

## ALLEGATO B

UNIVERSITÀ DEGLI STUDI DI MILANO

selezione pubblica per n.1 posto/i di Ricercatore a tempo determinato ai sensi dell'art.24, comma 3, lettera b) della Legge 240/2010

per il settore concorsuale 06/A2 - Patologia Generale e Patologia Clinica, settore scientifico-disciplinare MED/04 - Patologia Generale presso il Dipartimento di FISIOPATOLOGIA MEDICO-CHIRURGICA E DEI TRAPIANTI, (avviso bando pubblicato sulla G.U. 23 del 20/03/2020) Codice concorso 4283

## Elisa Araldi CURRICULUM VITAE

### INFORMAZIONI PERSONALI

COGNOME	ARALDI
NOME	ELISA
DATA DI NASCITA	05 NOVEMBRE 1985

### INSERIRE IL PROPRIO CURRICULUM

#### ESPERIENZA PROFESSIONALE

- Oct 2016 - present      **Postdoctoral fellowship**  
**Advisor: Prof. Markus Stoffel, MD, PhD.** Institute for Molecular Health Sciences, ETH Zurich, Zurich, Switzerland.
- Using in vivo models and computational genomics, I am studying the role of PAM, a peptidylglycineamidating monooxygenase, in diabetes onset and progression, and in endocrine disorders (manuscript in preparation).
  - Teaching assignment of two courses at ETH:
    - Current topics in Metabolism and Disease (Master students and PhD Students)
    - Insulin signaling (Theoretical and practical course for third year bachelor students)
- Attività o settore Academic research
- Aug 2015 - Sep 2016      **Postdoctoral fellowship**  
**Advisors: Dr. Prof. Yajaira Suarez and Dr. Prof. Carlos Fernandez-Hernando Labs.** Yale University, USA.
- The first year of postdoctoral work aimed at concluding a project on the role of a cholesterol intermediate, lanosterol, in innate immune responses (Araldi et al, Cell Reports, 2017)
- Attività o settore Academic research
- Jan 2011 - Jul 2015      **PhD Thesis**  
**Advisors: Dr. Prof. Yajaira Suarez and Dr. Prof. Carlos Fernandez-Hernando Labs.** Yale University and New York University, USA.
- The beginning of my PhD thesis was carried out at the New York University School of Medicine. The last part of my PhD thesis was carried out at the Yale University School of Medicine, Department of Comparative Medicine. I carried out three main projects:
    - 1) the role of a cholesterol intermediate, lanosterol, in innate immune responses (Araldi

- et al, Cell Reports, 2017);
  - 2) miR-17-92 in endothelial cell biology and emergence of hematopoietic stem cells (in preparation; Chamorro-Jorganes et al Circulation Research 2017);
  - 3) macrophage exosomal RNA.
  - Additionally, I have contributed my expertise in multiple collaborative projects: in the analysis of inflammatory and haematopoietic cells in atherosclerosis (Price et al, Cell Reports 2018; Canfran-Duque et al, EMBO Molecular Medicine, 2017; Aryal et al, Nature Communications, 2016; Ulrich et al, EMBO Molecular Medicine, 2016; Rotllan et al, FASEB Journal, 2015), and in genomic analysis (Goedeke et al, Nature Medicine, 2015, Goedeke et al, Atherosclerosis, 2015, Ramirez et al, Circulation Research, 2013).
- Attività o settore Academic research

- Aug 2010 - Dec 2010      **PhD rotation**  
**Dr. Prof. Iannis Aifantis Lab, supervision by Dr. Camille Lobry, PhD Rotation.** New York University School of Medicine, New York, USA
- Rotation required for my PhD program. The project aimed at the identification of the novel role of Notch signalling in myeloid cell lines and myeloid malignancies in vivo (Klinakis et al, Nature, 2011; Lobry et al, Journal of Experimental Medicine, 2013).
- Attività o settore Academic research
- Sep 2009 - Jul 2010      **Laboratory Internship**  
**Dr. Prof. Ernestina Schipani Lab.** Massachusetts General Hospital / Harvard Medical School, Endocrine Unit, Boston, USA.
- Laboratory internship, required for the Master thesis at the Scuola Normale Superiore, studying the role of hypoxia and transcription factor Hif-1, Hif-2 and ubiquitin ligase VHL in chondrogenesis, osteogenesis and mesenchymal stem cell homeostasis (Araldi et al, Nature Medicine, 2011; Maes et al, Journal of Bone Mineral Research, 2011; Rankin et al, Cell, 2012; Mangiavini et al, Developmental Biology, 2014; Mangiavini et al, The American Journal of Pathology, 2015).
- Attività o settore Academic research

