

Curriculum vitae
Ilaria Panzeri, PhD.
HFSP postdoctoral fellow

Citizenship: Italian

Spoken languages: Italian (mother tongue); English (C₁); French (A₁); German (A₁)

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Work experience

- 2019 – present HFSP-awarded postdoctoral fellow at the Van Andel Research Institute, Grand Rapids (Michigan, USA), Center for Epigenetics (Dr. Andrew Pospisilik). Project: “Polyphenism, obesity and cancer: searching for alternate states of tumor susceptibility”.
- 2017 – 2019 Post-doc at the Max Planck Institute of Immunobiology and Epigenetics, Freiburg (Germany), Epigenetics Department (Dr. Andrew Pospisilik). Project: “Phenotypic variation in complex diseases”.
- 2015 – 2017 Reserach fellow at the INGM (Fondazione Istituto Nazionale Genetica Molecolare “Romeo ed Enrica Invernizzi”), Milan (Prof. Massimiliano Pagani). Project: “Human CD4⁺ regulatory T lymphocytes in health and disease”.
- 2011 – 2014 Ph.D. student at the University of Milano-Bicocca, Milan (DIMET, Molecular and Translational Medicine program) / INGM, Milan (Prof. Massimiliano Pagani). Project: “Deciphering the role of regulatory noncoding RNAs in human CD4⁺ T lymphocytes differentiation through functional and biochemical studies”.
- Sept.-Oct. 2011 Scholarship at the University of Eastern Piedmont, Novara (Prof. Daniele Sblattero). Project: “Identification of new diagnostic markers for autoimmune pathologies through auto-antigen profiling (phage display and pyrosequencing)”.
- Jun.-Aug. 2011 *Post-lauream* stage at IRCCS Istituto Ortopedico Galeazzi, Milan (Giovanni Lombardi, M.Sc., Ph.D.). “GenoDisc European Project”.
- 2007 – 2011 M.Sc. student at the University of Milano-Bicocca, ZooPlantLab (Prof. Maurizio Casiraghi). Project: “Methyltransferases and epigenetics patterns within the phylum of Nematoda”. Master’s degree in Molecular Biology (110/110 *magna cum laude*).
- 2004 – 2007 B.Sc. student at the University of Milano-Bicocca (Prof. Enzo Martegani). Project: “Identification of the regions of adenylate cyclase that interact with Gpa2 in the yeast *Saccharomyces cerevisiae*”. Bachelor’s degree in Biotechnology program.

Awards

- 2018 Human Frontier Science Program Long-Term Postdoctoral Fellowship

- 2018 Best presentation (CRC Taylor&Francis Publishing Group, 1st Course on Computational Systems Biology of Cancer)
- 2017 Travel grant (Epigen, KAUST Research Conference on Environmental Epigenetics)
- 2016 Travel grant (Corporate Partnership Program (CPP) Fellowship EMBO|EMBL, EMBO|EMBL Transcription and Chromatin Conference)
- 2015 Travel grant (Corporate Partnership Program (CPP) Fellowship EMBO|EMBL, EMBO|EMBL The Non-Coding Genome Symposium)
- 2015 Travel grant for best poster presentation (SIBBM 2015 Seminar)
- 2014 Graduation from the University of Milano-Bicocca (Italy), Ph.D. in Translational and Molecular Medicine)
- 2013 Travel grant (Fondazione Cariplo for the DIMET doctoral school, EMBO|EMBL The Non-Coding Genome Symposia)
- 2011 Scholarship for doctoral studies MIUR (declined)
- 2011 Scholarship for internship (Fondazione Cariplo, University of Eastern Piedmont)
- 2011 Excellence in Studies award “Enrico Legler”
- 2011 Graduation from the University of Milano-Bicocca (Italy), *cum laude*

Selected publications

- L. Arrigoni, H. Al-Hasani, F. Ramirez, **I. Panzeri**, D.P. Ryan, D. Santacruz, N. Kress, A.J. Pospisilik, U. Boenisch, T. Manke. 2018. “RELACS nuclei barcoding enables high-throughput ChIP-seq.” *Comms. Bio.* Dec 5, 1, 214.
- I. Panzeri** and J.A. Pospisilik. 2018. “Epigenetic control of variation and stochasticity in metabolic disease.” *Mol. Metab.* Volume 14, August, Pages 26-38.
- M. De Simone*, A. Arrigoni*, G. Rossetti*, P. Gruarin*, V. Ranzani, C. Politano, R.J.P. Bonnal, E. Provasi, M.L. Sarnicola, **I. Panzeri**, M. Moro, M. Crosti, S. Mazzara, V. Vaira, S. Bosari, A. Palleschi, L. Santambrogio, G. Bovo, N. Zucchini, M. Totis, L. Gianotti, G. Cesana, R.A. Perego, N. Maroni, A. Pisani Ceretti, E. Opocher, R. De Francesco, J. Geginat, H.G. Stunnenberg, S. Abrignani, M. Pagani (*Equal contribution). 2016. “Transcriptional landscape of human tissue lymphocytes unveils uniqueness of tumor-infiltrating T regulatory cells.” *Immunity.* Nov 15;45(5):1135-1147. doi: 10.1016/j.immuni.2016.10.021.
- V. Ranzani, A. Arrigoni, G. Rossetti, **I. Panzeri**, S. Abrignani, R.J. Bonnal, M. Pagani. 2017. “Next-generation sequencing analysis of long noncoding RNAs in CD4+ T cell differentiation.” *Methods in molecular biology* ;1514:173-185.
- I. Panzeri**, G. Rossetti, M. Pagani. 2016. “Basic Principles of noncoding RNAs in epigenetics.” *Medical Epigenetics.*
- A. Arrigoni, V. Ranzani, G. Rossetti, **I. Panzeri**, S. Abrignani, R.J. Bonnal, M. Pagani. 2016. “Analysis RNA-seq and noncoding RNA.” *Methods in molecular biology.* ;1480:125-35. doi: 10.1007/978-1-4939-6380-5_11.

