

Born in Roma (Italy) February 12th, 1957.

Job address: Section Biology & Evolution, Dept Life Sciences & Biotechnology, University of Ferrara, via Borsari 46, 44121 Ferrara, Italy. E-mail: abl@unife.it Tel 0532-455712 Fax -455715

Degrees: 1981 M.S. Biological Sciences (*cum laude*), La Sapienza University of Roma, Italy.

Career: 1982 RESEARCHER, Dept Pharmacology – 1988 CADRE-SUPERVISOR Respiratory Disease Unit, MENARINI RICERCHE SUD PHARMACEUTICALS, Pomezia; 1990 ASSISTANT PROFESSOR, Fac Sciences TUSCIA UNIV VITERBO; 2000-present. PROFESSOR, Comparative Anatomy & Cytology, UNIV FERRARA Italy.

Visiting positions: 1993-94 VISITING SCIENTIST, Dept Histochemistry, ROYAL POSTGRADUATE MEDICAL SCHOOL UNIV LONDON UK (Prof J. Polak lab), CNR grant.

Academy: 2003-09. PRESIDENT-ELECT B.S. Natural Sciences + M.S. Preservation and management of natural, environmental and cultural heritage. 2009. Promotor of Interclasses B.S. Science and technology for environment, nature and cultural heritage. Teaching: Comparative anatomy (B.Sc. Biol Sciences), Developmental biology – Comparative Immunobiology (M.Sc. Biomolecular and Evo Sciences).

Adviser for Ministry University & Research: 2003-present. Research Projects of National Interest; 2005-. Three-year Evaluation of Italian Research (CIVR 2001-03) as CIVR-MIUR Expert (Veterinary Medicine/Animal Health); 2006-present. GALILEO Italy-France cooperation program; 2011-. FIRB, Regional POR and FARO; 2012-13. Seven-year Quality Evaluation of Italian Research (VQR 2004-10) as selected member of GEV 05 (Biological Sciences).

Guest-Editor: *Fish immunology after the post-genomic era* - Special Issue, Fish & Shellfish Immunol (Elsevier), 2011

National Advisory Board: 24th Conf Eur Comp Endocrinologists 2008.

Peer-reviewer: Aquat Living Res (Francia), Biol Proced Online (Canada), BMC Veterinary Research (UK), Brit J Nutrition (UK), Cell & Tissue Research (Germany), Dev Comp Immunol (USA), Dyn Biochem, Process Biotechnol & Mol Biol (UK), Fish & Shellfish Immunol (UK), Global Science Books (Japan), It J Zool (Italy), Marine Genomics (Netherlands), Microb Ecol (USA), Polar Biol (Germany) *et alia*.

Affiliations: Accademia delle Scienze di Ferrara, European Neuropeptide Club (ENC - founding member), Int Soc Developmental and Comparative Immunology (ISDCI), Italian Soc Developmental and Comparative Immunobiology (SIICS - Founding member, Consultant since 2007), Int Soc Fish & Shellfish Immunology (ISFSI - Founding member). Former member of European Society of Comparative Endocrinology (ESCE), New York Academy of Sciences (NYAS).

Organizer of Scientific Meetings: XL Meeting GEI, Viterbo, June 6-8, 1994; I Meeting ISFSI, Viterbo, May 23-7, 2010; XV Meeting SIICS, Ferrara, Feb 12-4, 2014.

Chairman: ISDCI, ISFSI, GEI and SIICS Congresses.

Grants: (as Scientific Supervisor) CNR, Italian Ministry University and Research (MIUR), Italian Ministry Agriculture (6 Fisheries and Aquaculture projects), PNRA 2009 (Natl Project Antarctic Research), University; (as Scientific Partner) EU (FAR; FISHAID), MIUR and PNRA 2004-06 (2 projects).

Publications: 105 peer-reviewed scientific articles (IF >250; JCR-SCI, Thomson), quoted by >2000 papers, ISI WoS, Thomson).

H-INDEX: 40.

TIS: Scheduled among the TOP ITALIAN SCIENTISTS (VIA-academy; <http://www.topitalianscientists.org>).

Research Interests:

Pharmacology (1982-90): Hypolipidemic drugs, platelet anti-aggregating drugs, PAF antagonists, anti-inflammatory drugs. From 1981 to 1992, Menarini Pharmaceuticals gained rank 9 worldwide in the list of companies with the highest impact on drug research [Garfield, E. A citation perspective on xenobiotics research, 1981-1992: the highest impact papers, institutions, and authors. Current Contents (Life Sciences) 3: 3-15, 1993].

