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Citizenship: Italian

Date of birth: December 17, 1977

POSITIONS AND EDUCATION

2024-Now	Director Max Planck Institute for Immunology and Epigenetics , Freiburg, Germany Department of Developmental Epigenetics
2014-2024	Group Leader Max Planck Institute for Immunology and Epigenetics , Freiburg, Germany Laboratory of “Epigenetics of early development, reproductive health and ageing”
2009-2013	HFSP and EMBO Post Doctorate training IGH-CNRS , Montpellier, France Laboratory of Chromatin and Cell Biology, Giacomo Cavalli Lab
2007-2009	Post Doctorate training Rockefeller University , New York, USA LMU/Gene-Center , Munich, Germany Laboratory of Developmental Neurogenetics, Ulrike Gaul Lab
2004-2007	PhD program Rockefeller University , New York, USA Advisors: Professor Ulrike Gaul, PhD, New York, USA Professor Riccardo Cortese*, MD-PhD, Rome, Italy Laboratory of Developmental Neurogenetics, Ulrike Gaul Lab * This work was a collaboration between The Rockefeller University and the degree-granting institution, the University La Sapienza, Rome, Italy.
2002-2004	Researcher Merck & Co. I.R.B.M. , Rome, Italy Laboratory of Molecular Biology, Riccardo Cortese Lab
2000-2002	Master Research University Federico II of Naples, Italy “Stazione Zoologica A. Dohrn” Naples, Italy Laboratory of Genetics, Roberto di Lauro Lab, supervision Mario De Felice

SUMMARY OF PUBLICATION RECORD

I have published 22 peer-reviewed papers (16 original publications, 6 reviews and methods), 7 of them in Nature/Cell/Science. My work has been cited ~ 11000 times, with three 1000+ and three 100+ citation papers (Source Google Scholar Citations). More than 3000 citations were attracted by publications where I am the main author. This highlights the impact of my own work as well as my propensity to collaborate.

PEER-REVIEWED PUBLICATIONS

- 2025 Chromatin landscape at cis-regulatory elements orchestrates cell fate decisions in early embryogenesis
Cardamone F., Piva A., Löser E., Eichenberger B., Romero-Mulero M.C., Zenk F., Shields E.J., Cabezas-Wallscheid N., Bonasio R., Tiana G., Zhan Y., **Iovino N.**
Nature Comm. 2025, March, 3007
- 2024 Inheritance of H3K9 methylation regulates genome architecture in Drosophila early embryos
Atinbayeva N., Valent I., Zenk F., Loeser E., Rauer M., Herur S., Quarato P., Pyrowolakis G., Gomez-Auli A., Mittler G., Cecere G., Erhardt S., Tiana G., Zhan Y., **Iovino N.**
Embo Journal, 2024 Jul;43(13)
- 2023 CBP and Gcn5 drive zygotic genome activation independently of their catalytic activity.
Ciabrelli F., Rabbani L., Cardamone F., Zenk F., Löser E., Schächtle M., Loubiere V. and **Iovino N.**
Science Advances 9, Issue 16 (2023)
- 2021 Histone variant H2A.Z regulates zygotic genome activation.
Ibarra-Morales D., Rauer M., Quarato P., Rabbani L., Zenk F., Schulte-Sasse M., Cecere G., **Iovino N.**
Nature Communications 12, Article number: 7002 (2021)
- 2021 HP1 drives de novo 3D genome reorganization in early Drosophila embryos.
Zenk F., Zhan Y., Kos P., Löser E., Atinbayeva N., Schächtle M., Tiana G., Giorgetti L., **Iovino N.**
Nature 593, 289–293
- 2021 Transovarial transmission of a core virome in the Chagas disease vector Rhodnius prolixus.
Brito TF, Coelho VL, Cardoso MA, Brito IAA, Berni MA, Zenk FL, **Iovino N**, Pane A.
PLoS Pathog. 2021 Aug 18;17(8)
- 2021 Intergenerationally Maintained Histone H4 Lysine 16 Acetylation Is Instructive for Future Gene Activation.
Samata M, Alexiadis A, Richard G, Georgiev P, Nuebler J, Kulkarni T, Renschler G, Basilicata MF, Zenk FL, Shvedunova M, Semplicio G, Mirny L, **Iovino N**, Akhtar A.
Cell 2020 Jul 9;182(1)
- 2018 Functions and mechanisms of epigenetic inheritance in animals.
Skvortsova K, **Iovino N**, Bogdanović O. (IN, co-corresponding author)
Nat Rev Mol Cell Biol. 2018 Dec;19(12)
- 2017 Germ line–inherited H3K27me3 restricts enhancer function during maternal-to-zygotic transition.

