

PERSONAL INFORMATION

Alessandro La Ferlita



Gender Male | Date of birth | Nationality Italian

PROFESSIONAL EXPERIENCES

From 2018 to today

PH.D. STUDENT AT BIOINFORMATICS UNIT, DEPARTMENT OF CLINICAL AND EXPERIMENTAL MEDICINE, UNIVERSITY OF CATANIA, CATANIA, ITALY.

From January 2020 to July 2020

VISITING RESEARCHER AT THE OHIO STATE UNIVERSITY COMPREHENSIVE CANCER CENTER (OSUCCC), THE OHIO STATE UNIVERSITY, COLUMBUS (OH), USA.

From November 5th, 2018 to November 5th, 2019

BIOINFORMATICIAN AT NGS UNIT OF NERVIANO MEDICAL SCIENCES, MILAN, ITALY.

From 2014 to 2017

Student AT SECTION OF BIOLOGY AND GENETICS, DEPARTMENT OF BIOMEDICAL AND BIOTECHNOLOGICAL SCIENCES, UNIVERSITY OF CATANIA, CATANIA, ITALY.

EDUCATION AND TRAINING

From 2018 to today

Ph.D. in Complex Systems for Life Sciences, PhD scholarship in Bioinformatics, University of Catania, Catania, Italy.

December 2017

Italian professional qualification of **SENIOR BIOLOGIST**

September 29, 2017

Master's degree in Molecular and Cellular Biology with 110/110 cum laude. University of Catania, Catania, Italy.

July 23, 2015

Bachelor's degree in Biological Sciences with 110/110. University of Catania, Catania, Italy.

PROFESSIONAL SKILLS

Mother tongue Italian

Other languages

	COMPREHENSION		SPEAKING		WRITING
	listening	Reading	Communication	Range of vocabulary	
ENGLISH	B2	B2	B2	B2	B2
	Cambridge English First (FCE) certificate				

Technical skills

Molecular and Cellular Biology skills

DNA and RNA extraction from tissues, cells, and biological fluids.

Exosomes purification from biological fluids.

I am able to perform PCR and RT-qPCR.

I am able to work with cell lines.

Informatics and Bioinformatics skills

I have advanced knowledge of all Microsoft Office software.

I can use all the main biological databases and several tools for statistical analysis.

I have advanced expertise in High Throughput technologies data analysis such as NGS (RNA-Seq, scRNA-Seq, DNA-Seq, and ChIP-Seq), microarray, nanostring, and Real-Time PCR.

I am able to perform metabolomic and network analysis.

I am able to develop customize bioinformatics pipelines for NGS data analyses

Programming languages:

1. R
2. BASH
3. Python
4. JAVA
5. PHP

Driving license Italian driving license type B

FURTHER INFORMATION

PUBBLICATIONS

1. **La Ferlita A**, Alaimo S, Di Bella S, Martorana E, Laliotis G, Bertoni F, Cascione L, Tsihchlis PN, Ferro A, Bosotti R, Pulvirenti A. *RNA detector: a free user-friendly and stand-alone software for RNA-Seq data analysis*. **BMC Bioinformatics** (under review).
2. Alaimo S, Rapicavoli RV, Marceca GP, **La Ferlita A**, Serebrennikova OB, Tsihchlis PN, Mishra B, Pulvirenti A, Ferro A. *PHENSIM: Phenotype Simulator*. **Plos. Comp. Bio** (under review). Pre-print available in BioRxiv (<https://www.biorxiv.org/content/10.1101/2020.01.20.912279v2>)
3. Laliotis G, Chavdoula E, Paraskevopoulou M, Kaba A, **La Ferlita A**, Anastas V, Orlacchio A, Taraslia V, Vlachos I, Capece M, Hatzigeorgiou A, Palmieri D, Alaimo S, Tsatsanis C, Sehgal L, Carbone DP, Coppola V, Tsihchlis PN. *IWS1 phosphorylation promotes cell proliferation and predicts poor prognosis in EGFR mutant lung adenocarcinoma patients, through the cell cycle-regulated U2AF2 RNA splicing*. **Nat Comm** (under review). Pre-print available in BioRxiv (<https://www.biorxiv.org/content/10.1101/2020.07.14.195297v4.abstract>)
4. Laliotis G, Kenney AD, Chavdoula E, Orlacchio A, Kaba AK, **La Ferlita A**, Anastas V, Tsatsanis C, Beane JD, Sehgal L, Coppola V, Yount JS, Tsihchlis PN. *IWS1 phosphorylation by AKT3 controls nuclear export of type I IFN mRNAs and sensitivity to oncolytic viral infection, by regulating the alternative RNA splicing of U2AF2*. **Commun Biol**. (under review). Pre-print available in BioRxiv (<https://www.biorxiv.org/content/10.1101/2020.12.26.424461v2.full>)
5. Mathur D, Liao C, **La Ferlita A**, Alaimo S, Ferro A, Xavier J. *Divergent use of metabolic fluxes in breast cancer metastasis*. **iScience** (under review). Pre-print available in BioRxiv (<https://www.biorxiv.org/content/10.1101/2020.08.03.234468v1.abstract>)
6. **La Ferlita A**, Alaimo S, Veneziano D, Nigita G, Balatti V, Croce CM, Ferro A, Pulvirenti