Neuroscience (1982-): Physio-pharmacology and development of primary sensory neurons, neurogenic inflammation, role of neuropeptides (tachykinins and CGRP) and receptors in visceral motility and inflammation, capsaicin-sensitive sensory neurons (vanilloid receptors), nociception and visceral pain, peripheral neuropathies, innervation of human airways and neurogenic bases of asthma.

Comparative Endocrinology (1991-): Adrenal homologue in cartilaginous and bony fish: development and differentiation. Cellular and immunological characterization of fish gametes, sperm cryopreservation. Neuro-endocrine-immune relationships in birds: role of the pituitary in development of primary lymphoid organs. Human endocrinology: non-genomic effects of 17 β -estradiol on amniocyte-derived cells lines, paracrine regulations of first-trimester human trophoblast functions, immune regulatory mechanisms (stimulation and tolerance) at foetus-mother interface.

Immunity EVO-DEVO (1991-): Immune system of teleost fish: development, lymphocyte function and molecules, mucosal immunity, adaptive immunity in farmed species (effects of stress, dietary immunostimulants or probiotics), adaptations of the immune system of extremophilic species (Polar and mesopelagic teleosts). Mammalian tumor immunology. Immunology of marine mammals and WG transcriptomics.

Research Collaborations: EU (Wageningen-Netherlands, Bodø and Bergen-Norway, Aberdeen-UK, Murcia-Spain), USA (Charleston SC, Philadelphia PA, Williamsburg VA), Italy (Universities, CNR, ENEA, ISPRA, IZSVE and Companies).

