

**Name** Bodega, Beatrice  
**ORCID ID** 0000-0003-0527-9234  
**Born** February 11th 1980  
**Civil status** Married, with one child (Leonardo, born May 7th 2016)  
**Nationality** Italian  
**Web site** [https://ingm.org/en/bodega\\_lab\\_eng/](https://ingm.org/en/bodega_lab_eng/)

**Current Positions:** *Associate Professor of Molecular Biology*  
Department of Biosciences,  
Università degli Studi di Milano, Milan, Italy.

**Group Leader**

Head of Genome Biology laboratory  
Fondazione Istituto Nazionale di Genetica Molecolare (INGM) “Romeo ed Enrica Invernizzi”, Milan, Italy.

**Research interest statement:** For 20 years I have been working on understanding the molecular function evolutionarily acquired by non-coding DNA in the human genome, in particular in the modulation of cellular processes (i.e. differentiation, homeostasis, plasticity) and how this portion of the genome modulates the response to the environment, the adaptation and progression of human diseases. My laboratory combines molecular, genomic and advanced imaging approaches with computational biology to describe the molecular mechanisms of DNA repetitive sequences, particularly the Transposable Elements, in human biology with a strong focus on translational aspects in biomedical research.

**Previous Positions**

2014 – 2019 Junior Group Leader, Head of Genome Biology laboratory, INGM, Milan, Italy.  
2009 – 2013 Senior Postdoc in Prof. Valerio Orlando’s lab, Fondazione Santa Lucia, Rome, Italy.  
2006 – 2008 Postdoc in Prof. Enrico Ginelli’s lab, University of Milan, Milan, Italy.  
2003 – 2006 PhD student in Prof. Enrico Ginelli’s lab, University of Milan, Milan, Italy.  
2001 – 2003 Undergraduate student in Prof. Anna Marozzi’s lab, University of Milan, Milan, Italy.

March 2016 – August 2016 Maternity Leave

**Education**

2006 Ph.D. in Medical Biotechnology applied to Medical Sciences, Medicine and Surgery faculty, Department of Biology and Genetics for Medical Sciences, University of Milan, Italy.  
*Supervisor: Prof. Enrico Ginelli*  
2003 Master degree in Medical Biotechnology, Medicine and Surgery faculty, Department of Biology and Genetics for Medical Sciences, University of Milan, Italy. *Supervisor: Prof. Anna Marozzi.*

**Other professional activities**

2022 Founding partner of the start-up **T-One Therapeutics** S.r.l., ([www.tonetx.eu](http://www.tonetx.eu)), a company for the preclinical development of new RNA therapy strategies for the treatment of tumor and autoimmune diseases.

## Honours and Awards

2018 – 2024	National Scientific Proficiency for Associate Professorship in Cellular Biology and Comparative Anatomy; Clinical Biochemistry and Molecular Biology, Italian Ministry of Research and University (MIUR).
2017 – 2023	National Scientific Proficiency for Associate Professorship in Molecular Biology; Applied Biology; Genetics, Italian Ministry of Research and University (MIUR).
2010 – 2012	Postdoctoral fellowship funded by AFM Telethon French foundation.
2006 – 2010	Research Assistant fellowship at University of Milan, Milan, Italy.
2003 – 2006	National PhD fellowship at University of Milan, Milan, Italy.
2008	Chiara D’Onofro “Young” Award.
2008	European Society of Human Genetics Young Scientist Award.
2008	Nomination per Genomic Pioneers Award for outstanding contribution to the field of Genomics Human Genome Meeting (HGM) Hyderabad.

## Funded research grants

2020 – 2022	Fondazione Cariplo, Bando 2019, Unit-PI, 120.000 €.
2020 – 2022	Fondazione regionale ricerca biomedica (FRRB) - programmi di rete, seconda edizione, Bando 2018, Unit-PI, 562.000 €.
2020 – 2022	Ministero della Salute, Giovani Ricercatori, Bando 2018, PI, 450.000 €.
2017 – 2018	Fondazione Cariplo, Giovani Ricercatori, Bando 2015, Unit-PI, 80.000 €.
2015 – 2016	French Muscular Dystrophy association (AFM), Bando 2014, PI, 90.000 €.
2013 – 2018	Epigenomics National Flagship Project (EPIGEN), PI, 300.000 €.
2013 – 2016	Ministero della Salute, Giovani Ricercatori, Bando 2011-2012, Unit-PI, 150.000€.

