

PERSONAL INFORMATION

Alessandro Gentile

WORK EXPERIENCE:

- November 2024-present Research Scholar at Department of Medicine, Division of Cardiology, University of Colorado, Anschutz Medical Campus, USA. Project title: Role of Four and half LIM domain 1 in the pathogenesis and phenotypic variability in hypertrophic cardiomyopathy. Toward a better elucidation of the underlying mechanisms of cardiac remodeling leading to heart failure.
- February 2023 – present Specialization School in Clinical Pathology and Clinical Biochemistry Department of Molecular Medicine and Medical Biotechnology, Federico II University of Naples, Italy
- July 2023 – July 2024 Scholarship funded by Intradepartmental Program of "Gynecological Physiopathology", Federico II University of Naples, Italy.
Scientific director: Prof. Maurizio Guida. Project title: 'Pilot study on the implementation of the screening for the identification of chromosomal anomalies during the first trimester of pregnancy in the Campania Region'.

TRAINING:

- December 2020–December 2022 Research Traineeship, Department of Molecular Medicine and Medical Biotechnology; Federico II University of Naples, Via S. Pansini 5, 80121 Naples, Italy
Project title: Monitoring of health and sports performance of professional athletes through the study of the relationship between physical exercise and the immune system: creation of the "biological passport" of the professional athlete.
Aim of the project: to identify new biomarkers for the early diagnosis of heart and/or skeletal muscle pathologies in athletes.

EDUCATION:

- December 2020 – December 2022 Master degree in Medical Biotechnology Summa cum laude
Federico II, University of Naples, Italy.
Acquisition of the following expertises:
- Techniques of molecular Biology and pathological Diagnosis

- Genetics and Synthesis of biomolecules
- Pharmacogenomics and Gene Therapy

October 2017 – December 2020

Bachelor degree in Medical Biotechnology 110/110
 Federico II, University of Naples, Italy.
 Acquisition of the following expertises:

- Molecular pathology
- Biochemistry
- Cellular and Molecular Biology
- Bioethics

PERSONAL SKILLS:

Mother tongue(s) Italian

Other language(s)

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

Job-related skills

- Independent management of scientific projects
- Execution of the main laboratory techniques
- Collaboration and communication with other scientific teams
- Writing scientific papers

Computer skills

- Operating systems: Windows, Mac Os.
- Softwares: Microsoft Word, PowerPoint, Microsoft Excel, Image-J, Adobe Illustrator, GraphPad Prism; AlphaFold; ChimeraX, UniProt.

Driving licence

- B issued on December 14th2016

ADDITIONAL INFORMATION

Laboratory skills:

- ELISA assay
- HPLC chromatography
- Use of Atomical Absorption Spectroscopy
- Agarose Gel Electrophoresis (DNA)
- Cell culture
- hIPSC culture
- hIPSC-CMs differentiation
- Protein extraction

- Western Blot analysis
- Immunoprecipitation
- Immunofluorescence (IF)
- Light and IF microscopes and relative softwares utilization
- RNA extraction
- DNA extraction
- cDNA synthesis
- q PCR
- Nuclei isolation from frozen human heart tissue for single nuclei RNA sequencing
- Quality test of fixed human heart slides for Spatial Transcriptomic (Xenium 5000 and Visium HD)
- Handling of mouse models of cardiomyopathies

PUBLICATIONS:

Abstracts:

Brancaccio M, Mennitti C, **Gentile A**, Ulisse J, Calvanese M, Scudiero O. Effects of Covid-19 Pandemic on Mental Behaviours and Physical Activity Habits of University Population of Naples, Federico II- Italy. 2nd International Webinar of Physical Health, Nursing care and Covid 19 Management. 19-21 March 2021.

Mennitti C, Brancaccio M, **Gentile A**, Ulisse J, Calvanese M, D'Alicandro G, Pero R, Frisso G, Scudiero O. Urinary parameter as new biomarkers for the prevention of pathologies and the safeguarding of the health of athletes. 2nd International Webinar of Physical Health, Nursing care and Covid 19 Management. 19-21 March 2021.

M. Brancaccio, C. Mennitti, **A. Gentile**, G. D'Alicandro, G. Frisso, O. Scudiero. Biomarkers in sport medicine: prevention of infections, inflammations, injuries and cardiovascular diseases. Febs 03/11/2021.