Luigi Abelli's SCIENTIFIC PUBLICATIONS - ARTICLES *in extenso*

- 1) Evangelista S, Abelli L, Maggi CA, Meli A. The effect of urethane and thiopental sodium on platelet aggregation *in vitro* and *in vivo*. *J Pharmac Meth (now J Pharmac Toxicol Meth)* 1984;12:107-12.
- 2) Maggi CA, Santicioli P, Giuliani S, Abelli L, Meli A. The motor effect of the capsaicin-sensitive inhibitory innervation of the rat ureter. *Eur J Pharmac* 1986;126:333-6.
- 3) Maggi CA, Santicioli P, Abelli L, Giuliani S, Furio M, Parlani M, Meli A. Multiple neurokinin receptors in the rat lower urinary tract. In: *Substance P and Neurokinins* (Henry JL et al. eds) Springer Verlag NY, 1986;111-3.
- 4) Maggi CA, Santicioli P, Abelli L, Parlani M, Capasso M, Conte B, Giuliani S, Meli A. Regional differences in the effects of capsaicin and tachykinins on motor activity and vascular permeability in the rat lower urinary tract. *N-S Arch Pharmac* 1987;335:636-45.
- 5) Maggi CA, Giuliani S, Santicioli P, Abelli L, Regoli D, Meli A. Further studies on the mechanisms responsible for the neurokinin-induced activation of micturition reflex in rats: evidence for the involvement of the capsaicin-sensitive bladder mechanoreceptors. *Eur J Pharmac* 1987;136:189-205.
- 6) Maggi CA, Evangelista S, Abelli L, Somma V, Meli A. Capsaicin-sensitive mechanisms and experimentally induced duodenal ulcers in rats. *J Pharm Pharmac* 1987;39:559-61.
- 7) Maggi CA, Giuliani S, Santicioli P, Abelli L, Meli A. Visceromotor responses to calcitonin gene-related peptide (CGRP) in the rat lower urinary tract: evidence for a transmitter role in the capsaicin-sensitive nerves of the ureter. *Eur J Pharmac* 1987;143:73-82.
- 8) Maggi CA, Santicioli P, Giuliani S, Manzini S, Parlani M, Abelli L, Meli A. Functional evidence for the involvement of multiple transmitters in the efferent functions mediated by the capsaicin-sensitive sensory neurons at visceral level. In: *Trends in cluster headache* (Sicuteri F et al. eds) Elsevier Amsterdam, 1987;69-75.
- 9) Maggi CA, Borsini F, Santicioli P, Geppetti P, Abelli L, Evangelista S, Manzini S, Theodorsson-Norheim E, Somma V, Amenta F, Bacciarelli C, Meli A. Cutaneous lesions in capsaicin-pretreated rats: a trophic role of capsaicin-sensitive afferents? *N-S Arch Pharmac* 1987;336:538-45.
- 10) Maggi CA, Giuliani S, Santicioli P, Abelli L, Geppetti P, Somma V, Renzi D, Meli A. Species-related variations in the sensory-efferent functions mediated by the capsaicin-sensitive sensory neurons at urinary bladder level: relation to bladder content of substance P-like immunoreactivity. *N-S Arch Pharmac* 1987;336:546-55.
- 11) Pestellini V, Giolitti A, Pasqui F, Abelli L, Cutrufo C, De Salvia G, Evangelista S, Meli A. Synthesis and hypolipidemic activity of new substituted (benzofuran-2-yl)-phenyl-carbinols. *Eur J Med Chem* 1988;23:203-6.
- 12) Maggi CA, Abelli L, Giuliani S, Santicioli P, Geppetti P, Somma V, Frilli S, Meli A. The contribution of sensory nerves to xylene-induced cystitis in rats. *Neuroscience* 1988;26:709-23.
- 13) Maggi CA, Parlani M, Astolfi M, Santicioli P, Rovero P, Abelli L, Somma V, Giuliani S, Regoli D, Meli A. Neurokinin receptors in the rat lower urinary tract. *J Pharmac Exp Ther* 1988;246:308-15.
- 14) Abelli L, Conte B, Somma V, Maggi CA, Giuliani S, Geppetti P, Alessandri M, Theodorsson E, Meli A. The contribution of capsaicin-sensitive sensory nerves to xylene-induced visceral pain in conscious, freely moving rats. *N-S Arch Pharmac* 1988;337:545-51.
- 15) Abelli L, Conte B, Somma V, Maggi CA, Giuliani S, Meli A. A method for studying pain arising from the urinary bladder in conscious, freely-moving rats. *J Urol* 1989;141:148-51.
- 16) Abelli L, Somma V, Maggi CA, Regoli D, Astolfi M, Parlani M, Rovero P, Conte B, Meli A. Effects of tachykinins and selective tachykinin receptor agonists on vascular permeability in the rat lower urinary tract: evidence for the involvement of NK-1 receptors. *J Auton Pharmac (now Auton Autacoid Pharmac)* 1989;9:253-63.
- 17) Maggi CA, Lippe IT, Giuliani S, Abelli L, Somma V, Geppetti P, Jancsó G, Santicioli P, Meli A. Topical versus systemic capsaicin desensitization: specific and unspecific effects as indicated by modification of reflex micturition in rats. *Neuroscience* 1989;31:745-56.
- 18) Manzini S, Conti S, Maggi CA, Abelli L, Somma V, Del Bianco E, Geppetti P. Regional differences in the motor and inflammatory responses to capsaicin in guinea pig airways. Correlation with content and release of substance P-like immunoreactivity. *Am Rev Respir Dis (now Am J Resp Crit Care)* 1989;140:936-41.
- 19) Maggi CA, Abelli L, Giuliani S, Somma V, Furio M, Patacchini R, Meli A. Motor and inflammatory effect of hyperosmolar solutions on the rat urinary bladder in relation to capsaicin-sensitive sensory nerves. *Gen Pharmac (now Vasc Pharmac)* 1990;21:97-103.
- 20) Maggi CA, Giuliani S, Ballati L, Rovero P, Abelli L, Manzini S, Giachetti A, Meli A. In vivo pharmacology of [β Ala⁸]neurokinin A-(4-10), a selective NK-2 tachykinin receptor agonist. *Eur J Pharmac* 1990;177:81-6.
- 21) Abelli L, Ferri G-L, Astolfi M, Conte B, Parlani M, Somma V, Geppetti P, Dahl D, Polak JM, Maggi CA. Involvement of capsaicin-sensitive nerves of the rat urinary bladder in acrylamide neuropathy. *J Auton Nerv Syst (now Auton Neuroscience)* 1990;30:S3-S4.
- 22) Ferri G-L, Sabani A, Abelli L, Polak JM, Dahl D, Portier M-M. Neuronal intermediate filaments in rat dorsal root ganglia: differential distribution of peripherin- and neurofilament proteins-immunoreactivity and effect of capsaicin. *Brain Res* 1990;515:331-5.
- 23) Maggi CA, Giuliani S, Santicioli P, Abelli L, Giachetti A. Facilitation of reflex micturition by intravesical administration of [β Ala⁸]neurokinin A (4-10), a selective NK-2 tachykinin receptor agonist. *J Urol* 1991;145:184-7.
- 24) Abelli L, Ferri G-L, Astolfi M, Conte B, Geppetti P, Parlani M, Dahl D, Polak JM, Maggi CA. Acrylamide-induced visceral neuropathy: evidence for the involvement of capsaicin-sensitive nerves of the rat urinary bladder. *Neuroscience* 1991;41:311-21.
- 25) Abelli L, Nappi F, Maggi CA, Rovero P, Astolfi M, Regoli D, Drapeau G, Giachetti A. NK-1 receptors and vascular permeability in rat airways. In: *Substance P and related peptides: cellular and molecular physiology* (Leeman SE et al. eds.). *Ann New York Acad Sci* 1991;632:358-9.

