

PERSONAL INFORMATION



NATALIA DI PIETRO

Work address: Laboratory of Vascular and Stem Cell Biology, Department of Medical, Oral and Biotechnological Sciences, University "G. d'Annunzio" CHIETI – PESCARA
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Sex Female | **Date of birth** 25 December 1976 | **Nationality** Italian

POSITION

SENIOR RESEARCHER (SSD/MED50)

Laboratory of VASCULAR and STEM CELL BIOLOGY, Department of Medical, Oral and Biotechnological Sciences, University "G. d'Annunzio" CHIETI – PESCARA, Center for Advanced Studies and Technology (CAST), Italy.

Scopus Author ID 24597692800
RESEARCH ID K-1604-2016
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H-Index 19, Citations 1304 (source Scopus 05 May 2023)

EDUCATION AND QUALIFICATIONS

2009	Ph.D. in "Physiopathology of Metabolism" University "G. d'Annunzio", Chieti-Pescara, (Italy) and NIDDK (National Institute of Diabetic, Digestive and Kidney Disease), NIH, Bethesda, Maryland (USA).
2004	Registration in the "National Biologists Order (ONB) Professional Register" Section A, n. 054067, Rome, Italy.
2003	Italian Government Biology Licence University of Ancona, Italy.
2003	Biological Sciences Degree University of Ancona, Italy. Degree mark 110/110
2017	National Habilitation as Associate Professor , 06 / N1 - SCIENCES OF HEALTH PROFESSIONS AND APPLIED MEDICAL TECHNOLOGIES National Habilitation as Associate Professor, 05 / F1 - APPLIED BIOLOGY National Habilitation as Associate Professor, 05 / E1 - BIOCHEMISTRY

WORK EXPERIENCE

December 1st 2021-ongoing

Senior Researcher (RTDB)

Department of Medical, Oral and Biotechnological Sciences, SSD MED/50 Area 06, Research Project title: "Development of Experimental Protocols to support innovative medical techniques useful for the diagnosis and treatment of chronic-degenerative cardiometabolic diseases". Laboratory of vascular and stem cell biology, University "G. d'Annunzio" CHIETI – PESCARA, Center for Advanced Studies and Technology (CAST, ex CeSI-MeT), Italy.

2020-2021

Junior Researcher (RTDA)

Department of Medical, Oral and Biotechnological Sciences, SSD MED/50 Area 06, Research Project title: "Development of experimental protocols to support innovative techniques useful for the diagnosis and treatment of chronic inflammatory state". Laboratory of vascular and stem cell biology, University "G. d'Annunzio" Chieti – Pescara, Center for Advanced Studies and Technology (CAST, ex CeSI-MeT), Italy.

2015 - 2019

Research Fellow

Department of Medicine and Aging Sciences, SSD MED/38 Area 06, Research Project title: "Oxidative Stress in Obese Children". Laboratory of Vascular and Stem Cell Biology (Mentor: Prof. A. Pandolfi). Center for Excellence on Ageing and Translational Medicine, CeSI-MeT, University "G. d'Annunzio", Chieti-Pescara, Italy.

2009 - 2014

Post-doctoral Fellow

Department of Medical, Oral and Biotechnological Sciences, SSD MED/46 Area 06, Research Project title: "Potential role of glucose in the regulation of neurodegeneration mechanisms" O.U. Blood Vessel Pathophysiology (Mentor: Prof. A. Pandolfi), CeSI (Center for Excellence on Ageing), University "G. d'Annunzio", Chieti-Pescara, Italy.

2006 - 2008

Visiting PhD student

NIDDK (National Institute of Diabetic, Digestive and Kidney Disease) (Mentor: Dr. E. Mueller), NIH, Bethesda, Maryland, USA.

2004 - 2008

PhD student

Department of Biomedical Sciences, O.U. Blood Vessel Pathophysiology (Mentor: Prof. A. Pandolfi), CeSI (Center for Excellence on Ageing), campus University "G. d'Annunzio", Chieti-Pescara, Italy.

2003 - 2004

Fellowship in Cellular Biology

Department of Bio-morphology, and Laboratory of Diabetes and Metabolism (Mentor Prof. M. Felaco, coordinator Prof. A. Pandolfi), CeSI (Center for Excellence on Ageing), campus University "G. d'Annunzio", Chieti-Pescara, Italy.

MAIN TRAINING COURSES

(Total attended courses: 13)

2021

Course for the use of Liquid Nitrogen

(Nippon Gases Pharma Srl), CAST (Center for Advanced Studies and Technology), Chieti, Italy.

2011-2012

Training Course in "Clinical Nutrition"

University of "Niccolò Cusano" in agreement with the International Academy of Clinical Nutrition (A.I.Nu.C), for the Academic Year 2011-2012, Rome (Italy).

2007-2008

Training Course in "Introduction to the Principles and Practice of Clinical Research"

NIH (National Institute of Health) Bethesda, Maryland, USA.