## Institutional responsibilities

2021 – to date	Coordinator of the Bioinformatic Unit of INGM, Milan, Italy.
2014 – 2015	Technical Scientific Committee member for Italian Ministry of Health, Rome, Italy.
2004 – 2008	Responsible for the execution of paternity test analyses, Dept. of Biology and Genetics for Medical Sciences, University of Milan, Milan, Italy.

## Membership of Scientific Societies

2020 – to date	Fantom_6 Consortium Project, official collaborator (RIKEN Center, Yokohama, Japan)
2010 – 2016	Fantom_5 Consortium Project, official collaborator (RIKEN Center, Yokohama, Japan)
2008 – to date	SIBBM (Italian Society of Biophysics and Molecular Biology)

## Reviewing activities

*Reviewer for Scientific Journals:* Stem Cells, FEBS letters, Human Genetics, PLOS One, BMC Genomics, BMC Medical Genomics, Frontiers in Cellular Neuroscience, Science Signaling, Scientific Reports, JoVE, Genome Research, Genome Biology, Nature Communication, Science, Nature Genetics.

*Referee for Funding Agencies:* ANR, Agence Nationale de la recherche, France.

*Editor:* Capturing chromosome conformation, *Methods in Molecular Biology* (2020); Chromatin Traits in Human Diseases, *Frontiers in Cell and*

Developmental Biology (2019); Polycomb Group of proteins (PcG),  
Methods in Molecular Biology, (2016).

**Invited seminars in National/International Institutes**

1. TIGEM, Naples, Italy, July 2022 (Host Prof. Andrea Ballabio)
2. San Raffaele Hospital, Milan, Italy, September 2021 (Host Prof. Paolo Della Bona)
3. San Raffaele Hospital, Milan, Italy, July 2020 (Host Dr. Davide Mazza)
4. University of Milan, Milan, Italy, February 2020 (Host Prof. Marco Muzi Falconi)
5. Friedrich Miescher Institute (FMI) for Biomedical Research, Basel, Switzerland, December 2019 (Host Prof. Susan Gasser)
6. Riken OMICS Science Center, Yokohama, Japan, October 2019 (Host Dr. Piero Carninci)
7. Institute of Neuroscience, CNR, Milan, Italy, March 2019 (Host. Dr. Roberta Benfante)
8. University of Milan Bicocca, Milan, Italy, January 2018 (Host Prof. Raffaella Meneveri)
9. Humanitas University, Rozzano, Italy, October 2017 (Host Dr. Giulia Soldà)
10. Nerviano Medical Sciences, Nerviano, Italy, October 2017 (Host Dr. Anna Migliazza)
11. Istituto Italiano di Tecnologia (IIT), Genova, Italy, October 2016 (Host Prof. Stefano Gustincich)
12. Epigen Chromatin Seminar, Padova, Italy, July 2014 (Host Prof. Stefano Piccolo)
13. Epigen Chromatin Seminar, Palermo, Italy, June 2014 (Host Prof. Davide Corona)
14. University of Modena, Modena, Italy, May 2014 (Host Prof. Rossela Tupler)
15. University of Milan, Milan, Italy, January 2011 (Host Prof. Enrico Ginelli)
16. Fondazione IRCCS Istituto Neurologico C. Besta, Milan, Italy, January 2010 (Host Dr. Marina Mora)
17. University of Milan, Milan, Italy, March 2009 (Host Prof. Paolo Plevani)
18. University of Turin, Turin, Italy, February 2009 (Host Prof. Michele De Bortoli).