- 26) Abelli L, Maggi CA, Rovero P, Del Bianco E, Regoli D, Drapeau G, Giachetti A. Effect of synthetic tachykinin analogues on airway microvascular leakage in rats and guinea-pigs: evidence for the involvement of NK-1 receptors. *J Auton Pharmac (now Auton Autacoid Pharmac)* 1991;11:267-75.
- 27) Abelli L, Somma V, Conte B, Parlani M, Geppetti P, Maggi CA. Mechanical irritation induces neurogenic inflammation in the rat urethra. *J Urol* 1991;146:1624-6.
- 28) Ferri G-L, Zareh S, Sbraccia M, Abelli L, Frontali N, Dahl D. Heterogeneous visceral nerve changes in acrylamide intoxication. *Exp Brain Res* 1991;87:363-70.
- 29) Abelli L, Romano N, Mastroliola L, Theodorsson E, Maggi CA. Role of sensory nerves in the development of the micturition reflex in rats. *Acta Embryol Morphol Exp* 1991;12(1):65-6.
- 30) Maggi CA, Abelli L, Giuliani S, Geppetti P. Capsaicin-sensitive afferents and pain arising from the urinary bladder. In: *Pain versus Man* (Sicuteri F et al eds) Raven Press, NY. *Adv Pain Res Ther* 1992;20:71-80.
- 31) Abelli L, Nappi F, Perretti F, Maggi CA, Manzini S, Giachetti A. Microvascular leakage induced by substance P in rat urinary bladder: involvement of cyclo-oxygenase metabolites of arachidonic acid. *J Auton Pharmac (now Auton Autacoid Pharmac)* 1992;12:269-76.
- 32) Abelli L, Nappi F, Subissi A, Manzini S, Giachetti A. Effect of mequitamium iodide (LG 30435) on airway microvascular leakage in the guinea-pig. *Pulm Pharmac (now Pulm Pharmac Ther)* 1992;5:137-41.
- 33) Maggi CA, Lecci A, Abelli L, Giuliani S. The role of capsaicin-sensitive afferents in the genesis of vesical pain and inflammation. In: *New trends in referred pain and hyperalgesia* (Vecchiet L et al. eds.) Elsevier Science Publ, Amsterdam. Pain research and clinical management (ISSN 0921-3287) 1993;7:161-75.
- 34) Neuhuber WL, Appelt M, Polak JM, Baier-Kustermann W, Abelli L, Ferri G-L. Rectospinal neurons: cell bodies, pathways, immunocytochemistry and ultrastructure. *Neuroscience* 1993;56:367-78.
- 35) Abelli L, Geppetti P, Maggi CA. Relative contribution of sympathetic and sensory nerves to thermal nociception and tissue trophism in rats. *Neuroscience* 1993;57:739-45.
- 36) Manzini S, Perretti F, Abelli L, Evangelista S, Seeds EAM, Page CP. Isbufylline, a new xanthine derivative, inhibits airways hyperresponsiveness and airways inflammation in guinea pigs. *Eur J Pharmac* 1993;249:251-7.
- 37) Tramontana M, Renzi D, Panerai C, Surrenti C, Nappi F, Abelli L, Evangelista S. Capsaicin-like effect of resiniferatoxin in the rat stomach. *Neuropeptides* 1994;26:29-32.
- 38) Viti G, Nannicini R, Ricci R, Pestellini V, Abelli L, Furio M. New antagonists of platelet-activating factor containing 2-oxazolidinone or 2-morpholinone. *Eur J Med Chem* 1994;29:401-6.
- 39) Abelli L, Romano N, Mastroliola L. Histology of developing thymus in sea bass *Dicentrarchus labrax* (L.). In: *Contributions to Animal Biology* (Argano R et al. eds.), Halocynthia Association, Palermo-Italy, 1994;9-15.
- 40) Ward JK, Barnes PJ, Springall DR, Abelli L, Tadjkarimi S, Yacoub MH, Polak JM, Belvisi MG. Distribution of human iNANC bronchodilator and nitric oxide-immunoreactive nerves. *Am J Respir Cell Mol Biol* 1995;13:175-84.
- 41) Scapigliati G, Mazzini M, Mastroliola L, Romano N, Abelli L. Production and characterization of a monoclonal antibody against the thymocytes of the sea bass *Dicentrarchus labrax* (L.) (Teleostea, Percichthyidae). *Fish Shellfish Immunol* 1995;5:393-405.