2006

Training Course for Animal Users

NIH (National Institute of Health) Bethesda, Maryland, USA.

2001-2003

Training in alimentary and wine-making microbiology

Department of Agrarian and Environmental Biotechnologies, University of Ancona, Ancona, Italy.

PERSONAL SKILLS

Mother tongue	Italian
Other language	English (level B2+: understanding, listening and writing) French (school level: understanding, listening and writing)
Digital competence	Windows and Macintosh operating system, Office package, graphics processing programs, network resources, statistical software.

ADDITIONAL INFORMATION

Member of Scientific Society	2005- Siset (Italian Society for the Study of Haemostasis and Thrombosis) 2009- SCR Italy (Stem Cell Research Italy) 2009- StemTech Group (group for the study of Stem Cells Chieti-Teramo) 2010- ISNN (International society of Nutrigenetics/Nutrigenomics) 2010- iNOS (Italian Nitric Oxide Society) 2011- ABNI (Italian Association of Biologists Nutritionists) 2013- AICC (Italian Association of Cell Culture) 2014- SIN (Italian Society of Nephrology) 2019- SID (Italian Society of Diabetes) 2020- SIRTEPS (Italian Society of Translational Research and Health Professions) 2021- DDS (Digital Dentistry Society) 2022- BBBA (Bone, Biomaterials & Beyond Academy) 2022- Cenacolo Odontostomatologico Adelante (Odontostomatological cenacle Adelante)
Ad hoc Reviewer (32 Journals)	Toxins; Journal of Functional Foods; Molecular Nutrition and Food Research; BBA-Molecular Basis of Disease; PlosOne; Scientific Reports – Nature; Current Pharmaceutical Design; JSM Atherosclerosis; Food Science and Nutrition; Experimental and Clinical Endocrinology & Diabetes; European Journal of Pharmacology; Journal of Vascular Research; DNA and Cell Biology; Nutrition, Metabolism & Cardiovascular Diseases; Antioxidants; Theranostics; Journal of Traditional and Complementary Medicine; Molecular Biology Reports; Acta Diabetologica; Food & Function; Life; Nutrients; Frontiers in Pharmacology; Gene & Nutrition; Hystology and Histopathology; Molecules, Antioxidants; Hemodialysis International; International Journal of Molecular Sciences; FASEB Journal
Reviewer for Grant proposal	2017 Project NCN-POLAND. National Sciences Center research grant, Poland.

Editorial Board member

Guest Editor (Special Issue)

Food Science and Nutrition

- International Journal of Molecular Sciences (IF 5.924). Section: Biochemistry. Special Issue: The Molecules and Stem Cells in Bone Regeneration.
- International Journal of Molecular Sciences (IF 5.924). Section: Molecular Pathology, Diagnostics, and Therapeutics. Special Issue: Natural Bioactive Compounds to Promote Cardiovascular Health.
- Applied Sciences (IF 2.679). Section: Food Science and Technology. Special Issue: Essential Oils: Potential Effects on the Cardiovascular System.
- Antioxidants (IF 6.313). Section: Health Outcomes of Antioxidants and Oxidative Stress. Special Issue: Antioxidants and their Role in the Prevention and Treatment of Chronic Kidney Disease.
- Antioxidants (IF 7.675). Section: Health Outcomes of Antioxidants and Oxidative Stress. Special Issue: Antioxidants and their Role in the Prevention and Treatment of Chronic Kidney Disease VOLUME II
- Bioengineering (IF 5.046). Section: Biomedical Engineering and Biomaterials. Special Issue: Recent Advances in Biomaterials for Bone Tissue Engineering Strategies.
- Pathogens (IF 4.531). Section: Pathogens. Special Issue: Oral Microbiome and Human Systemic Health

Organization in Scientific Committee for National and International Congresses

22 February 2023. Organizer of PhD (Course in Medical Biotechnologies) seminar, Theme: Collagen. University "G. d'Annunzio" Chieti – Pescara. Center for Advanced Studies and Technology (CAST).

14 February 2023. Organizer and moderator of the Webinar Bone Biomaterials & Beyond (BBBA) ACADEMY. Speaker: Christopher Kottgen: "Augmentation of horizontal defects with a xenogeneic cortical membrane".

16 November 2022. Organizer (Scientific Organizational Committee) Meeting: Bone bio-modification following the use of the piezoelectric knife and its clinical applications. International Speaker: Prof. Serge Dibart, Professor and Chair of the Department of Periodontology at the Boston University Henry M. Goldman School of Dental Medicine. University "G. d'Annunzio" Chieti – Pescara. Center for Advanced Studies and Technology (CAST)

Participation in Founded Projects

PI (Principal Investigator) in RESEARCH PROJECS (UNIVERSITY G. D'ANNUNZIO)

University funds (ex 60%) 2020 -ongoing:

2022 Development of experimental protocols to support Innovative Medical Techniques useful for the diagnosis and treatment of chronic-degenerative cardiometabolic diseases

2021 Identification of new potential erythrocyte biomarkers for monitoring cardiovascular complications in uremia

2020 Identification of new potential erythrocyte biomarkers for monitoring cardiovascular complications in uremia

Role of Coordinator in RESEARCH PROJECTS FROM PRIVATE NATIONAL AND INTERNATIONAL INSTITUTIONS

2021-2022 GUNA S.p.A. Project: INNOVATIVE COLLAGEN-BASED COMPOUND APPLICATIONS IN THE DENTAL FIELD: FROM IN VITRO AND IN VIVO STUDIES TO THE POTENTIAL USE AS COATING ON NEW IMPLANT SURFACES.

