

## EMANUELE MONTELEONE

### TECHNICAL SKILLS

#### Bioinformatics Skills

- Functional analysis: single enrichment analysis, gene-set based analysis
- Microarray data analysis: expression, genotyping, exon
- NGS data analysis: exome, variant calling, RNA-seq, Meth-seq, DNA-Seq.
- Biostatistics: microarray normalization, regression, multiple test correction
- Predictors and clustering analysis of expression data: Classification and regression Tree, Random Forest, Cross validation, K-means, K-medoids, Hierarchical Clustering
- System biology and biological networks analysis
- Databases and repositories: Ensembl, UCSC, MsigDB, EMBL, GeneBank, Uniprot
- Libraries: Ensembl API, SAMtools, Bioconductor, BioPerl, Biopython

#### Molecular and Cellular Biology

- Microbiological, Human and Mouse cell cultures, transient and stable transfections of human and mouse cells in culture (plasmids, siRNA, shRNA)
- DNA and RNA extraction, PCR, Real Time PCR, ChIP, Cloning, IF, RNA-FISH, Northern Blot, REMSA
- Whole protein extraction and fractioning, Western Blot, IP
- Animal handling (Mice)

#### Computer Skills

OS: Windows, UNIX / MAC / LINUX

PERL, HTML, Python, PHP , MySQL, R, shell scripting

### RESEARCH EXPERIENCE

**MOLECULAR BIOTECHNOLOGY CENTER, UNIVERSITY OF TURIN, IT / 2017- PRESENT**

Research experience in Bioinformatics and Cancer Biology

**CENTER FOR LIFE SCIENCE, HARVARD MEDICAL SCHOOL, BOSTON, USA / 2016**

Research experience in Bioinformatics and Cancer Biology

**MOLECULAR BIOTECHNOLOGY CENTER, UNIVERSITY OF TURIN, IT / 2013-2015**

Research experience in Bioinformatics and Developmental Molecular Biology

**CENTER FOR MOLECULAR SYSTEMS BIOLOGY, BIOINDUSTRY PARK SILVANO FUMERO, UNIVERSITY OF TURIN, IT / 2011-2012**

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Research experience in Cancer epigenetics and Bioinformatics

**DEPARTMENT OF BIOTECHNOLOGY, TEMPLE UNIVERSITY,**

**PHILADELPHIA, USA / 2010**

Research experience in Cancer epigenetics

**DEPARTMENT OF CELLULAR AND DEVELOPMENT BIOLOGY, UNIVERSITY OF PALERMO,**

**IT / 2007-2010**

Technical experience in Microbiology

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**EDUCATION  
AND DEGREES**

**PHD IN MOLECULAR MEDICINE - DEPT. MOLECULAR BIOTECHNOLOGY AND HEALTH  
SCIENCES, UNIVERSITY OF TURIN, IT / 2017**

Training thesis: *"Discovery and characterization of long non-coding RNAs controlling pluripotency and self-renewal in mouse embryonic stem cells"*.

**MASTER'S DEGREE IN MOLECULAR AND CELLULAR BIOLOGY - DEPT. OF ANIMAL AND  
HUMAN BIOLOGY, UNIVERSITY OF TURIN, IT / 2012**

Training thesis: *"Estrogen receptor alpha maintains basal activity of transcriptional enhancers in a ligand-independent manner in collaboration with other transcription factors"*.

**BACHELOR DEGREE IN BIOLOGICAL SCIENCES - DEPT. OF CELLULAR AND  
DEVELOPMENTAL BIOLOGY, UNIVERSITY OF PALERMO, IT / 2010**

Training thesis: *"Expression of RBL2 in lung and breast tumoral cells"*.

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**LANGUAGES**

**Italian** Mother tongue

**English** Fluent in speaking, reading and writing (I have studied in the US for a year, it helped me build confidence in speaking and it improved my communication skills in the field of Health Science)

**French** Good knowledge (I studied French for 5 years and I often travel to France)

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**PUBLICATIONS****STAT3 activities and energy metabolism: dangerous liaisons**

A. Camporeale and M. Demaria and E. Monteleone and C. Giorgi and M. Wieckowski and P. Pinton and V. Poli

Cancers 6 1579--1596 (2014)

**mTORC1 and muscle regeneration are regulated by the LINC00961-encoded SPAR polypeptide**

A. Matsumoto and A. Pasut and M. Matsumoto and R. Yamashita and J. Fung and E. Monteleone and A. Saghatelian and K. I. Nakayama and J. G. Clohessy and P. P. Pandolfi

Nature 541 228 (2017)

**Tailoring CD19xCD3-DART exposure enhances T-cells to eradication of B-cell neoplasms**

P. Circosta and A. R. Elia and I. Landra and R. Machiorlatti and M. Todaro and S. Aliberti and D. Brusa and S. Deaglio and S. Chiaretti and R. Bruna and others

Oncolmmunology 7 e1341032 (2018)

**An integrated genome-wide CRISPRa approach to functionalize lncRNAs in drug resistance**

A. C. Bester and J. D. Lee and A. Chavez and Y.-R. Lee and D. Nachmani and S. Vora and J. Victor and M. Sauvageau and E. Monteleone and J. L. Rinn and others

Cell 173 649--664 (2018)

**SP1 and STAT3 Functionally Synergize to Induce the RhoU Small GTPase and a Subclass of Non-canonical WNT Responsive Genes Correlating with Poor Prognosis in Breast Cancer**

E. Monteleone and V. Orecchia and P. Corrieri and D. Schiavone and L. Avalle and E. Moiso and A. Savino and I. Molineris and P. Provero and V. Poli

Cancers (2019)

**Network analysis allows to unravel breast cancer molecular features and to identify novel targets**

A. Savino and L. Avalle and E. Monteleone and I. Miglio and A. Griffa and G. Accetta and P. Provero and V. Poli

bioRxiv 570051 (2019)

**CD28 individual signalling up-regulates human IL-17A expression by promoting the recruitment of RelA/NF- $\kappa$ B and STAT3 transcription factors on the proximal promoter.**

L. Tuosto and M. Kunkl and M. Mastrogiovanni and N. Porciello and S. Caristi and E. Monteleone and S. Arcieri

Frontiers in Immunology 10 864 (2019)

**Vulnerabilities in MIDH2 AML confer sensitivity to APL-like targeted combination therapy**

V. Mugoni and R. Panella and G. Cheloni and M. Chen and O. Pozdnyakova and D. Stroopinsky and J. Guarnerio and E. Monteleone and J. D. Lee and L. Mendez and others

Cell research 29 446 (2019)

**Reactivation of PTEN tumor suppressor for cancer treatment through inhibition of a MYC-WWP1 inhibitory pathway**

Y.-R. Lee and M. Chen and J. D. Lee and J. Zhang and S.-Y. Lin and T.-M. Fu and H. Chen and T. Ishikawa and S.-Y. Chiang and J. Katon and others

Science 364 eaau0159 (2019)

**Where Sin3a Meets STAT3: Balancing STAT3-Mediated Transcriptional Activation and Repression**

E. Monteleone and V. Poli

Cancer Research 79 3031--3033 (2019)

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**REFERENCES****VALERIA POLI**

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DEPARTMENT OF MOLECULAR BIOTECHNOLOGY AND HEALTH SCIENCES  
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