

PERSONAL INFORMATION



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[Skype Stem](#)

WORK EXPERIENCE

- 1979-81: fellow in the Laboratory of Electron Microscopy, Department of Human Anatomy, University of Rome "La Sapienza".
- 1981: visiting researcher Lab. Natl. of Health in Paris (prof. J. Dayan): *in vitro* culture studies.
- 1983: researcher, School of Medicine, University of Naples Federico II (Histology).
- 1988/9: fellow Department of Biostructures University of Washington, Seattle (WA, USA). 3D reconstruction of pancreatic islets.
- 1989/91: fellow, III Medical Clinic of the Justus-Liebig Universität, Giessen (Germany) (chairman prof. K. Federlin) and subsequent scientific collaboration.
- since 1992 professor of Histology and Embryology in the Dentistry School of the Second University of Naples;
- since 1996 professor Histology and Embryology in the School of Medicine of the same Institution.
- Since 2005 and Actual Position: full professor of Histology and Embryology, Department of Experimental Medicine. Director of the TERM lab. Co-director in the CGA (Centro Grandi Apparecchiature) and BioTecknet. Director of the Laboratory: Tissue Engineering, Regenerative Medicine and Cancer Stem cell targeting.
Director of Hospital Unit of Diagnostics in Cytometry and Molecular Oncology (Deep Sequencing genes).

EDUCATION AND TRAINING

1968-1973

Classical High school

1973-1979

Medical School University Federico II of Naples, Obtained cum Laude

PERSONAL SKILLS

Mother tongue

Italian

Other language(s)

English

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B2	C1	C1	C1	C1

French

	C2	C1	C2	C1	C1
Replace with name of language certificate. Enter level if known.					

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user

[Common European Framework of Reference for Languages](#)

Communication skills

- good communication skills gained through my experience as academic and speaker in many international congresses.

Organisational / managerial skills leadership (currently responsible for a team of 10 people)

ADDITIONAL INFORMATION

Funds and collaborations

- Italian MURST (Projects of relevant Interest-SIRIO-FIRB);
- CNR PROJECT;
- COST "NAMABIO"
- European Community (Eurotransbio);
- PON Prometheus, PON 03 and PON 07 -ESA (European Space Agency); -Campania Region. -
Private Companies (Novaxa Leader); -Second University of Naples

- Italian PRIN Miur

Collaborations: Prof. Dubois, ULB, Belgium,
prof. T. Mitsiadis, Institute of Oral Biology Zurich,
prof. Pacifici, Thomas Jefferson University Phi, USA,
prof. Cossu and prof. Sampaolesi San Raffaele-DIBIT, Milan;
prof. Sampaolesi, University of Leuven, Stem cell Institute;
prof. Papagerakis, University of Michigan, Dep. Head and Neck, Ann Arbor;
Dr. A. Perry, Dublin Trinity College,
Prof Evzen Amler, Charles University of Prague, Institute of Biophysics,
Prof Regad, Nottingham Trent University, UK
Prof. Nirmal Robinson, Adelaide (Australia)

Referee and Editor activities:

Referee of several Journals, including:

Stem Cells; Tissue Eng; Cancer Res; Int. J. of cancer;
FEBS letters; JBMR; Cell Death and Differentiation; BMC central; PLOS One; Stem Cells Rev;
ECM J; Biomaterials; J Cell Physiology; J Cell Biochem; Bone; Gene Ther; J Cell Biochem., Cyotherapy, Stem cell
Rev rep; Stem Cells and Regen, frontiers in Physiol; Oncotarget.

Member of the Editorial Board and Top Reviewer of the following International Journals:

-Stem Cells,
-Stem Cells Transl Med
-Plos One; Journal of Dental
research; Stem Cell Reviews
Letters, Stem Cells in Oral
Biology; Cells;Int J Mol Sci

Scientific Society

Member of several societies including the Italian Society of Human Anatomy and Histology

Scientific Activity

Topics: Mesenchymal Stem Cells differentiation into bone and Cancer Stem Cells of osteosarcomas and oral cancer. In particular, he studied: -mesenchymal stem cells, characterizing a subpopulation, called SBP-DPSCs which has demonstrated capability to produce woven bone in vitro. Moreover, he has studied their interactions with scaffolds and tissue formation in engineered rotating apparatuses. Studies led to the production of a bone tissue in vivo. The studies were then enlarged and applied to humans leading to a successful clinical trial in which mandible bone defects were completely restored. Moreover, he is studying other than the applications of DPSCs, adult Mesenchymal cells of human adipose tissue, with the production in vitro and in vivo of a loose adipose, vascularized connective and other tissues. Mesenchymal stem cells were also loaded on several scaffolds and in 3D their behavior was studied. The ability to drive differentiation has been evidenced. In addition, he studies the cancer stem cells (CSCs) in osteosarcomas. He identified those cells using the CD133 marker and other techniques, then after transplantation into NOD/SCID mice obtained tumours with the same CSCs. Studies on CSCs and compared those cells when forming spheres with adherent ones from sarcomas and oral cancer. Another interesting topic regards the studies of interaction of CSCs with adipose stem cells. Articles on those topics have been published to International Journals with IF. Two International patents have been also obtained and extended worldwide. Studies on several aspects of cancers have also been published.