Funding Grants

2016 SIN (Italian Society of Nephrology)

Project title: "Identification of new potential biomarkers in red blood cells (RBCs) for monitoring the development of Cardiovascular Disease (CVD) in Chronic Kidney Disease (CKD)".

Principal Investigator (30 months)

Scientific research activity

The research activity of Dr. Natalia Di Pietro has been focused on the study of the potential biomolecular mechanisms associated with the loss of vascular homeostasis and therefore with cardiovascular disease.

This condition is often related to a state of low-grade chronic inflammation, which is also the basis of the onset of numerous diseases, such as diabetes, chronic renal failure, obesity and neurodegenerative diseases.

The experimental results obtained using in vitro, ex vivo, and in vivo study models allow easy translational application in the field of biomedical technologies, biotechnologies and applied medical technical sciences. The studies conducted by Dr. Natalia Di Pietro support the possibility of identifying potential biomolecular markers of disease and of developing related diagnostic kits and new drugs applied for the prevention and treatment of these diseases.

Recently, the research activity of Dr. Natalia Di Pietro has broadened in the dental field. In particular, her interests are focused on: new biomaterials and implant surfaces; in vitro mechanisms that regulate the osseointegration processes of dental implants; in vitro mechanisms that regulate the regeneration of periodontal and peri-implant soft tissues.

Participation in Founded Projects

ITALIAN RESEARCH MINISTRY

2004 PRIN: Molecular basis of insulin-resistance and their role in the alterations of vascular wall (24 months). **Co-investigator.**

2006 PRIN: "ER Stress: potential new mechanism of cell damage in diabetes. **Co-investigator.**

2005 MIPAAF: "Carotenoid's activity in the human health." (CARONUT, 36 months). **Co-investigator.**

2008 PRIN: "Mechanisms of vascular cell activation in T2D". **Co-investigator.**

EUROPEAN RESEARCH PROGRAMS

2006 EFSD (European Foundation for the Study of Diabetes): "SIRT1 mediated epigenetic changes in diabetes vascular complications". **Co-investigator** (24 months)

2010 EFSD: "TRIB3 and cardiovascular risk in type 2 diabetes mellitus". **Co-investigator** (24 months) Private Founding

2006 TELETHON: "The role of TRB3 gene modulation of insulin resistance-mediated endothelial dysfunction and myocardial infarction". **Co-investigator** (24 months)

2012 CYSTIC FIBROSIS FOUNDATION: "The role of vascular endothelium in cystic fibrosis inflammation". **Co-investigator** (12 months)

2016 EUROPEAN UNION'S HORIZON 2020: "An INNOvative approach towards understanding and arresting Type 1 DIAbetes" (INNODIA PROJECT). **Co-investigator** (24 months).

2019 PON MISE: "Identification of new compounds for the pharmacological treatment of diseases with a high need for care of the organs of sight and hearing". **Co-investigator (41 months - ongoing)**

2022 PNRR: "Fondazione (HUB) CN3 - Sviluppo di terapia genica e farmaci con tecnologia a RNA – e allo Spoke n. 10 Bambino Gesù Hospital di Roma – Spoke Leader - responsabile Prof. Franco Locatelli – "Preclinical development, GMP manufacturing and clinical trials of GTMP". **Co-investigator- ongoing**

Research Supervisory and Training Responsibilities

Supervisor and training responsibility of PhD Students

2022- ongoing Supervisor of the experimental PhD thesis of Heydari Sheikh Hossein (Medical Biotechnologies, XXXVIII Cycle). University G. d'Annunzio Chieti-Pescara, Chieti.

2022- ongoing Supervisor of the experimental PhD thesis of Amjad Muhammad Dawood (Medical Biotechnologies, XXXVIII Cycle). University G. d'Annunzio Chieti-Pescara, Chieti.

2021- ongoing Supervisor of the experimental PhD thesis (Medical Biotechnologies, XXXVII Cycle) of Tea Romasco. University G. d'Annunzio Chieti-Pescara, Chieti.

2021-2022 Supervisor of the experimental thesis of industrial doctorate of Stefano Di Carlo, University G. d'Annunzio Chieti-Pescara, Chieti.

2021-2022 Supervisor of the experimental thesis of industrial doctorate of Francesco Saverio Sirabella. University G. d'Annunzio Chieti-Pescara, Chieti, Italy.