Mariarita Brancaccio, Laura Sarno, Cristina Mennitti, Mariella Calvanese, **Alessandro Gentile**, Roberta Musto, Giulia Gaudiello, Giulia Frisso, Maurizio Guida, Olga Scudiero. The biological role of human defensins in pregnant women with Covid-19. 6° Congresso Nazionale SIPMel, 1-3-13-15 December 2021.

Cristina Mennitti, Mariarita Brancaccio, **Alessandro Gentile**, Pietro Romano, Martina Vano, Biagio Gargiulo, Iolanda Coto, Margherita Gabriella De Biasi, Giulia Frisso, Olga Scudiero. Evaluation of proinflammatory cytokines and defensins in celiac patients. 6° Congresso Nazionale SIPMel, 1-3-13-15 December 2021.

C. Mennitti, L. Gentile, **A. Gentile**, M. Calvanese, R. De Simone, P. Romano, J. Ulisse, G. D'Alicandro, S. Laneri, R. Pero, O. Scudiero. Evaluation of immune system in competitive athletes affected by covid-19. SISMES 2022.

-Cristina Mennitti, Mariarita Brancaccio, **Alessandro Gentile**, Pietro Romano, Martina Vano, Biagio Gargiulo, Iolanda Coto, Renata Auricchio, Olga Scudiero. Evaluation of Proinflammatory Interleukins and Human Defensins in Celiac Children. 19th ICDS Sorrento, 19-22 ottobre 2022.

Cristina Mennitti, Mariarita Brancaccio, **Alessandro Gentile**, Mariella Calvanese, Luca Gentile, Jacopo Ulisse, Giovanni D'alicandro, Giulia Frisso, Olga Scudiero. The role of vitamins in athlete's muscle metabolism. XII National Congress SISMES Padua, 8–10 October, 2021.

Mariarita Brancaccio, Cristina Mennitti, **Alessandro Gentile**, Mariella Calvanese, Jacopo Ulisse, Luca Gentile, Giovanni D'Alicandro, Giulia Frisso, Olga Scudiero. Hepatic function in professional basketball athletes. XII National Congress SISMES Padua, 8–10 October, 2021.

Iolanda Veneruso, Cristina Mennitti, Gennaro Di Bonito, Jacopo Ulisse, **Alessandro Gentile**, Fabiana Di Fusco, Cleo De Luca, Giovanni D'Alicandro, Olga Scudiero, Valeria D'Argenio. Effects of physical exercise on salivary microbiota in elite athletes. WORLDLAB EUROMEDLAB 21-25 May 2023.

Alessandro Gentile, Cristina Mennitti, Carolina Punziano, Luca Gentile, Mariella Calvanese, Pietro Romano, Andrea Ruggiero, Giovanni D'Alicandro, Raffaella Pero, Giulia Frisso, Raffaella Faraonio, Olga Scudiero. The role of laboratory medicine in monitoring athlete health. WORLDLAB EUROMEDLAB 21-25 May 2023.

Cristina Mennitti, Ciro Miele, Carmela Scarano, Iolanda Veneruso, **Alessandro Gentile**, Rosaria Mormile, Giovanni D'Alicandro, Cristina Mazzaccara, Filomena Capasso, Giulia Frisso, Valeria D'Argenio, Olga Scudiero. Integrated approach to investigate a deep vein thrombosis event in an elite basketball athlete. WORLDLAB EUROMEDLAB 21-25 May 2023.

Cristina Mennitti, Ciro Miele, Carmela Scarano, Iolanda Veneruso, **Alessandro Gentile**, Mariella Calvanese, Francesca Perna, Fabiana Di Fusco, Cleo De Luca, Pietro Romano, Rosaria Mormile, Francesca Saviano, Giovanni D'Alicandro, Cristina Mazzaccara, Giulia Frisso, Filomena Capasso, Valeria D'Argenio, Olga Scudiero. Multidisciplinary approach to investigate a deep vein thrombosis event in a young elite basketball athlete. XIV National Congress SISMES Napoli, 2-4 November 2023.

Alessandro Gentile, Cristina Mennitti, Carolina Punziano, Luca Gentile, Laura Ingenito, Mariella Calvanese, Aniello Vastola, Andrea Ruggiero, Francesca Perna, Giovanni D'Alicandro, Raffaella Pero, Giulia Frisso, Paola Borrelli, Clara Crescioli, Raffaella Faraonio, Olga Scudiero. Evaluation of the antioxidant system in professional basketball athletes. XIV National Congress SISMES Napoli, 2-4 November 2023.