- 42) Romano N, Baldassini MR, Abelli L, Aita M, Mastroliola L. Ultrastructural study on the plial epithelium of the bursa of Fabricius in chick embryos: influence of partial decerebration and hypophyseal allografts. *J Anat* 1996;188:29-41.
- 43) Abelli L, Gallo VP, Civinini A, Mastroliola L. Immunocytochemical and ultrastructural evidence of adrenal chromaffin cell subtypes in sea bass *Dicentrarchus labrax* (L.). *Gen Comp Endocrinol* 1996;101:113-22.
- 44) Romano N, Casini P, Abelli L, Mastroliola L, Aita M. Influence of partial decerebration and hypophyseal allograft on differentiation of thymic epithelial cells in chick embryos: an ultrastructural study. *Anat Embryol (now Brain Structure Function)* 1996;193:593-600.
- 45) Scapigliati G, Romano N, Picchiotti S, Mazzini M, Mastroliola L, Scalia D, Abelli L. Monoclonal antibodies against sea bass *Dicentrarchus labrax* (L.) immunoglobulins: immunolocalization of immunoglobulin-bearing cells and applicability in immunoassays. *Fish Shellfish Immunol* 1996;6:383-401.
- 46) Abelli L, Picchiotti S, Romano N, Mastroliola L, Scapigliati G. Immunocytochemical detection of thymocyte antigenic determinants in developing lymphoid organs of sea bass *Dicentrarchus labrax* (L.). *Fish Shellfish Immunol* 1996;6:493-505.
- 47) Abelli L, Picchiotti S, Romano N, Mastroliola L, Scapigliati G. Ontogeny of thymocytes in sea bass *Dicentrarchus labrax*: studies with monoclonal antibodies. *It J Zool* 1996;63:329-31.
- 48) Romano N, Taverne-Thiele AJ, Abelli L, Mastroliola L, Rombout JHMW. Organ distribution of carp (*Cyprinus carpio*) leucocytes during ontogeny. *It J Zool* 1996;63:333-5.
- 49) Abelli L, Picchiotti S, Romano N, Mastroliola L, Scapigliati G. Immunohistochemistry of gut-associated lymphoid tissue of the sea bass *Dicentrarchus labrax* (L.). *Fish Shellfish Immunol* 1997;7:235-45.
- 50) Romano N, Abelli L, Mastroliola L, Scapigliati G. Immunocytochemical detection and cytomorphology of lymphocyte subpopulations in a teleost fish *Dicentrarchus labrax*. *Cell Tiss Res* 1997;289:163-71.
- 51) Gallo VP, Abelli L, Civinini A, Mastroliola L. Fine cytology of interrenal cells in sea bass *Dicentrarchus labrax* (L.): influence of different salinity concentrations. In: *Frontiers in Environmental and Metabolic Endocrinology* (Maitra SK ed.) The University of Burdwan Publications, Burdwan-India, 1997;67-75.
- 52) Romano N, Baldassini MR, Terribili FR, Abelli L, Mastroliola L, Mazzini M. Histological observations on lymphomyeloid organs of the Antarctic fish *Trematomus bernacchii* (Teleostei: Nototheniidae). *Polar Biol* 1997;18:358-62.
- 53) Scapigliati G, Romano N, Abelli L, Baldassini MR, Terribili FR, Mazzini M. A study on the immune system of some Antarctic teleost species. In: *Proceedings of the Third Meeting on Antarctic Biology* (di Prisco G et al. eds.) Camerino University Press, Camerino-Italy, 1997; 381-8.
- 54) Picchiotti S, Terribili FR, Mastroliola L, Scapigliati G, Abelli L. Expression of lymphocyte antigenic determinants in developing gut-associated lymphoid tissue of the sea bass *Dicentrarchus labrax* (L.). *Anat Embryol (now Brain Structure Function)* 1997;196:457-63.
- 55) Abelli L, Baldassini MR, Meschini R, Mastroliola L. Apoptosis of thymocytes in developing sea bass *Dicentrarchus labrax* (L.). *Fish Shellfish Immunol* 1998;8:13-24.