A. Identification of tRNA-derived ncRNAs in TCGA and NCI-60 panel cell lines and development of the public database tRFexplorer. **Database**. doi: 10.1093/database/baz115.

7. Di Bella S, La Ferlita A, Carapezza G, Alaimo S, Isacchi A, Ferro A, Pulvirenti A, Bosotti R. A benchmarking of pipelines for detecting ncRNAs from RNA-Seq data. **Briefings in Bioinformatics**. doi: 10.1093/bib/bbz110.

8. Alaimo S, Micale G, La Ferlita A, Ferro A, Pulvirenti A. Computational methods to investigate the impact of miRNAs on pathways. **Methods Mol Biol**. 2019; 1970:183-209. doi: 10.1007/978-1-4939-9207-2_11.

9. Battaglia R, Palini S, Vento ME, La Ferlita A, Lo Faro MJ, Caroppo E, Borzi P, Falzone L, Barbagallo D, Ragusa M, Scalia M, D'Amato G, Scollo P, Musumeci P, Purrello M, Gravotta E, Di Pietro C. Identification of extracellular vesicles and characterization of miRNA expression profiles in human blastocoel fluid. **Sci Rep**. 2019 Jan 14;9(1):84. doi: 10.1038/s41598-018-36452-7.

10. La Ferlita A, Battaglia R, Andronico F, Caruso S, Cianci A, Purrello M, Di Pietro C. Non-Coding RNAs in Endometrial Physiopathology. **Int J Mol Sci**. 2018, 19, 2120. doi: 10.3390/ijms19072120.

11. Di Pietro C, Caruso S, Battaglia R, Iraci Sareri M, La Ferlita A, Strino F, Bonaventura G, Di Mauro M, Barcellona ML, Perciavalle V, Purrello M, Cianci A. MiR-27a-3p and miR-124-3p, upregulated in endometrium and serum from women affected by Chronic Endometritis, are new potential molecular markers of endometrial receptivity. **Am J Reprod Immunol**. 2018, e12858. doi: 10.1111/aji.12858.

12. Battaglia R, Vento ME, Ragusa M, Barbagallo D, La Ferlita A, Di Emidio G, Borzi P, Artini PG, Scollo P, Tatone C, Purrello M, Di Pietro C. MicroRNAs Are Stored in Human MII Oocyte and Their Expression Profile Changes in Reproductive Aging. **Biol Reprod**. 2016, 95, 131. doi: 10.1095/biolreprod.116.142711.

Posters

Laliotis G, Chavdoula E, Paraskevopoulou M, Kaba A, La Ferlita A, Anastas V, Orlacchio A, Taraslia V, Vlachos I, Capece M, Hatzigeorgiou A, Palmieri D, Alaimo S, Tsatsanis C, Sehgal L, Carbone DP, Coppola V, Tsihchlis PN. Abstract PO-011: IWS1 phosphorylation promotes tumor growth and predicts poor prognosis in EGFR mutant lung adenocarcinoma patients, through the epigenetic regulation of U2AF2 RNA splicing. **Abstracts: AACR Special Virtual Conference on Epigenetics and Metabolism**. October 15-16, 2020.