## ISTRUZIONE E FORMAZIONE

- Aug 2010 - Jul 2015      **PhD in Pathobiology and Translational Medicine**  
Sackler Institute of Graduate Biomedical Sciences, New York University School of Medicine, New York, USA. Mentors: Prof. Yajaira Suarez, PhD, Prof. Carlos Fernandez-Hernando, PhD.
- Oct 2004- Jul 2010      **M. Sc. in Biological Sciences**  
Scuola Normale Superiore, Pisa, Italy. Final grade 70/70 cum laude. Diploma Thesis title “Dual Action of pVHL in limb bud mesenchyme”, advisor Prof. Ernestina Schipani, MD, PhD.
- Oct 2007 - July 2009      **M. Sc. in Biological Sciences**  
University of Pisa, Pisa, Italy. Final grade 110/110 cum laude. Diploma Thesis title: “An innovative strategy for the identification of novel genes or microRNAs involved in cardiac protection”, advisor Prof. Mauro Giacca, MD, PhD.
- Oct 2004 - Jul 2007      **B. Sc. in Molecular and Cellular Biology**  
University of Pisa, Pisa, Italy. Final grade 110/110 cum laude. Diploma thesis title “Post-transcriptional Modifications of BCL6 by microRNAs”, advisors Prof. Arturo Falaschi and Letizia Pitto, PhD.

## COMPETENZE PERSONALI

Lingua madre Italian

Altre lingue

COMPRESIONE		PARLATO		PRODUZIONE SCRITTA
Ascolto	Lettura	Interazione	Produzione orale	
English	C2	C2	C2	C2
German	A2	A2	A2	A2

Livelli: A1/A2: Utente base - B1/B2: Utente intermedio - C1/C2: Utente avanzato  
Quadro Comune Europeo di Riferimento delle Lingue

Competenze comunicative

- Guest speaker at the "Dr. You" ETH podcast in the episodes about gender balance in the sciences and master suppression techniques (Episodes S02E02 and S02E10 at <https://podcasts.apple.com/ch/podcast/doctor-you/id1459740382>).

Competenze organizzative e gestionali

- Scientific chair and organizer of the "PIs of tomorrow - The future of Swiss research" session of LS2 meeting 2018, 2019 and 2020 (<https://annual-meeting.ls2.ch/pis-of-tomorrow>).
- Main grantee of the "Fix-the-Leaky-Pipeline" grant for the DBIOL women peer mentoring group and main organizer of group activities.
- Creator and organizer of the ETH Institute of Molecular Health Science (IMHS) postdoc seminar series.
- Board member of the scientific staff association of the ETH biology department (AMB). Creator and main organizer of the postdoc-to-faculty mentoring program in the DBIOL department (<https://www.dbiol-mentoring.ethz.ch/>).
- Board member of the Women in Science Association at Yale (WISAY). During this appointment, I created and organized a workshop series on leadership and soft skills for women in science at Yale.

Competenze professionali

Journal refereed:

- Ad hoc reviewer for PLOS ONE, Atherosclerosis, FEBS Open Bio, International Journal of Molecular Sciences, Genetic Testing and Molecular Biomarkers.

Competenze digitali

AUTOVALUTAZIONE				
Elaborazione delle informazioni	Comunicazione	Creazione di Contenuti	Sicurezza	Risoluzione di problemi
Utente avanzato	Utente avanzato	Utente avanzato	Utente intermedio	Utente intermedio

Livelli: Utente base - Utente intermedio - Utente avanzato  
Competenze digitali - Scheda per l'autovalutazione

- Programming in Python and R for data analysis
- Operating Systems OS and Windows
- Excellent in Word, Excel, PowerPoint, GraphPad Prism, Illustrator, Photoshop, Fiji

Patente di guida B

## ULTERIORI INFORMAZIONI

### Presentazioni e conferenze

Jan 2020: Department of Molecular Medicine, University of Pavia, Italy. Invited seminar: "Peptide amidation in physiology and disease".

Feb 2018 - 2020: LS2 Life Science Switzerland annual meeting, Lausanne, Switzerland. Scientific chair and organizer of the "PIs of Tomorrow - The future of Swiss research" session.

Mar 2018 XIX IGIS (International group on insulin secretion) Servier Symposia, Saint-Jean-Cap-Ferrat, France. Poster presentation "The role of the enzyme peptidylglycine monooxygenase in diabetes".

