



## Ivan Ferrari

**Home:** Vicolo Tripoli 3, 24040 ARCENE (BG) **Mobile:** 3485975562  
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**Gender:** Male | **Date of birth:** Oct 22 1995 | **Nationality:** Italy

### PREFERRED JOB

Researcher in medical and biological sciences

### WORK EXPERIENCE

[ 09/2021 - present ]

#### Bioinformatician

*Istituto Nazionale di Genetica Molecolare* , Sforza 35 - MILANO (MI) Italy

**Company sector:** R&D and patents

**Business or sector:** biomedical

**Main activities and responsibilities:** Bioinformatician of the Molecular Histology and Cell Growth unit

[ 12/2018 - 12/2019 ]

#### Bioinformatics research intern

*Istituto Nazionale di Genetica Molecolare* , Sforza 35 - MILANO (MI) Italy

**Business or sector:** biomedical

**Main activities and responsibilities:** Analysis of primary tissues and derived organoids obtained from patients affected by colorectal cancer through single cell RNA sequencing

**Acquired skills and achieved objectives:** Basilar knowledge of the following programming languages.

Basilar knowledge of the shell 'bash'

Single cell RNA sequencing analysis

[ 04/2017 - 07/2017 ]

#### Undergraduate Intern Researcher

*BIOMETRA- edificio Farmacologia Medica* , Vanvitelli 32 - MILANO (MI) Italy

**Business or sector:** biomedical

**Main activities and responsibilities:** Analysis of differences in PHOX2B protein variants half-life through western blot.

**Acquired skills and achieved objectives:** Cell culture management

Western blot

Image acquisition and quantification of protein levels through Lycor apparatus

### EDUCATION AND TRAINING

[ 2022 - 2025 ]

#### Molecular and cellular biology

*Università degli Studi di MILANO*

**Town:** MILANO

**EQF level:** 8

**NQF level:** Doctor of Philosophy (Ph.D.)

*Principal subjects/occupational skills covered:*

- acquisition of skills in the field of biomolecular science and biotechnology

- acquisition of a molecular approach to the study of complex biological problems in model organisms

[ 2020 - 2021 ]

#### Bioinformatics and Functional Genomics

*Università degli Studi di MILANO*

**Town:** MILANO

**EQF level:** 8

**NQF level:** 2nd level Academic Master's programme

[ 2017 - 2020 ]

#### MEDICAL BIOTECHNOLOGY AND MOLECULAR MEDICINE

*Università degli Studi di MILANO*

**Town:** MILANO

2nd level degree in Pharmaceutical, veterinary and medical biotechnologies

**Final degree mark:** 110/110 cum laude

**EQF level:** 7  
**NQF level:** 2nd cycle degree/Master of Science (2 years)  
**Dissertation/thesis title:** Elucidating colorectal cancer heterogeneity at single cell resolution

[ 2014 - 2017 ] **BIOTECNOLOGIE MEDICHE**  
*Università degli Studi di MILANO*

**Town:** MILANO  
1st level degree in Biotechnologies  
**Final degree mark:** 107/110  
**EQF level:** 6  
**NQF level:** 1st cycle degree/Bachelor (3 years)  
**Dissertation/thesis title:** ANALISI MEDIANTE 'WESTERN BLOT' QUANTITATIVO DEL RUOLO DEL TRATTO DI POLI-ALANIN A SULL'EMIVITA DEL FATTORE DI TRASCRIZIONE PHOX2B.

## PRE-UNIVERSITY STUDIES

[ 2014 ] **Secondary school diploma:** Industrial Vocational School  
Italian secondary school diploma

## LANGUAGE SKILLS

**Mother tongue(s):** Italian

**Other language(s)**

### English

**LISTENING:** C1 **READING:** C1 **WRITING:** C1  
**SPOKEN INTERACTION:** C1 **SPOKEN PRODUCTION:** C1

### Diploma(s) or certificate(s)

**English:** Certificato conoscenza lingua inglese - SLAM (UniMi), 18 12 2018 - European level: C1

*Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2: Proficient user*  
*Common European Framework of Reference for Languages*

## DIGITAL COMPETENCES

### SELF-ASSESSMENT

INFORMATION AND DATA LITERACY	COMMUNICATION AND COLLABORATION	DIGITAL CONTENT CREATION	SAFETY	PROBLEM SOLVING
Independent user	Independent user	Independent user	Basic user	Independent user