Supervisor and training responsibility of undergraduate

2023- ongoing Supervisor of the experimental thesis of Aristide Salvatore, Course of Study in Techniques of prevention in the environment and in the workplace, University G. d'Annunzio Chieti-Pescara, Chieti.

2022- ongoing Supervisor of the experimental thesis of Simona Zazzara, Course of Study in Techniques of prevention in the environment and in the workplace, University G. d'Annunzio Chieti-Pescara, Chieti.

2022- ongoing Supervisor of the experimental thesis of Gabriella Palmarini, Course of Study in Cardiocirculatory physiopathology and cardiovascular perfusion techniques, University G. d'Annunzio Chieti-Pescara, Chieti.

2021-2022 Supervisor of the experimental thesis of Giuliana Candela, Course of Study in Cardiocirculatory physiopathology and cardiovascular perfusion techniques, University G. d'Annunzio Chieti-Pescara, Chieti, Italy.

2021- 2022 Supervisor of the experimental thesis of Alessandro Ciabattini, Course of Study in Techniques of prevention in the environment and in the workplace, University G. d'Annunzio Chieti-Pescara, Chieti, Italy.

Co-Supervisor of degree thesis and medical specializations

2022 Co-supervisor of the experimental thesis of Chiara Angelucci, Course of study in Cardiocirculatory physiopathology and cardiovascular perfusion techniques, University G. d'Annunzio Chieti-Pescara, Chieti, Italy.

2021 Co-Supervisor of Valeria Schiavone Thesis, University G. d'Annunzio Chieti-Pescara, Chieti-Italy.

2018 Co-Supervisor of Simona Silvestri, Specialization thesis in Nephrology, University G. d'Annunzio Chieti-Pescara, Chieti, Italy.

2017 Co-Supervisor of Carola Palmerini Thesis, University G. d'Annunzio Chieti-Pescara, Chieti, Italy.

2015 Co-Supervisor of Michela Toro, Specialization thesis in Nutrition Sciences, University G. d'Annunzio Chieti-Pescara, Chieti, Italy.

2014 Co-Supervisor of Federica Carfagnini, M.D. thesis, University G. d'Annunzio Chieti-Pescara, Chieti, Italy.

Supervisor of Foreign Medical Students

2022 Supervisor of Bianca Poggianella Fede (Faculdade de Medicina de Jundiaí, Brazil), SISM (Medical Student Italian Secretary). University G. d'Annunzio Chieti-Pescara, Chieti, Italy.

2022 Supervisor of Ian Inestroza (Universidad Autonoma de Honduras, Honduras), SISM (Medical Student Italian Secretary). University G. d'Annunzio Chieti-Pescara, Chieti, Italy.

2021 Supervisor of Grazia Senatore (Università di Salerno) and Myriam Traulo (Università Tor Vergata, Rome), SISM (Medical Student Italian Secretary). University G. d'Annunzio Chieti-Pescara, Chieti, Italy.

2021 Supervisor of Adrián Alejandro Moreno Mares (University of Mexico), SISM (Medical Student Italian Secretary). University G. d'Annunzio Chieti-Pescara, Chieti, Italy.

2019 Supervisor of Sama Ramos (University of Caxias do Sul, RS, Brazil), SISM (Medical Student Italian Secretary) research exchange program. University G. d'Annunzio Chieti-Pescara, Chieti, Italy.

2018 Supervisor of Liudmilla Denisova (University of Medicine and Dentistry, Moscow, Russia), SISM (Medical Student Italian Secretary) research exchange program. University G. d'Annunzio Chieti-Pescara, Chieti, Italy.

2018 Supervisor of Gabrielle Mitjascic (University of San Francisco, USA), SISM (Medical Student Italian Secretary) research exchange program. University G. d'Annunzio Chieti-Pescara, Chieti, Italy.

2017 Supervisor of Krstić Miloš (Medical Faculty in Kragujevac, Serbia), SISM (Medical Student Italian Secretary) research exchange program. University G. d'Annunzio Chieti-Pescara, Chieti, Italy.

2016 Supervisor of Alexandra Nicoleta Totoianu (University of Medicine and Pharmacy Craiova, Romania), SISM (Medical Student Italian Secretary) research exchange program. University G. d'Annunzio Chieti-Pescara, Chieti, Italy.

2016 Supervisor of Nicolae-Alexandru Vladulescu (University of Medicine and Pharmacy Craiova, Romania), SISM (Medical Student Italian Secretary) research exchange program. University G. d'Annunzio Chieti-Pescara, Chieti, Italy.

2013 Supervisor of Reza Sorbi (University of Teheran, Iran), SISM (Medical Student Italian Secretary) research exchange program. University G. d'Annunzio Chieti-Pescara, Chieti, Italy.

Undergraduate Students

2003-2004 Tutor in Biology, Faculty of Psychology. University G. d'Annunzio Chieti-Pescara, Chieti, Italy.

2022- ongoing Tutor in Radiological techniques and criteria of correctness, Faculty of Medical Radiology Techniques for Images and Radiotherapy. University G. d'Annunzio Chieti-Pescara, Chieti, Italy.

