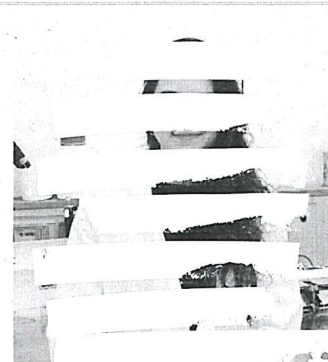


# Curriculum vitae

Name De Negri Atanasio Giulia

Date of birth :

Nationality



## Education and training

September 2023-now	Belong to the COST 'CA21139 - 3Rs concepts to improve the quality of biomedical science (IMPROVE)'
March 2022-now	Fellowship at the Department of Earth, Environmental and Life Sciences (DISTAV), University of Genoa Supervisor: Prof. Elena Grasselli
November 2021	Member of the team for the PoC call funded from Compagnia San Paolo 'Validation of engineerREd VaSCULAR bioprosthEses in high performance bioreactor – RESCUE'
March 2021-February 2022	Member of the team for the PoC call funded from MISE and UNIGE 'Validation of engineerREd VaSCULAR bioprosthEses in high performance bioreactor – RESCUE'
13-14 September 2021	Participation to 'cREOgiovani conference' <i>Oral presentation</i> 'Production of emulsion with rotor-stator emulsification and mathematical validation based on experimental data'
25-29 July 2021	Participation to 'the Controlled Release Society (CRS) virtual annual meeting ' <i>Poster presentation</i> 'PLGA-PEG-based nanosystem for a vascular-intended drug delivery'
5-8 July 2021	Participation to '4 <sup>th</sup> BIONECA summer school'
10 June 2021	Ph.D. in Translational Biotechnology at the Department of Experimental Medicine (DIMES) thesis: 'Innovative tools for vascular disease', supervisor: Professor Domenico Palombo.
March 2021-February 2022	Post-hoc fellow at the Department of Civil, Chemical and Environmental Engineering (DICCA)
January 2018-February 2022	Involvement in the Genoa Tissue Bank at the Ospedale Policlinico San Martino, Genova.
November 2020	Participation to seminar 'Produrre nanoemulsioni stabili. Dal laboratorio alla scala industriale' organized from Alfatest strumentazione scientifica.
September 2020	Participation to seminar 'Treatment of cardiovascular disease' organized from the Stem cell Research.
January-July 2020	Research period abroad at the Instituto de Investigação e Inovação da Universidade do Porto (i3S) (Porto, Portugal), supervisor: Professor Bruno Sarmento.
2019	National congress 'Il contributo dell'Ingegneria Chimica Italiana alla sostenibilità globale' and GRICU summer school. <i>Oral presentation:</i> 'Production and characterization of polymeric nanoparticles for the controlled release of model proteins.'
2018	Summer School 'Comprehensive Summer School on Tissue Engineering from biology to materials and products validation' University of Trento.
2017	Government exam and licensed as a professional industrial pharmacist (Genova, Italy).
2012-2017	Master's degree in pharmacy (LM-13) at the University of Genoa, thesis: 'A release study of gentamicin from bone cement', supervisors: Professor Monica Casale and Professor Laura Pastorino.
2006-2011	High school diploma in scientific studies.