Digital competences - Self-assessment grid

**Basic digital competence:**

### OFFICE AUTOMATION

**Spreadsheets:** (Highly Specialised)

### APPLICATION SOFTWARE

**CAD - Assisted Design:** (Highly Specialised)

### COMPUTER PROGRAMMING

**Programming languages:** Bash (Intermediate) , Python (Highly Specialised) , R (Highly Specialised)

### SYSTEMS AND NETWORKS MANAGEMENT

**Operating systems:** (Intermediate)

### DATA MANAGEMENT

**DBMS:** MySQL (Intermediate)

## PUBLICATIONS

Journal articles "[Preprint] CIA: a Cluster Independent Annotation method to investigate cell identities in scRNA-seq data" ; Ivan Ferrari, Mattia Battistella, Francesca Vincenti, Andrea Gobbini, Samuele Notarbartolo, Jole Costanza, Stefano Biffo, Renata Grifantini, Sergio Abrignani, Eugenia Galeota ; biorxiv (2023) [www.biorxiv.org/content/10.1101/2023.11.30.569382v1](http://www.biorxiv.org/content/10.1101/2023.11.30.569382v1)

Other "CIA - Cluster Independent Annotation" ; Ivan Ferrari, Mattia Battistella, Francesca Vincenti, Andrea Gobbini, Eugenia Galeota (2023)

- Journal articles "FAM46C Is an Interferon-Stimulated Gene That Inhibits Lentiviral Particle Production by Modulating Autophagy" ; Marilena Mancino, Giancarlo Lai, Federica De Grossi, Alessandro Cuomo, Lara Manganaro, Giacomo M. Butta, Ivan Ferrari, Elisa Vicenzi, Guido Poli, Elisa Pesce, Stefania Oliveto, Stefano Biffo, Nicola Manfrini ; Microbiology Spectrum ; American Society for Microbiology (2023)  
[www.ncbi.nlm.nih.gov/pmc/articles/PMC10434054/](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC10434054/)
- "In vitro-derived medium spiny neurons recapitulate human striatal development and complexity at single-cell resolution" ; Paola Conforti, Vittoria Dickinson Bocchi, Ilaria Campus, Linda Scaramuzza, Maura Galimberti, Tiziana Lischetti, Francesca Talpo, Matteo Pedrazzoli, Alessio Murgia, Ivan Ferrari, Chiara Cordiglieri, Alessandra Fasciani, Ernest Arenas, Dan Felsenfeld, Gerardo Biella, Dario Besusso, Elena Cattaneo ; Cell Reports Methods ; Cell (2022)  
[doi.org/10.1016/j.crmeth.2022.100367](https://doi.org/10.1016/j.crmeth.2022.100367)
- "[Preprint] Combinatorial selection of biomarkers to optimize gene signatures in diagnostics and single cell applications" ; Ivan Ferrari, Saveria Mazzara, Sergio Abrignani, Renata Grifantini, Mauro Bombaci, Riccardo L. Rossi ; biorxiv (2022)  
[www.biorxiv.org/content/10.1101/2022.01.17.476603v2](http://www.biorxiv.org/content/10.1101/2022.01.17.476603v2)
- Other "combiroc" ; Ivan Ferrari, Riccardo L. Rossi (2021)  
[cran.r-project.org/web/packages/combiroc/index.html](http://cran.r-project.org/web/packages/combiroc/index.html)
- Journal articles "Epigenomic landscape of human colorectal cancer unveils an aberrant core of pan-cancer enhancers orchestrated by YAP/TAZ" ; Giulia Della Chiara, Federica Gervasoni, [...]Massimiliano Pagani ; Nature Communications ; Nature Publishing Group and Springer Science+Business Media (2021)  
[www.nature.com/articles/s41467-021-22544-y](http://www.nature.com/articles/s41467-021-22544-y)

## ADDITIONAL INFORMATION

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Included in the Acknowledgements of 'Pirone, Luciano & Caldinelli, Laura & Di Lascio, Simona & Di Girolamo, Rocco & Di Gaetano, Sonia & Fornasari, Diego & Pollegioni, Loredano & Benfante, Roberta & Pedone, Emilia. (2019). Molecular insights into the role of the polyaniline region in mediating PHOX2B aggregation. The FEBS Journal. 286. 10.1111/febs.14841' for technical contribution.