- 56) Romano N, Picchietti S, Taverne-Thiele JJ, Taverne N, Abelli L, Mastrolia L, Verburg-Van Kemenade B, Rombout JHMW. Distribution of macrophages during fish development: an immunohistochemical study in carp (*Cyprinus carpio*, L.). *Anat Embryol (now Brain Structure Function)* 1998;198:31-41.
- 57) Scapigliati G, Abelli L, Romano N, Mastrolia L, Mazzini M. Studies on the sea bass *Dicentrarchus labrax* (L.) immune system for its control in aquaculture. In: *New Developments in Marine Biotechnology* (Le Gal Y & Halvorson H eds.) Plenum Press, New York, 1998;93-5.
- 58) Mazzini M, Scapigliati G, Abelli L, Terribili FR, Scalia D, Fanelli M, Fausto AM, Mastrolia L, Romano N. A study on the effect of hyperoxygenation on the immune system of euryaline fish in aquaculture. *Biol Mar Medit* 1998;5(3):1633-41.
- 59) Scapigliati G, Romano N, Abelli L. Monoclonal antibodies in fish immunology: identification, ontogeny and activity of T- and B-lymphocytes. *Aquaculture* 1999;172:3-28.
- 60) Romano N, Taverne-Thiele AJ, Fanelli M, Baldassini MR, Abelli L, Mastrolia L, Van Muiswinkel WB, Rombout JHMW. Ontogeny of the thymus in a teleost fish, *Cyprinus carpio*, L.: developing thymocytes in the epithelial microenvironment. *Dev Comp Immunol* 1999;23:123-27.
- 61) Abelli L, Baldassini MR, Mastrolia L, Scapigliati G. Immunodetection of lymphocyte subpopulations involved in allograft rejection in a teleost, *Dicentrarchus labrax* (L.). *Cell Immunol* 1999;191:152-60.
- 62) Abelli L, Scapigliati G, Romano N, Scalia D, Terribili FR, Meloni S, Mazzini M. Age- and season-related variations of serum Ig and number of T- and B-cells in *Dicentrarchus labrax* (L.), and preliminary data on effect of hyperoxygenation. In: *New species for mediterranean aquaculture* (Enne G & Greppi GF eds.) Elsevier, Paris, 1999;141-4.
- 63) Taddei AR, Abelli L, Baldacci A, Barbato F, Fausto AM, Mazzini M. Ultrastructure of spermatozoa of marine teleosts *Umbrina cirrosa* L. and *Diplodus puntazzo* (Cetti) and preliminary observations on effects of cryopreservation. In: *New species for mediterranean aquaculture* (Enne G & Greppi GF eds) Elsevier Paris, 1999;407-13.
- 64) Scapigliati G, Romano N, Abelli L, Meloni S, Ficca AG, Buonocore F, Bird S, Secombes CJ. Immunopurification of T-cells from sea bass *Dicentrarchus labrax* (L.). *Fish Shellfish Immunol* 2000;10:329-41.
- 65) Romano N, Ceccariglia S, Abelli L, Mazzini M, Mastrolia L. Lymphomyeloid organs of the Antarctic fish *Trematomus nicolai* and *Chionodraco hamatus* (Teleostei: Notothenioidea): a comparative histological study. *Polar Biol* 2000;23:321-8.
- 66) Taddei AR, Barbato F, Abelli L, Canese S, Moretti F, Rana KJ, Fausto AM, Mazzini M. Is cryopreservation a homogeneous process? Ultrastructure and motility of untreated, prefreezing and postthawed spermatozoa of *Diplodus puntazzo* (Cetti). *Cryobiology* 2001;42:244-55.
- 67) Picchietti S, Scapigliati G, Fanelli M, Barbato F, Canese S, Mastrolia L, Mazzini M, Abelli L. Sex-related variations of serum immunoglobulins during reproduction in gilthead sea bream and evidence for a transfer from the female to the eggs. *J Fish Biol* 2001;59:1503-11.