## Publications

- De Negri Atanasio, G.; Ferrari, P.F.; Campardelli, R.; Perego, P.; Palombo, D. 'Poly (Lactic-co-Glycolic Acid) Nanoparticles and Nanoliposomes for Protein Delivery in Targeted Therapy: A Comparative In Vitro Study.' *Polymers* 2020, 12, 2566.
- Ferrari, P.F., Pettinato, M., Casazza, A.A., De Negri Atanasio, G., Palombo, D., Perego, P. 'Polyphenols from Nerone Gold 26/6, a new pigmented rice, via non-conventional extractions: antioxidant properties and biological validation'. *Journal of Chemical Technology and Biotechnology*, 2021.
- De Negri Atanasio, G.; Ferrari, P.F.; Campardelli, R.; Perego, P.; Palombo, D. 'Innovative nanotools for vascular drug delivery: the atherosclerosis case study' (Review Article) *J. Mater. Chem. B*, 2021.
- De Negri Atanasio, G.; Ferrari, P.F.; Campardelli, R.; Firpo, G.; Perego, P.; Palombo, D. Bevacizumab-Controlled Delivery from Polymeric Microparticle Systems as Interesting Tools for Pathologic Angiogenesis Diseases. *Polymers* 2022, 14, 2593.
- De Negri Atanasio G., Ferrari P.F., Baião A., Perego P., Sarmiento B., Palombo D., Campardelli R. 'Bevacizumab encapsulation into PLGA nanoparticles functionalized with immunouteroglobin-1 as an innovative delivery system for atherosclerosis' *International Journal of Biological Macromolecules* 2022,
- Allaria, G.; De Negri Atanasio, G.; Filippini, T.; Robino, F.; Dondero, L.; Soggia, F.; Rispo, F.; Tardanico, F.; Ferrando, S.; Aicardi, S.; Demori, I.; Markus, J.; Cortese, K.; Zanotti-Russo, M.; Grasselli, E. Innovative In Vitro Strategy for Assessing Aluminum Bioavailability in Oral Care Cosmetics. *Int. J. Environ. Res. Public Health* 2022, 19, 9362.
- Demori, I.; El Rashed, Z.; De Negri Atanasio, G.; Parodi, A.; Millo, E.; Salis, A.; Costa, A.; Rosa, G.; Zanotti Russo, M.; Salvidio, S.; Cortese, K.; Grasselli, E. First Evidence of Anti-Steatotic Action of Macrotympanain A1, an Amphibian Skin Peptide from *Odorrana macrotympana*. *Molecules* 2022, 27, 7417.
- Ferrari, P.F.; Trucillo, P.; De Negri Atanasio, G.; Bufalini, C.; Campardelli, R.; Perego, P.; Palombo, D.; Reverchon, E. Operating Parameters Optimization for the Production of Liposomes Loaded with Antibodies Using a Supercritical Fluid-Assisted Process. *Processes* 2023, 11, 663. <https://doi.org/10.3390/pr11030663>
- Grasso F, Méndez-Paz D, Vázquez Sobrado R, Orlandi V, Turrini F, De Negri Atanasio G, Grasselli E, Tiso M, Boggia R. Feasibility of Enzymatic Protein Extraction from a Dehydrated Fish Biomass Obtained from Unsorted Canned Yellowfin Tuna Side Streams: Part I. *Gels*. 2023; 9(9):760. <https://doi.org/10.3390/gels9090760>
- Orlandi, Valentina, et al. "Green Extraction and Preliminary Biological Activity of Hydrolyzed Collagen Peptides (HCPs) Obtained from Whole Undersized Unwanted Catches (*Mugil cephalus* L.)." *Molecules* 28.22 (2023): 7637.
- Rispo, Francesca, et al. "An extensive review on phenolic compounds and their potential estrogenic properties on skin physiology." *Frontiers in Cell and Developmental Biology* 11 (2023).

## Posters and oral presentations

*Person who presented orally is underlined*

- Perego P., Ferrari P.F., De Negri Atanasio G., Pane B., and Palombo D. 'From chemical engineering to tissue engineering: functionalization of small-diameter vascular prostheses with bioactive compounds' 8th International Conference 'Biomaterials, Tissue Engineering & Medical Devices' BIOMMEDD 2018, Cluj-Napoca Romanian. (oral presentation)
- Ferrari P.F., De Negri Atanasio G., Pralits J.O., Perego P. and Palombo D. 'Study of engineered vascular bioprostheses in bioreactor' al 68<sup>th</sup> congress internazionale organized from European Society of Cardiovascular Surgery (ESCVS) 2018 (oral presentation).
- Ferrari P.F., De Negri Atanasio G., Pralits O.J., Perego P. and Palombo D. 'Biodegradable engineered small-diameter vascular scaffold: a study in bioreactor' ESVB 2019 Strasbourg, France. (oral presentation)



