

## **CURRICULUM VITAE**

### **Robert Vignali**

Born on February 26th, 1957 in Kiln House Tadley (United Kingdom).

Degree in Biological Sciences, Università di Pisa, 1983 (110/110 with honours).

**Present Position:** Associate Professor, Developmental Biology

**Affiliation:** University of Pisa, Italy

Dipartimento di Biologia, Laboratori di Biologia Cellulare e dello Sviluppo,

#### UNIVERSITA' DI PISA:

1986: Research Assistant

2001: Associate Professor

#### TEACHING:

2001/2002: Developmental Biology

2002/2003: Developmental Biology; Cell Biotechnology

2003/2004: Development and Differentiation of the Nervous System; Cell Biotechnology

2004/present: Development and Differentiation of the Nervous System; Developmental Biology

#### PROFESSIONAL SERVICES

2003-present: Co-organizer of the "Italian-German Xenopus Meeting" (with Stefano Piccolo and Tomas Pieler)

2004-2007: Contact person for the University of Pisa in the TEMPUS-MEDA project with Alexandria University (Egypt) and Bordeaux 2 University (France) on "Updating Life Science studies using new curricula and technologies at the Faculty of Sciences, Alexandria University"

#### SCIENTIFIC INTERESTS:

1983-1994: Molecular organization of eukaryotic genomes and chromosomes: organization of highly repeated DNA in newts (*Triturus*).

1994-2002: Genetic control of early development: mesoderm induction, neural induction and brain patterning

2002-present: Eye development and retinal cell type specification. HMGA proteins in nervous system.

Model systems: *Xenopus laevis*

## PUBLICATIONS

Cremisi F., **Vignali R.**, Batistoni R., Barsacchi G. (1988) Heterochromatic DNA in *Triturus* (Amphibia, Urodela). II. A centromeric satellite DNA. *Chromosoma* 97: 204-211.

Etzerodt M., **Vignali R.**, Ciliberto G., Scherly D., Mattaj I.W., Philipson L. (1988) Structure and expression of a *Xenopus* gene encoding an snRNP protein (U1 70K). *EMBO J.* 7: 4311-4321.

Giorgi F., Bradley J.T., **Vignali R.**, Mazzini M. (1989) An autoradiographic analysis of vitellogenin synthesis and secretion in the fat body of the stick insect *Bacillus rossius*. *Tissue and Cell* 21: 543-558.

**Vignali R.**, Rijli F.M., Batistoni R., Fratta D., Cremisi F., Barsacchi G. (1991) Two dispersed highly repeated DNA families of *Triturus vulgaris meridionalis* (Amphibia, Urodela) are widely conserved among Salamandridae. *Chromosoma* 100: 87-96.

Demartis A., Maffei M., **Vignali R.**, Barsacchi G., De Simone V. (1994) Cloning and developmental expression of *LFB3/HNF1 $\beta$*  in *Xenopus laevis*. *Mech. Dev.*, 47: 19-28.

**Vignali R.**, De Lucchini S., Kablar B., Barsacchi G. (1995) Genetic control of development in *Xenopus laevis*. *Genetica* 94: 235-248.

Pannese M., Polo C., Andreazzoli M., **Vignali R.**, Kablar B., Barsacchi G., Boncinelli E. (1995) The *Xenopus* homologue of *Otx2* is a maternal gene that demarcates and specifies anterior structures in frog embryos. *Development* 121: 707-720.

Kablar B., **Vignali R.**, Menotti L., Pannese M., Andreazzoli M., Polo C., Giribaldi M.G., Boncinelli E., Barsacchi G. (1996) *Xotx* genes in the developing brain of *Xenopus laevis*. *Mech. Dev.* 55: 145-158.

**Vignali R.**, Nardi I. (1996) Unusual features of the urodele genome: do they have a role in evolution and development? *Int. J. Dev. Biol.* 40: 637-643.

Pannese M., Lupo G., Kablar B., Boncinelli E., Barsacchi G., **Vignali R.** (1998) The *Xenopus Emx* genes identify presumptive dorsal telencephalon and are induced by head organizer signals. *Mech. Dev.* 73: 73-83

**Vignali R.**, Poggi L., Madeddu F., Barsacchi G. (2000) *HNF1 $\beta$*  is required for mesoderm induction in the *Xenopus* embryo. *Development* 127: 1455-1465

**Vignali R.**, Colombetti S., Lupo G., Zhang W., Stachel S., Harland R.M., Barsacchi G., (2000) *Xotx5b*, a new member of the *otx* gene family, may be involved in anterior and eye development in *Xenopus laevis*. *Mech Dev.* 96: 3-13.

Poggi L., Carl M., **Vignali R.**, Barsacchi G., Wittbrodt J. (2002) Expression of a medaka (*Oryzias latipes*) *Bar* homologue in the differentiating central nervous system and retina. *Mech Dev.* 114: 193.

Lupo G., Harris W.A., Barsacchi G., **Vignali R.** (2002) Induction and patterning of the telencephalon in *Xenopus laevis*. *Development*, 129: 5421-5439.

**Vignali R.** (2003) My perpetual cycle: from student to researcher to teacher to student..., *International Journal of Developmental Biology*, 47: 203-211.

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Viczian A.S., **Vignali R.**, Zuber M.E., Barsacchi G., Harris W.A. (2003) XOt5b and XOt2 regulate photoreceptor and bipolar fates in the *Xenopus* retina. *Development*, 130: 1281-1294.

**Vignali R.**, Andreazzoli M., Cremisi F., Barsacchi G. (2003) "Organizing the eye" in The Vertebrate Organizer, pp. 257-278, Grunz H., 2003.

Poggi L., Vottari T., Barsacchi G., Wittbrodt J., **Vignali R.** (2004) The homeobox gene *XBH1* cooperates with proneural genes to specify ganglion cell fate within the *Xenopus* neural retina. *Development* 131: 2305-2315.

Lunardi A., **Vignali R.** (2006) *Xenopus* Xot2 and *Drosophila* otd share similar activities in anterior patterning of the frog embryo. *Dev. Genes Evol.* 216: 511-521.

Benini F., Onorati M., Altamura S., Manfioletti G., **Vignali R.** (2006) Identification and developmental expression of *Xenopus* hmga2b. *Biochem. Biophys. Res. Comm.* 351: 392-397.

Decembrini S., Andreazzoli M., **Vignali R.**, Barsacchi G. (2006) Timing the generation of distinct retinal cells by homeobox proteins. *PLoS Biology* 4: e272.

Onorati M., Cremisi F., Liu Y., He R.-Q., Barsacchi G., **Vignali R.** (2007) A specific box switches the cell fate determining activity of XOTX2 and XOTX5b in the *Xenopus* retina. *Neural Development* 2: 12.