- 68) Scapigliati G, Romano N, Buonocore F, Picchietti S, Baldassini MR, Prugnoli D, Galice A, Meloni S, Secombes CJ, Mazzini M, Abelli L. The immune system of sea bass, *Dicentrarchus labrax*, reared in aquaculture. *Dev Comp Immunol* 2002;26:151-60.
- 69) Fausto AM, Taddei AR, Abelli L, Mazzini M. Effects of cryopreservation on the fish spermatozoa ultrastructure. In: *Proceedings of the 9th International Symposium on Spermatology* (Van der Horst G et al. eds) Monduzzi Ed Bologna, 2002;35-9.
- 70) Fiorini S, Ferretti ME, Biondi C, Pavan B, Lunghi L, Paganetto G, Abelli L. 17 β -estradiol stimulates arachidonate release from human amnion-like WISH cells through a rapid mechanism, involving a membrane receptor. *Endocrinology* 2003;144:3359-67.
- 71) Picchietti S, Taddei AR, Scapigliati G, Buonocore F, Fausto AM, Romano N, Mazzini M, Mastrolia L, Abelli L. Immunoglobulin protein and gene transcripts in ovarian follicles throughout oogenesis in the teleost *Dicentrarchus labrax* (L.). *Cell Tissue Res* 2004;315:259-70.
- 72) Fausto AM, Picchietti S, Taddei AR, Zeni C, Scapigliati G, Mazzini M, Abelli L. Formation of the egg envelope of a teleost, *Dicentrarchus labrax* (L.): immunochemical and cytochemical detection of multiple components. *Anat Embryol (now Brain Structure Function)* 2004;208:43-53.
- 73) Romano N, Ceccariglia S, Abelli L, Baldassini MR, Picchietti S, Mazzini M, Mastrolia L. Adaptation of fish lymphomyeloid organs to polar water. *Chemistry and Ecology* 2004;20(S1):65-77.
- 74) Bagni M, Romano N, Fioia MG, Abelli L, Scapigliati G, Tiscar PG, Sarti M, Marino G. Short- and long-term effects of a dietary yeast β -glucan (Macrogard) and alginate acid (Ergosan) preparation on immune response in sea bass (*Dicentrarchus labrax*). *Fish Shellfish Immunol* 2005;18:311-25.
- 75) Abelli L, Coscia MR, De Santis A, Zeni C, Oreste U. Evidence for hepato-biliary transport of immunoglobulin in the antarctic teleost fish *Trematomus bernacchii*. *Dev Comp Immunol* 2005;29:431-42.
- 76) Romano N, Baldassini MR, Buonocore F, Picchietti S, Mastrolia L, Abelli L. In vivo allograft rejection in a bony fish *Dicentrarchus labrax* (L.): characterisation of effector lymphocytes. *Cell Tissue Res* 2005;321:353-63.
- 77) Picchietti S, Abelli L, Buonocore F, Randelli E, Fausto AM, Scapigliati G, Mazzini M. Immunoglobulin protein and gene transcripts in sea bream (*Sparus aurata* L.) oocytes. *Fish Shellfish Immunol* 2006;20:398-404.
- 78) Picchietti S, Mazzini M, Taddei AR, Renna R, Fausto AM, Mulero V, Carnevali O, Cresci A, Abelli L. Effects of administration of probiotic strains on GALT of larval gilthead seabream: immunohistochemical and ultrastructural studies. *Fish Shellfish Immunol* 2007;22:57-67.
- 79) Romano N, Rossi F, Abelli L, Caccia E, Piergentili R, Mastrolia L, Randelli E, Buonocore F. Majority of $TCR\beta^+$ T-lymphocytes located in thymus and midgut of the bony fish, *Dicentrarchus labrax* (L.). *Cell Tissue Res* 2007;329:479-89.
- 80) Picchietti S, Guerra L, Selleri L, Buonocore F, Abelli L, Scapigliati G, Mazzini M, Fausto AM. Compartmentalisation of T cells expressing *CD8a* and *TCR\beta* in developing thymus of sea bass *Dicentrarchus labrax* (L.). *Dev Comp Immunol* 2008;32:92-9.
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