2022- ongoing Tutor in Manual handling of loads, Faculty of Techniques of prevention in the environment and in the workplace. University G. d'Annunzio Chieti-Pescara, Chieti, Italy.

2021- ongoing Tutor in Behavioral rehabilitation techniques, Faculty of Speech and Language Therapy. University G. d'Annunzio Chieti-Pescara, Chieti, Italy.

2020- ongoing Tutor in Food inspection and control, Faculty of Techniques of prevention in the environment and in the workplace. University G. d'Annunzio Chieti-Pescara, Chieti, Italy.

2020- ongoing Tutor in Applied Sciences and Techniques III and IV, Faculty of Cardiocirculatory physiopathology and cardiovascular perfusion techniques. University G. d'Annunzio Chieti-Pescara, Chieti, Italy.

Institutional Responsibilities

2023-ongoing Member in the Board of PhD Course in "Medical Biotechnologies" (University G. d'Annunzio Chieti-Pescara).

Teaching

2022-2023 Teaching Assignments (University G. d'Annunzio, Chieti-Pescara)

- Teaching Assignment, 1st semester, Applied Medical Sciences and Techniques (MED/50 2 CFU = 20 hours) in the Integrative teaching course "Propaedeutics and Cardiac Surgery I" in the Course "Cardiocirculatory and Cardiovascular Perfusion techniques" A.Y. 2022/2023.
- Teaching Assignment, 1st semester, Applied Medical Sciences and Techniques IV (MED/50 2 CFU = 20 hours) in the Integrative teaching course "Propaedeutics and Cardiac Surgery I" in the Course "Cardiocirculatory and Cardiovascular Perfusion techniques" A.Y. 2022/2023.
- Teaching Assignment, 2nd semester, Food inspection and control (MED/50 3 CFU= 24 hours), in the Integrative teaching course "Techniques of prevention in the environment and in the workplace" A.Y. 2022/2023.
- Teaching Assignment, 2nd semester, Behavioral rehabilitation techniques (MED/50 3 CFU = 30 hours), in the Integrative teaching course "Speech and Language Therapy II" A.Y. 2022/2023. Also, COORDINATOR of the Integrative teaching course in "Speech Theories and Techniques II".
- Teaching Assignment, 2nd semester, Manual handling of loads I (MED/50 2 CFU = 16 hours), in the Integrative teaching course "Clinical Sciences II", in the Course "Techniques of prevention in the environment and in the workplace" A.Y. 2022/2023.
- Teaching Assignment, 2nd semester, Radiological techniques and criteria of correctness (MED/50 1 CFU = 10 hours), in the Integrative teaching course "Diagnostics and Applied Medical Technical Sciences II" in the Course in "Medical Radiology Techniques for Images and Radiotherapy" A.Y. 2022/2023.

2021-2022 Teaching Assignments (University G. d'Annunzio, Chieti-Pescara)

- Teaching Assignment, 1st semester, Applied Medical Sciences and Techniques III (MED/50 2 CFU = 20 hours) in the Integrative teaching course "Propaedeutics and Cardiac Surgery I" in the Course "Cardiocirculatory and Cardiovascular Perfusion techniques" A.Y. 2021/2021.
- Teaching Assignment, 2nd semester, Applied Medical Sciences and Techniques IV (MED/50 2 CFU = 20 hours), in the Integrative teaching course "Propaedeutics and Cardiac Surgery Technique II" in the Course "Cardiocirculatory and Cardiovascular Perfusion techniques" A.Y. 2021/2022.
- Teaching Assignment, 2nd semester, Food Inspection and Control (MED/50 3 CFU= 24 hours), in the Integrative teaching course "Prevention Sciences" in the Course "Environmental and Workplace Prevention Techniques", A.Y. 2021/2022.
- Teaching Assignment, 2nd semester, Behavioral rehabilitation techniques (MED/50 3 CFU=30hours), in the Integrative teaching course in Speech Language and Therapy. A.Y. 2021/2022.

2020-2021 Teaching Assignments (University G. d'Annunzio, Chieti-Pescara)

- Teaching Assignment, 1st semester, Applied Medical Sciences and Techniques (MED/50 2 CFU = 20 hours) in the Integrative teaching course "Propaedeutics and Cardiac Surgery I" in the Course "Cardiocirculatory and Cardiovascular Perfusion techniques" A.Y. 2020/2021. Also, COORDINATOR of the Integrative Course "Propaedeutics and Cardiac Surgery Technique I".
- Teaching Assignment, 2nd semester, Applied Medical Sciences and Techniques IV (MED/50 2 CFU = 20 hours), in the Integrative teaching course "Propaedeutics and Cardiac Surgery Technique II" in the Course "Cardiocirculatory and Cardiovascular Perfusion techniques" A.Y. 2020/2021. Also, COORDINATOR of the Integrative Course "Propaedeutics and Cardiac Surgery Technique II".
- Teaching Assignment, 2nd semester, Food Inspection and Control (MED/50 3 CFU= 24 hours), in the Integrative teaching course "Prevention Sciences" in the Course "Environmental and Workplace Prevention Techniques", A.Y. 2020/2021.

