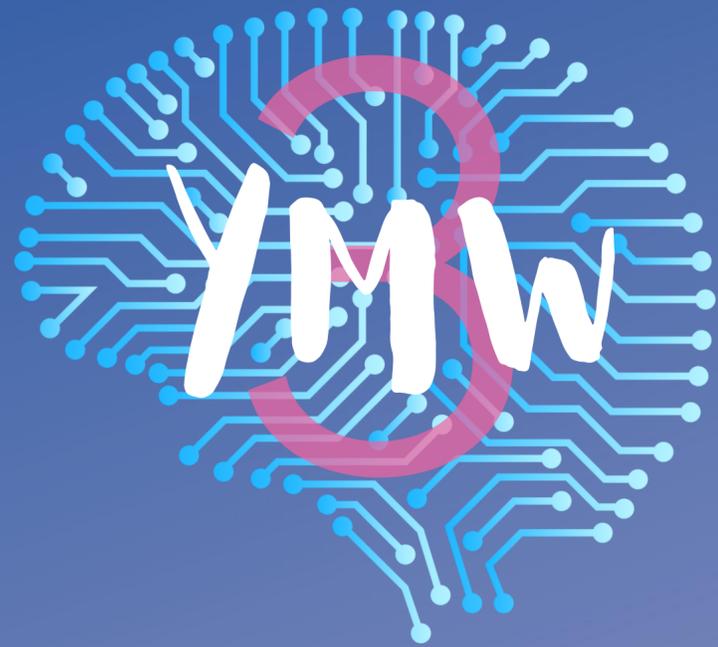
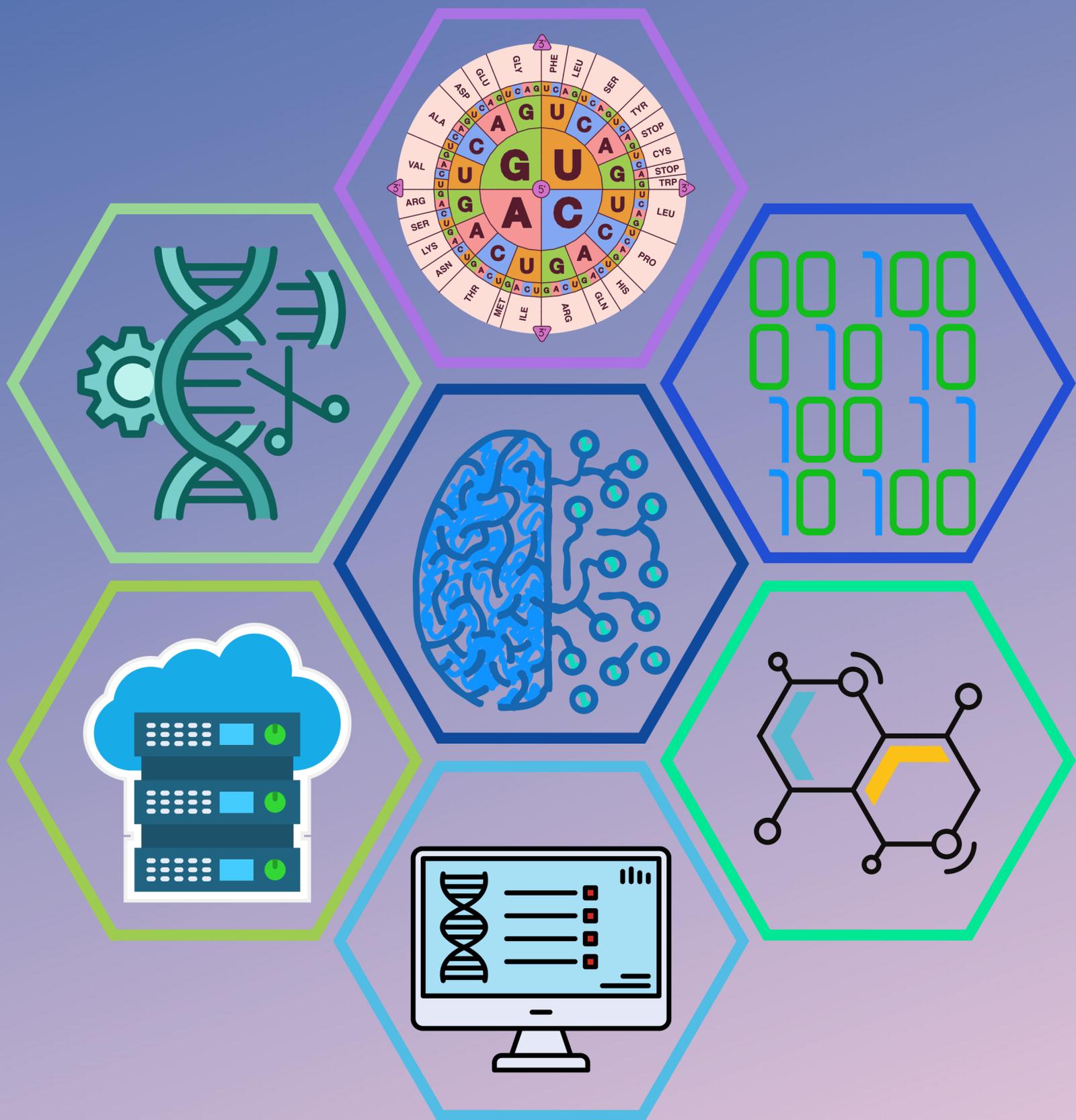