## Publications

Total number: 42

H-index: 17

Average IF: 11.024

Total IF: 429,93

Total Citations: 4367

1. Forastieri C, Italia M, Toffolo E, Romito E, Bonasoni MP, Ranzani V, [Bodega B](#), Rusconi F, Battaglioli E. Evolution increases primate brain complexity extending RbFOX1 splicing activity to LSD1 modulation. *J Neurosci*. 2022 42(18): 3689-3703.
2. Marasca F, Sinha S, Vadalà R, Polimeni B, Ranzani V, Paraboschi E.M, Burattin F.V., Ghilotti M., Crosti M., Negri M.L., Campagnoli S., Notarbartolo S., Sartore-Bianchi A, Salvatore Siena S, Prati D, Montini G., Viale G, Torre O, Harari S, Grifantini R, Soldà G, Biffo S, Abrignani A and [Bodega B](#). LINE1 are spliced in non-canonical transcript variants to regulate T cell quiescence and exhaustion. *Nat Genet*. 2022 54(2):180-193.
  - **Commented as news and views:** Nat Genet (2022) 54(3) 98-99. Lusic M, Mhlanga MM., Walking the LINEs hidden in the dark matter of the genome
3. Spreafico M, Cafora M, Bragato C, Capitano D, Marasca F, [Bodega B](#), De Palma C, Mora M, Gelfi C, Marozzi A, Pistocchi A. Targeting HDAC8 to ameliorate skeletal muscle differentiation in Duchenne muscular dystrophy. *Pharmacol Res*. 2021 170:105750.
4. Grapotte M, Saraswat M, Bessière C, Menichelli C, Ramilowski JA, Severin J, Hayashizaki Y, Itoh M, Tagami M, Murata M, Kojima-Ishiyama M, Noma S, Noguchi S, Kasukawa T, Hasegawa A, Suzuki H, Nishiyori-Sueki H, Frith MC; [Bodega B](#), et al., [Fantom\_5 Consortium] Discovery of widespread transcription initiation at microsatellites predictable by sequence-based deep neural network. *Nat Commun* 2021 2:12(1):3297
5. Fontana C, Marasca F, Provitera L, Mancinelli S, Pesenti N, Sinha S, Passera S, Abrignani S, Mosca F, Lodato S, [Bodega B\\*](#), Fumagalli M. Early Intervention in preterm infants modulates LINE-1 promoter methylation and neurodevelopment. *BMC Med*. 2021 5;19(1):42.  
\* Co-last and Co-corresponding author
6. Gregoretti F, Cortesi A, Oliva G, [Bodega B](#), Antonelli L. An Algorithm for the Analysis of the 3D Spatial Organization of the Genome. *Methods Mol Biol*. 2020 2157:299-320.
7. Marasca F, Cortesi A, [Bodega B](#). 3D COMBO chrRNA-DNA-Immuno FISH” *Methods Mol Biol*, 2020 2157:281-297.
8. Rovina D, La Vecchia M, Cortesi A, Fontana L, Pesant M, Maitz S, Tabano S, [Bodega B](#), Miozzo M, Sirchia SM. Profound Alterations of the Chromatin Architecture at Chromosome 11p15.5 in Cells From Beckwith-Wiedemann and Silver-Russell Syndromes Patients. *Sci Rep*. 2020 19;10(1):8275.
9. Marasca F, Gasparotto E, Polimeni B, Vadalà R, Ranzani V, [Bodega B](#). The Sophisticated Transcriptional Response Governed by Transposable Elements in Human Health and Disease *Int J Mol Sci*. 2020 30;21(9):3201.
10. Marasca F, Cortesi A, Manganaro L, [Bodega B](#). 3D Multicolor DNA FISH Tool to Study Nuclear Architecture in Human Primary Cells. *J Vis Exp*. 2020 25;(155).