R.J.P. Bonnal, V. Ranzani, A. Arrigoni, S. Curti, **I. Panzeri**, P. Gruarin, S. Abrignani, G. Rossetti & M. Pagani. 2015. “De novo transcriptome profiling of highly purified human lymphocytes primary cells”. *Sci. Data.* 2, 150051.

I. Panzeri, G. Rossetti, S. Abrignani, M. Pagani. 2015. “Long intergenic non-coding RNAs: novel drivers of human lymphocyte differentiation”. *Front. Immunol.* Apr 15;6:175. doi: 10.3389/fimmu.2015.00175.

V. Ranzani*, G. Rossetti*, **I. Panzeri***, A. Arrigoni*, R.J. Bonnal*, S. Curti, P. Gruarin, E. Provasi, E. Sugliano, M. Marconi, R. De Francesco, J. Geginat, B. Bodega, S. Abrignani, M. Pagani. (*Equal contribution). 2015. “The long intergenic noncoding RNA landscape of human lymphocytes highlights the regulation of T cell differentiation by linc-MAF-4”. *Nat. Immunol.* Mar;16(3):318-325. doi: 10.1038/ni.3093.

M. Pagani, G. Rossetti, **I. Panzeri**, P. de Candia, R.J. Bonnal, R.L. Rossi, J. Geginat, S. Abrignani. 2013. “Role of microRNA and long-non-coding RNAs in CD4(+) T-cell differentiation”. *Immunol. Rev.* May;253(1):82-96. doi: 10.1111/imr.12055.

Conferences

1st Course on Computational Systems Biology of Cancer (24-29 September, 2018, Paris) Oral presentation: “Polyphenism, obesity and cancer: searching for alternate states of tumor susceptibility”.

ChroMe Network Meeting (10-14 July 2017, Oxford) Oral presentation: “Phenotypic variation in health and disease”.

KAUST Research Conference on Environmental Epigenetics (12-15 February 2017, KAUST) Poster presentation: “Long noncoding RNAs: new players in plasticity and new therapeutic opportunities in the human immune system” (*Epigen travel grant*)

EMBO | EMBL Conference: “Transcription and Chromatin 2016” (27-30 August 2016, Heidelberg) Poster presentation: “Long intergenic noncoding RNAs: new epigenetic players in human primary lymphocytes plasticity” (*Corporate Partnership Programme Fellowship EMBO|EMBL Travel grant*)

X National Congress of the Italian Society of Immunology, Clinical Immunology and Allergology (25-28 May 2016, Abano Terme) Oral presentation: “Long noncoding RNAs: new players in plasticity and new therapeutic opportunities in human immune system”

EMBO | EMBL Symposium: “The Non-Coding Genome 2015” (18-21 October 2015, Heidelberg) Poster presentation: “Identification of long intergenic noncoding RNAs as modulators of plasticity in circulating and tumor-associated human lymphocytes” (*Corporate Partnership Programme (CPP) Fellowship EMBO|EMBL Travel grant*)

SIBBM 2015 Seminar: “From genomes to functions” (1-3 July 2015, Turin) Poster presentation: “Long intergenic non-coding RNAs: novel drivers of human lymphocyte differentiation” (*SIBBM Travel award for poster presentation*)

V Milan Meets Immunology Meeting (18 February 2015, Milan) Oral presentation: “LincRNAs landscape in human lymphocytes highlights regulation of T cell differentiation by linc-MAF-4”

FISV XIII Congress (24-27 September 2014, Pisa) Oral presentation: “LincRNAs landscape in human lymphocytes highlights regulation of T cell differentiation by linc-MAF-4”

MiChroNetwork Meeting (29 October 2013, Milan) Oral presentation: “Deciphering the epigenetic role of linc-MAF in CD4⁺ T cells differentiation”

EMBO | EMBL Symposium: “The Non-Coding Genome” (09-12 October, 2013, Heidelberg) Poster presentation: “De novo identification of lincRNAs in human lymphocyte subsets”

Laboratory skills Molecular biology: RNA and DNA extraction and purification; RNA-seq; *in vitro* transcription; RNA capturing techniques (RIP, RAP, ChIRP); RNA pull-down assays; PCR and RT-qPCR; *S. cerevisiae* and *E. coli* culture and manipulation; cloning; cell fractionation; CRISPR-Cas9 site-directed mutagenesis; chromatin-immunoprecipitation (ChIP and ChIP-seq); ATAC-seq; chromosome-conformation capture (3C, 4C); DNA-FISH; RNA-FISH; immuno-fluorescence; BRET-assay; SDS-page; western-blot.

Cell-biology: human lymphocytes purification from blood; expansion, maintenance and differentiation of human primary lymphocytes and cell lines in cultures; transfection; nucleofection; transduction; FACS staining and basic analysis.

In vivo: FELASA certificate category B (core modules and additional general topics listed in 2010/63/EU and TierSchVersV(D), rodent module and basic mouse module), including hands-on training and verification of skills by trainers, mouse handling, breeding, genotyping and embryo dissection.

Mentoring Alessia Dardanelli, PhD student in Experimental Medicine and Medical Biotechnologies (University of Milan)

Alessandra Albertelli, Master student in Medical Biotechnologies and Molecular Medicine (University of Milan)

Giuseppa Grasso, Bachelor student in Industrial Biotechnologies (University of Milano-Bicocca)

Lucrezia Ferme, Bachelor student in Medical Biotechnology (University of Milan)