

Curriculum Vitae: Ida Biunno

Education and training

	University of Milan	Diploma di Laurea	1982	Molecular Biology
	University of Pennsylvania	PhD	1980	Molecular Biochemistry
	Temple University	Bachelor of Science	1976	Biology and Psychology

Employment and research experience

1982-1988	Researcher National Cancer Institute of Milan, Experimental Oncology Unit (Milan, Italy)
1989- 1992	Visiting Scientist Salk Institute (La Jolla, USA)
1988- 2018	Senior Researcher National Research Council (Milan, Italy)
2008-present	Steering Committee Member of the European Huntington's Disease Network.
2008-	Adjunct Associate Professor Temple University Department of Biotechnology and Bio-innovation (Philadelphia, USA)
2005	Member of the EHDN- EUROPEAN REGISTRY steering committee
2018-present	Chief Scientific Officer of ISENET Biobanking Milano- Italy

Peer reviewed publications (2012-2020)

Sourcing the immune system to induce immunogenic cell death in Kras-colorectal cancer cells.

Cirone M, Lotti LV, Granato M, Renzo LD, **Biunno I**, Cattaneo M, Verginelli F, Vespa S, Davies D, Wells V, Mariani-Costantini R, Mallucci L.
Br J Cancer. 2019 Oct;121(9):768-775.

Association Between Toll-Like Receptor 4 (TLR4) and Triggering Receptor Expressed on Myeloid Cells 2 (TREM2) Genetic Variants and Clinical Progression of Huntington's Disease.

Vuono R, Kouli A, Legault EM, Chagnon L, Allinson KS, La Spada A; REGISTRY Investigators of the European Huntington's Disease Network, **Biunno I**, Barker RA, Drouin-Ouellet J.
Mov Disord. 2020 Mar;35(3):401-408.

SEL1L plays a major role in human malignant gliomas.

Mellai M, Annovazzi L, Boldorini R, Bertero L, Cassoni P, De Blasio P, **Biunno I**, Schiffer D.
J Pathol Clin Res. 2020 Jan;6(1):17-29. doi: 10.1002/cjp2.134. Epub 2019

Trehalose to cryopreserve human pluripotent stem cells.

Ntai A, La Spada A, De Blasio P, **Biunno I**.
Stem Cell Res. 2018; 31:102-112. doi: 10.1016/j.scr.2018.07.021. Epub 2018

Clinical and genetic characteristics of late-onset Huntington's disease.
Oosterloo M, Bijlsma EK, van Kuijk SM, Minkels F, de Die-Smulders CE; REGISTRY Investigators of the European Huntington's Disease Network; Registry Steering committee; Language coordinators; EHDN's associate site in Singapore.
Parkinsonism Relat Disord. 2018 Nov 29. pii: S1353-8020(18)30490-5. doi: 10.1016

Reduced Cancer Incidence in Huntington's Disease: Analysis in the Registry Study.
McNulty P, Pilcher R, Ramesh R, Necuinate R, Hughes A, Farewell D, Holmans P, Jones L; REGISTRY Investigators of the European Huntington's Disease Network.
J HuntingtonsDis. 2018;7(3):209-222. doi: 10.3233/JHD-170263

Sell1 knockdown negatively influences zebrafish embryos endothelium.
Barbieri A, Carra S, De Blasio P, Cotelli F, **Biunno I**.
J Cell Physiol. 2017 Dec 7. doi: 10.1002/jcp.26366.

Generation of Human-Induced Pluripotent Stem Cells from Wolfram Syndrome Type 2 Patients Bearing the c.103 + 1G>A CISD2 Mutation for Disease Modeling.
La Spada A, Ntai A, Genovese S, Rondinelli M, De Blasio P, **Biunno I**.
Stem Cells Dev. 2018 Jan 22. doi: 10.1089/scd.2017.0158. [Epub ahead of print]
PMID: 29239282

Cognitive decline in Huntington's disease expansion gene carriers
Verena Baake, Robert H.A.M. Reijntjes, Eve M. Dumas, Jennifer C. Thompson,
REGISTRY Investigators of the European Huntington's Disease Network, Raymund A.C. Roos PII: S0010-9452(17)30242-3 DOI: 10.1016/j.cortex.2017.07.017
Reference: CORTEX 2078

mSEL-1L deficiency affects vasculogenesis and neural stem cell lineage commitment. Cardano M., Diaferia G.R., Conti L., Baronchelli S., Barbieri A., De Blasio P., **Biunno I**. Jo. Cell Physiology, 2017 Aug 17. doi: 10.1002/jcp.26153

Identification of genetic variants associated with Huntington's disease progression: a genome-wide association study. Moss DJH, Pardiñas AF, Langbehn D, Lo K, Leavitt BR, Roos R, Durr A, Mead S; **TRACK-HD investigators; REGISTRY investigators**, Holmans P, Jones L, Tabrizi SJ. Lancet Neurol. 2017;16(9):701-711. doi: 10.1016/S1474-4422(17)30161-8.