11. Bianchi A, Mozzetta C, Pegoli G, Lucini F, Valsoni S, Rosti V, Petrini C, Cortesi A, Gregoret F, Antonelli L, Oliva G, De Bardi M, Rizzi R, [Bodega B](#), Pasini D, Ferrari F, Bearzi C, Lanzuolo C. Dysfunctional Polycomb Transcriptional Repression Contributes to Lamin A/C-dependent Muscular Dystrophy. *J Clin Invest*. 2020 May 1;130(5):2408-2421.
12. Cortesi A, Pesant M, Sinha S, Marasca M, Sala E, Gregoret F, Antonelli L, Oliva G, Chierighin C, Soldà G, [Bodega B](#). 4q-D4Z4 chromatin architecture regulates the transcription of muscle atrophic genes in Facioscapulohumeral muscular dystrophy. *Gen Res*. 2019 Jun;29(6):883-895
13. Mazzola M, Deforian G, Pezzotta A, Ferrari L, Fazio G, Bresciani E, Saitta C, Ferrari L, Fumagalli M, Parma M, Marasca F, [Bodega B](#), Riva P, Cotelli F, Biondi A, Marozzi A, Cazzaniga G, Pistocchi A. NIPBL: a new player in myeloid cell differentiation. *Haematol*. 2019 Jul;104(7):1332-1341
14. Marasca F, [Bodega B\\*](#), Orlando V. How Polycomb-mediated cell memory deals with a changing environment *BioEssays*, 2018 Apr;40(4):e1700137  
\* Co-last and Co-corresponding author
15. Noguchi S, Arakawa T, Fukuda S, Furuno M, Hasegawa A, Hori F, Ishikawa-Kato S, Kaida K, Kaiho A, Kanamori-Katayama M, Kawashima T, Kojima M, Kubosaki A, Manabe RI, Murata M, Nagao-Sato S, Nakazato K, Ninomiya N, Nishiyori-Sueki H, Noma S, Saijyo E, Saka A, Sakai M, Simon C, Suzuki N, Tagami M, Watanabe S, Yoshida S, Arner P, Axton RA, Babina M, Baillie JK, Barnett TC, Beckhouse AG, Blumenthal A, [Bodega B](#), et al., [Fantom\_5 Consortium] FANTOM5 CAGE Profiles of Human and Mouse Samples. *Sci Data*. 2017 Aug 29;4:170112
16. [Bodega B\\*](#), Marasca F, Ranzani V, Cherubini A, Della Valle F, Neguembor MV, Wassef M, Zippo A, Lanzuolo C, Pagani M, Orlando V. A cytosolic Ezh1 isoform modulates a PRC2-Ezh1 epigenetic adaptive response in postmitotic cells *Nat Struct Mol Biol*. 2017 May;24(5):444-452  
\* Co-Corresponding author
  - **Commented as news and views:** *Nat Struct Mol Biol* (2017) 24(5) 435-437. Brand M., Dilworth J., Splicing of Ezh1 gets muscle out of stressful situations
  - **Research highlight:** *Nat Rev Mol Cell Biol* (2017) 18(5):276-277. Zlotorynski E. Cytosolic Ezh1 muscles PRC2 out of the nucleus
17. Cortesi A, [Bodega B](#). Chromosome Conformation Capture in Primary Human Cells. *Methods Mol Biol*. 2016;1480:213-21.
18. Hurst LD, Ghanbarian AT, Forrest AR, Kawaji H, Rehli M, Baillie K, de Hoon M, Haberle V, Lassmann T, Kulakovskiy IV, Lizio M, Itoh M, Andersson R, Mungall CJ, Meehan TF, Schmeier S, Bertin N, Jørgensen M, Dimont E, Arner E, Schmidl C, Schaefer U, Medvedeva YA, Plessy C, Vitezic M, Severin J, Semple CA, Ishizu Y, Young RS, Francescato M, Alam I, Albanese D, Altschuler GM, Arakawa T, Archer JAC, Arner P, Babina M, Baker S, Balwierz PJ, Beckhouse AG, Pradhan-Bhatt S, Blake JA, Blumenthal A, [Bodega B](#), et al., The Constrained Maximal Expression Level Owing to Haploidy Shapes Gene Content on the Mammalian X Chromosome. *PLoS Biol*. 2015 Dec 18;13(12):e1002315
19. Carbajo D, Magi S, Itoh M, Kawaji H, Lassmann T, Arner E, Forrest AR, Carninci P, Hayashizaki Y, DaubCO, Rehli M, Baillie J, de Hoon MJ, Haberle V, Lassmann T, Kulakovskiy IV, Lizio M, Itoh M, Andersson R, Mungall CJ, Meehan TF, Schmeier S, Bertin N, Jørgensen M, Dimont E, Arner E, Schmidl C, Schaefer U, Medvedeva YA, Plessy C, Vitezic M, Severin J, Semple CA, Ishizu Y, Francescato M, Alam I, Albanese D, Altschuler GM, Archer JA, Arner P, Babina M, Baker S, Balwierz PJ, Beckhouse AG, Pradhan-Bhatt S, Blake JA, Blumenthal A, [Bodega B](#), et al., Application of Gene Expression Trajectories Initiated from ErbB Receptor Activation Highlights the Dynamics of Divergent Promoter Usage. *PLoS One*. 2015 Dec 14;10(12):e0144176.