# YOUNG MINDS AT WORK:

Blending Human Genetics and  
Bioinformatics

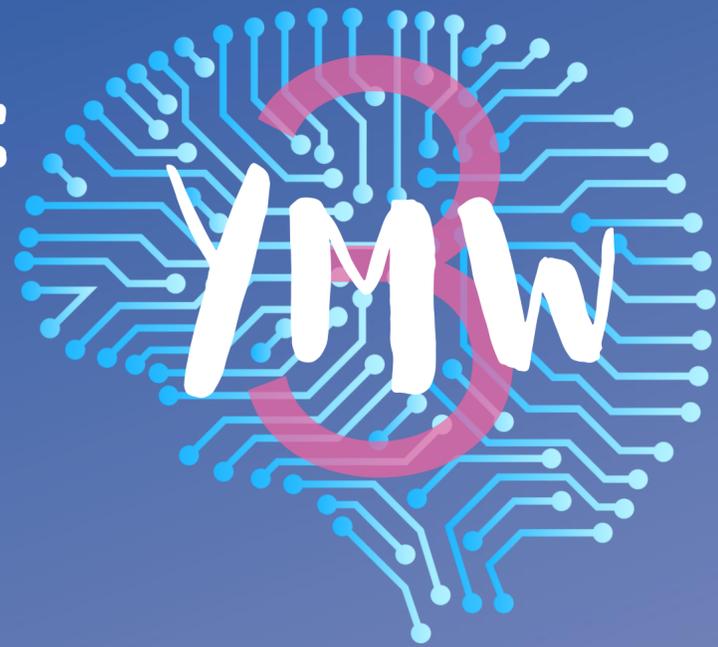


FREE-ONLINE WORKSHOP  
18-19<sup>th</sup> March 2026



# YOUNG MINDS AT WORK:

## Blending Human Genetics and Bioinformatics



### Conference Co-Chairs

Pasqualina D'Ursi (CNR-ITB)  
Paola Fossa (UniGE)  
Paola Mandich (UniGE)  
Carlo Maj (Uni-Marburg)  
Yuejuan Zheng (Shanghai University of Traditional  
Chinese Medicine)

### Local Organizers

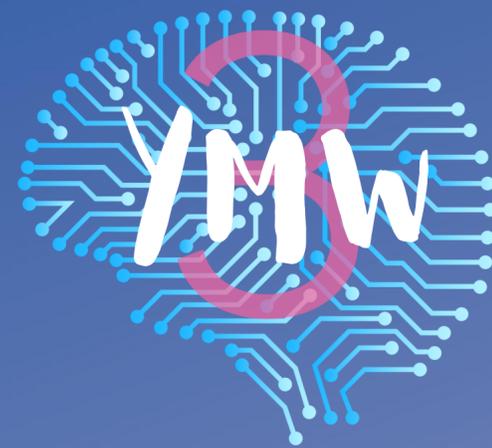
Matteo Gnocchi (CNR-ARMi4)  
John Hatton (CNR-ITB)

### Scientific Committee

Youssef Abili (Human Technopole)  
Shahin Allahi (UniGE)  
Valeria Barili (UniPR)  
Giacomo Baruzzo (UniPD)  
Vincenzo Bonnici (UniPR)  
Beatrice Casini (UniGE-ITB)  
Giulia Cesaro (UniPD)  
Ilaria Cherchi (UniTN)  
Ilaria Cestonaro (IRP-Città della Speranza)  
Elisa De Tomi (San Raffaele)  
Hannah Klinkhammer (Uni-Marburg)  
Kiran Kunwar (Uni-Marburg)  
Aldo Pastore (Fondazione Pisana per la Scienza Onlus)  
Simone Pernice (UniTO)  
Clarissa Ponti (UniGE)  
Naomi Scarano (ITB-CNR)  
Fabio Sirchia (UniPV)  
Mirko Treccani (UniPR)  
Laura Veschetti (IRCCS San Raffaele Scientific Institute and  
Vita-Salute San Raffaele University)