- De Negri Atanasio G., Ferrari P.F., Campardelli R., Palombo D. and Perego P. 'Production and characterization of polymeric nanoparticles for the controlled release of model proteins' National congress 'Il contributo dell'Ingegneria Chimica Italiana alla sostenibilità globale' Palermo, Mondello 3-6 July 2019 (oral presentation).
- De Negri Atanasio G., Ferrari P.F., Pane B., Pralits O.J. Palombo D., and Perego P. 'Study of vascular prosthesis in bioreactor' National congress 'Il contributo dell'Ingegneria Chimica Italiana alla sostenibilità globale' Palermo, Mondello 3-6 July 2019 (poster presentation).
- De Negri Atanasio G., Ferrari P.F.; Sarmento B., Perego P., Palombo D., Campardelli R. 'PLGA-PEG-based nanosystem for a vascular-intended drug delivery' The Controlled Release Society (CRS) virtual annual meeting 2021 (poster presentation).
- De Negri Atanasio G., Pralits O.J, Campardelli R. 'Production of emulsion with rotor-stator emulsification and mathematical validation based on experimental data' 'cREOgiovani conference' 2021 (oral presentation).
- Allaria G, Tardanico F, De Negri Atanasio G, Dondero L, Rispo F, Filippini T, Robino F, Soggia F, Ferrando S, Aicardi S, Demori I, Markus J, Cortese K, Cagliani M C, Zanotti-Russo M, Grasselli E; Innovative in vitro strategy for assessing aluminum bioavailability in oral care products. XVI International Congress of Toxicology (ICT 2022) UNITING IN TOXICOLOGY. Maastricht (NL), 18-21 Settembre 2022 (poster presentation).
- Orlandi V, Dondero L, Grasso F, Tiso M, De Negri Atanasio G, Rispo F, Tardanico F, Allaria G, Turrini F, Grasselli E, Boggia R; The fish product as an example of renewable resource: exploitation and valorization of mullet (*Mugil cephalus*) skin. First Symposium for Young Chemists: Innovation and Sustainability, Rome 20-23 June 2022 (poster presentation).
- Allaria G, Tardanico F, De Negri Atanasio G, Dondero L, Rispo F, Filippini T, Robino F, Soggia F, Ferrando S, Aicardi S, Demori I, Markus J, Cortese K, Cagliani M C, Zanotti-Russo M, Grasselli E; Assessing aluminum bioavailability in oral care products by an in vitro double step approach. International Symposium of the federation of European societies on trace elements and minerals. FESTEM 2022, Madrid, 28 Settembre – 1 Ottobre 2022 (poster presentation).
- Grasselli E, Allaria G, Dondero L, De negri Atanasio G, Galliani G, Cortese K, Rispo F, Tardanico F, Filippini T, Robino F, Soggia F, Ferrando S, Aicardi S, Demori I, Markus J, Zanotti-Russo M; In vitro investigation of aluminum bioavailability after exposure of oral care products. (2022). 21st International Congress of the European Society of Toxicology In Vitro (ESTIV 2022). Barcelona-Sitges, Spain, 21-25 November 2022 (oral presentation)
- Zanotti-Russo M, Allaria G, Dondero L, De Negri Atanasio G, Rispo F, Tardanico F, Robino F, Perata E, Bruzzone F, Grasselli E; The study on EDs and the application of the NGRA according to the guidelines SCCS NoG XI Ed: two overlapping challenges; (2022). 21st International Congress of the European Society of Toxicology In Vitro (ESTIV 2022). Barcelona-Sitges, Spain, 21-25 November 2022 (poster presentation).
- De Negri Atanasio G, Robino F, Dondero L, Perata E, Rispo F, Allaria G, Tardanico F, Bruzzone F, Zanotti-Russo M, Grasselli E; ToxTool: an innovative database for the regulatory affair. (2022). 21st International Congress of the European Society of Toxicology In Vitro (ESTIV 2022). Barcelona-Sitges, Spain, 21-25 November 2022 (poster presentation).
- Dondero L, De Negri Atanasio G, Rispo F, Allaria G, Tardanico F, Turrini F, Grasso F, Orlandi V, Boggia R, Grasselli E; Evaluation of extracted collagen from food waste as an active ingredient for cosmetic application. (2022); 21st International Congress of the European Society of Toxicology In Vitro (ESTIV 2022). Barcelona-Sitges, Spain, 21-25 November 2022 (poster presentation).
- Rispo F, Dondero L, De Negri Atanasio G, Allaria G, Tardanico F, Rosatto S, Bellisomi M, Palumbi G, Tomesani I, Iervasi E, Izzotti A, Nicosia E, Grasselli E; Estrogenic activity related to the presence of SARS-CoV-2 in wastewater. (2022). 21st International Congress of the European Society of Toxicology In Vitro (ESTIV 2022). Barcelona-Sitges, Spain, 21-25 November 2022 (poster presentation).

