

CV - Prof. Carlo Tacchetti

Naples (I), July 12, 1957

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Affiliations

Professor of Anatomy – Medical School, Vita-Salute San Raffaele University

Group Leader - Experimental Imaging Center, IRCCS San Raffaele Hospital

Director - International PhD Course in Molecular Medicine, Vita-Salute San Raffaele University

Coordinator – UniSR/HSR/Microsoft AI Center (S-RACE)

Studies

- 1982 - Federico II University, Naples (I). 6 yrs. *Degree in Medicine and Surgery*, laude
- 1987 - Federico II University, Naples (I). 3 yrs. *Diploma of Specialist in Oncology*, laude

Education

- 1979/1982 - *Training student* – 3 yrs. Institute of General Pathology, Medical School, Federico II University, Naples (I)
- 1980 - *Training student* - 2 mo. Weizman Institute of Science. Rehovot (IL)
- 1981 - *Training student* - 3 mo. National Cancer Institute, National Institutes of Health - Bethesda, Md, (USA)

Academic career

- 1992/2000 – 7.5 yrs. *Associate Professor of Human Anatomy*. Faculty of Medicine, University of Genoa (I)
- 2000/2017 – 6.5 yrs. *Full Professor of Human Anatomy* - Faculty of Medicine, University of Genoa (I)
- 2017/Present - *Full Professor of Human Anatomy* - Faculty of Medicine, University Vita-Salute San Raffaele, Milan (I)

Scientific career

- 1983/ 1985 – 3 yrs. *Post Doc* National Cancer Institute, National Institutes of Health - Bethesda, Md, (USA)
- 1989 - *Visiting Scientist* – 2 mo. European Molecular Biology Laboratories (EMBL) Heidelberg (D)
- 1986/1990 – 3.5 yrs. *Staff Scientist* - Istituto Scientifico Tumori, Genoa (I)
- 1990/1991 – 1 yr. *EU Senior Cancer Research Scientist* - CNRS, Ecole Normale Supérieure. Paris (F)
- 2002/2012 – 10 yrs. *Laboratory Director* - IFOM-IEO campus, Milan (satellite unit, University of Genoa) (I)
- 2004/2012 – 5 yrs. *Founder and Director* - Centro Interdipartimentale di Ricerca MicroSCoBiO (Correlative Microscopy and Spectroscopy in Biomedicine), University of Genoa (I)
- 2010/2024 - *Director* - Experimental Imaging Center – IRCCS San Raffaele Scientific Hospital, Milan (I)
- 2022/Present – 2 yrs. *Coordinator* - UniSR/HSR/Microsoft AI in Healthcare strategic partnership – University Vita-Salute San Raffaele and IRCCS San Raffaele Scientific Hospital, Milan (I)
- 2024/Present – *Group Leader* – Cancer Imaging, Experimental Imaging Center – IRCCS San Raffaele Scientific Hospital, Milan (I)

Publications

ORCID: <https://orcid.org/0000-0003-4602-000X>

PubMed: <https://pubmed.ncbi.nlm.nih.gov/?term=tacchetti+c&sort=date>

Bibliometric parameters:

146 peer reviewed publications

Total IF: 1128; Average IF: 8.2

H-index: 54 (Scopus)

Scientific interests:

1. The initial studies were aimed at the setting of 3D models for in vitro studies of tissue homeostasis, his studies in thyroid and cartilage have been pivotal for the most recent advancement in this approach (Tacchetti et al. 1987. **J. Cell Biol.** 105:999-1006; Descalzi-Cancedda F et al. 1989. **J. Cell Biol.** 107:2455-2463; Quarto R. et al. 1990. **J. Cell Biol.** 110:1379-1386).
2. The interest slowly moved to understanding of the molecular basis of cancer metastasis identifying for the first time the Urokinase receptor as one of the molecular events involved in the matrix degradation associated to cancer cell migration (Stoppelli M.P., Tacchetti C. et al. 1986 **Cell** 45:675-684), cancer progression, on the role played by molecular mechanisms promoting cancer cell survival and migration mostly in collaboration with the research groups directed by Prof. P.P. Di Fiore, Prof. Paolo Pinton, Prof. Giulio Draetta, Prof Michele Carbone (Confalonieri S. et al. 2000. **J. Cell Biol.** 150:905-911; Santolini E. et al. 2000. **J. Cell Biol.** 151:1345-1351; Salcini A.E. 2001. et al. **Nature Cell Biol.** 3:755-760; Croce A. et al 2004. **Nature Cell Biol.** 6:1173-9; Tosoni D. 2005. **Cell** 123:875-88; Puri C. et al. 2005; **Mol. Biol. Cell.** 16:2704-2718; Sigismund S. et al. 2005. **P. Natl. Acad. Sci. USA.** 102:2760-65; Giorgi C et al. 2010. **Science** 330:1247-51; Missiroli S et al. 2016. **Cell Report** 16:2415–27; Loffreda A. et al. 2017. **Nature Commun.** 22:313; Bononi A. et al. 2017. **Nature.** 546:549-553; Caldieri G. et al. 2017 **Science.** 356:617-624; Pascolutti R. et al. 2019. **Cell Rep.** 27:3049-3061; Manzo T. et al. 2020. **J Exp Med.** 217(8):e20191920.
3. In the last two years, in addition to latter field of research, Prof. Tacchetti has developed a strong interest in the application of Artificial Intelligence in healthcare. Within this frame he has fostered a pivotal partnership between Microsoft and UniSR/HSR and generated two AI platforms for the prognostic risk calculation of Covid-19 patients (AI-SCORE, one of the few reaching the clinical stage. Paper in press: DOI: 10.1007/s11547-022-01518-0) and for predicting the immunotherapy response in NSCLC lung cancer PD-L1 positive lung cancer patients (AI-HOPE project).

