

Architect and PhD Candidate in Architectural Technology at the Department of Architecture and Design of Genova University (Italy). Her main research interests are integration of Nature-based solutions in the urban environment to improve urban resilience and environmentally sustainable design.

EDUCATION/QUALIFICATIONS

NOVEMBER 2021 – PRESENT UNIVERSITÀ DEGLI STUDI DI GENOVA, ITALY PhD Candidate at the Department of Architecture and Design, University of Genoa, within the EU Funded FET HORIZON 2020 project "ECOLOPES: ecological building envelopes".

NOVEMBER 2021 ORDER OF ARCHITECTS GENOA, ITALY Professional qualification for architectural practice.

MARCH 2021 UNIVERSITÀ DEGLI STUDI DI GENOVA, ITALY Title of the master's degree thesis: "Microclimatic and perceptive effects of nature-based solutions in urban regeneration design – the case study of Genoa Cornigliano". Tutors: Prof. Andrea Giachetta, Katia perini, Giulia Maria Dotti Sani; Dr. Petra Hurtado. Evaluation: 110/110 cum laude and recommendation for publication.

SEPTEMBER 2019-FEBRUARY 2020 TECHNISCHE UNIVERSITAT WIEN, AUSTRIA Erasmus Exchange Program, Department of Architecture. Credits achievement: 33 ECTS.

OCTOBER 2018 UNIVERSITÀ DEGLI STUDI DI GENOVA, ITALY Title of the bachelor's degree thesis: "A micro-architecture for the Ligurian Mountain Highway – territorial analysis and design proposal" Tutor: Prof. Andrea Giachetta, Andrea Bacigalupo. Evaluation: 110/110 cum laude.

WORK EXPERIENCE

MAY-OCTOBER 2021 UNIVERSITÀ DEGLI STUDI DI GENOVA, ITALY, RESEARCH FELLOWSHIP

Architecture and Design Department, Polytechnic School, title of the research: "Urban regeneration and human-nature interaction in relation to microclimatic conditions, comfort and environmental sustainability", within the EU Funded FET HORIZON 2020 project "ECOLOPES: ecological building envelopes".

OCTOBER 2020 – FEBRUARY 2021 UNIVERSITÀ DEGLI STUDI DI GENOVA, ITALY, <u>ACADEMIC</u> <u>TUTOR</u>

IANUA School of Advanced Study, University of Genoa.

2020 UNIVERSITÀ DEGLI STUDI DI GENOVA, ITALY, <u>EDUCATIONAL PEER TUTOR</u> Architecture and Design Department, Polytechnic School.

MAIN TEACHING ACTIVITIES

MAY 2023 UNIVERSITÀ DEGLI STUDI DI GENOVA, ITALY

Architecture and Design Department, Polytechnic School, title of the seminar: "Assessment of nature-based solutions performances".

(Course: Technological design of vegetation for building, bachelor's degree), 4 hours.

JANUARY 2023 UNIVERSITÀ DEGLI STUDI DI GENOVA, ITALY

Architecture and Design Department, Polytechnic School, title of the seminar: "environmental sustainability and impact of urban regeneration design".

(Course: Technological design of vegetation for urban spaces, bachelor's degree), 4 hours.

FEBRUARY 2023 – JUNE 2023 UNIVERSITÀ DEGLI STUDI DI GENOVA, ITALY

Architecture and Design Department, Polytechnic School, teaching support. (Design studio: Design, Technology and Environment, master's degree), 30 hours.

SEPTEMBER 2022 – FEBRUARY 2023 UNIVERSITÀ DEGLI STUDI DI GENOVA, ITALY

Architecture and Design Department, Polytechnic School, teaching support. (Design studio: Technology of Architecture, bachelor's degree), 30 hours.

MARCH 2022 UNIVERSITÀ DEGLI STUDI DI GENOVA, ITALY

Architecture and Design Department, Polytechnic School, title of the seminar: "the ECOLOPES project: thermal comfort and case studies".

(Course: Technological design of vegetation for building, bachelor's degree), 4 hours.

DECEMBER 2021 UNIVERSITÀ DEGLI STUDI DI GENOVA, ITALY

Architecture and Design Department, Polytechnic School, title of the seminar: "assessment of microclimatic and perceptive effects of vegetation for urban regeneration design". (Design studio: Technology of Architecture, bachelor's degree), 4 hours.

