject [web of science]: Q2 in GENETICS & HEREDITY

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Subject Area [Scopus]: Biochemistry, Genetics and Molecular Biology

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Journal Impact Factor Five Year [web of science]: 4

Quartile and subject [web of science]: Q2 in GENETICS & HEREDITY

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Citations [Scopus]: 14

Subject Area [Scopus]: Biochemistry, Genetics and Molecular Biology

Journal Impact Factor 2024 [web of science]: 3.7

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Subject Area [Scopus]: Biochemistry, Genetics and Molecular Biology

Journal Impact Factor 2024 [web of science]: 3.7

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Quartile and subject [web of science]: Q2 in GENETICS & HEREDITY, Q2 in BIOTECHNOLOGY & APPLIED MICROBIOLOGY

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Journal Impact Factor 2024 [web of science]: 4.9

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Quartile and subject [web of science]: Q1 in BIOCHEMISTRY & MOLECULAR BIOLOGY

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Subject Area [Scopus]: Biochemistry, Genetics and Molecular Biology

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Quartile and subject [web of science]: Q2 in GENETICS & HEREDITY

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Subject Area [Scopus]: Biochemistry, Genetics and Molecular Biology

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Quartile and subject [web of science]: Q2 in GENETICS & HEREDITY

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Citations [Scopus]: 53

Subject Area [Scopus]: Biochemistry, Genetics and Molecular Biology

Journal Impact Factor 2024 [web of science]: 3.7

Journal Impact Factor Five Year [web of science]: 4.2

Quartile and subject [web of science]: Q2 in GENETICS & HEREDITY, Q2 in BIOTECHNOLOGY & APPLIED MICROBIOLOGY

## 2016

Martelli P, Fariselli P, Savojardo C, **Babbi G**, Aggazio F and Casadio R (2016), "Large scale analysis of protein stability in OMIM disease related human protein variants", BMC Genomics. Vol. 17

DOI: 10.1186/s12864-016-2726-y

Citations [Scopus]: 36

Subject Area [Scopus]: Biochemistry, Genetics and Molecular Biology

Journal Impact Factor 2024 [web of science]: 3.7

Journal Impact Factor Five Year [web of science]: 4.2

Quartile and subject [web of science]: Q2 in GENETICS & HEREDITY, Q2 in BIOTECHNOLOGY & APPLIED MICROBIOLOGY

# CONFERENCES

## ORAL PRESENTATIONS

International meeting: ELIXIR Rare Disease Community F2F/hybrid meeting 2025: “Analysis of rare disease variants with the Bioinformatic Sweeties”, Bologna, 15-16 May 2025

International Conference: The International Conference on Intelligent Systems for Molecular Biology (ISMB) 2024: “Analysing multifunctional proteins with MultifacetedProtDB”, Montreal, Canada, July 12-16 2024

National meeting of Italian ELIXIR -Rare Disease Community, “Reactome pathways and Rare Diseases”, Rome 28-29 November, 2023

International Conference: Critical Assessment of Genome Interpretation CAGI\*\*: “Disease associations of proteins with multiple functions”, Boston, Massachusetts, USA, September 29-October 1, 2023

National Conference: 62<sup>nd</sup> SIB Congress 2023: “The DAR database: mapping disease related enzymes to Reactome pathways” Firenze, September 7-9, 2023

National Conference: BBCC2022 Bioinformatics and Computational Biology Conference: “Protein structural and functional features relate human variations to diseases” – online event, remote attendance, Naples, Italy, December 13-15, 2022

International Conference: Critical Assessment of Genome Interpretation CAGI 2022: “Predicting the effects of missense variations and the case of MTHFR deficiency”, Berkeley, California (USA), remote attendance, May 14-16, 2022

International Conference: The International Conference on Intelligent Systems for Molecular Biology (ISMB) /European Conference on Computational Biology (ECCB) 2021: “Physico-chemical and structural features of pathogenic and benign human protein missense variations collected from HUMSAVAR and ClinVar”, virtual event, remote attendance, July 25 - 30, 2021