- Zenk F., Loeser E., Schiavo R., Kilpert F., Bogdanović O., **Iovino N.**
Science 357, 212-216
- 2017 KDM4 Inhibition Targets Breast Cancer Stem-like Cells.
Metzger E, Stepputtis SS, Strietz J, Preca BT, Urban S, Willmann D, Allen A, Zenk F, **Iovino N**, Bronsert P, Proske et al., Schüle R.
Cancer Res. 2017 Nov 1;77(21)
- 2017 Cellular analysis of the action of epigenetic drugs and probes.
Hau M, Zenk F, Ganesan A, **Iovino N**, Jung M.
Epigenetics 2017 May 4;12(5)
- 2017 Chromatin Preparation and Chromatin Immuno-precipitation from Drosophila Embryos.
Löser E, Latreille D, **Iovino N.**
Methods Mol Biol. 2016;1480:23-36.
- 2014 Paternal diet defines offspring chromatin state and intergenerational obesity.
Öst A, Lempradl A, Casas E, Weigert M, Tiko T, Deniz M, Pantano L, Boenisch U, Itskov PM, Stoeckius M, Ruf M, Rajewsky N, Reuter G, **Iovino N**, Ribeiro C, Alenius M, Heyne S, Vavouri T, Pospisilik JA.
Cell 2014 Dec 4;159(6)
- 2014 Drosophila epigenome reorganization during oocyte differentiation and early embryogenesis.
Iovino N.
Brief Funct. Genomics 2014 May;13(3)
- 2013 PRC2 controls Drosophila oocyte cell fate by repressing cell cycle genes.
Iovino N, Ciabrelli F, Cavalli G.
Developmental Cell 26(4), 431-9
- 2011 Trithorax group proteins: switching genes on and keeping them active.
Schuettengruber B, Martinez AM, **Iovino N**, Cavalli G.
Nat Rev Mol Cell Biol. 2011 Nov 23;12(12)
- 2011 Rolling ES cells down the Waddington landscape with Oct4 and Sox2.
Iovino N, Cavalli G.
Cell 2011 Jun 10;145(6)
- 2009 miR-184 has multiple roles in Drosophila female germline development.
Iovino N, Pane A, Gaul U.
Developmental Cell 17(1), 123-33
- 2007 The role of site accessibility in microRNA target recognition.
Kertesz M*, **Iovino N***, Unnerstall U, Gaul U, Segal E.
Nature Genetics 39(10), 1278-84. (* equally contributed to this work.)
- 2007 A mammalian microRNA expression atlas based on small RNA library sequencing.
Landgraf P, Rusu M, Sheridan R, Sewer A, **Iovino N**, Aravin A, Pfeffer S, Rice A, Kamphorst AO, Landthaler M, Lin C, Socci ND, Hermida L, Fulci V, Chiaretti S, Foà R, Schliwka J, Fuchs U, Novosel A, Müller RU, Schermer B, Bissels U, Inman J, Phan Q, Chien M, Weir DB, Choksi R, De Vita G, Frezzetti D, Trompeter HI,

Hornung V, Teng G, Hartmann G, Palkovits M, Di Lauro R, Wernet P, Macino G, Rogler CE, Nagle JW, Ju J, Papavasiliou FN, Benzing T, Lichter P, Tam W, Brownstein MJ, Bosio A, Borkhardt A, Russo JJ, Sander C, Zavolan M, Tuschl T. **Cell** 2007 Jun 29;129(7)