2014-2016 Integrative teaching assignment for the discipline of Applied Biology (University G. d'Annunzio, Chieti):

- Nursing course, University G. d'Annunzio, Chieti.

2014-2015 Integrative teaching assignment for the discipline of Applied Biology (University G. d'Annunzio, Chieti):

- Health Assistant course, University G. d'Annunzio, Chieti.
Integrative teaching assignment for the discipline of Applied Biology (University G. d'Annunzio, Chieti)
- Dietistic course, University G. d'Annunzio, Chieti.

2009-2011 Integrative teaching assignment for the discipline of Applied Biology (SSD/BIO13):

- Nursing course, University G. d'Annunzio, Chieti.
- Health Assistant course, University G. d'Annunzio, Chieti.
- Dietistic course, University G. d'Annunzio, Chieti.

Conferences at National and International Meetings

Participation with ORAL COMMUNICATION or POSTER PRESENTATION (peer-reviewed published abstract) at:

- 87 National Conferences (2003-2022)
- 44 International Conferences (2005-2022)

Invited Speaker

27 April 2023. Natalia Di Pietro & Luca Comuzzi. WEBINAR GUNA. "Collagene: nuove formulazioni per un versatile uso in odontoiatria".

14-15 April 2023. Natalia Di Pietro & Adriano Piattelli. 10° Congresso Istituto Stomatologico Toscano. "Macro- e micro-strutture implantari innovative per migliorare la struttura e la stabilità dei tessuti molli peri-implantari", Viareggio.

11 March 2023. Natalia Di Pietro & Adriano Piattelli. CORSO DI FORMAZIONE CONTINUA: Il futuro anteriore dell'implantologia, Naples.

10 March 2023. Natalia Di Pietro. UNISTEM DAY 2023, University G. d'Annunzio di Chieti-Pescara. "Cellule staminali e cavo orale: nuove terapie in vista? "

07 March 2023. Natalia Di Pietro & Adriano Piattelli. WEBINAR YOUR DENTAL COACH. "50 YEARS OF IMPLANTOLOGY: IMPLANTOLOGY 4.0. A LOOK INTO THE FUTURE!".

22 February 2023. Natalia Di Pietro. Organizer and Moderator of the PhD meeting on Collagen, CAST University Chieti-Pescara. "Collagene e tessuti molli peri-implantari: uno studio sperimentale"; "Collagene: dalla rigenerazione ossea alla guarigione delle ferite".

11 February 2023. Natalia Di Pietro, Adriano Piattelli, Alessandro Cipollina. CORSO DI FORMAZIONE CONTINUA AIO (Associazione Italiana Odontoiatri) CATANIA: "Implantologia 4.0 uno sguardo al futuro", Catania.

10 February 2023. Natalia Di Pietro & Adriano Piattelli. MASTER "SECOND LEVEL INTERNATIONAL MASTER IN ORAL SURGERY & IMPLANTOLOGY", Saint Camillus International University Rome. "50 years of implantology: implantology 4.0. a look into the future!", Rome.

8 December 2022. Natalia Di Pietro, Adriano Piattelli, Morena Petrini and Margherita Tumedei. "40 YEARS OF OSSEOINTEGRATION: THE IMPLACIL DE BORTOLI EXPERIENCE, IMPLANTOLOGY 4.0. A JUMP TO THE FUTURE!". International Conference, University of Santa Catarina, Brasil.

6 December 2022. Natalia Di Pietro. "5-DELTA-AMINOLEVULINIC ACID IN COMBINATION WITH PHOTODYNAMIC THERAPY (ALA-PDT): REGENERATIVE EFFECTS ON ORAL CELLS". Conference University of Guarulhos, Sao Paulo-SP, Brasil.

5 December 2022. Natalia Di Pietro, Adriano Piattelli, Morena Petrini and Margherita Tumedei. "40 YEARS OF OSSEOINTEGRATION: THE IMPLACIL DE BORTOLI EXPERIENCE, IMPLANTOLOGY 4.0. A JUMP TO THE FUTURE!". International Meeting, Sao Paulo-SP, Brasil.

12 November 2022. Natalia Di Pietro. "(1) Integrazione e stabilità tissutale: come la ricerca di base può supportare le applicazioni cliniche. (2) Mantenere la salute peri-implantare nel tempo: nuovi approcci dalla medicina rigenerativa". CORSO di AGGIORNAMENTO AIO (Associazione Italiana Odontoiatri) "INNOVAZIONE IN IMPLANTOLOGIA, LA RICERCA E LA CLINICA: ELEMENTI FONDAMENTALI DEI TESSUTI DI SOSTEGNO PERIMPLANTARI", Palermo.