National Conference: BITS 2021, Annual Meeting of the Bioinformatics Italian Society: “A large-scale analysis of human protein missense variations collected from HUMSAVAR and ClinVar”, virtual event, remote attendance, July 01-02, 2021

National Conference: 61<sup>st</sup> SIB Congress 2021 Virtual Edition, “Analysis of the Huntingtin solvent accessible surface”, remote attendance, 23-24 September 2021

International Conference: R2B OnAir – Research to Business is the International Exhibition on Industrial Research and Skills for Innovation: “Bioinformatic tools and services for the analysis of biological big data”, virtual event, remote attendance, 10-12 June, 2020

National Conference: BBCC2017 Bioinformatics and Computational Biology Conference: “From phenotypes to molecular mechanisms and pathways” – Naples, Italy, December 18-20, 2017

International Conference: NGS 2017: structural variation and population genomics: “eDGAR: a webserver for analysing the relationship among genes and polygenic diseases” – Barcellona (Spain), April 3-5, 2017

Local session of the International Competition: 3 Minutes Thesis (3MT) competition - University of Bologna: “Organizing the knowledge for genome editing” – Bologna (Italy), March 28, 2017

National Conference: Proteine 2016, Congress of the Protein Group of the Italian Society of Biochemistry and Molecular Biology (SIB): “Dissecting the Biological Complexity at the Molecular level” – Bologna (Italy), March 30- April 1, 2016

International Conference: Critical Assessment of Genome Interpretation CAGI 2016:” Predicting the effect of

variations on NPM-ALK functional activity and binding affinity with Hsp90.” – San Francisco (USA), March 25-27, 2016

## POSTER PRESENTATIONS

International Conference: **Babbi G**, Bertolini E, Savojardo C, Martelli PL, Casadio R. (2024) *Exploring the associations of multifaceted proteins to diseases*. FEBS conference 2024, Milan, July 29 – July 3, 2024

International Conference: **Babbi G**, Savojardo C, Bertolini E, Baldazzi D, Martelli PL, Casadio R (2023) *The DAR database unravels the complex associations between human enzymes and genetic diseases* - The International Conference on Intelligent Systems for Molecular Biology (ISMB) 2023, Lyon, 23-27 July, 2023

International Conference: **Babbi G**, Savojardo C, Martelli PL, Casadio R. (2021) *The peculiar solvent accessible surface of Huntingtin*. FEBS OPEN BIO 11, 474-474 - FEBS conference 2021, virtual event, remote attendance, July 03-08, 2021

International Conference: **Babbi G**, Martelli PL, and Casadio R. (2020) *Identifying biological functions underlying phenotypes using PhenPath*, F1000Research 2020, 9(ISCB Comm J):1328, doi: 10.7490/f1000research.1118374.1 - Bioinformatics and Computational Biology Conference (BBCC) Naples, remote attendance 16-18 November, 2020

International Conference: **Babbi G**, Martelli PL, Savojardo C, Baldazzi D, Tavella T and Casadio R. (2020) *eDGAR+: a data resource of annotated gene-variant-disease relations*, International conference “Intelligent Systems for Molecular Biology” (ISMB), virtual event, remote attendance, 13-16 July, 2020

International Conference: **Babbi G**, Garcia L, Gray A, Martelli PL, Casadio R. (2020) *eDGAR and PhenPath resources join the Bioschemas Profiles*, ELIXIR All Hands meeting, remote attendance 8-10 June, 2020 published on F1000Research 2020, 9 (ELIXIR):569, doi: 10.7490/f1000research.1118004.1

National Conference: **Babbi G**, Martelli PL, Bovo S, Casadio R (2018) *From diseases and phenotypes to processes and pathways*, Congress of the Italian Federation of Life Sciences societies (FISV) 2018 congress, Rome, 18-21 September, 2018