Jun 2015: Howard Hughes Medical Institute Science Meeting, Translational Medicine Meeting, Ashburn, VA, USA. Poster presentation: "Lanosterol modulates macrophage immune responses."

Mar 2015: Deuel Conference on Lipids, Monterrey, CA, USA. Poster presentation: "Innate Immune Responses regulate cholesterol metabolism."

Jul 2014: Lindau Nobel Laureate meeting 64th Lindau Nobel Laureate Meeting in Medicine and Physiology, Lindau, Germany. Deutsche Forschungsgemeinschaft Fellowship for participating at the Meeting.

Oct 2013: Yale University, Vascular Biology and Therapeutics Retreat, New Haven, CT, USA. Best poster award: "The role of miR-17-92 cluster in hematopoietic stem cells and their vascular niche".

Jan 2013: Keystone Symposia, Noncoding RNAs in Development and Cancer, Vancouver, Canada.

Oct 2012: FEBS Workshop, Molecular and Cellular Mechanisms in Angiogenesis, Capri, Italy. Trans-YTF grant Fellowship for participating at the workshop.

Apr 2012: International Society of Extracellular Vesicles, 2012 ISEV meeting, Gothenburg, Sweden. Oral Presentation: "Regulation of endothelial cell functions by macrophage-derived microRNAs".

Oct 2011: North America Vascular Biology Organization, NAVBO 2011 Workshops in Vascular Biology, Hyannis, MA. Co-author of the poster: "MicroRNA-16 and MicroRNA-424 Regulate Cell-Autonomous Angiogenic Functions in Endothelial Cells via Targeting Vascular Endothelial Growth Factor Receptor-2 and Fibroblast Growth Factor Receptor-1."

Oct 2010: American Society for Bone Mineral Research, Annual Meeting 2010, Toronto. Presenter author of the poster "Dual Action of Von Hippel Lindau Protein (pVHL) in Limb Bud Mesenchyme".

Jan 2010: Keystone Symposia, Hypoxia: Molecular Mechanisms of Oxygen Sensing and Response Pathways. Co-author of the poster "Dual Action of Von Hippel Lindau Protein (pVHL) in Limb Bud Mesenchyme".

### Riconoscimenti e premi

2012 - 2015: Howard Hughes Medical Institute International Student Research Fellowship. HHMI three-year fellowship program supports outstanding international predoctoral students studying in the United States to support years three, four, and five of a Ph.D. program.

Oct 2013: Vascular Biology and Therapeutics Retreat at Yale University, New Haven, CT, USA. Best poster award: "The role of miR-17-92 cluster in hematopoietic stem cells and their vascular niche".

Jun 2012: American Heart Association Predoctoral Fellowship, AHA Founders Affiliates. Two-year predoctoral fellowship awarded for the period July 2012- June 2014 (Score 1.15, Percentile Rank 1.16). Declined.

2011 - 2012: Vittorio Defendi Fellowship in Pathobiology and Translational Medicine, New York University School of Medicine, Pathobiology and Translational Medicine graduate program.

2010 - 2011: Rotary International district 2050, Ambassadorial Scholarship 2010/2011 in the New York district 7030. The scholarship provides a grant of \$ 25,000 for one academic year of study in another country.

Sep 2004: Scuola Normale Superiore, Pisa, Italy

One of 30 winners of the national selection for the Faculty of Science at the Scuola Normale Superiore.

