

## Curriculum Vitae

Name: Antonio Pannuti  
Date and place of Birth: Nov 21, 1953, Naples, Italy  
Country of citizenship: Italy  
Home address: 1213 Highland Bluff Dr., Atlanta, GA 30339

Education: PhD in Cellular and Molecular Genetics.  
University of Naples, Italy (1988)

Membership: Genetics Society of America  
The American Society for Cell Biology

Current position: Senior Research Associate, Emory University  
(with Prof. John C. Lucchesi).

### Professional History:

1980-1983: Undergraduate student at the Electron Microscopy Facility, University of Naples, Italy (with Prof. Carlo Taddei).

During this period of time I was trained in Electron Microscopy and image analysis of biological specimens. I conducted research on the structure on particular association of intracellular membranes and ribosomes in the oocytes of hibernating Lizards.

1983-1988: PhD student, Departement of Genetics, University of Naples, Italy  
(with Prof. Paolo Amati and Prof. Luigi Lania)

Main scientific interest: DNA viruses that can cause cancer in lab animals and the ability of viral gene products to activate cellular genes. Also the study of the type I Interferon, an antiviral protein, and its ability to activate genes important for the immune response against viral infection

1988- 1989: Postdoctoral fellow, Departement of Genetics, University of Naples, Italy  
(with Prof. Luigi Lania).

Worked on a class of factors (Zink finger proteins) in humans that have the ability to regulate the activity of other genes. Also involved in the discovery of a repetitive sequence in the human genome associated to integrated retroviral elements.

Feb 1989 – Aug 1990: Visiting Assistant Professor, University of North Carolina at Chapel Hill (with Prof. John C. Lucchesi)  
Beginning of work on the phenomenon of dosage compensation in the fruit fly,.

Aug 1990 – Jan 1992: Visiting Assistant Professor, Emory University, Atlanta, GA  
(with Prof. John C. Lucchesi)

Feb 1992- Oct1995: Research Assistant Professor, University of Naples, Italy

Characterization of genes specifically expressed in the germline of *Drosophila melanogaster*.  
One of these genes, named Tosca is a factor needed for DNA repair after recombination.

Nov 1995 – Nov 1998: Visiting Research Associate, Emory University, Atlanta, GA  
(with Prof. John C. Lucchesi)

Nov 1998 to date: Senior Research Associate, Emory University, Atlanta, GA  
(with Prof. John C. Lucchesi)

Study of factors involved in the phenomenon of dosage compensation

### **Publications:**

Pannuti, A. and C. Taddei (1987). The membrane component of the ribosomal bodies from the lizard *Lacerta sicula*: a freeze-etching study. *Experientia* 43:918-920.

Pannuti, A., La Mantia, G. and L. Lania (1987). Regulation of viral and cellular promoter activity by polyomavirus early proteins. *Nucleic Acids Res.* 15, 1595-1613.

Pannuti, A., Pascucci, A., La Mantia, G., Fisher-Fantuzzi, L., Vesco, C. and L. Lania (1987). Trans- activation of cellular and viral promoter by a transforming nonkaryophilic Simian virus 40 Large T antigen. *J. Virol.* 61, 1296-1299.

Lania, L., Pannuti, A., La Mantia, G. and C. Basilico (1987). The transcription of B2 repeated sequences is regulated during the transition from quiescent to proliferative state in cultured rodent cells. *FEBS Letters* 219, 400-404.

Pannuti, A., Lanfranccone, L., Pascucci, A., Pelicci, P.G., La Mantia G. and L. Lania (1988). Isolation of cDNAs encoding finger proteins and measurement of the corresponding mRNA levels during myeloid terminal differentiation. *Nucleic Acids Res.* 16, 4227-4237.

Pascucci, A., Pannuti, A., La Mantia, G. and L. Lania (1988). Sequences both 5' and 3' to the transcription initiation site contribute to the ability of a mouse H-2 gene to respond to type I interferon. *FEBS Letters* 226, 297-302.