20. Cesarini E, Mozzetta C, Marullo F, Gregoret F, Gargiulo A, Columbaro M, Cortesi A, Antonelli L, Di Pelino S, Squarzone S, Palacios D, Zippo A, [Bodega B](#), Oliva G, Lanzaolo C. Lamin A/C sustains PcG protein architecture, maintaining transcriptional repression at target genes. *J Cell Biol.* 2015 Nov 9;211(3):533-51
21. Zanconato F, Forcato M, Battilana G, Azzolin L, Quaranta E, [Bodega B](#), Rosato A, Bicciato S, Cordenonsi M, Piccolo S. Genome-wide association between YAP/TAZ/TEAD and AP-1 at enhancers drives oncogenic growth. *Nat Cell Biol.* 2015 Sep;17(9):1218-27
22. Yoshihara M, Ohmiya H, Hara S, Kawasaki S, Hayashizaki Y, Forrest AR, Kawaji H, Rehli M, Baillie J, de Hoon MJ, Haberle V, Lassmann T, Kulakovskiy IV, Lizio M, Itoh M, Andersson R, Mungall CJ, Meehan TF, Schmeier S, Bertin N, Jørgensen M, Dimont E, Arner E, Schmidl C, Schaefer U, Medvedeva YA, Plessy C, Vitezic M, Severin J, Semple CA, Ishizu Y, Francescato M, Alam I, Albanese D, Altschuler GM, Archer JA, Arner P, Babina M, Baker S, Balwierz PJ, Beckhouse AG, Pradhan-Bhatt S, Blake JA, Blumenthal A, [Bodega B](#), et al., Discovery of molecular markers to discriminate corneal endothelial cells in the human body. *PLoS One.* 2015 Mar 25;10(3):e0117581
23. Arner E., Daub C., Vitting-Seerup K., Andersson R., Lilje B., Drablos F., Lennartsson A., Ronnerblad M., Hrydziszko O., Vitezic M., Freeman T., Alhendi A., Arner P., Axton R., Baillie K., Beckhouse A., [Bodega B](#). et al., [Fantom\_5 Consortium] Enhancers lead waves of coordinated transcription in transitioning mammalian cells. *Science.* 2015 Feb 27;347(6225):1010-4
24. Ranzani V., Rossetti G., Panzeri I., Arrigoni A., Bonnal R., Curti S., Gruarin P., Provasi E., Sugliano E., Marconi M., De Francesco R., Geginat J., [Bodega B](#)., Abrignani S., Pagani M. LincRNAs landscape in human lymphocytes highlights regulation of T cell differentiation by linc-MAF-4. *Nat Immunol.* 2015 Mar;16(3):318-325
25. Liang C; FANTOM Consortium, et al, Alam I, Albanese D, Altschuler G, Andersson R, Arakawa T, Archer J, Arner E, Arner P, Babina M, Baillie K, Bajic V, Baker S, Balic A, Balwierz P, Beckhouse A, Bertin N, Blake JA, Blumenthal A, [Bodega B](#), et al., The statistical geometry of transcriptome divergence in cell-type evolution and cancer. *Nat Commun.* 2015 Jan 14;6:6066
26. [Bodega B\\*](#), Orlando V. Repetitive Elements dynamics in cell identity programming, maintenance and disease. *Curr Opin Cell Biol.* 2014 Dec;31:67-73 \* Co-Corresponding author
27. Hasegawa Y, Tang D, Takahashi N, Hayashizaki Y, Forrest AR, Kawaji H, Rehli M, Baillie J, de Hoon MJ, Haberle V, Lassmann T, Kulakovskiy IV, Lizio M, Itoh M, Andersson R, Mungall CJ, Meehan TF, Schmeier S, Bertin N, Jørgensen M, Dimont E, Arner E, Schmidl C, Schaefer U, Medvedeva YA, Plessy C, Vitezic M, Severin J, Semple CA, Ishizu Y, Young RS, Francescato M, Alam I, Albanese D, Altschuler GM, Arakawa T, Archer JA, Arner P, Babina M, Baker S, Balwierz PJ, Beckhouse AG, Pradhan-Bhatt S, Blake JA, Blumenthal A, [Bodega B](#), et al., CCL2 enhances pluripotency of human induced pluripotent stem cells by activating hypoxia related genes. *Sci Rep.* 2014 Jun 24;4:5228.
28. Morikawa H, Ohkura N, Vandenbon A, Itoh M, Nagao-Sato S, Kawaji H, Lassmann T, Carninci P, Hayashizaki Y, Forrest AR, Standley DM, Date H, Sakaguchi S, Kawaji H, Rehli M, Baillie JK, de Hoon MJ, Haberle V, Lassmann T, Kulakovskiy IV, Lizio M, Itoh M, Andersson R, Mungall CJ, Meehan TF, Schmeier S, Bertin N, Jørgensen M, Dimont E, Arner E, Schmidl C, Schaefer U, Medvedeva YA, Plessy C, Vitezic M, Severin J, Semple CA, Ishizu Y, Francescato M, Alam I, Albanese D, Altschuler GM, Archer JA, Arner P, Babina M, Baker S, Balwierz PJ, Beckhouse