International Conference: **Babbi G**, Martelli PL, Profiti G, Bovo S, Savojardo C, Casadio R. (2017) *eDGAR: a webserver for analysing the relationship among genes and polygenic diseases*. International Conference, NGS 2017: structural variation and population genomics”, pp. 46 – 47 - Barcellona, Spain, April 3-5, 2017

International Conference: **Babbi G**, Martelli PL, Profiti G, Bovo S, Savojardo C and Casadio R. (2017) *Analysing the relations among genes and polygenic diseases with eDGAR*, Joint 25th Annual International Conference on Intelligent Systems for Molecular Biology (ISMB) and 16th European Conference on Computational Biology (ECCB) 2017 published on F1000Research 2017, 6: 1532 (doi: 10.7490/f1000research.1114767.1)

International Conference: **Babbi G**, Martelli PL, Profiti G, Casadio R. *Analysing OMIM disease-related variations: a large-scale investigation at the chromosome level* Proceedings of IWWBIO 2016 – 4th International Work-Conference on Bioinformatics and Biomedical Engineering – Granada, Spain, 20-22 April 2016

## ABSTRACTS

Trevisi P, Luise D, Palladino G, Palumbo F, Scicchitano D, **Babbi G**, Castagnetti A, Rampelli S, Candela M, Martelli PL, Correa F. *EU Circles Project: Multi-omics Analysis Reveals Distinct Microbial Networks Linked to a Blend of Chestnut and Quebracho Extract Supplementation in Weaned Pigs Under Different Farming Conditions*, 26th Congress ASPA, 17-20 June 2025, Turin, accepted for ORAL presentation

Correa F, Luise D, Palladino G, Secchi N, Scicchitano D, **Babbi G**, Rampelli S, Candela M, Martelli PL, Trevisi P. *CIRCLES EU Project: On-farm Wastewater Treatment with Bioactivators Reduces Air Pollution and Modulate*

*Slurry Microbiota in Pig Growing Units*, 26th Congress ASPA, 17-20 June 2025, Turin, accepted for ORAL presentation

Piscitiello E, Neri G, Hitrec T, Tinganelli W, **Babbi G**, Morganti AG, Cenacchi G, Papa V, Grillini M, Squarcio F, Occhinegro A, Taddei L, Alberti L, Luppi M, Martelli D, Tupone D, Amici R, Negrini M, Zoccoli A, Durante M, Borello U, Cerri M. *Synthetic torpor enhances resistance against radiation: transcriptome profiling of radioprotected livers*. 74° Congresso Nazionale SIF (Società Italiana di Fisiologia), Rome, Italy, September 11-13 2024.

Piscitiello E, Hitrec T, Neri G, Tinganelli W, **Babbi G**, Morganti AG, Cenacchi G, Papa V, Grillini M, Salucci S, Faenza I, Squarcio F, Occhinegro A, Alberti L, De Angelis E, Taddei L, Luppi M, Martelli D, Tupone D, Amici R, Negrini M, Zoccoli A, Durante M, Borello U, Cerri M. *Multiorgan histological and transcriptional adaptations in rats induced in synthetic torpor* - "17th International Hibernation Symposium", Mont Tremblant (Québec, Canada) July 21-26 2024.

Scicchitano D, Leuzzi D, **Babbi G**, Palladino G, Turrone S, Laczny CC, Wilmes P, Correa F, Leekitcharoenphon P, Savojardo C, Luise D, Martelli PL, Trevisi P, Aarestrup FM, Rampelli S, "Detection, spread and transmission of antimicrobial resistant bacteria from swine farms to the surrounding environment.", Food System Microbiomes 2024 International Conference. Torino, Italy, May 14-17 2024.

