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Department of Health Sciences  
Center for Translational Research on  
Autoimmune and Allergic Disease -CAAD-  
Corso Trieste 15A, 28100 Novara (NO), Italy

Novara, 10-10.2022

## Dr. Andrea Cochis, PhD

### Personal Information



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### Current Position

Dr. Andrea Cochis (AC) was enrolled as fixed-term researcher (*Ricercatore a tempo determinato, art. 24 comma 3 lettera B legge 204/2010*) by the Department of Health Sciences of the University of Piemonte Orientale on 29-11.2019. He got the position in the Academic sector 06/N1 health professions sciences and applied medical technologies (*scienze delle professioni sanitarie e delle tecnologie mediche applicate*) belonging to the disciplinary scientific sector S.S.D. MED/50 APPLIED MEDICAL TECHNICAL SCIENCES (*SCIENZE TECNICHE MEDICHE APPLICATE*). He obtained the national scientific qualification as Associate Professor (*Abilitazione Scientifica Nazionale - ASN*) in the Academic sector 06/N1 health professions sciences and applied medical technologies (*scienze delle professioni sanitarie e delle tecnologie mediche applicate*) belonging to the disciplinary scientific sector S.S.D. MED/50 APPLIED MEDICAL TECHNICAL SCIENCES (*SCIENZE TECNICHE MEDICHE APPLICATE*). This result belongs to the National announcement “BANDO D.D. 1532/2016” and the license is intended for the period 13/01/2020 to 13/01/2029 (art. 16, comma 1, Legge 240/10).

## Academic Formation

- 2010 Master Degree, Molecular Biotechnologies, University of Turin
- 2010-2014 PhD, Biotechnologies for Human Health, University of Piemonte Orientale UPO  
Laboratory of Biomedical Materials  
Project: *Development of thermo-responsive hydrogels based on methylcellulose for applications in regenerative medicine*
- 2012-2013 Visiting PhD student, AO Research Institute, Davos Platz (CH)  
Laboratory of Musculoskeletal regeneration  
Project: *Induction of chondrogenesis of mesenchymal stem cells by mechanical stimulation with bioreactor using a methylcellulose-based hydrogel as substrate for the cells*. European project European Cooperation in Science & Technology (COST) “From nano to macro biomaterials (design, processing, characterization, modeling) and applications to stem cells regenerative orthopedic and dental medicine” (NAMABIO), COST-NAMABIO, COST-STSM-MP1005-9595
- 2014-2015 Research Fellow, University of Milan  
Laboratory of Molecular Medicine  
Project: *Histological and immunohistochemical analysis of bone regeneration of severe alveolar ridge atrophies treated with a biomimetic scaffold of hydroxyapatite and tricalcium phosphate in CAD/CAM technology*. Project PRIN-20102ZLNJ5\_006, Progetti di Rilevante Interesse Nazionale (PRIN), “Adult stem cells and 3d scaffolds: a novel cell construct in bone diseases treatment”.
- 2016-2019 Research Fellow, University of Piemonte Orientale UPO  
Laboratory of Biomedical Materials  
Project: *Development of in vitro models for the study of the interaction between oral microbiome, gingival tissues and biomedical implants*.
- 2019-2020 Fixed-term researcher A (*Ricercatore a tempo determinato, art. 24 comma 3 lettera A legge 204/2010*), University of Piemonte Orientale UPO  
Laboratory of Biomedical Materials  
Project: *Study of the interaction between biomaterials for osteoarticular regeneration and bacteria for the purpose of preventing infections*. H2020 European Project N. 814558 - RESTORE – H2020-NMBP-TR-IND-2018-2020/H2020-NMBP-TR-IND-2018.
- 2020-to date Fixed-term researcher B (*Ricercatore a tempo determinato, art. 24 comma 3 lettera B legge 204/2010*), University of Piemonte Orientale UPO  
Laboratory of Biomedical Materials  
Project: *combining ICT, biomedicine and material science competencies to increase the application of precision medicine approaches in the treatment of musculoskeletal disorders*. H2020 European Project PREMURSA - Precision medicine for musculoskeletal regeneration, prosthetics, and active ageing. H2020-MSCAITN-ID: 860462.

## Scientific Activity

The major Scientific topics tackled by AC are related to the **Biomaterials, Tissue Engineering and Regenerative** Medicine fields. In particular, research activities were mainly focused on the design and validation of innovative biomaterials aimed at bone and cartilage repair and regeneration. Moreover, efforts have been done in view of developing innovative **antibacterial strategies** as alternative to the common antibiotics therapy to prevent bacterial infections often leading to implants’ failure.