Cristina Mennitti, Annalisa Ranieri, Ersilia Nigro, Lorella Tripodi, **Alessandro Gentile**, Mariella Calvanese, Francesca Perna, Antonio Imperatore, Giulia De Fonzo, Fabio Fimiani, Arturo Cesaro, Giovanni D'Alicandro, Giuseppe Limongelli, Aurora Daniele, Raffaella Pero, Giulia Frisso, Paolo Calabro, Lucio Pastore, Maria Rosaria Licenziati, Olga Scudiero and Barbara Lombardo. Influence of physical activity on cardiovascular risk in childhood obesity. XIV National Congress SISMES Napoli, 2-4 November 2023.

Marco Boni, Cristina Mennitti, **Alessandro Gentile**, Andrea Ruggiero, Iolanda Veneruso, Carmela Scarano, Paola Borrelli, Valeria D'Argenio, Olga Scudiero. Correlation between anthropometric data and physical test results in bob and skeleton elite athletes. XV National Congress SISMES Chieti, 19-21 September 2024. (selected for short communication)

Laura Sarno, Paola Borrelli, Cristina Mennitti, **Alessandro Gentile**, Mariella Calvanese, Giuliana Orlandi, Antonio Angelino, Maurizio Guida, Olga Scudiero. Translation and cross cultural adaptation of the Italian version of Pregnancy Physical Activity Questionnaire. XV National Congress SISMES Chieti, 19-21 September 2024. (selected for short communication)

Cristina Mennitti, **Alessandro Gentile**, Raffaele Amitrano, Pietro Romano, Luca Gentile, Luca Manfredi, Sabrina De Simone, Silvana Capone, Rosario Liguori, Gianluigi Carbone, Ciro Miele, Filomena Capasso, Giovanni D'Alicandro, Daniela Terracciano, Barbara Lombardo, Cristina Mazzaccara, Paola Borrelli, Giulia Frisso, Olga Scudiero. Evaluation of inflammatory status and coagulation parameters pre- and post-training in professional basketball athletes. XV National Congress SISMES Chieti, 19-21 September 2024. (selected for short communication)

Alessandro Gentile, Cristina Mennitti, Iolanda Veneruso, Carmela Scarano, Aniello Vastola, Giulia De

Fonzo, Antonio Imperatore, Victoria Di Martino, Giovanni D'Alicandro, Daniela Terracciano, Raffaella Pero, Barbara Lombardo, Giulia Frisso, Valeria D'Argenio, Olga Scudiero. Analysis of the salivary microbiota composition in professional athletes. XV National Congress SISMES Chieti, 19-21 September 2024. (selected for short communication)

Cristina Mennitti, **Alessandro Gentile**, Chiara Russo, Ilaria La Monica, Maria Rosaria Di Iorio, Laura Ingenito, Giovanni D'Alicandro, Raffaella Pero, Barbara Lombardo, Giulia Frisso, Clara Crescioli, Daniela Terracciano, Paola Borrelli, Olga Scudiero. The impact of Covid-19 infection on the immune system in elite athletes. XV National Congress SISMES Chieti, 19-21 September 2024. (selected for short communication)

Alessandro Gentile, Cristina Mennitti, Gabriele Farina, Daniela Terracciano, Silvia Giannattasio, Francesco Marampon, Cristina Fantini, Andrea Lenzi, Silvia Migliaccio, Olga Scudiero, Clara Crescioli. The vitamin d receptor elocalcitol regulates the myokine il-6. XXI Congresso Nazionale SISA Roma, 3-4 Ottobre 2024. (Winner of the best abstract award)

Alessandro Gentile, Cristina Mennitti, Raffaele Amitrano, Luca Gentile, Laura Ingenito, Gianluigi Carbone, Mariano Fiorenza, Evelina La Civita, Mattia Digno, Giovanni D'Alicandro, Nadia Tinto, Daniela Terracciano, Paola Borrelli, Olga Scudiero. Evaluation of biochemical and hormonal parameters in professional basketball athletes during pre- and post-training session. 56° CONGRESSO NAZIONALE SIBIOC MEDICINA DI LABORATORIO Bologna, 8-10 Ottobre 2024.