- AG, Pradhan-Bhatt S, Blake JA, Blumenthal A, [Bodega B](#), et al., Differential roles of epigenetic changes and Foxp3 expression in regulatory T cell-specific transcriptional regulation. *Proc Natl Acad Sci U S A*. 2014 Apr 8;111(14):5289-94
29. Arner E, Forrest AR, Ehlund A, Mejhert N, Itoh M, Kawaji H, Lassmann T, Laurencikiene J, Rydén M, Arner P, Rehli M, Baillie J, de Hoon MJ, Haberle V, Kulakovskiy IV, Lizio M, Itoh M, Andersson R, Mungall CJ, Meehan TF, Schmeier S, Bertin N, Jørgensen M, Dimont E, Arner E, Schmidl C, Schaefer U, Medvedeva YA, Plessy C, Vitezic M, Severin J, Semple CA, Ishizu Y, Francescato M, Alam I, Albanese D, Altschuler GM, Archer JA, Arner P, Babina M, Baker S, Balwierz PJ, Beckhouse AG, Pradhan-Bhatt S, Blake JA, Blumenthal A, [Bodega B](#), et al., Ceruloplasmin is a novel adipokine which is overexpressed in adipose tissue of obese subjects and in obesity-associated cancer cells. *PLoS One*. 2014 Mar 27;9(3):e80274.
30. Forrest A, Kawaji H, Rehli M, Baillie J, de Hoon M, Haberle V, Lassmann T, Kulakovskiy I, Lizio M, Itoh M, Andersson A, Mungall C, Meehan T, Freeman T, Schmeier S, Bertin N, Jørgensen M, Dimont E, Arner E, Schaefer U, Medvedeva Y, Taylor M, Francescato F, Vitezic M, Severin J, Semple C, Ishizu Y, Kaiho A, Saka A, Hasegawa H, Knox A, Mackay-Sim A, Edge A, Bonetti A, Diehl A, Favorov A, Meynert A, Saxena A, Joshi A, Califano A, Lennartsson A, Gibson A, Kwon A, Schwegmann A, Beckhouse A, Mathelier A, Blumenthal A, Sajantila A, Pain A, Kasianov A, Kubosaki A, Deplancke B, [Bodega B](#), et al., [Fantom\_5 Consortium] A promoter level mammalian expression atlas. *Nature*. 2014 Mar 27;507(7493):462-70
31. Andersson R, Gebhard C, Miguel-Escalada I, Hoof I, Bornholdt J, Boyd M, Chen Y, Zhao X, Schmidl C, Suzuki T, Ntini E, Arner E, Valen E, Li K, Schwarzfischer L, Glatz D, Raithel J, Lilje B, Rapin N, Bagger FO, Jørgensen M, Andersen PR, Bertin N, Rackham O, Burroughs AM, Baillie JK, Ishizu Y, Shimizu Y, Furuhashi E, Maeda S, Negishi Y, Mungall CJ, Meehan TF, Lassmann T, Itoh M, Kawaji H, Kondo N, Kawai J, Lennartsson A, Daub CO, Heutink P, Hume DA, Jensen TH, Suzuki H, Hayashizaki Y, Müller F; FANTOM Consortium, Forrest AR, Carninci P, Rehli M, Sandelin A, Kawaji H, Baillie JK, de Hoon MJ, Haberle V, Lassmann T, Kulakovskiy IV, Lizio M, Itoh M, Andersson R, Mungall CJ, Meehan TF, Schmeier S, Bertin N, Jørgensen M, Dimont E, Arner E, Schmid C, Schaefer U, Medvedeva YA, Plessy C, Vitezic M, Severin J, Semple CA, Ishizu Y, Young RS, Francescato M, Alam I, Albanese D, Altschuler GM, Arakawa T, Archer JA, Arner P, Babina M, Rennie S, Balwierz PJ, Beckhouse AG, Pradhan-Bhatt S, Blake JA, Blumenthal A, [Bodega B](#), et al., [Fantom\_5 Consortium] An atlas of active enhancers across human cell type and tissues. *Nature*. 2014 Mar 27;507(7493):455-461
32. Giussani M, Cardone MF, [Bodega B](#), Ginelli E, Meneveri R. Evolutionary history of linked D4Z4 and Beta satellite clusters at the FSHD locus (4q35). *Genomics*. 2012 Nov;100(5):289-96
33. Cabisianca DS, Casa V, [Bodega B](#), Xynos A, Ginelli E, Tanaka Y, Gabellini D. A long ncRNA links copy number variation to a polycomb/trithorax epigenetic switch in FSHD muscular dystrophy. *Cell*. 2012 May 11;149(4):819-31.
34. Stojic L\*, Jasencakova Z\*, Prezioso C\*, Stutzer A, [Bodega B](#), Pasini D, Klingberg R, Mozzetta C, Margueron R, Puri PL, Schwarzer D, Helin K, Fischle W, Orlando V. Chromatin regulated interchange between PRC2-Ezh2 and PRC2-Ezh1 complexes controls Myogenin activation in skeletal muscle cells. *Epigenetics Chromatin*. 2011 Sep 5;4:16
35. Cheli S, François S, [Bodega B](#), Ferrari F, Tenedini E, Roncaglia E, Ferrari S, Ginelli E, Meneveri R. Expression Profiling of FSHD-1 and FSHD-2 Cells during Myogenic Differentiation Evidences Common and Distinctive Gene Dysregulation Patterns. *PLoS One*. 2011;6(6):e20966