- 2007 A novel class of small RNAs bind to MILI protein in mouse testes.
Aravin A, Gaidatzis D, Pfeffer S, Lagos-Quintana M, Landgraf P, **Iovino N**, Morris P, Brownstein MJ, Kuramochi-Miyagawa S, Nakano T, Chien M, Russo JJ, Ju J, Sheridan R, Sander C, Zavolan M, Tuschl T.
Nature 2006 Jul 13;442(7099)
- 2005 A loxP-containing pol II promoter for RNA interference is reversibly regulated by Cre recombinase.
Iovino N, Denti MA, Bozzoni I, Cortese R.
RNA Biol. 2005 Jul-Sep;2(3)
- 2005 Tagging genes with cassette-exchange sites.
Cobellis G, Nicolaus G, Iovino M, Romito A, Marra E, Barbarisi M, Sardiello M, Di Giorgio FP, **Iovino N**, Zollo M, Ballabio A, Cortese R.
Nucleic Acids Res. 2005 Mar 1;33(4)

TEACHING

2021	Quantitative genomics, full semester teaching, University College, Freiburg
2018	Chromatin and the Environment, Spetses summer school
2018-2020	Human physiology, full semester teaching, University College, Freiburg
2018-2020	Genetics and Epigenetics, full semester teaching, University College, Freiburg
2017-2020	Developmental Biology, full semester teaching, University College, Freiburg
2014-2020	Scientific Methods and Logic Course, Epigenetics, MPI, Freiburg
2015-2020	Epigenetics Lecture Series, Epigenetics, Uniklinik, Freiburg
2014-2020	Genetics and Developmental Biology, Epigenetics, University Freiburg

PRIZES AND AWARDS

2020-2024	DFG-CRC992 Two PhD-Students grant
2019-2024	ERC Consolidator grant
2019-2024	CIBSS- DFG One PhD-Students grant
2018-2021	EMBO YIP Young Investigators Programme
2016-2020	DFG-CRC992 Two PhD-Students grant
2011-2013	HFSP Human Frontier Science Program
2010-2011	EMBO Long Term Fellowship

2004-2015	EMBO Short Term Fellowship
2003-2007	Merck & Co PhD fellowship
1998-2002	University Federico II, Naples, Italy Studentship

REVIEWING for JOURNALS and FUNDING AGENCIES

I have reviewed for paper Cell, Science and Nature groups.

I have reviewed grant proposals for the German DFG agency and the French ANR agency.

MENTORING

I have mentored eight Master students.

I have mentored six Ph.D. students.

I have mentored four Postdocs.

INVITED and ORGANISED TALKS

2025	Invited speaker at Keystone Symposia on Epigenetics & Chromatin Architecture
2024	Invited speaker at the 5th Danube Conference on Epigenetics
2023	Organizer EMBL Conference: Chromatin and Epigenetics
2021	Organizer EMBL Conference: Chromatin and Epigenetics
2018	Invited speaker at Spetses Summer School on Chromatin, Greece
2018	Invited speaker at Developmental Programming and Reprogramming, Munich
2017	Invited speaker at Environmental Epigenetics conference, Kaust, Saudi Arabia
2017	Selected talk at EMBO meeting: Chromatin and Epigenetics, Heidelberg
2017	Selected talk at EMBO meeting: Awakening of the genome, Dresden, Germany
2017	Selected talk at Chromatin and Epigenetics meeting, Munich, Germany
2016	Biomedical Center Munich, Germany
2016	IFOM-IEO, Milan, Italy
2016	Selected talk at Epigenetics Meeting, Freiburg, Germany
2016	FMI, Basel, Switzerland
2015	University Freiburg Medical Centre, Germany
2014	Selected talk at the 4 th Barcelona Chromatin Club meeting, Barcelona, Spain
2013	MRC Clinical Science Center, Imperial College London, London, UK
2013	Institut Curie, Genetics and Developmental Biology Department, Paris, France
2013	IBV, Nice, France
2013	LBCMCP, Toulouse, France
2013	IGFL, Lyon, France
2012	Selected talk at the French Fly Meeting, Clermont-Ferrand, France
2008	Selected talk at the 49 th Annual Drosophila Research Conference, San Diego