Leuzzi D, Scicchitano D, Palladino G, Turrone S, **Babbi G**, Manfreda G, De Cesare A, Martelli PL, Rampelli S, Candela M, "Search for bacteriocin producing genes in the poultry gut associated microbiome to support antibiotic free production in poultry farm", 7th International Conference on Microbial Diversity. " Parma, September 26-29 2023

Manfredi M, Vazzana G, **Babbi G**, Bertolini E, Savojardo C, Martelli PL, Casadio R (2023) "Deep Learning and protein embedding at the Bologna Biocomputing Group" BITS2023. Bari, June 21-23, 2023

**Babbi G**, Bertolini E, Baldazzi D, Savojardo C, Martelli PL, Casadio R (2023) *Enzymes and diseases: the DAR database* - BIOPROSYS meeting, Naples 18-19 May, 2023

**Martelli PL**, Manfredi M, Vazzana G, Babbi G, Bertolini E, Savojardo C, Casadio R (2023) *Deep Learning and protein embedding at the Bologna Biocomputing Group*- BIOPROSYS meeting, Naples 18-19 May, 2023

Scicchitano D, Palladino G, Brigidi P, Laczny C, Halder R, De Cesare A, Manfreda G, Martelli PL, **Babbi G**, Turrone S, Candela M, Rampelli S (2022) *Resistome and xenobiome temporal dynamics in poultry production chain: the CIRCLES project* – Yakult Symposium 2022, Milan, Italy, 13-14 October, 2022

Hitrec T, Tinganelli W, Negrini M, **Babbi G**, Squarcio F, Simoniello P, Cenacchi G, Grillini M, Papa V, Morganti A, Romani , Compagnone M, Marchesano V, Helm A, Piscitiello E, Occhinegro A, Taddei L, Luppi M, Amici R, Sioli M, Zoccoli A, Durante M, Cerri M. (2022) *Molecular mechanism for synthetic torpor-induced radioprotection: HIBRAD preliminary results* – 47th Annual Meeting of the European Radiation Research Society (ERRS 2022), Catania, Italy, 21-24 September, 2022

Palladino G, Scicchitano D, Brigidi P, Laczny C, Halder R, Trevisi P, Luise D, De Cesare A, Manfreda G, Martelli PL, **Babbi G**, Turrone S, Candela M, Rampelli S. (2022) *Resistome and xenobiome temporal dynamics in poultry and swine production chains: the CIRCLES project* - Federation of European Microbiological Societies (FEMS) Conference in Balgrade, Serbia, 30 June – 2 July, 2022

Savojardo C, Martelli PL, **Babbi G**, Anteghini M, Manfredi M, Madeo G, Capriotti E, et al. (2021) *SB4ER: An ELIXIR Service Bundle for Epidemic Response*. BioHackrXiv. March 25.

Hitrec T, Tinganelli W, Romani F, Simoniello P, Squarcio F, Luppi M, Compagnone G, Morganti AG, **Babbi G**, Martelli PL, Casadio R, Amici R, Negrini M, Zoccoli A, Durante M and Cerri M. (2020) *Effetti molecolari indotti dall'irraggiamento di roditori in torpore sintetico*, SIRR 2020 (XIX Convegno Nazionale della Società Italiana per le Ricerche sulle Radiazioni) 10-12 November, 2020



Savojardo C, Martelli PL, **Babbi G**, Tartari G, Baldazzi D and Casadio R. (2020) *A Bologna Biocomputing pipeline combining multiple tools for protein functional annotation in CAFA4*, International conference “Intelligent Systems for Molecular Biology” (ISMB), 13-16 July, 2020

Savojardo C, Martelli PL, Fariselli P, **Babbi G** and Casadio R. (2018) *INPS and INPS-3D: sequence- and structure-based prediction of protein stability change upon single-point variations*, Conference on the Critical Assessment of Genome Interpretation (CAGI5), Chicago, July 5-7, 2018

**Babbi G**, Profiti G, Martelli PL and Casadio R. (2018) *From phenotypes to molecular mechanisms and pathway. Informal proceeding of the Human Genetic Variation and Disease*, Gordon Research Conference, University of New England, June 10 - 15, 2018

Martelli PL, **Babbi G**, Profiti G and Casadio R. (2018) *Predicting protein-protein interaction sites with computational approaches*. Proteine 2018, University of Verona, May 20 -30, 2018