# Scientific Program

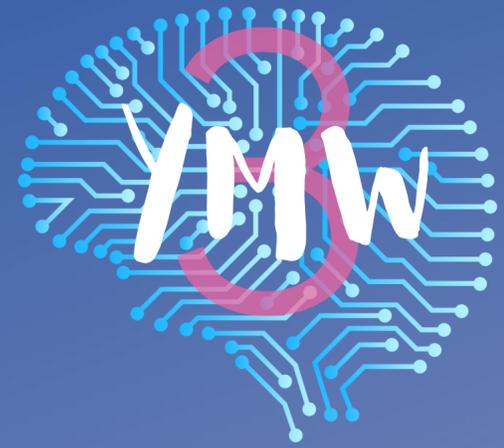
March 18<sup>th</sup>, 2026



9:15-9:30	Join the workshop
9:30-9:45	<b>WELCOME ADDRESS</b> Member of SIGU Board: <b>Prof. Paola Mandich</b> BITS President: <b>Prof. Raffaele Calogero</b> ITB-CNR Director: <b>Dr. Gianluca De Bellis</b>
9:45-10:15	<b>OPENING KEYNOTE LECTURE</b> Chairs: Clarissa Ponti, Valeria Barili  <b>Prof. Brunella Franco</b> - Università degli Studi di Napoli "Federico II", Napoli The journey from gene identification to basic cell biology
10:25-10:45	<b>TRACK 1</b> Chairs: Clarissa Ponti, Valeria Barili <b>Chen Jiaxu</b> - A Graph-Based Transcriptomic Framework Unravels Divergent Immune Trajectories in Systemic Lupus Erythematosus
10:45-11:05	<b>Busciglio Sabrina</b> - Beyond DNA sequence: DNA methylation as a functional classifier in germline neurodevelopmental disorders and somatic rare tumors
11:05-11:20	<b>Break</b>
11:20-11:40	<b>Jian Chen</b> - Ruan Jian Qing Mai Formula Attenuates NINJ1-Mediated Macrophage Ferroptosis to Improve Diabetic Wound Healing
11:40-12:00	<b>Lorenzi Alessia</b> - Integrating RNA-Seq to Improve Molecular Diagnosis in Unresolved Genetic Diseases
12:00-13:00	<b>POSTER SESSION</b>
13:00-14:00	<b>Break (poster)</b>
14:00-14:10	Join the workshop
14:15-14:45	<b>KEYNOTE LECTURE</b> Chairs: Kiran Kunwar, Youssef Abili  <b>Prof. Alexander Hoischen</b> - Radboudumc University medical center Nijmegen Long-read genome sequencing – the next rare disease revolution
14:55-15:15	<b>TRACK 2</b> Chairs: Kiran Kunwar, Youssef Abili <b>Luciani Alessandra</b> - Characterization of Brain Microbiome in Neurodegenerative Disease via Metatranscriptomics
15:15-15:35	<b>Gabrielli Federico</b> - Integrative Analysis of Gut Mycobiome in Metabolic Syndrome Using Compositional Statistics and Large Language Model Embeddings
15:35-16:00	<b>Break</b>
16:00-16:30	<b>KEYNOTE LECTURE</b> Chairs: Hannah Klinkhammer, Ilaria Cherchi  <b>Prof. Alexandre Reymond</b> - Center for Integrative Genomics, University of Lausanne Copy number variants effects
16:40-17:00	<b>TRACK 3</b> Chairs: Hannah Klinkhammer, Ilaria Cherchi <b>Treccani Mirko</b> - Do phenolic metabolites reflect genetic risk signatures for cardiometabolic diseases? Exploring genomic complexity using the PGS Catalog
17:00-17:20	<b>Gaudio Andrea</b> - GWAS by subtraction to Disentangle RBD Genetic Background from $\alpha$ -Synucleinopathies
17:20-17:40	<b>Devito Sara</b> - The Network for Italian Genomes (NIG) as a National Reference Infrastructure for Genomic Medicine

# Scientific Program

March 19<sup>th</sup>, 2026



9:00-9:15

Join the workshop

9:15-9:45

**KEYNOTE LECTURE**

Chairs: Ilaria Cestonaro, Naomi Scarano

**Prof. Christian Giliissen** - Radboudumc University medical center, Nijmegen  
Blending Genetics and Bioinformatics to study neurodevelopmental disorders

**TRACK 4**

Chairs: Ilaria Cestonaro, Naomi Scarano

9:55-10:15

**Yang Zhicong** - Integrated Genetics and Multi-omics Analysis Identifies Myeloid-derived CHI3L1 as a Core Driver of Neutrophil Storms and Structural Remodeling in Ulcerative Colitis

10:15-10:35

**Barili Valeria** - On the development of neoantigen vaccine for HCC cure: from genomics of Hepatitis B Virus (HBV) integration in liver cells genome to immunological host response toward neoepitopes as novel immunotherapeutic approaches

10:35-10:50

**Break**

10:50-11:20

**KEYNOTE LECTURE**

Chairs: Shahin Allahi, Laura Veschetti

**Prof. Isidro Cortes** - EMBL-EBI, UK  
Computational early cancer genome analysis at a national scale

**TRACK 5**

Chairs: Shahin Allahi, Laura Veschetti

11:30-11:50

**Chengyuan Dong** - Machine Learning-Based Innovation in Clinical Biochemical Markers for Enhanced Early Detection of Colorectal Cancer

11:50-12:10

**Ghiretti Lucia** - Integrative Multi-Omics Analysis to Explore the Molecular Impact of Dietary (Poly)phenols on Humans

12:10-12:25

**Conclusions**

12:25-12:45

**BEST ORAL AND BEST POSTER AWARDS**