Epigenetic and transcriptional modulation of WDR5, a chromatin remodeling protein, in Huntington's disease human induced pluripotent stem cell (hiPSC) model.
Baronchelli S, La Spada A, Ntai A, Barbieri A, Conforti P, Jotti GS, Redaelli S, Bentivegna A, De Blasio P, **Biunno I**. Mol Cell Neurosci. 2017, 82:46-57. doi: 10.1016/j.mcn.2017.04.013.

A review on research grade hiPSCs qualification and biobanking processes.
A. Ntai, S. Baronchelli, A. La Spada, A. Moles, A. Guffanti, P. De Blasio, **I Biunno**
Biobanking and Biopreservation, 2017;15(4):384-392. doi: 10.1089/bio.2016.0097

Cell Microarray (CMA) an alternative high-throughput platform to analyse hiPSC lines. La Spada A., Baronchelli S., Ottoboni L., Ruffini F., Martino G., De Blasio A., **Biunno I**. Journal Histochemistry Cytochemistry 2016; 64(12):739-751

Clinical manifestations of intermediate allele carriers in Huntington disease. Cubo E, Ramos-Arroyo MA, Martinez-Horta S, Martínez-Descalls A, Calvo S, Gil-Polo C; European HD Network. Neurology. 2016;87(6):571-8. doi: 10.1212/WNL.0000000000002944.

DNA Methylation Profiles of Human Pluripotent Stem Cells, a Versatile Tool to Investigate Cell Identity and Biosafety. Baronchelli S., **Biunno I**. *Insights in Stem Cells*, 2016

Investigating DNA methylation dynamics and safety of human embryonic stem cell differentiation toward striatal neurons. Baronchelli S, La Spada A, Conforti P, Redaelli S, Dalprà L, De Blasio P, Cattaneo E, **Biunno I**. *Stem Cells Dev*. 2015;24(20):2366-77

SEL1L SNP rs12435998, a predictor of glioblastoma survival and response to radio-chemotherapy. Mellai M, Cattaneo M, Storaci AM, Annovazzi L, Cassoni P, Melcarne A, De Blasio P, Schiffer D, **Biunno I**. *Oncotarget*. 2015;6(14):12452-67.

Additional congeners of the macrolide neamycin: structure revision and biological activity. Simone M, Maffioli SI, Tocchetti A, Tretter S, Cattaneo M, **Biunno I**, Gaspari E, Donadio S. *J Antibiot (Tokyo)*. 2015;68(6):406-8.

A miRNA Signature in Human Cord Blood Stem and Progenitor Cells as Potential Biomarker of Specific Acute Myeloid Leukemia Subtypes. Cattaneo M, Pelosi E, Castelli G, Cerio AM, D'Angiò A, Porretti L, Rebullà P, Pavesi L, Russo G, Giordano A, Turri J, Cicconi L, Lo-Coco F, Testa U, **Biunno I**. *J Cell Physiol*. 2015;230(8):1770-80.

Fibroblasts maintained in 3 dimensions show a better differentiation state and higher sensitivity to estrogens. Montani C, Steimberg N, Boniotti J, Biasiotto G, Zanella I, Diaferia G, **Biunno I**, Caimi L, Mazzoleni G, Di Lorenzo D. *Toxicol Appl Pharmacol*. 2014;280(3):421-33

BRCA1 point mutations in premenopausal breast cancer patients from Central Sudan. **Biunno I**, Aceto G, Awadelkarim KD, Morgano A, Elhaj A, Eltayeb EA, Abuidris DO, Elwali NE, Spinelli C, De Blasio P, Rovida E, Mariani-Costantini R. *Fam Cancer*. 2014;13(3):437-44.

SEL1L regulates adhesion, proliferation and secretion of insulin by affecting integrin signaling. Diaferia GR, Cirulli V., **Biunno I**. *PLoS One*. 2013 Nov 20;8(11):

Down-modulation of SEL1L, an unfolded protein response and endoplasmic reticulum-associated degradation protein, sensitizes glioma stem cells to the cytotoxic effect of valproic acid. Cattaneo M, Baronchelli S, Schiffer D, Mellai M, Caldera V, Saccani GJ, Dalpra L, Daga A, Orlandi R, DeBlasio P, **Biunno I**. *J Biol Chem*. 2014;289(5):2826-38

Riva G, Baronchelli S, Paoletta L, Butta V, **Biunno I**, Lavitrano ML, Dalprà L, Bentivegna A. In vitro anticancer drug test: A new method emerges from the model of glioma stem cells. *Toxicology Reports*. 2014;188–199

The V471A polymorphism in autophagy-related gene ATG7 modifies age at onset specifically in Italian Huntington disease patients. Metzger S, Walter C, Riess O, Roos RA, Nielsen JE, Craufurd D; REGISTRY Investigators of the **European Huntington's Disease Network**, Nguyen HP. *PLoS One*. 2013;8(7):e68951.