Publications

- 1) Pisanti F.A., **Papaccio G.**, Frascatore S.: Dialysis of haemolysates in glycosylated hemoglobin assay. *Acta Diabetologica Latina, (oggi Acta Diabetologica)* 29, 393-4, 1982.
- 2) **Papaccio G.** and Pisanti F.A.: Scanning Electron Microscopy of the Cephalopod Gill: a vascular cast study. *J. Electron Microscopy*, 33: 349-355, 1984.
- 3) **Papaccio G.**, Pisanti F.A. and Frascatore S.: Acetyl- homocysteine thiolactone-induced increase of Superoxide Dismutase counteracts the effect of subdiabetogenic doses of streptozocin. *Diabetes* 35, 470-474, 1986.
- 4) **Papaccio G.**, Esposito V.: Hyperglycemic effects of hydrochlorothiazide and propranolol. A biochemical and ultrastructural study. *Acta Diabetologica Latina, (oggi Acta Diabetologica)* 24, 325-330, 1987.
- 5) Esposito V. and **Papaccio G.**: Nephrotoxicity of Cyclosporin A in diabetic Bio Breeding rats, *Micron*, 19, 227-234, 1988.
- 6) Pisanti F.A., Frascatore S., **Papaccio G.**: Superoxide dismutase activity in the Bio Breeding rat: a dynamic time-course study. *Life Sciences*, 43, 1625-1632, 1988.
- 7) **Papaccio G.** and Mezzogiorno V.: Morphological aspects of glucagon and somatostatin islet cells in diabetic bio breeding and low-dose streptozocin-treated wistar rats. *Pancreas* 4, 289-294, 1989.
- 8) **Papaccio G.**, Esposito V. and Mezzogiorno V.: Multiple low-dose streptozocin-treated rats: biochemical and morphological effects of Cyclosporin A administration. *Cell. Mol. Biol.* 35, 409-420, 1989.
- 9) **Papaccio G.**, Esposito V. and Mezzogiorno V.: Recovery from pancreatic side effects after the withdrawal of Cyclosporin A treatment in Bio Breeding and Wistar rats. *Micron* 20, 88-97, 1989.
- 10) **Papaccio G.**, Esposito V.: Cyclosporin administration during pregnancy induces ultrastructural changes on pancreatic Beta-cells of newborn rats. *Cell Tissues and Organs*, 137: 336-341, 1990.
- 11) **Papaccio G.**, Chieffi-Baccari G., Mezzogiorno V., Esposito V.: Capillary area in early low-dose-Streptozocin treated mice. *Histochemistry*, 95, 19-21, 1990.
- 12) **Papaccio G.**, Linn T., Federlin K., Volkmann A., Esposito V. and Mezzogiorno V.: Further morphological and biochemical observations on early low dose streptozocin diabetes in mice. *Pancreas*, 6, 659-67, 1991.
- 13) **Papaccio G.**: Prevention of low-dose-streptozocin induced diabetes by acetyl-homocysteine-thiolactone. *Diabetes Res and Clin Pr* , 13, 95-102, 1991.
- 14) **Papaccio G.**, Frascatore S., Esposito V., Pisanti F.A.: Early macrophage infiltration in low dose streptozocin decreases islet superoxide dismutase levels: prevention by silica pretreatment. *Acta Anatomica (oggi Cells Tissues and Organs)* 142: 141-146, 1991.
- 15) **Papaccio G.**, Latronico M., Frascatore S. and Pisanti F.: Superoxide dismutase in low-dose-treated mice: a dynamic time-course study. *Int. J. Pancreatol.*, 10, 253-260, 1991.
- 16) Sabbatini M., De Nicola L., Uccello F., Romano G., **Papaccio G.** et al.: Medium-term cyclosporin renal dysfunction and its reversibility in rats. *Am. J. Physiol Sect E*, 260: 898-905, 1991.
- 17) **Papaccio G.**, Esposito V.: Ultrastructural observations on cytotoxic effector cells infiltrating pancreatic islets of low dose streptozocin treated mice. *Virchows Archiv A*, 420: 5-10, 1992.
- 18) **Papaccio G.**, Chieffi-Baccari G.: Alterations of islet microvasculature in low dose streptozocin treated mice. *Histochemistry and Cell Biol.*, 97: 371-374, 1992.
- 19) **Papaccio G.** and Latronico M.: Diabetes incidence and histopathological lesions in animal models. *Diabetes Res. and Clin. Practice*, 18, 137, 1992.
- 20) **Papaccio G.**, Chieffi Baccari G. , Esposito V.: Immunomodulation of low dose streptozocin diabetes in mice reveals that insulitis is not obligatory for B cell destruction. *J. of Anatomy*, 181, 403-407, 1992.