36. **Bodega B\***, Di Capua G, Grasser F, Cheli S, Brunelli S, Mora M, Meneveri R, Marozzi A, Muller S, Battaglioli E, Ginelli E. Remodelling of the chromatin structure of the facioscapulohumeral muscular dystrophy (FSHD) locus and upregulation of FSHD-related gene 1 (FRG1) expression during human myogenic differentiation. (2009) *BMC Biology* 7:41. \* [Corresponding author](#)
37. **Bodega B**, Cardone MF, Muller S, Neusser M, Orzan F, Rossi E, Battaglioli E, Marozzi A, Riva P, Rocchi M, Meneveri R, Ginelli E. Evolutionary genomic remodelling of the human 4q subtelomere (4q35.2). *BMC Evol Biol.* 2007 Mar 14;7:39
38. Rossi E, Picozzi P, **Bodega B**, Lavazza C, Carlo-Stella C, Marozzi A, Ginelli E. Forced Expression of RDH10 Gene Retards Growth of HepG2 Cells. (2007) *Cancer Biol Ther.* 2007 Feb;6(2):238-44.
39. **Bodega B\***, Cardone MF, Rocchi M, Meneveri R, Marozzi A, Ginelli E. The boundary of human rDNA is constituted by evolutionary conserved low copy sequences. *Genomics.* 2006 Nov;88(5):564-71 \*[Corresponding author](#)
40. Di Pasquale E, Rossetti R, Marozzi A, **Bodega B**, Borgato S, Cavallo L, Einaudi S, Radetti G, Russo G, Sacco M, Wasniewska M, Cole T, Beck-Peccoz P, Nelson LM, Persani L. Identification of new variants of human BMP15 gene in a large cohort of women with premature ovarian failure. *J Clin Endocrinol Metab.* 2006 May;91(5):1976-9.
41. **Bodega B**, Bione S, Dalpra L, Toniolo D, Ornaghi F, Vegetti W, Ginelli E, Marozzi A. Influence of intermediate and uninterrupted FMR1 CGG expansions in premature ovarian failure manifestation. *Hum Reprod.* 2006 Apr;21(4):952-7.
42. **Bodega B**, Porta C, Crosignani PG, Ginelli E, Marozzi A. Mutations in the coding region of FOXL2 gene are not a major cause of POF. *Mol Hum Reprod.* 2004 Aug;10(8):555-7

*Chapters:*

- **Bodega B**, Pagani M. Epigenetica. “Genetica” (2018) EdiSES S.r.l., ISBN 978 88 7959 968 9

**Patents**

International patent application (**PCT/EP2021/070181**, «inhibitors of LINE1 and uses thereof»), inventor.

“Le dichiarazioni rese nel presente curriculum sono da ritenersi rilasciate ai sensi degli artt. 46 e 47 del D.P.R. 445/2000”

Milan, June 6<sup>th</sup> 2022