La Ferlita A, Di Bella S, Alaimo S, Carapezza G, Isacchi A, Ferro A, Bosotti R, Pulvirenti A. RNAdetector: a comprehensive RNA-seq pipeline for gene expression and non-coding RNAs analysis. **Annual meeting of Bioinformatics Italian Society (BITS)**. Palermo, Italy. June 26-28, 2019

Privitera G, Caruso A, La Ferlita A, Alaimo S, Ferro A, Forte S, Pulvirenti A. TMBCALC: an easy to use pipeline for Tumor Mutational Burden CALLing in Clinical practice. **Annual meeting of Bioinformatics Italian Society (BITS)**. Palermo, Italy. June 26-28, 2019.

Di Pietro C, Caruso S, Battaglia R, Iraci M, La Ferlita A, Strino F, Bonaventura G, Di Mauro M, Barcellona M.L, Perciavalle V, Cianci A. MICRORNA EXPRESSION PROFILES IN ENDOMETRIUM AND SERUM FROM WOMEN AFFECTED BY CHRONIC ENDOMETRITIS. NEW MOLECULAR MARKERS OF ENDOMETRIUM RECEPTIVITY. **3rd Biomarker Meeting in PERSONALIZED REPRODUCTIVE MEDICINE**. 3rd Biomarker Meeting in PERSONALIZED REPRODUCTIVE MEDICINE Valencia, Spain. April 7-9, 2016

- Oral communication** Battaglia R, Vento M.E, Ragusa M, Barbagallo D, Arena D.P, **La Ferlita A**, Di Emidio G, Borzi P, Artini P.G, Scollo P, Tatone C, Purrello M, Di Pietro C. *Identification of MicroRNAs related to Human MII Oocyte in Reproductive Aging*. **17th World Congress of the Academy of Human Reproduction**. Rome, Italy. March 15-18, 2017
- Conferences** **Annual meeting of Bioinformatics Italian Society (BITS)**. Palermo, Italy. June 26-28, 2019.
- 34th Annual Meeting ESHRE**. Barcellona, Spain, July 1-4, 2018.
- VII NATIONAL MEETING SIERR** "Current Trends in Clinical Embryology". Rome, Italy. February 2-3, 2018.
- 17th World Congress of the Academy of Human Reproduction**. Rome, Italy. March 15-18, 2017
- 3rd Biomarker Meeting in PERSONALIZED REPRODUCTIVE MEDICINE**. Valencia, Spain. April 6-9, 2016.
- Scientific societies** Member of **Bioinformatics Italian Society (BITS)** from 2019
- Member of **European Society of Human Reproduction and Embryology (ESHRE)** from 2018
- Courses** **Lipari school on Computational Metabolomics and Metabolic Diseases**. July 25-31, 2019. Lipari, Italy.
- Lipari school on Computational Immunology, Immunotherapy and Autoimmune Diseases**. July 25-31, 2018. Lipari, Italy.
- Examination of urine: from collection to reporting. Application of Quality standards**. March 2017. University of Catania, Catania, Italy.
- Examination of cervical exfoliative cytology for cancer screening**. February 13-17, 2017. University of Catania, Catania, Italy.
- Personal data** I authorize the processing of my personal data pursuant to the Italian Legislative Decree 30 June 2003, n. 196 "Codice in materia di protezione dei dati personali".

DICHIARAZIONE SOSTITUTIVA DI CERTIFICAZIONE (art. 46 e 47 D.P.R 445/2000)

Il sottoscritto Alessandro La Ferlita, ai sensi e per gli effetti degli articoli 46 e 47 e consapevole delle sanzioni penali previste dall'articolo 76 del D.P.R 28 Dicembre 2000, n. 445 nelle ipotesi di falsità in atti e dichiarazioni mendaci, dichiara che le informazioni riportate nel presente curriculum vitae, redatte in formato europeo, corrispondono a verità.

Data
01/04/2021

Firma