Mennitti, C.; **Gentile, A.**; Calvanese, M.; Adesso, R.; Puzone, S.; Micioscia, A.; Di Dato, F.; Caiazza, M.; Savoia, M.; Matarazzo, M.; Iorio, R.; Limongelli, G.; Scudiero, O. Evaluation of cardiovascular risk in patients affected by Wilson Disease. 56 Congresso Nazionale SIBIOC – MEDICINA DI LABORATORIO. Bologna, 8-10 October 2024

Mennitti, C.; **Gentile, A.**; Veneruso, I.; Scarano, C.; La Monica, I.; Di Iorio, M.R.; Nigro, E.; Tripodi, L.; Fimiani, F.; Cesaro, A.; D'Alicandro, G.; Daniele, A.; Pero, R.; Frisso, G.; Calabrò, P.; Pastore, L.; Licenziati, M.R.; D'Argenio, V.; Scudiero, O.; Lombardo, B. Influence of physical activity on cardiovascular risk in childhood obesity. 56 Congresso Nazionale SIBIOC – MEDICINA DI LABORATORIO. Bologna, 8-10 October 2024

Miele, C.; **Gentile, A.**; Mennitti, C.; Calvanese, M.; Amitrano, R.; Saviano, F.; Manfredi, L.; De Simone, S.; D'Alicandro, G.; Borrelli, P.; Capasso, F.; Scudiero, O.; Mazzaccara, C. Assessment of hemostatic imbalance in elite basketball players before and after a high-intensity exercise. 56 Congresso Nazionale SIBIOC – MEDICINA DI LABORATORIO. Bologna, 8-10 October 2024

Borrelli F, Cason M, Calore C, Losi MA, Canciello G, **Gentile A**, Tozza S, Bello L, Chen SN, Bueno Marinas M, Celegghin R, Perazzolo Marra M, , Frisso G, Medo K, Taylor MRG, Mestroni L, Pilichou K, Lombardi R. Characterization of Hypertrophic Cardiomyopathy Caused by Mutations in Four and a Half LIM Domains 1 Gene. Department of Medicine's Annual Research Day; University of Colorado Denver Anschutz Medical Campus. Colorado, USA. April 23rd, 2024.

Full papers:

Mariarita Brancaccio, Cristina Mennitti, Mariella Calvanese, **Alessandro Gentile**, Roberta Musto, Giulia Gaudiello, Giulia Scamardella, Daniela Terracciano, Giulia Frisso, Raffaella Pero, Laura Sarno, Maurizio Guida and Olga Scudiero. Diagnostic and Therapeutic Potential for HNP-1, HBD-1 and HBD-4 in Pregnant Women with COVID-19. International Journal of Molecular Sciences, 22 March 2022.

Mariarita Brancaccio, Cristina Mennitti, **Alessandro Gentile**, Luca Correale, Cosme Franklim Buzzachera, Cinzia Ferraris, Cristina Montomoli, Giulia Frisso, Paola Borrelli and Olga Scudiero. Effects of the COVID-19 Pandemic on Job Activity, Dietary Behaviours and Physical Activity Habits of University Population of Naples, Federico II-Italy. International Journal of Environmental Research and Public Health, 5 February 2021

Gentile Alessandro, Punziano Carolina, Calvanese Mariella, De Falco Renato, Gentile Luca, D'Alicandro Giovanni, Miele Ciro, Capasso Filomena, Pero Raffaella, Mazzaccara Cristina, Lombardo Barbara, Frisso Giulia, Borrelli Paola, Mennitti Cristina, Scudiero Olga, Faraonio Raffaella. Evaluation of Antioxidant Defence Systems and Inflammatory Status in Basketball Elite Athletes. Genes (Basel). 2023 Sep 29

Mennitti Cristina, Miele Ciro, Scarano Carmela, Veneruso Iolanda, **Gentile Alessandro**, Mormile Rosaria, Saviano Francesca, D'Alicandro Giovanni, Mazzaccara Cristina, Frisso Giulia, Capasso Filomena, D'Argenio Valeria, Scudiero Olga. Integrated Approach to Highlighting the Molecular Bases of a Deep Vein Thrombosis Event in an Elite Basketball Athlete. Int J Mol Sci. 2023 Jul 31

