

Susanna Chiocca

**Education and PHD/Masters/Courses**

1990: Ph.D. in Molecular Biology/Virology

MD Anderson Cancer Center The University of Texas Graduate  
School of Biomedical Science Houston, Texas, USA

1984: Bachelor of Science Magna cum Laude, University of Texas, Texas, USA

**Titles (included other positions covered)**

2005-present : European Institute of Oncology (IEO) Milano: Director of “Viral Control of Cellular Pathways and Biology of Tumorigenesis” Unit, Department of Experimental Oncology

2005- present SEMM Faculty Member

1998-2004 Senior Staff Scientist, Department of Experimental Oncology, European Institute of Oncology

1997-1998 Staff Scientist, Institute for Molecular Pathology (IMP), Vienna Austria

**Research Activities carried out at IEO**

- \* Viral-Host interactions
- \* Mechanism and role of SUMOylation
- \* Mechanism and role of HDACs in tumorigenesis

**Passed Research Activities**

-Viral-Host interactions.

Institute for Molecular Pathology (IMP), Vienna Austria

-Molecular Carcinogenesis

Swiss Institute for Experimental Cancer Research (ISREC), Lausanne Switzerland

-Viral Oncogenesis

MD Anderson Cancer Center, Houston, Texas USA

**Awards and other Recognitions**

**2011-2015** Member of International steering committee for the Network supported by the European Commission (FP7-HEALTH-2011) “Role of human papillomavirus infection and other co-factors in the aetiology of head and neck cancer in Europe and India”.

**1990** Recognition Award for Research Excellence from  
Dept. of Tumor Biology-M.D. Anderson Cancer Center

**1990** AACR-Upjohn Young Investigator Award

**1989** John P. McGovern Award, The University  
of Texas Graduate School of Biomedical Sciences.

## Selected Publications

1. Varadaraj A, Mattoscio D, **Chiocca S**.

SUMO Ubc9 enzyme as a viral target.

IUBMB Life. 2014 Jan 6. doi: 10.1002/iub.1240. [Epub ahead of print]

2. Pozzebon ME<sup>#</sup>, Varadaraj A<sup>#</sup>, Mattoscio D, Jaffray E, Miccolo C, Galimberti V, Tommasino M, Hay RT, **Chiocca S**.

A BC-box domain-related mechanism for VHL protein degradation. Proceedings of the National Academy of Sciences (PNAS). 2013. Nov 5;110(45):18168-73. Epub 2013 Oct 21. <sup>#</sup>Equal contributing authors

3. Citro S, Jaffray E, Hay RT, Seiser C, **Chiocca S**.

A role for paralog-specific sumoylation in histone deacetylase 1 stability. J Mol Cell Biol. 2013 Sep 25. [Epub ahead of print]

4. Mattoscio D, Segre' CV, **Chiocca S**. Viral manipulation of cellular protein conjugation pathways: the SUMO lesson. World Journal of Virology. 2013 May 12; 2(2)

5. Santoro F, Botrugno OA, Dal Zuffo R, Pallavicini I, Matthews GM, Cluse L, Barozzi I, Senese S, Fornasari L, Moretti S, Altucci L, Pelicci PG, **Chiocca S**, Johnstone RW, Minucci S. A dual role for Hdac1: oncosuppressor in tumorigenesis, oncogene in tumor maintenance. Blood. 2013 Feb 25.

6. Sinigalia S, Alvisi G, Segre' CV, Mercorelli B, Muratore G, Winkler M, Hsiao H-H, Urlaub H, Ripalti A, **Chiocca S**, Palù G, Loregian A. The Human Cytomegalovirus DNA Polymerase Processivity Factor UL44 is Modified by SUMO in a DNA-Dependent Manner. PLoS One. 2012;7(11):e49630. doi: 10.1371/journal.pone.0049630. Epub 2012 Nov 15.

7. **Chiocca S**, Seiser C. [Lifting the threshold between life and death: SUMO and HDAC fine-tune HIPK2 to sense redox status.](#) Mol Cell. 2012 May 25;46(4):382-3.

8. Segre' CV and **Chiocca S**. Regulating the regulators: the post-translational code on class I HDAC1 and HDAC2, J Biomed Biotechnol. 2011;2011:690848. Epub 2010 Dec 9

9. Simboeck E, Sawicka A, Zupkovitz G, Senese S, Winter S, Dequiedt F, Ogris E, Di Croce L, **Chiocca S**, Seiser C. [A phosphorylation switch regulates the transcriptional activation of cell cycle regulator p21 by histone deacetylase inhibitors.](#) J Biol Chem. 2010 Dec 24;285(52):41062-73.

10. Citro S, **Chiocca S**. Listeria monocytogenes: a bacterial pathogen to hit on the SUMO pathway. Cell Res. 2010 Jun 8.

11. Pozzebon M, Segre' CV, **Chiocca S**. Inhibition of the SUMO pathway by Gam1. Methods Mol Biol. 2009;497:285-301.

12. Senese S, Zaragoza K, Minardi S, Muradore I, Ronzoni S, Passafaro A, Bernard L, Draetta GF, Alcalay M, Seiser C, **Chiocca S**. Role for histone deacetylase 1 in human tumor cell proliferation. Mol Cell Biol. 2007 Jul;27(13):4784-95. Epub 2007 Apr 30.

13. Boggio R, Passafaro A, **Chiocca S**. Targeting SUMO E1 to ubiquitin ligases: a viral strategy to counteract sumoylation. J Biol Chem. 2007 May 25;282(21):15376-82. Epub 2007 Mar 28.

14. Tago K, **Chiocca S**, Sherr CJ. Sumoylation induced by the Arf tumor suppressor: a p53-independent function. Proc Natl Acad Sci U S A. 2005 May 24;102(21):7689-94. Epub 2005 May 16.

15. Boggio R, Colombo R, Hay RT, Draetta GF, **Chiocca S**. A mechanism for inhibiting the SUMO pathway. Mol Cell. 2004 Nov 19;16(4):549-61.

### **Congresses**

- Speaker at the FASEB Summer Research Conference entitled "Histone deacetylases and Reversible Acetylation in Signaling and Disease", Lucca, Italy. August 9-14, 2009.
- Speaker at the "Emerging Oncogenic Viruses Meeting", Manduria, Italy. June 2-6 2010.
- Speaker Role of Infections in Human Cancers Summer School, Rajiv Gandhi Centre of Biotechnology Trivandrum, Kerala INDIA, 5-7 November 2012.
- Speaker EUROGIN 2013: HPV at cross-roads.
- Speaker European Institute of Oncology "Fourth Theory and hands-on course on CO2 laser surgery in laryngeal cancer" 2-3 December 2013
- Co-Organizer and Speaker at the "Emerging Oncogenic Viruses Meeting", Manduria, Italy, June 3 2014.