Selected Publications:

- Van Genderen ME et al. 2025; *Jama*. 333:1483
- Ogliari F et al. 2025; *Lung cancer*. 199:108075
- Sorge M et al. 2024; *EMBO Mol. Med.* 16:2450
- Simoni M et al. 2024; *EMBO Mol. Med.* 16:1324
- Mesa M et al. 2024; *Nature comm.* 15:5119
- Mazzocca M et al. 2023; *Nature comm.* 14:6433
- Danese A et al. 2022; *Cell Rep.* 40:111124.
- Palmisano A et al. 2022; *Radiol Med.* 127:960-972.
- Esposito A et al. 2021; *Eur Radiol.* 31:4031-4041.
- Manzo T et al. 2020; *J Exp Med.* 217:e20191920.
- Gaviraghi et al. 2020; *Sci Rep.* 10:16906.
- Pascolutti R. et al. 2019; *Cell Rep.* 7(10):3049-3061.
- Caldieri G. et al. 2017; *Science.* 356:617-624
- Bononi A. et al. 2017; *Nature.* 546:549-553
- Loffreda A. at al. 2017; *Nature comm.* 8:313
- Missiroli S. et al. 2016; *Cell Report.* 16:1–13

- Bagnato P. et al. 2017; *Oncotarget*. 8:60109-60122
- Castagnola P. et al. 2016; *Oncotarget*. 7:85411-85429
- Cossu I. et al. 2015; *Biomaterials*. 68:89-99
- Daniele T. et al. 2014; *Curr. Biol*. 24:393-403
- Cortese K. et al. 2013; *Mol. Biol. Cell*. 24:129-144
- Giorgi C. et al. 2010; *Science*. 330:1247-51"
- Mancuso P. et al. 2009; *Clin. Cancer Res*. 15:267-273
- Calebiro D. et al. 2009; *PLoS Biol*. 7:e1000172
- Cortese K. et al. 2009; *J. Histochem. Cytochem*. 57:1103-12
- Settembre C. et al. 2008; *Hum. Mol. Genet*. 17:119-29
- Vicidomini G. et al. 2008; *Traffic*. 9:1-11
- Settembre C. et al. 2007; *P. Natl. Acad. Sci. USA*. 104:4506-11
- Lampugnani M.G. et al. 2006; *J. Cell Biol*. 174:593-604
- Tosoni D. et al. 2005; *Cell*. 123:875-88
- Sigismund S. et al. 2005; *P. Natl. Acad. Sci. USA*. 102:2760-65
- Valabrega C. et al. 2005; *Oncogene* 24:3002-10
- Surace E.M. et al. 2005; *Mol. Ther*. 12: 652-8
- Schiaffino M.V. and Tacchetti C. 2005; *Pigm. Cell. Res*. 18:227-233
- Puri C. et al. 2005; *Mol. Biol. Cell*. 16:2704-2718
- Croce A. et al. 2004; *Nature Cell Biol*. 6:1173-9
- Segat D. et al. 2002; *J. Biol. Chem*. 277:31612-31622
- Salcini A.E. et al. 2001; *Nature Cell Biol*. 3:755-760
- Mitchell K.J. et al. 2001; *J. Cell Biol*. 155:41-51
- Santolini E. et al. 2000; *J. Cell Biol*. 151:1345-1351
- Confalonieri S. et al. 2000; *J. Cell Biol*. 150:905-911
- Incerti B. et al. 2000; *Hum. Mol. Genet*. 9:2781-2788
- Santolini E. et al. 2000; *J. Cell Biol*. 151:1345-1351
- Confalonieri S. et al. 2000; *J. Cell Biol*. 150:905-911
- Incerti B. et al. 2000; *Hum. Mol. Genet*. 9:2781-2788
- Schiaffino M.V. et al. 1999; *Nature Genet*. 23:108-112
- Tacchetti C. . et al. 1997; *Am. J. Pathol*. 150:533-542
- Schiaffino M.V. . et al. 1996; *P. Natl. Acad. Sci. USA*. 93:9055-9060
- Quarto R. . et al. 1990; *J. Cell Biol*. 110:1379-1386
- Tacchetti C. et al. 1989; *Dev. Biol*. 132:442-447
- Descalzi-Cancedda F. et al. 1987; *J. Cell Biol*. 107:2455-2463
- Stoppelli M.P. et al. 1986; *Cell* 45:675-684
- Tacchetti C. et al. 1986; *J. Cell. Physiol*. 126:93-98
- Tacchetti C. et al. 1986; *J. Cell Biol*. 105:999-1006