In the context of Bone repair, Titanium (Ti) and its alloys (Ti6Al4V) metallic devices, bioactive glasses (45S or 5S3.5), injectable fillers and advanced ceramics (zirconia) have been considered. The use of metal ions such as copper, silver, strontium and tellurium has been investigated to improve the bioactivity of the materials conferring pro-osteointegrative, pro-angiogenic and anti-inflammatory activity. The use of polymers and natural compounds has been tested to make the surface of biomaterials more “cells’ friendly” thus improving and speeding up the healing process. Moreover, attempts have been done to introduce nanostructures in the materials’ surface by advanced technologies to promote cells’ adhesion and differentiation through mechanotransduction and to prevent bacterial adhesion by prohibiting anchorage. The use of advanced materials such as graphene has also been tested to improve the mechanical properties of implantable materials in order to better face the mechanical stress imposed to the skeletal system. Regarding **Cartilage regeneration**, the use of advanced hydrogels has been exploited. Hydrogels mechanical properties have been improved in order to achieve around 100 kPa compressive stress resistance. These superior mechanical properties allowed for a better chondrogenesis of mesenchymal stem cells seeded in the hydrogel constructs. Moreover, the hydrogel biological performances have been further improved by the addition of anti-inflammatory drug or antibacterial agent to protect the healing tissue from inflammation and infection.

**Alternative strategies to counteract drug-resistant bacteria** growth have been proposed to prevent medical devices infection, representing nowadays one of the most frequent reasons of implant failure. Accordingly, the surface of bone or cartilage substitute has been doped by metal ions (silver, copper, tellurium), natural compounds from renewable sources or antimicrobial peptides developed from non-pathogenic bacteria or cells to counteract infections. Moreover, surface physical-chemical properties have been exploited to prevent early bacteria adhesion by nanotopographies aimed at prohibiting anchorage sites and superhydrophobic nanolayers showing contact angles of  $>150^\circ$ .

The Research activities carried out by AC during the mentioned period have been designed, discussed and performed thanks to the collaboration with **National and International partners**, including leading Companies producing biomedical devices for Orthopedics applications. Within UPO, AC developed a strong collaboration with the Orthopedics (Prof. Massimiliano Leigheb) and Dentistry (Prof. Vincenzo Rocchetti) Units, bringing to common publications and funded projects. National collaborations include Politecnico di Torino (Prof. Silvia Spriano and Prof. Enrica Verné), Politecnico di Milano (Prof. Roberto Chiesa), University of Bari (Prof. Elvira de Giglio), CNR of Napoli (Prof. Vincenzo Guarino) and CNR of Biella (Prof. Claudia Vineis); International Partners are represented by Chubu University (Japan, Prof. Seiji Yamaguchi), Graz University (Austria, Prof. Fernando Warkomicka), Newcastle University (UK, Prof. Piergiorgio Gentile), Institute for Research and Innovation in Health of Porto University (Portugal, Prof. Meriem Lamghari), University of Belgrade (Serbia, Prof. Bojana Obradovic), Erlangen University (Germany, Prof. Aldo Boccaccini), MERLN Institute for Technology-Inspired Regenerative Medicine at Maastricht University (Nederland, Prof. Lorenzo Moroni), German Institute of Textile and Fiber Research of Denkerdorf (Germany, Dr. Maryam Alibadi), Turin Polytechnic University in Tashkent (Uzbekistan, Prof. Dilshat Tulyaganov), Teheran University of Science and Technology (Iran, Prof. Bijan Yekta). AC also collaborated for the development of innovative strategies aimed at Orthopedics applications with National (Intrauma S.p.A., Rivoli, Italy) and International (CIDETED, San Sebastian, Spain; ASKEL Healthcare, Helsinki, Finland) **Leading companies** in the context of Projects funded by different EU agencies (EASy-FIX: EU MANUNET Program 2020; RESTORE: EU H2020-NMBP-TR-IND-2018, ID: 814558.).

## Publications - bibliometric indexes

Till now (last update 27-09.2022) the scientific production of AC resulted in 81 publications into international peer-reviewed journals. Scopus Author ID: 54902000600. The bibliometric indexes result as follow:

Publications: 81; H-index: 25 (Scopus), 27 (Scholar); Citations: 1739 (Scopus), 2330 (Scholar).