Ranieri Annaluisa, Mennitti Cristina, Falcone Noemi, La Monica Ilaria, Di Iorio Maria Rosaria, Tripodi Lorella, **Gentile Alessandro**, Vitale Maria, Pero Raffaella, Pastore Lucio, D'Argenio Valeria, Scudiero Olga, Lombardo Barbara. Positive effects of physical activity in autism spectrum disorder: how influences behavior, metabolic disorder and gut microbiota. Front Psychiatry. 2023 Oct 10

Laura Sarno, Paola Borrelli, Cristina Mennitti, **Alessandro Gentile**, Mariella Calvanese, Giuliana Orlandi, Antonio Angelino, Maurizio Guida, Olga Scudiero. Adherence to physical activity among pregnant women in Southern Italy: results of a cross-sectional survey. Midwifery. 2024 July 10

Ciro Miele, Cristina Mennitti, **Alessandro Gentile**, Iolanda Veneruso, Carmela Scarano, Aniello Vastola, Ilaria La Monica, Fabiana Uomo, Fernanda Iafusco, Filomena Capasso, Raffaella Pero, Valeria D'Argenio, Barbara Lombardo, Nadia Tinto, Pierpaolo Di Micco, Olga Scudiero, Giulia Frisso and Cristina Mazzaccara. Thrombosis and Thrombotic Risk in Athletes. Journal of Clinical Medicine. 2024 August 19

Cristina Mennitti, Laura Sarno, Mariella Calvanese, **Alessandro Gentile**, Giuseppina Esposito, Caterina Fulgione, Giuliana Orlandi, Antonio Angelino, Giulia Scamardella, Ferdinando Barretta, Fabio Fimiani, Arturo Cesaro, Paola Borrelli, Daniela Terracciano, Raffaella Pero, Paolo Calabrò, Giulia Frisso, Maurizio Guida, Olga Scudiero. Preliminary study on the role of human defensins, interleukins and PCSK9 in early and late preeclampsia. Reproductive Biology. 2024 August 22

Iolanda Veneruso, Cristina Mennitti, **Alessandro Gentile**, Gennaro Di Bonito, Jacopo Ulisse, Carmela Scarano, Barbara Lombardo, Daniela Terracciano, Raffaella Pero, Giovanni D'Alicandro, Giulia Frisso, Valeria D'Argenio*, Olga Scudiero. Effect of elite sport activity on salivary microbiota: The case of water polo. Heliyon. 2024 November 23

Mennitti Cristina, Farina Gabriele, Imperatore Antonio, De Fonzo Giulia, **Gentile Alessandro**, La Civita Evelina, Carbone Gianluigi, De Simone Rosa Redenta, Di Iorio Maria Rosaria, Tinto Nadia, Frisso Giulia, D'Argenio Valeria, Lombardo Barbara, Terracciano Daniela, Crescioli Clara, Scudiero Olga. How Does Physical Activity Modulate Hormone Responses? Biomolecules. 2024 Nov 7

Mennitti Cristina, Calvanese Mariella, **Gentile Alessandro**, Vastola Aniello, Romano Pietro, Ingenito Laura, Gentile Luca, Veneruso Iolanda, Scarano Carmen, La Monica Ilaria, Di Lorenzo Ritamaria, Frisso Giulia, D'Argenio Valeria, Lombardo Barbara, Scudiero Olga, Pero Raffaella, Laneri Sonia. Skin Microbiome Overview: How Physical Activity Influences Bacteria. Microorganisms. 2025 Apr 10

Miele Ciro, Mennitti Cristina, **Gentile Alessandro**, Calvanese Mariella, Manfredi Luca, Ruggiero Andrea, Randa Immacolata, Cirillo Ferdinando, D'Alicandro Giovanni, Tinto Nadia, Frisso Giulia, Mazzaccara

Cristina, Scudiero Olga. Resistance or Resilience? Hemostatic Balance in an FV Leiden Elite Athlete. Semin Thromb Hemost. 2025 Aug 25

Imperatore Antonio, Cristina Mennitti, Giulia De Fonzo, Raffaele Amitrano, **Alessandro Gentile**, Mariella Calvanese, Fernanda Iafusco, Serena Coppola, Mattia Digno, Paola Borrelli, Lombardo Barbara, Frisso Giulia, Berni Canani Roberto, Tinto Nadia, D'Argenio Valeria & Scudiero Olga. "Toward a Multi-Trait Genetic Panel Targeting Training, Rehabilitation, and Chronic Disease Prevention: A Narrative Review" Genes. 2025.

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10/12/2025