15 October 2022. Natalia Di Pietro. "(1) Integrazione e stabilità tissutale: come la ricerca di base può supportare le applicazioni cliniche. (2) Mantenere la salute peri-implantare nel tempo: nuovi approcci dalla medicina rigenerativa. (3) Uno sguardo verso il futuro". CORSO di AGGIORNAMENTO "INNOVAZIONE IN IMPLANTOLOGIA, LA RICERCA E LA CLINICA: ELEMENTI FONDAMENTALI DEI TESSUTI DI SOSTEGNO PERIMPLANTARI", Messina.

14 October 2022. Natalia Di Pietro. "(1) Meccanismo d'azione della Terapia Fotodinamica (ALA-PDT); (2) Fotobiomodulazione; (3) Dove siamo nella realtà quotidiana: importanza della raccolta dati". CORSO di AGGIORNAMENTO "ALADENT: NUOVE SOLUZIONI NELLA TERAPIA DEI TESSUTI PERIMPLANTARI E PARODONTALI", Catania.

9-10 September 2022. Natalia Di Pietro. "NEWS IN REGENERATIVE MEDICINE IN DENTISTRY: FROM EXPERIMENTAL RESEARCH TO CLINICAL PROTOCOLS". 4th International Congress "Technological Innovations and Experimental Protocols in Periodontology, Oral Surgery and Orthodontics", Bari.

9 July 2022. Natalia Di Pietro. "Bone and Soft Tissue Regeneration in Oral Defects.". Meeting "UNA FINESTRA SUL FUTURO", Alcamo, Trapani.

8 July 2022. Natalia Di Pietro. "How to Write scientific paper". MINI-CORSO di AGGIORNAMENTO, Sciacca, Agrigento.

19-20 June 2022. Natalia Di Pietro. "Role of collagen in bone regeneration: new evidences from in vitro studies". BBB ACADEMY TENTATIVE CLOSED MEETING, Turin.

19-20 May 2022. Natalia Di Pietro e Adriano Piattelli. "Maintaining dental implants health overtime: new approaches to improve osseointegration and soft tissue health". 5th Bilateral Italy-Israel Dental Congress. Tel Aviv, Israel.

1-2 April 2022. Natalia Di Pietro, Pier Michele Mandrillo. "Biotestimolazione cellulare e riepitelizzazione: ruolo della matrice extracellulare, fotobiomodulazione ed ossido nitrico". Il Congress SIF Italia Centrale: La flebolinefologia tra presente, futuro... e la clinica. Flebolinefologia tra tecnologia e ricerca. Pescara.

25-26 March 2022. Natalia Di Pietro. "Collagene iniettabile e fotobiomodulazione. Approcci innovativi per la Medicina Rigenerativa in Odontoiatria". XXVI NATIONAL CONGRESS COI-AIOG:

"L'Odontoiatria al servizio della salute. Odontoiatria e Medicina: un binomio inscindibile", Catania.

14 March 2022. Natalia Di Pietro, Adriano Piattelli. "Salute parodontale e perimplantare: nuove prospettive concepite attorno al ruolo chiave dei tessuti molli". COLGATE Webinar FAD.

26 February 2022. Natalia Di Pietro. "RUOLO DEL COLLAGENE E DELL' AIRPLASMA NELLA GUARIGIONE DELLE FERITE: DAGLI STUDI IN VITRO ALLE APPLICAZIONI IN VIVO". Cenacolo Odontostomatologico Adelante. Il futuro della Ricerca, la ricerca del futuro. Benessere e Bellezza. Francavilla al Mare, Chieti.

27 November 2021 Giovanna Iezzi, Natalia Di Pietro, Pier Michele Mandrillo. "Tissue regeneration: role of fibroblasts and extracellular matrix". Course ANDI PUGLIA (National Association of Italian Dentists), Trani.

27 November 2021 Simonetta D'Ercole, Morena Petrini, Natalia Di Pietro. "Traditional and innovative techniques for the treatment of periodontitis and peri-implantitis: focus on photodynamic therapy and 5-Delta-Aminolevulinic acid". Course ANDI PUGLIA (National Association of Italian Dentists), Trani.

02 October 2021 Natalia Di Pietro & Emira D'Amico & Tania Pierfelice. "Innovative implant surfaces. What practical information can basic research transfer to the daily clinic?". ANDI Course (National Association of Italian Dentists) "Perimplantitis revised", Foggia.

20-21 October 2018 Di Pietro N. "Principles for consciously healthy nutrition". Pescara Wellness & Beauty 2018: National Fair Conferences, Pescara.

03-06 October 2018 Di Pietro N. "Identification of new potential biomarkers in red blood cells (RBCs) for monitoring the development of cardiovascular disease (CVD) in chronic kidney disease (CKD)". MINI-LECTURE. 59th National Congress of the Italian Society of Nephrology (SIN), Rimini.

07 September 2018 Di Pietro N. "Nutrition and its microscopic implications: Pathophysiological Mechanisms". Saper Nutrire (SANI) conference to stay HEALTHY, CeSI-MeT, University G. d'Annunzio Chieti-Pescara, Chieti.