Suicidal ideation in a European Huntington's disease population. Hubers AA, van Duijn E, Roos RA, Craufurd D, Rickards H, Bernhard Landwehrmeyer G, van der Mast RC, Giltay EJ; **REGISTRY investigators of the European Huntington's Disease Network**. *J Affect Disord*. 2013;151(1):248-58.

Tissue microarray (TMA) versus whole section immunohistochemistry in the assessment of ER/PR and Her-2/neu status in a breast cancer series from Sudan. Awadelkarim KD, Arizzi C, Elamin EO, Osman I, Mekki SO, **Biunno I**, Barberis MC, Mariani-Costantini R. *Breast J*. 2013;19(4):446-7.

Delineating the cytogenomic and epigenomic landscapes of glioma stem cell lines. Baronchelli S, Bentivegna A, Redaelli S, Riva G, Butta V, Paoletta L, Isimbaldi G, Miozzo M, Tabano S, Daga A, Marubbi D, Cattaneo M, **Biunno I**, Dalprà L. *PLoS One*. 2013;8(2):e57462.

Tissue microarray design and construction for scientific, industrial and diagnostic use. Pilla D, Bosisio FM, Marotta R, Faggi S, Forlani P, Falavigna M, **Biunno I**, Martella E, De Blasio P, Borghesi S, Cattoretti G. *J Pathol Inform*. 2012;3:42. doi: 10.4103/2153-3539.104904.

β -Defensin genomic copy number does not influence the age of onset in Huntington's Disease. Vittori A, Orth M, Roos RA, Outeiro TF, Giorgini F, Hollox EJ; Registry investigators of the **European Huntington's Disease Network**. *J Huntingtons Dis*. 2013;2(1):107-24. doi: 10.3233/JHD-130002.

Cell and tissue microarray technologies for protein and nucleic acid expression profiling. Cardano M, Diaferia GR, Falavigna M, Spinelli CC, Sessa F, DeBlasio P, **Biunno I**. *J Histochem Cytochem*. 2013;61(2):116-24. doi: 10.1369/0022155412470455.

The first reported generation of several induced pluripotent stem cell lines from homozygous and heterozygous Huntington's disease patients demonstrates mutation related enhanced lysosomal activity. Camnasio S, Delli Carri A, Lombardo A, Grad I, Mariotti C, Castucci A, Rozell B, Lo Riso P, Castiglioni V, Zuccato C, Rochon C, Takashima Y, Diaferia G, **Biunno I**, Gellera C, Jaconi M, Smith A, Hovatta O, Naldini L, Di Donato S, Feki A, Cattaneo E. *Neurobiol Dis*. 2012;46(1):41-51.

SEL1L, an UPR response protein, a potential marker of colonic cell transformation. Ashktorab H, Green W, Finzi G, Sessa F, Nouraie M, Lee EL, Morgano A, Moschetta A, Cattaneo M, Mariani-Costantini R, Brim H, Biunno I. *Dig Dis Sci*. 2012 Apr;57(4):905-12.

CAG repeat expansion in Huntington disease determines age at onset in a fully dominant fashion. Lee JM, Ramos EM, Lee JH, Gillis T, Mysore JS, Hayden MR, Warby SC, Morrison P, Nance M, Ross CA, Margolis RL, Squitieri F, Orobello S, Di Donato S, Gomez-Tortosa E, Ayuso C, Suchowersky O, Trent RJ, McCusker E, Novelletto A, Frontali M, Jones R, Ashizawa T, Frank S, Saint-Hilaire MH, Hersch SM, Rosas HD, Lucente D, Harrison MB, Zanko A, Abramson RK, Marder K, Sequeiros J, Paulsen JS; PREDICT-HD study of the Huntington Study Group (HSG), Landwehrmeyer GB; **REGISTRY study of the European Huntington's Disease Network**, Myers RH; HD-MAPS Study Group, MacDonald ME, Gusella JF; COHORT study of the HSG. *Neurology*. 2012;78(10):690-5

Discrepancies in reporting the CAG repeat lengths for Huntington's disease. Quarrell OW, Handley O, O'Donovan K, Dumoulin C, Ramos-Arroyo M, **Biunno I**, Bauer P, Kline M, Landwehrmeyer GB; European Huntington's Disease Network. *Eur J Hum Genet*. 2012;20(1):20-6. doi: 10.1038/ejhg.2011.136