



Carlotta Salvatori

EDUCATION AND TRAINING

15/09/2021 – 20/06/2023

Master's degree in Biomedical Engineering University of Pisa

Final grade 110 cum laude | **Thesis** Design of a novel bio-hybrid catheter

10/10/2022 – 20/06/2023 Pontedera, Italy

Master thesis student Scuola Superiore Sant'Anna, The BioRobotics Institute

- Numerical Analyses
- CAD design
- Analytical Analyses
- Material characterization (tensile tests, biological tests)

Address Viale Rinaldo Piaggio, 34, 56025, Pontedera, Italy | **Thesis** Design of a novel bio-hybrid catheter

15/09/2017 – 23/04/2021

Bachelor's degree in Biomedical Engineering University of Pisa

I learn to use EBB, FDM and STL printers and the different embryonic movements from the genesis to the final term
i had the possibility to work in a laboratory with a team
I learn the different material and the best to obtain the different movement in the space and in the time

Field of study Industrial Sector | **Final grade** 103 | **Thesis** Reproduction of embryonic movements by 4D printers

WORK EXPERIENCE

INTERNATIONAL CONFERENCE WITH PEER REVIEW

- Chiesa I. (speaker), Salvatori C., Vozzi G., Gottardi R., De Maria C. Development of a self-folding engineered trachea by 4D bioprinting. International Conference on Biofabrication 2022, 25-28 September 2022. Speaker
- Chiesa I. (presenter), Salvatori C., Vozzi G., De Maria C., Gottardi R. A 4D bioprinted self-folding scaffold for the bioinspired development of bilayered engineered trachea. Gordon Research Conference - Signal Transduction by Engineered Extracellular Matrices. 24-29 July 2022. Manchester, NH, USA. Poster
- De Maria C. (speaker), Chiesa I., Dell'Amico C., Salvatori C., Esposito A., Onorati M. 4D bioprinting of a dynamic multi-material scaffold for in vitro modeling of neural tube development. TERMIS-EU. 28-06/01-07-2022. Kraków, Poland. Oral presentation

PAPER

- Chiesa, I. De Maria C., Tonin R., Ripanti F., Ceccarini M. R., Salvatori C., Mussolin L., Paciaroni A., Petrillo C., Cesprini E., Feo F., Calamai M., Morrone A., Morabito A., Beccari T., Valentini L. "Biocompatible and Printable Ionotronic Sensing Materials Based on Silk Fibroin and Soluble Plant-Derived Polyphenols", 2022, ACS Omega. doi: 10.1021/acsomega.2c04729

CONFERENCE PROCEEDING

- Chiesa Irene, Salvatori Carlotta, Vozzi Giovanni, Gottardi Riccardo, and De Maria Carmelo, "Development of a self-folding engineered trachea by 4D bioprinting," International Conference on Biofabrication 2022, September 25th -28th 2022, Montecatini, Italy, 2022. The contribute was accepted as oral presentation.
- Salvatori Carlotta, Ricotti Leonardo, and Vannozzi Lorenzo. "A novel concept of steerable catheters actuated by muscle cells: the BioMeld project", VIII Congress of National Group of Bioengineering (GNB), June 21th-23th, Padova, Italy 2023. The contribute was accept as poster session.
- Vannozzi Lorenzo, Salvatori Carlotta, Niosi Ignazio, Trucco Diego, and Ricotti Leonardo "A novel steerable and soft microcatheter actuated by an engineered muscle tissue", 33rd Annual Conference of the European Society for Biomaterials (ESB), 2023, September 4-8, Davos, Switzerland (2023). The contribute was accepted as poster session.
- Salvatori, C., Trucco D., Niosi I., Ricotti L., and Vannozzi L., "A novel steerable catheter controlled with a biohybrid actuator: a feasibility study", Living Machines 2023 conference, July 11-13, Genova (Italy), 2023. The contribute was accepted as poster session.

LANGUAGE SKILLS

MOTHER TONGUE(S): Italian

Other language(s):

English

Listening	Reading	Spoken production	Spoken interaction	Writing
B2	B2	B2	B2	B2

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

DIGITAL SKILLS

MATLAB and simulink

MICROSOFT PACKETS

Microsoft Office | Microsoft Excel | Microsoft Word | Outlook | Microsoft Powerpoint

OTHER

Social Media | Google Docs

FEM ANALYSIS AND SIMULATION

COMSOL multiphysics | Ansys

RECONSTRUCTION AND SEGMENTATION

3D Slicer | MeshLab | unconditional positive regard

3D MODELLING SOFTWARE

ultimaker cura | EAGLE | FUSION 360