

## Giulia Pavani, PhD

Phone: (+39)3288759265 , : (+33) 762237106,

E-Mail: [giulia.pavani@gmail.com](mailto:giulia.pavani@gmail.com)

[gpavani@genethon.fr](mailto:gpavani@genethon.fr)

### Education

Ph.D. Biochemistry, Molecular Biology and Biotechnology, University of Ferrara, Italy 2014

Advisors: DPhil Paris Margaritis (The University of Pennsylvania, Perelman School of Medicine, Philadelphia, Pennsylvania, U.S.A)

Prof. Francesco Bernardi (Università degli studi di Ferrara, Italy)

HERCULES European School, Neutrons and Synchrotron Radiation for science; Biomolecular structure and dynamics

M.S. Molecular and Cellular Biotechnologies, University Vita-Salute S. Raffaele, Milan, Italy 2010

B.A. Cell and Molecular Biology, University of Ferrara, Italy 2008

### Research Experience

- Genethon, UMR951 - Post Doctoral Fellow (April-Present) 2015-present  
Genome editing of hematopoietic progenitor stem cells with CRISPR/Cas9
- Children's Hospital of Philadelphia, Postdoctoral Fellow (April – December) 2014  
Long term expression of FVIIa variants with Adeno Associated Virus (AAV)-based vectors  
Identification of sequence determinants of mouse Protein C interaction with mouse Endothelial Protein C Receptor(EPCR)
- University of Ferrara, Structure function studies of a natural mutation of Factor V involved in membrane binding. 2013
- Children's Hospital of Philadelphia/University of Pennsylvania 2010-2012  
Characterization of FVIIa interaction with EPCR, functional implication on hemostatic activity in vitro and in vivo  
Overcoming humoral immunity to AAV Using Capsid Decoys
- University Vita-Salute S. Raffaele, Characterization of cytoprotective and anti-inflammatory properties of Protein C zymogen, effects in barrier-protective response on endothelial cells. 2008-2010  
Development and validation of new assays for diagnosis of Heparin-Induced Thrombocytopenia
- University of Ferrara, Characterization of two natural variants of human Protein S: interactions with lipids and apoptotic cell membranes 2006 -2007

## Publications

**Pavani, G.**, Zintner, S. M., Ivanciu, L., Small, J. C., Stafford, K. A., Szeto, J. H. and Margaritis, P. (2016), One amino acid in mouse factor VIIa defines its endothelial protein C receptor binding and modulates its EPCR-dependent hemostatic activity in vivo. *J Thromb Haemost.* Accepted Author Manuscript. doi:10.1111/jth.13607

Marcos-Contreras OA, Smith SM, Bellinger DA, Raymer RA, Merricks E, Faella A, **Pavani G**, Zhou S, Nichols TC, High KA, Margaritis P (2016). Sustained correction of FVII deficiency in dogs using AAV-mediated expression of zymogen FVII. *Blood* 127:565-57

Baroni, M., **Pavani, G.**, Pinotti, M., Branchini A, Bernardi F, Camire MF (2015) Asymmetric processing of mutant factor X Arg386Cys reveals differences between intrinsic and extrinsic pathway activation. *Biochimica et Biophysica Acta (BBA)*

**Pavani, G.**, Ivanciu, L., Faella, A., Marcos-Contreras, O., Margaritis, P., (2014). The Endothelial Protein C Receptor enhances hemostasis of FVIIa administration in hemophilic mice in vivo. *Blood* 124, no. 7 (August 14, 2014): 1157–65.

Ivanciu, L., Toso, R., Margaritis, P., **Pavani, G.**, Kim, H., Schlachterman, A., et al. (2011). A zymogen-like factor Xa variant corrects the coagulation defect in hemophilia. *Nature biotechnology*, 29(11), 1028–1033.

Mingozzi, F., Anguela, X. M., **Pavani, G.**, Chen, Y., Davidson, R. J., Hui, D. J., et al. (2013). Overcoming Preexisting Humoral Immunity to AAV Using Capsid Decoys. *Science Translational Medicine*, 5(194).

Margaritis, P., Roy, E., Faella, A., Downey, H. D., Ivanciu, L., **Pavani, G.**, et al. (2011). Catalytic domain modification and viral gene delivery of activated factor VII confers hemostasis at reduced expression levels and vector doses in vivo. *Blood*, 117(15), 3974–3982.

Baroni, M., **Pavani, G.**, Marescotti, D., Kaabache, T., Borgel, D., Gandrille, S., et al. (2010). Membrane binding and anticoagulant properties of protein S natural variants. *Thrombosis research*, 125(2), e33–e39.

## Reviews

Masat, E., **Pavani, G.**, & Mingozzi, F. (2013). Humoral Immunity to AAV Vectors in Gene Therapy: Challenges and Potential Solutions. *Discovery medicine*, 15(85), 379–389.

Valle, Della, P., **Pavani, G.**, & D'Angelo, A. (2012). The protein C pathway and sepsis. *Thrombosis research*, 129(3), 296–300.

## Awards

- Bayer Hemophilia Awards Program – Early Career Investigator Award 2017
- Martin Villar Haemostasis Award, Basic Research 2015
- University Institute for Higher Studies - IUSS Ferrara 1391, Doctoral Dissertation Award 2014
- Nicolò Copernico thesis award, for innovative theses in sciences and technologies
- Travel award, 54<sup>th</sup> Annual meeting of the American Society of Hematology 2012

- Travel award, 53<sup>th</sup> Annual meeting of the American Society of Hematology 2011
- Best poster award, 6<sup>th</sup> Symposium on Hemostasis

**Presentations**

- 19<sup>th</sup> American Society of Gene and Cell Therapy, Washington, USA (poster) 2016
- 57<sup>th</sup> Annual meeting of the American Society of Hematology , Orlando, USA (poster) 2015
- 56<sup>th</sup> Annual meeting of the American Society of Hematology , San Francisco, USA (poster) 2014
- 7<sup>th</sup> Symposium on Hemostasis, Chapel Hill, NC, USA (talk) 2014
- XXIV Congress of International Society of Thrombosis and Hemostasis, Amsterdam The Netherlands (talk) 2013
- Riunione Nazionale "A. Castellani" dei Dottorandi di Ricerca in Discipline Biochimiche, Brallo di Pregola, Italy (talk) 2013
- 54<sup>th</sup> Annual meeting of the American Society of Hematology , Atlanta GA, USA (talk) 2012
- 41<sup>st</sup> Annual Workshop on Hemostasis, Philadelphia, PA, USA (poster) 2012
- 6<sup>th</sup> Symposium on Hemostasis, Chapel Hill, NC, USA (poster) 2012
- 53<sup>th</sup> Annual meeting of the American Society of Hematology, San Diego, CA, USA (talk) 2011

Il sottoscritto acconsente, ai sensi del D.Lgs. 30/06/2003 n.196, al trattamento dei propri dati personali.

Il sottoscritto acconsente alla pubblicazione del presente curriculum vitae sul sito dell'Università di Ferrara.