BACKGROUND STUDIES

MAY-JUNE 2023 ABITALAB, ITALY

70-hours Masterclass on "Regenerative design for climate change".

FEBRUARY 2022 POLITECNICO DI MILANO, ITALY

25-hours course on "Life-cycle assessment in building construction. Environmental assessment at building and product scale".

NOVEMBER 2021 MCNEEL EUROPE, SPAIN

14-hours online workshop "Sustainable Cities– Urban analysis and simulation in times of climate change".

JUNE 2021 IANUA SCHOOL OF ADVANCED STUDY, GENOA, ITALY II level Diploma on Sciences and Technologies of Sustainability (2 years).

JUNE 2019 IANUA SCHOOL OF ADVANCED STUDY, GENOA, ITALY

I level Diploma on Sciences and Technologies of Sustainability (2 years).

PUBLICATIONS

Mosca F., Canepa M., Perini K. 2023. Strategies for adaptation to and mitigation of climate change: Key performance indicators to assess nature-based solutions performances. Urban Climate, 49. <u>https://doi.org/10.1016/j.uclim.2023.101580</u>.

Mosca F., Perini K., 2023. Verde pensile: una strategia per il cambiamento climatico. In "Nuove forme di Natura - Il verde pensile per rigenerare le città / New forms of Nature / Green roofs for regenerating cities". Genoa University Press. ISBN 978-88-3618-199-5.

Uthaia Selvan, S., Saroglou, T., Mosca, F., Tyc, J., Joschinski, J., Calbi, M., Vogler, V., Weisser, W., Grobman, Y. J., Barath, S., 2023. MULTI-SPECIES BUILDING ENVELOPES: DEVELOPING A MULTICRITERIA DESIGN DECISION-MAKING METHODOLOGY FOR COHABITATION. In "HUMAN-CENTRIC, Proceedings of the 28th International Conference of the Association for Computer-AidedArchitectural Design Research in Asia (CAADRIA)".

Mosca F., Perini K., 2022. Reviewing the Role of Key Performance Indicators in Architectural and Urban Design Practices. Sustainability. 14(21), 14464. <u>https://doi.org/10.3390/su142114464</u>.

Canepa, M., Mosca, F., Barath, S., Changenet, A., Hauck, T.E., 2022. Ecolopes, beyond greening. A multi-species approach for urban design. Agathòn 11 238. https://doi.org/10.19229/2464-9309/11212022doi.org/10.19229/2464-9309/11212022.

Perini K., Barath S., Canepa M., Hensel M., Mimet A., Mosca F., Roccotiello E., Selami T., Sunguroglu Hensel D., Tyc J., Uthaya S., Vogler V., Weisser W., 2021. ECOLOPES: A multi-species design approach to building envelope design for regenerative urban ecosystems. In "Responsive Cities: Design with Nature – Symposium proceedings" 2021. ISBN- 978-84-12-08856-4.

Mosca F., Dotti Sani G.M., Giachetta A., Perini K., 2021. Nature-Based Solutions: Thermal Comfort Improvement and Psychological Wellbeing, a Case Study in Genoa, Italy. Sustainability, 13(21), 11638. <u>https://doi.org/10.3390/su132111638</u>.

Perini K., Mosca F., Giachetta A., 2021. Urban regeneration: benefits of nature-based solutions. AGATHÓN – International Journal of Architecture, Art and Design, 9. ISSN: 2532-683X.

MEMBERSHIP AND ACTIVITIES IN ASSOCIATIONS

Member of SITdA, the Italian Society of Architectural Technology.

First prize winner for the SITdA competition "Un selfie dei territori" focused on potentiality and criticalities of the Italian territory (September 2022).

SOFTWARE SKILLS

- Autocad 2d, 3d Autodesk
- Adobe Suite
- Microsoft Suite
- 3d Studio Max

- Envi-met 5.1.1
- Sketchup
- Rhinoceros Grasshopper (+ Ladybug Tools)

LANGUAGES

- English: advanced level;
- German: starting level;
- French: starting level.

In compliance with EU General Data Protection Regulation (GDPR), I hereby authorize you to use and process my personal details contained in this document.

Sincerely, Francesca Mosca

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