

Cinzia Borgogna

Curriculum vitae

PERSONAL DATA

Birth: October 22, 1981

Citizenship: Italian

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BIO AND EDUCATION

2005: Degree in Medical Biotechnology at the University of Turin, Italy.

2009: PhD in Clinical and Experimental Medicine, University of Piemonte Orientale, working in the laboratory of Molecular Virology (Head: Prof. Marisa Gariglio). She worked on the human model of Epidermodysplasia verruciformis and in vitro experimental models of HPV infection, including keratinocytes expressing viral oncoproteins from different HPV genotypes.

2010-2011: Visiting worker at the National Institute for Medical Research (London, UK), Department of Virology, with a collaborative project NIMR- University of Piemonte Orientale. "Epidermodysplasia verruciformis as a human model to elucidate beta-papillomavirus life cycle and their role in skin cancer development." PI: Dr John Doorbar and Prof. Marisa Gariglio.

UNIVERSITY CAREER

2011-	Assistant Professor of Medical Microbiology, University of Piemonte Orientale, School of Medicine.
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MAIN FIELDS OF INTEREST

1. Beta-HPV and skin carcinogenesis
2. HPyV and carcinogenesis

CURRENT ISSUES OF RESEARCH

1. **Beta papillomavirus infection and skin cancer development in immunosuppressed individuals**
Her laboratory has interests in the pathogenesis, molecular genetics and biochemistry of human papillomaviruses (HPV). Emphasis has been placed on understanding betaHPV-epithelial keratinocyte interactions in naturally occurring patient lesions, such as skin cancer developing in immunosuppressed individuals (including organ transplant recipients) and patients suffering from primary immunodeficiency (including Epidermodysplasia verruciformis), and on developing experimental model skin systems (organotypic raft cultures and transgenic mice) that closely reflect these events.

2. **Human Polyomavirus and cancer development.** Her laboratory studies the biology of Human Polyomaviruses (HPyVs) and their association with cancer development under conditions of immune impairment. This area of study ranges from investigation of the HPyVs life cycle to the molecular pathways involved in carcinogenesis. Recently, a key focus of our work has been to set up different methodologies, at both cellular and molecular level, to verify the presence of HPyVs in human tissues.

CURRENT FUNDED PROJECTS

PROGRAMME	FUNDED PROJECT
PRIN 2012 Starting Grant MIUR (Ministero dell'Istruzione, dell'Università e della Ricerca).	High-throughput analysis of beta-Papillomaviruses infection/reactivation in the immunocompromised host for understanding virus-host interactions and their pathogenic role in developing malignancies. 2014-2017
Compagnia di San Paolo CALL EXCELLENT PI	Defining the causal association between human beta papillomavirus infection, keratinocyte stem cells expansion and skin cancer development in the immunocompromised host. 2015-2018
Bando DiMet per il finanziamento di progetti di ricerca : Fondi di ateneo 2015	Defining the oncogenic role of beta-papillomavirus and polyomavirus infection in organ transplant recipients. 2016-2018

TOP FIVE PAPERS

- 1) Quint KD, Genders RE, de Koning MNC, Borgogna C, Gariglio M, Bouwes Bavinck JN, et al. Human Beta-papillomavirus infection and keratinocyte carcinomas. *J Pathol* 2015;235: 342–354.
- 2) Lo Cigno I, De Andrea M, Borgogna C, Albertini S, Landini MM, Peretti A, et al. The Nuclear DNA Sensor IFI16 Acts as a Restriction Factor for Human Papillomavirus Replication through Epigenetic Modifications of the Viral Promoters. *J Virol* 2015;89(15):7506-20.
- 3) Borgogna C, Lanfredini S, Peretti A, De Andrea M, Zavattaro E, Colombo E, et al. Improved detection reveals active β -papillomavirus infection in skin lesions from kidney transplant recipients. *Mod Pathol* 2014;27: 1101–15.
- 4) Borgogna C, Landini MM, Lanfredini S, Doorbar J, Bouwes Bavinck JN, Quint KD, et al. Characterization of skin lesions induced by skin-tropic α - and β -papillomaviruses in a patient with epidermodysplasia verruciformis. *Br J Dermatol* 2014;171: 1550–54.
- 5) Landini MM, Borgogna C, Peretti A, Colombo E, Zavattaro E, Boldorini R, et al. α - and β - papillomavirus infection in a young patient with an unclassified primary T-cell immunodeficiency and multiple mucosal and cutaneous lesions. *J Am Acad Dermatol* 2014;71(1):108-15.e1.

AWARDS

- 2005: Her degree thesis was awarded by the “Medicine Academy of Turin” in 2006.
- 2006: Winner of the “Biotech” award for the “Start-Cup Piemonte 2006” competition
- 2009: FEMS Advanced Fellowship to spend a two-year period as visiting scientist at the NIMR (London, UK).
- 2011: Winner of a travel award for participating to the 27th International Papillomavirus Conference.