La Mantia, G., Pengue, G., Maglione, D., Pannuti, A., Pascucci, A. and L. Lania (1989). Identification of new human repetitive sequences: characterization of the corresponding cDNAs and their expression in embryonal carcinoma cells. *Nucl. Ac. Res.* 17, 5913-22.

Lania, L., La Mantia, G., Pannuti, A., Pascucci, A., Pengue, G. and I. Feliciello (1989). Expression of human finger genes in neoplastic cells and during cell differentiation. In: *Pathology of gene expression*, Raven Press, L. Frati and S.A. Aaronson Editors. 99-107.

Lania, L., Donti, E., Pannuti, A., Pascucci, A., Pengue, G., Feliciello, I., La Mantia, G., Lanfranccone, L. and P.G. Pelicci (1990). cDNA isolation, expression analysis, and chromosomal

localization of two human zinc finger genes. *Genomics* 6, 333-340.

Polito LC, Pannuti A and Lucchesi JC (1990). Dosage compensation in *Drosophila melanogaster* male and female embryos generated by segregation distortion of the sex chromosomes. *Dev. Genetics* 11, 249-253.

Zhou S, Yang Y, Scott MJ, Pannuti A, Fehr KC, Eisen A, Koonin EV, Fouts DL, Wrightsman, R, Manning JE and Lucchesi JC (1995) Male-specific lethal 2, a dosage compensation gene of *Drosophila*, undergoes sex-specific regulation and encodes a protein with a RING finger and a metallothionein-like cysteine cluster. *EMBO J.* 14, 2884-2895.

Digilio FA, Pannuti A, Lucchesi JC, Furia M, Polito LC (1996) *Tosca*: a *Drosophila* gene encoding a nuclease specifically expressed in the female germline. *Devel. Biol.* 178, 90-100.

Hilfiker, A., D. Hilfiker-Kleiner, A. Pannuti, and J. C. Lucchesi (1997) *mof*, a putative acetyl transferase gene related to the Tip60 and MOZ human genes and to the SAS genes of yeast, is required for dosage compensation in *Drosophila*. *EMBO J.* 16, 2054-2060.

Smith ER, Eisen A, Gu W, Sattah M, Pannuti A, Zhou J, Cook RG, Lucchesi JC, Allis CD (1998) ESA1 is a histone acetyltransferase that is essential for growth in yeast. *Proc. Natl. Acad. Sci. USA* 95, 3561-3565

Smith ER, Pannuti A, Gu W, Steurnagel A, Cook RG, Allis CD, Lucchesi JC (2000) The *Drosophila* MSL complex acetylates histone H4 at lysine 16, a chromatin modification linked to dosage compensation. *Mol Cell Biol.* 20, 312-8.

Neal KC, Pannuti A, Smith ER, Lucchesi JC. (2000) A new human member of the MYST family of histone acetyl transferases with high sequence similarity to *Drosophila* MOF. *Biochim. Biophys. Acta.* 1490, 170-4.

Gu W, Wei X, Pannuti A, Lucchesi JC. (2000) Targeting the chromatin-remodeling MSL complex of *Drosophila* to its sites of action on the X chromosome requires both acetyl transferase and ATPase activities. *EMBO J.* 19, 5202-11.

Pannuti A, Kocacitak T, Lucchesi JC (2000) *Drosophila* as a model for the study of sex determination in Anopheline and Aedine mosquitoes, pp. 263–269 in: *Area-Wide Control of Fruit Flies and Other Insect Pests*, edited by K.H. Tan. Penerbi Universiti Sains Malaysia, Pulau Pinang.

Pannuti A, Lucchesi JC. (2000) Recycling to remodel: evolution of dosage-compensation complexes. *Curr. Opin. Genet. & Dev.* 10, 644-50

Sass GL, Pannuti A, Lucchesi JC (2003) Male-specific lethal complex of *Drosophila* targets activated regions of the X chromosome for chromatin remodeling. *Proc. Natl. Acad. Sci. USA* 100, 8287-8291.

Pannuti A, Hernandez G, Pillarisetti A, Lucchesi JC The MSL complex of *Drosophila* enhances the rate of read-through errors implicating that it functions by increasing the rate of transcript elongation. (Manuscript in preparation).