- 21) **Papaccio G.**: Gangliosides prevent insulitis but not islet B cell desruption in LDS treated mice. *Diabetes Res. and Clin. Practice*, 19, 9-15, 1993.
- 22) **Papaccio G.**, Linn T., Chieffi-Baccari G.: Morphological observations on pancreatic islet blood vessels in low dose streptozocin treated mice. *J. of Anatomy*, 182, 45-53, 1993.
- 23) **Papaccio G.**, Chieffi Baccari G., Mezzogiorno V., Esposito V.: Extra-islet infiltration in NOD mouse: observations after immunomodulation. *Pancreas*, 8, 459-464, 1993.
- 24) **Papaccio G.**, Chieffi Baccari G., Mezzogiorno V. : In vivo effects of gangliosides on NOD mice. *Acta Anat. (oggi Cells Tissues and Organs)* 147: 168-173, 1993.
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- 26) **Papaccio G.**: Insulitis and islet microvasculature in type I diabetes. *Histol. Histopathol.* (invited review) , 8: 751-759, 1993.
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- 28) **Papaccio G.**, Esposito V., Chieffi Baccari G.: The immunosuppressant FK506 inhibits the damage to mouse pancreatic islets induced by low dose streptozocin. *Cell. Tissue Res.*, 277: 573-578, 1994.
- 29) **Papaccio G.**, Frascatore S and Pisanti F.A: An increase in superoxide dismutase counteracts islet vascular alterations in low dose streptozocin treated mice. *Histochemistry and Cell Biol.*, 101: 215-221, 1994.
- 30) **Papaccio G.**, Strate C and Linn T: Pancreatic duct infiltration in the low-dose streptozocin-treated mouse. *Histol. Histopathol.*, 9: 529-534, 1994.
- 31) **Papaccio G.** : Morphology and Molecular Biology: can the latter ignore the former? An Imaginary Dialogue. *Arch. Histol. Cytol.* 57: 301-303, 1994.
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- 33) **Papaccio G.**, Chieffi Baccari G, Strate C and Linn T: Pancreatic duct inflammatory infiltration in the non obese diabetic (NOD) mouse. *J. Anat.* 185: 465-470, 1995.
- 34) **Papaccio G.**, Esposito V., Latronico M VG and Pisanti FA : Administration of a nitric oxide synthase inhibitor does not suppress low-dose streptozocin-treated diabetes in mice. *Int J Pancr.* 17: 63-68, 1995.
- 35) **Papaccio G.**: Inhibition of Nitric oxide formation and prevention of type 1 diabetes. *Autoimmunity*, 20: 69, 1995.
- 36) **Papaccio G.**, Frascatore S, Pisanti F.A., Latronico M G V and Linn T: Superoxide dismutase in the non obese diabetic mouse: a dynamic time-course study. *Life Sciences* 56: 2223-2228, 1995.
- 37) **Papaccio G.**, Pisanti FA, Sellitti S, Frascatore S and Chieffi Baccari G: The vitamin E derivative by U-83836-E in the low-dose streptozocin-treated mouse: effects on diabetes development. *Diabetes Res. and Clin. Pr.* 30:163-171, 1995.
- 38) **Papaccio G.**, Sellitti S., Salvatore G. and Chieffi Baccari G.: The Harderian Gland in autoimmune diabetes of the non obese diabetic mouse. *Microscopy Res and Technique* 34:156-165, 1996.
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- 41) **Papaccio G.**, Latronico MVG, Pisanti FA, Federlin K and Linn T: Adhesion molecules and microvascular changes in the nonobese diabetic (NOD) mouse pancreas. An NO-inhibitor (ω -NAME) is unable to block adhesion inflammation-induced activation. **Autoimmunity** 27: 65-77, 1998.
- 42) **Papaccio G.**, Morelli MP, Pisanti FA: Effect of butylated hydroxytoluene (BHT) enriched diet on serum antioxidant activity in pre- and overtly diabetic NOD mice. **Life Sciences** 63: 1357-60, 1998.
- 43) **Papaccio G.**, De Luca B, Pisanti FA: Macrophages and antioxidant status in the NOD mouse pancreas. **J. Cell Biochem** 71: 479-490, 1998.
- 44) **Papaccio G.**, Ammendola E, Pisanti FA: Nicotinamide decreases MHC class II but not MHC class I expression and increases ICAM-I structures in the nonobese diabetic (NOD) mouse pancreas. **J Endocrinol** 160: 389-400 1999.