#### Pubblicazioni

1. Price NL, Singh AK, Rotllan N, Goedeke L, Wing A, Canfran-Duque A, Diaz-Ruiz A, Araldi E, Baldan A, Camporez JP, Suarez Y, Rodeheffer MS, Shulman GI, de Cabo R, Fernandez-Hernando C. "Genetic Ablation of miR-33 Increases Food Intake, Enhances Adipose Tissue Expansion, and Promotes Obesity and Insulin Resistance." *Cell Reports* 2018 Feb 20;22(8):2133-2145. doi: 10.1016/j.celrep.2018.01.074.
2. Araldi E, Fernandez-Fuertes M, Canfran-Duque A, Tang W, Madrigal-Matute J, Basit A, Chamorro-Jorganes A, Lasuncion MA, Wu D, Fernandez-Hernando C and Suarez Y. "Lanosterol modulates innate immune responses in macrophages." *Cell Reports*, 2017 Jun 27;19(13):2743-2755. doi: 10.1016/j.celrep.2017.05.093.
3. Canfran-Duque A, Rotllan N, Zhang X, Fernandez-Fuertes M, Ramirez-Hidalgo C, Araldi E, Daimiel L, Busto R, Fernandez-Hernando C, Suarez Y. "Macrophage deficiency of miR-21 promotes apoptosis, plaque necrosis, and vascular inflammation during atherogenesis." *EMBO Molecular Medicine*, 2017 Sep;9(9):1244-1262. doi: 10.15252/emmm.201607492.
4. Montenont E, Echagarruga C, Allen N, Araldi E, Suarez Y, Berger JS. "Platelet WDR1 suppresses platelet activity and associates with cardiovascular disease." *Blood*, 2016 Sep 8. pii: blood-2016-03-703157. [Epub ahead of print]
5. Aryal B, Araldi E\*, Rotllan N\*, Ramirez CM, He S, Chousterman BG, Fenn AM, Wanschel A, Madrigal-Matute J, Warrier N, Martin-Ventura JL, Swirski FK, Suarez Y, Fernandez-Hernando C. "ANGPTL4 deficiency in haematopoietic cells promotes monocyte expansion and atherosclerosis progression." *Nature Communications*, 2016 Jul 27;7:12313. doi: 10.1038/ncomms12313
6. Ulrich V, Rotllan N, Araldi E, Luciano A, Skrobilin P, Abonnenc M, Perrotta P, Yin X, Bauer A, Leslie KL, Zhang P, Aryal B, Montgomery RL, Thum T, Martin K, Suarez Y, Mayr M, Fernandez-Hernando C, Sessa WC. "Chronic miR-29 antagonism promotes favorable plaque remodeling in atherosclerotic mice." *EMBO Molecular Medicine* 2016 Jun 1;8(6):643-53. doi: 10.15252/emmm.201506031.
7. Goedeke L, Rotllan N, Ramirez CM, Aranda JF, Canfran-Duque A, Araldi E, Fernandez-Hernando A, de Cabo R, Baldan A, Suarez Y, Fernandez-Hernando C. "miR-27b inhibits LDLR and ABCA1 expression but does not influence plasma and hepatic lipid levels in mice." *Atherosclerosis*, 2015 Dec;243(2):499-509. doi: 10.1016/j.atherosclerosis.2015.09.033.
8. Chamorro-Jorganes A, Lee MY, Araldi E, Landskroner-Eiger S, Fernandez-Fuertes M, Sahraei M, Quiles Del Rey M, van Solingen C, Yu J, Fernandez-Hernando C, Sessa WC, Suarez Y. "VEGF-Induced Expression of miR-17-92 Cluster in Endothelial Cells is Mediated by ERK/ELK1 Activation and Regulates Angiogenesis." *Circulation Research*, 2015 Oct 15. pii: CIRCRESAHA.115.307408.
9. Mangiavini L, Merceron C, Araldi E, Khatri R, Gerard-O'Riley R, Wilson TL, Sandusky G, Abadie J, Lyons K, Giaccia AJ, Schipani E. "Fibrosis and Hif1a-dependent tumors of the soft tissue upon loss of Vhl in mesenchymal progenitors." *The American Journal of Pathology*, 2015 Nov;185(11):3090-3101. doi: 10.1016/j.ajpath.2015.07.008. Epub 2015 Sep 6.
10. Goedeke L, Rotllan N, Canfran-Duque A, Aranda JF, Ramirez CM, Araldi E, Lin CS, Anderson N, Wagschal, de Cabo R, Horton JD, Lasuncion MA, Naar AM, Suarez Y, Fernandez-Hernando C. "Identification of miR-148a as a novel regulator of cholesterol metabolism." *Nature Medicine*, 2015 Oct 5. doi: 10.1038/nm.3949.
11. Rotllan N, Chamorro-Jorganes A, Araldi E, Wanschel AC, Aryal B, Aranda JF, Goedeke L, Salerno AG, Ramirez CM, Sessa WC, Suarez Y, Fernandez-Hernando C. "Hematopoietic Akt2 deficiency attenuates the progression of atherosclerosis." *FASEB Journal*. 2015 Feb;29(2):597-610. doi:

10.1096/fj.14-262097

12. Mangiavini L, Merceron C, Araldi E, Khatri R, Gerard-O'Riley R, Wilson TL, Rankin EB, Giaccia AJ, Schipani E. "Loss of VHL in mesenchymal progenitors of the limb bud alters multiple steps of endochondral bone development." *Developmental Biology*. 2014 Sep 1;393(1):124-36. doi: 10.1016/j.ydbio.2014.06.013.
13. van Solingen C, Araldi E, Chamorro-Jorganes A, Fernandez-Hernando C, Suarez Y. "Improved repair of dermal wounds in mice lacking microRNA-155." *Journal of Cellular and Molecular Medicine*. 2014 Mar 17. doi: 10.1111/jcmm.12255.
14. Chamorro-Jorganes A, Araldi E, Rotllan N, Cirera-Salinas D, Suarez Y. "Autoregulation of glypican-1 by intronic microRNA-149 fine-tunes the angiogenic response to fibroblast growth factor in human endothelial cells." *Journal of Cell Science*. 2014 Jan 24. doi: 10.1242/jcs.130518
15. Miller AM, Gilchrist DS, Nijjar J, Araldi E, Ramirez CM, Lavery CA, Fernandez-Hernando C, McInnes IB, Kurowska-Stolarska M. "MiR-155 has a protective role in the development of non-alcoholic hepatosteatosis in mice." *PLoS One*. 2013;8(8):e72324. doi: 10.1371/journal.pone.0072324.
16. Ramirez CM, Rotllan N, Vlassov AV, Davalos A, Li M, Goedeke L, Aranda JF, Cirera-Salinas D, Araldi E, Salerno A, Wanschel A, Zavadil J, Castrillo A, Kim J, Suarez Y, Fernandez-Hernando C. "Control of cholesterol metabolism and plasma high-density lipoprotein levels by microRNA-144." *Circulation Research*. 2013 Jun 7;112(12):1592-601. doi: 10.1161/CIRCRESAHA.112.300626.
17. Lobry C, Ntziachristos P, Ndiaye-Lobry D, Oh P, Cimmino L, Zhu N, Araldi E, Hu W, Freund J, Abdel-Wahab O, Ibrahim S, Skokos D, Armstrong SA, Levine RL, Park CY, Aifantis I. "Notch pathway activation targets AML-initiating cell homeostasis and differentiation." *Journal of Experimental Medicine*. 2013 Feb 11;210(2):301-19. doi: 10.1084/jem.20121484.
18. Rankin EB, Wu C, Khatri C, Wilson TLS, Andersen R, Araldi E, Rankin AL, Yuan J, Kuo CJ, Schipani E, and Giaccia AJ. "The HIF signaling pathway in osteoblasts directly regulates erythropoiesis through the production of EPO." *Cell*. 2012 Mar 30;149(1):63-74. doi: 10.1016/j.cell.2012.01.051
19. Maes C, Araldi E, Haigh K, Khatri R, Van Looveren R, Amato J, Giaccia AJ, Haigh JJ, Carmeliet G and Schipani E. "VEGF-independent cell-autonomous functions of HIF-1 regulating oxygen consumption in fetal cartilage are critical for chondrocyte survival." *Journal of Bone Mineral Research*. 2011 Dec 8. doi: 10.1002/jbmr.1487.
20. Chamorro-Jorganes A, Araldi E, Penalva LO, Sandhu D, Fernandez-Hernando C, Suarez Y. "MicroRNA-16 and MicroRNA-424 Regulate Cell-Autonomous Angiogenic Functions in Endothelial Cells via Targeting Vascular Endothelial Growth Factor Receptor-2 and Fibroblast Growth Factor Receptor-1." *Arterioscler ThrombosisVascular Biology*. 2011 Nov;31(11):2595-606. doi: 10.1161/ATVBAHA.111.236521
21. Klinakis A, Lobry C, Abdel-Wahab O, Oh P, Haeno H, Buonamici S, van De Walle I, Cathelin S, Trimarchi T, Araldi E, Liu C, Ibrahim S, Beran M, Zavadil J, Efstratiadis A, Taghon T, Michor F, Levine RL, Aifantis I. "A novel tumor-suppressor function for the Notch pathway in myeloid leukemia." *Nature*. 2011 May 12;473(7346):230-3. doi: 10.1038/nature09999
22. Araldi E, Khatri R, Simon MC, Giaccia AJ, Schipani E. "Lack of HIF-2 in limb bud mesenchyme causes only a very modest and transient delay of endochondral bone development." *Nature Medicine*. 2011 Jan;17(1):25-6. doi: 10.1038/nm0111-25

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Dati personali Autorizzo il trattamento dei miei dati personali ai sensi del Decreto Legislativo 30 giugno 2003, n. 196 (Codice in materia di protezione dei dati personali) e sue successive modifiche e integrazioni, nonché del Regolamento UE 679/2016 (Regolamento Generale sulla Protezione dei dati o, più brevemente, RGPD).

Data

17.04.2020

Luogo

Zurigo