- Veronica De Mattei 'Studio e modellazione matematica di protesi vascolari biodegradabili ed ingegnerizzate di piccolo calibro in bioreattore' 2019 bachelor's degree in chemical engineering, University of Genoa (2018-2019).
- Alessio Del Lungo 'Produzione di emulsioni con emulsionatore rotore/statore, validazione di modelli matematici sulla base di dati sperimentali' bachelor's degree in chemical engineering, University of Genoa (2021).
- Lucrezia Lodi 'Studio di fattibilità di sistemi microparticellari polimerici per il rilascio controllato di Bevacizumab' bachelor's degree in chemical engineering, University of Genoa (2021).
- Maia Clericuzio 'La tomatidina: un composto di origine naturale con elevate potenzialità in campo farmaceutico' bachelor's degree in chemical engineering, University of Genoa (2021).
- Viola Prando 'Studio dell'effetto del tipo e della concentrazione dei tensioattivi per la produzione e stabilizzazione di emulsioni a base di isopropilmiristato' bachelor's degree in chemical engineering, University of Genoa (2021).
- Veronica De Mattei 'Vascular prostheses production and engineering by electrospun polymeric materials' Master's Degree thesis degree in chemical engineering, University of Genoa (2021).

## Languages

- English first certificate (2016) (B2)
- Portuguese (A1)

## Skills and competences

### Informatic skills

- Good command of Microsoft office software.
- Good command of program for digital images elaboration (ImageJ).
- Good command of statistic software (Origin, Statistica, Prism).

### Laboratory skills

- Production of polymeric nanoparticles by different techniques (i.e., double emulsion, nanoprecipitation and microfluidic).
- Production of liposome by the hydration of lipidic film.
- Production of single emulsion O/W and W/O by different techniques (i.e., use the rotor/stator emulsification and microfluidic).
- Production of alginate microparticle.
- Deposition of polymeric shell on surface nanoparticles.
- Superficial carrier functionalization for targeted drug therapy.
- Extraction techniques: solid liquid extraction (SLE), ultrasound-assisted extraction (UAE), high pressure and temperature extraction (HPTE).
- Assay for the extract validation (DPPH, ABTS, and Folin-Ciocalteu)
- Morphology characterization tests (SEM, TEM, and DLS).
- Analytical chemistry (FTIR, CD, and UV).
- Study of antimicrobial activity.
- Hemocompatibility studies.
- Cell viability tests (MTS and LDH).
- Biochemical analyses (zymography, protein analysis, western blot, ELISA).
- Cellular uptake studies.
- Production of vascular polymeric prostheses by electrospinning.
- Mechanical characterization of biomaterials.
- Studies in bioreactor to test the polymeric prostheses behaviour under different regimes of pressure (systolic and diastolic).



- Detection of lipid peroxidation (TBARS).
- CALUX

*In compliance with the law D.LGS. no. 196 dated 30/06/2003, I hereby authorize you to use and process my personal details contained in this document.*

Genova, 13/02/2024

Giulia de Negri Atanasio