- 45) **Papaccio G.**, De Luca A, Pisanti F.A. and Zarrilli F: Detection of Dendritic cells in the nonobese diabetic (NOD) mouse islet pancreatic infiltrate is correlated with the Th2-cytokine production. **J Cell Biochem** 74: 447-457, 1999.
- 46) **Papaccio G.**, Pisanti FA, Latronico MVG, Ammendola E and Galdieri M: Multiple low-dose as well as single high dose treatment with streptozocin do not generate nitric oxide. **J Cell Biochem** 77: 82-91, 2000.
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- 50) Di Marco R, Puglisi G, **Papaccio G.**, Nicoletti A, Patti F, Reggio A, Bendtzen F, Nicoletti F: Sodium fusidate (fusidin) ameliorates the course of monophasic experimental allergic encephalomyelitis in the Lewis rats. **Mult Scler** 7: 101-4, 2001.
- 51) **Papaccio G.**, Pedullà M, Ammendola E, and Todaro M. Cytokine regulatory effects on α -1 proteinase inhibitor expression in NOD mouse islet endothelial cells. **J Cell Biochem** 85: 123-130, 2002.
- 52) **Papaccio G.**, Pisanti FA, Di Montefiano R, Graziano A and Latronico MVG: Th1 and Th2 cytokines exert regulatory effects upon islet microvascular areas in the NOD mouse. **J Cell Biochem** 86 651-664, 2002.
- 53) **Papaccio G.**, Nicoletti F, Pisanti FA, Galdieri M, Bendtzen K. An Imidazoline Compound Completely Counteracts Interleukin-1[β] toxic Effects to Rat Pancreatic Islet [beta] Cells. **Mol Med.** 8:536-45, 2002.
- 54) Nicoletti F, Di Marco R, **Papaccio G.**, Conget I, Gomis R, Bernardini R, Sims JE, Shoenfeld Y and Bendtzen K. Essential pathogenetic role of endogenous IL-18 in murine diabetes induced by multiple low doses of streptozocin. Prevention of hyperglycemia and insulitis by a recombinant IL-18-binding protein: Fc construct. **Eur J Immunol** 33: 2278-2286, 2003.
- 55) Todaro M, Di Gaudio F, Lavitrano M, Stassi G. and **Papaccio G.** Islet β -cell apoptosis triggered *in vivo* by interleukin-1 β is not related to the inducible nitric oxide synthase pathway: evidence for mitochondrial function impairment and lipoperoxidation. **Endocrinology** 144: 4264-4271, 2003.
- 56) Di Marco R, Mangano K, Quattrochi C, Musumeci R, Speciale AM, **Papaccio G.**, Buschard K, Bendtzen K, Nicoletti F Curative effects of sodium fusidate on the development of dinitrobenzenesulfonic acid-induced colitis in rats **Clin Imunol** 109: 266-71, 2003.
- 57) **Papaccio G.**, Graziano A, Valiante S, d'Aquino R, Travali A, and Nicoletti F Interleukin (IL)-1 β toxicity to islet β cells: Efroxan exerts a complete protection. **J. Cell Physiol** 203: 94-102, 2005.
- 58) **Papaccio G.**, Graziano A, d'Aquino R, Valiante S and Naro F A biphasic role of nuclear transcription factor (NF)-kB in the islet β -cell apoptosis induced by Interleukin (IL)-1 β . **J. Cell Physiol**, 204: 124-130, 2005.
- 59) Laino L, d'Aquino R, Graziano A, Lanza V, Carinci F, Pirozzi G, Naro F and **Papaccio G.** Dental pulp stem cells can be detected in aged humans: an useful source for living autologous fibrous bone tissue (LAB). **J. Bone Mineral. Res.**, 20:1394-402, 2005.
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- 62) **Papaccio G** and Laino G. First International Meeting on "Stem Cell applications in the Craniofacial region" **J. Cell Physiol**. 208:473-5, 2006.
- 63) **Papaccio G.**, Graziano A, d'Aquino R, De Francesco F, Puca A, Pedullà M. An early but intense cytokine production within the islets may be predictive for type 1 diabetes occurrence in the Bio Breeding (BB) rat. **J. Cell Physiol** 209 :1016-20, 2007.
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PATENTS

1- "Stem cells obtained from pulp of deciduous or permanent teeth and of dental germ, able to produce human bone tissue" PCT/EP2005/0081; WO 2006/010600

2- "Selection of an embryonic-like stem cell population from Human periodontal folliculi" n. WO2007/096115A2

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