**Babbi G**, Martelli PL, Bovo S, Casadio R. (2018), *EDGAR and PhenPath, from diseases and phenotypes to processes and pathways. Poster at the Human Genetic Variation and Disease*, Gordon Research Conference, University of New England, June 10 - 15, 2018

Andreoletti G, Hoskins RA, Moulton J, Brenner SE, **The Cagi Participants**. (2017) *Findings from the Fourth Critical Assessment of Genome Interpretation, a community experiment to evaluate phenotype prediction*. International Conference “NGS 2017: structural variation and population genomics”, pp. 55 – 56 - Barcellona, Spain, April 3-5, 2017

**Babbi G**, Martelli PL, Profiti G, Bovo S, Savojardo C and Casadio R. (2017), *Analysing the relations among genes and polygenic diseases with eDGAR*. Proceedings of the 59th Congress of the Italian Society of Biochemistry of Molecular Biology (SIB 2017), Caserta, September 20 – 22, 2017

**Babbi G**, Martelli PL, Profiti G, Bovo S, Savojardo C, Casadio R. (2017) *Analysing the relations among genes and polygenic diseases with eDGAR. BITS*, Proceedings of the 14th Annual Meeting of the Bioinformatics Italian Society, p. 134-135. Cagliari, July 5-7, 2017

Bovo S, **Babbi G**, Martelli PL, Casadio R. (2016) *Liver pyruvate kinase (L-PYK): predict the effects of missense mutations on kinase activity and allosteric regulation*. Conference on the Critical Assessment of Genome Interpretation (CAGI4), 25-27 March 2016, San Francisco, California, USA.

**Babbi G**, Martelli PL, Bovo S, Casadio R. (2016) *Predicting the effect of variations on protein functional activity and interaction*. Conference on the Critical Assessment of Genome Interpretation (CAGI4), 25-27 March 2016, San Francisco, California, USA.

Bovo S, Martelli PL, **Babbi G**, Casadio R. (2016) *Discriminating sick from healthy individuals by annotating exome variations*. Conference on the Critical Assessment of Genome Interpretation (CAGI4), 25-27 March 2016, San Francisco, California, USA.

**Babbi G**, Martelli PL, Bovo S, Casadio R. (2016) *Predicting the effect of variations on NPM-ALK functional activity and binding affinity with Hsp90*. Conference on the Critical Assessment of Genome Interpretation (CAGI4), 25-27 March 2016, San Francisco, California, USA.

Martelli PL, **Babbi G**, Bovo S, Casadio R. (2016) *Mapping of OMIM diseases and their associated genes in the chromosome space: addressing the complexity of polygenic disorders*. – Conference book, Gordon Research Conference - Human Single Nucleotide Polymorphisms & Disease - Mount Holyoke College, South Hadley, MA - June 12-17, 2016

Diquigiovanni C, Bergamini C, Evangelisti C, Costanzini A, Isidori F, Anbunathan H, Bowcock A, Casadio R, **Babbi G**, Rhoden KJ, Lenaz G, Fato R, Seri M, Romeo G, Bonora E. *Mutation in MYO1F cause familial non-medullary thyroid cancer (FNMTCT)*. European Human Genetics Conference. Barcelona, Spain. May 21-24, 2016.

## **OTHER ATTENDED CONFERENCES**

National symposium on: Space biomedicine for future missions of Human Exploration of Space: a Call to Action, ASI, Rome – remote attendance, 15-17 March 2023

Elixir All-Hands meeting 2021, virtual conference, 1-11 June 2021

BIOHACKATHON-EUROPE - ELIXIR, virtual hackathon, 9-13 November 2020

Interoperability F2F meeting – ELIXIR, virtual hackathon, 11-12 May, 2020

National Conference: From molecules to complex biological functions: The computational method – Bologna (Italy), July 12, 2016

International Symposium on: The impact of Genomic Deep Sequencing from Pediatric Research and Clinical Practice – Bologna (Italy), 19-20 November 2015

58th National Meeting of the Italian Society of Biochemistry and Molecular Biology – Urbino (Italy), September 14-16, 2015