13-15 June 2018 Di Pietro N. "Biodiversity, natural molecules and cardiovascular health". Biodiversity 2018, XII National Conference, Teramo.

Awards: International

2022 MENTION. Romasco, Mandrillo, Schiavone, Pelusi, Piattelli, **Di Pietro.** "New approaches for periodontal tissues regeneration: in vitro and in vivo effectiveness of Collagen Biorevitalization" Technological Innovations and Experimental Protocols in Periodontology, Oral Surgery and Orthodontics. Use of Growth Factors, Clinical Relevance and Prospectives, 4th International Congress, Bari.

2022 AWARD: RICERCA BIOFISICA. TAOBUK DA VINCI AWARD. Cipollina, Tumedei, D'Ercole, Petrini, **Di Pietro.** "Complex Magnetic Fields in Biofisica Informazionale". TaoBuk, Taormina Book Festival, Contest 2022, Taormina.

2022 AWARD: INNOVAZIONE-APPLICAZIONI CLINICHE BIOFISICA. TAOBUK DA VINCI AWARD. Cannarozzo, Romasco, **Di Pietro**, Cordovana, Lo Giudice, Pierfelice, D'Amico. "Effetti di una nuova terapia fotodinamica basata su acido 5-aminolevulinico e led (630nm): dalla ricerca di base alle applicazioni cliniche in campo dentale", Closed Meeting ANTECH. TaoBuk, Taormina Book Festival, Contest 2022, Taormina.

2021 BEST POSTER AWARD. "Post-extraction sites treated with porcine derived materials from histological results to future possibilities for ridge preservation". Bone, Biomaterials & Beyond Academy. BBBA International Congress, Seville, Spain.

National

2023 AWARD: QUALITA' DELLA RICERCA. Tea Romasco, Pier Michele Mandrillo, Adriano Piattelli, **Natalia Di Pietro.** "Medicina Traslazionale in Odontoiatria: Nuovi Approcci Biotecnologici e Sinergici alla Stimolazione Collagenica dei Tessuti Molli Orali". Reggio Calabria, 24-25 March 2023. XXVII National Congress COI-AIOG: "Dalla ricerca scientifica alla clinica: la pratica odontoiatrica tra generalisti e specialisti".

2022 AWARD: BEST POSTER. Pierfelice TV, D'Amico E, Petrini M, Piattelli A, **Di Pietro N**, Lepore S, Vecchiet F, Cacchio L, D'Arcangelo C, Iezzi G. "PHOTODYNAMIC THERAPY BASED ON NEW 5-ALA GEL AND 630nm-LED PROMOTES OSTEOGENIC EFFECTS". CDUO, Bologna.

2006 SISET (Italian Society for the Study of Haemostasis and Thrombosis) Young Investigator Award

Patents

2023. Industrial Patent N: 102023000007497, 18/04/2023. TITLE: PERINATAL TISSUE-DERIVED CELL CULTURE ISOLATOR AND METHOD OF ISOLATION OF AT LEAST A TYPE OF CELL FROM A PERINATAL TISSUE. Role: INVENTOR.

2022. Industrial Patent N: 102022000015318, 21/07/2022. TITLE: USE OF 5-AMINOLEVULINIC ACID FOR THE TREATMENT OF PANCREATIC CANCER. Role: INVENTOR.

Scientific Publications (all career) and Book Chapter (4)

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1. Schiavone V, Romasco T, Di Pietrantonio N, Garzoli S, Palmerini C, Di Tomo P, Pipino C, Mandatori D, Fioravanti R, Butturini E, Sabatino M, Baldassarre MPA, Ragno R, Pandolfi A, **Di Pietro N**. Essential Oils from Mediterranean Plants Inhibit In Vitro Monocyte Adhesion to Endothelial Cells from Umbilical Cords of Females with Gestational Diabetes Mellitus. *Int J Mol Sci.* **2023** Apr 13;24(8):7225. doi: 10.3390/ijms24087225.
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2. Romasco T, Mandrillo PM, Morsut E, Tumedei M, Mandatori D, Petrini M, Curia MC, De Angelis F, D'Arcangelo C, Piattelli A, **Di Pietro N**. Morpho-Functional Effect of a New Collagen-Based Medical Device on Human Gingival Fibroblasts: An In Vitro Study. *Biomedicines.* **2023** Mar 5;11(3):786. doi: 10.3390/biomedicines11030786.
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La Sottoscritta Natalia Di Pietro consapevole che chiunque rilascia dichiarazioni mendaci è punito ai sensi del codice penale e delle leggi speciali in materia, ai sensi e per gli effetti degli art. 46 e 47 D.P.R. n. 445/2000.

Luogo e data

Firma del dichiarante

CHIETI 05 Maggio 2023



Autorizzo il trattamento dei miei dati personali ai sensi del Decreto Legislativo 30 giugno 2003, n. 196 e del GDPR (Regolamento UE 2016/679).