### List of 10 selected publications:

1. Bonifacio, M.A., Cochis, A., Cometa, S., Scalzone, A., Gentile, P., Procino, G., Milano, S., Scalia, A.C., Rimondini, L., De Giglio, E. (2020). Advances in cartilage repair: The influence of inorganic clays to improve mechanical and healing properties of antibacterial Gellan gum-Manuka honey hydrogels. *Materials Science and Engineering: C*, 108, 110444. (IF=8.457).
2. Bonifacio, M.A., Cometa, S., Cochis, A., Scalzone, A., Gentile, P., Scalia, A.C., Rimondini, L., Mastroilli, P., De Giglio, E. (2022). A bioprintable gellan gum/lignin hydrogel: a smart and sustainable route for cartilage regeneration. *International Journal of Biological Macromolecules*, 216, 336-346. (IF=8.025).
3. Rezvan, A., Sharifikolouei, E., Lassnig, A., Soprunyuk, V., Gammer, C., Spieckermann, F., Schranz, W., Najmi, Z., Cochis, A., Scalia, A.C., Rimondini, L., Manfredi, M., Eckart, J., Sarac, B. (2022). Antibacterial activity, cytocompatibility, and thermomechanical stability of Ti<sub>40</sub>Zr<sub>10</sub>Cu<sub>36</sub>Pd<sub>14</sub> bulk metallic glass. *Materials Today Bio*, 16, 100378. (IF=10.761).
4. Sharifikolouei, E., Najmi, Z., Cochis, A., Scalia, A. C., Aliabadi, M., Perero, S., Rimondini, L. (2021). Generation of cytocompatible superhydrophobic Zr–Cu–Ag metallic glass coatings with antifouling properties for medical textiles. *Materials Today Bio*, 12, 100148. (IF=10.761).
5. Rivera, L. R., Cochis, A., Biser, S., Canciani, E., Ferraris, S., Rimondini, L., Boccaccini, A. R. (2021). Antibacterial, pro-angiogenic and pro-osteointegrative zein-bioactive glass/copper based coatings for implantable stainless steel aimed at bone healing. *Bioactive materials*, 6(5), 1479-1490. (IF=16.874).
6. Bonifacio, M.A., Cochis, A., Cometa, S., Gentile, P., Scalzone, A., Scalia, A.C., Rimondini, L., De Giglio, E. (2020). From the sea to the bee: Gellan gum-honey-diatom composite to deliver resveratrol for cartilage regeneration under oxidative stress conditions. *Carbohydrate polymers*, 245, 116410. (IF=10.723).
7. Bonifacio, M.A., Cometa, S., Cochis, A., Gentile, P., Ferreira, A.M., Azzimonti, B., Procino, G., ceci, E., Rimondini, L., De Giglio, E. (2018). Antibacterial effectiveness meets improved mechanical properties: Manuka honey/gellan gum composite hydrogels for cartilage repair. *Carbohydrate polymers*, 198, 462-472. (IF=10.723).
8. Varoni, E.M., Vijayakumar, S., Canciani, E., Cochis, A., De Nardo, L., Lodi, G., Rimondini, L., Cerruti, M. (2018). Chitosan-based trilayer scaffold for multitissue periodontal regeneration. *Journal of Dental Research*, 97(3), 303-311. (IF=8.924).
9. Cochis, A., Ferraris, S., Sorrentino, R., Azzimonti, B., Novara, C., Geobaldo, F., Truffa Giachet, F., Vineis, C., Varesano, A., Sayed Abdelgeliel, A., Rimondini, L. (2017). Silver-doped keratin nanofibers preserve a titanium surface from biofilm contamination and favor soft-tissue healing. *Journal of Materials Chemistry B*, 5(42), 8366-8377. (IF=7.571).
10. Cochis, A., Azzimonti, B., Della Valle, C., De Giglio, E., Bloise, N., Visai, L., Cometa, S., Rimondini, L., Chiesa, R. (2016). The effect of silver or gallium doped titanium against the multidrug resistant *Acinetobacter baumannii*. *Biomaterials*, 80, 80-95. (IF=12.479).

## Awards

2013	Best Oral Presentation; Italian Society for Biomaterials (SIB - Baveno, 3-5 june); Title: <i>thermo-responsive methylcellulose-based hydrogel for cell sheet technology</i>
2015	Best Oral Presentation; Italian Society for Biomaterials (SIB - Portonovo, 3-5 june); Title: <i>cell sheet technology via thermo-responsive methylcellulose-based hydrogel for skin repair</i>
2016	Best Poster; World Biomaterials Congress (WBC - Montreal, Canada, 17-22 may); Title: <i>Gallium as novel anti-bacterial and pro-osteointegrative agent for orthopedic devices: an in vitro and in vivo study</i>
2019	Best Publication; 1st Coatings and Interfaces Web Conference; Title: <i>Functionalization of PU Foams via Inorganic and Organic Coatings to Improve Cell and Tissue Interactions</i>

## Participation to National and International funded Projects

AC has been involved in different National and International Projects funded by either national or international agencies. A summary table is provided below reporting the funding scheme, a brief description of the aims and the role assigned to AC.

<i>Project -funding scheme</i>	<i>Brief description</i>	<i>Role of AC in the Project</i>
PELARGODONT - Engineering and functionalization of delivery system with Pelargonium sidoides biologically active substance on periodontal inflamed surface area Funder: EU Call area: H2020-EU-M-ERA.NET project4048 Overall budget: € 800 000 Funding Period: 2017-19	The project aims at the development of innovative hydrogels made of recombinant polymers dedicated to the regeneration of periodontal pockets doped with pro-regenerative and antibacterial natural extracts.	Member, UPO Unit (partner)
RESTORE - <i>User-centred smart nanobiomaterial-based 3D matrices for chondral repair</i> Funder: EU Call area: H2020-NMBPTR-IND-2018 Overall budget: € 5 539 736,25 Funding Period: 2019-22	The project is working on an effective approach to the treatment of knee chondral lesions, through developing a new generation of smart nanoenabled 3D matrices.	Member, UPO Unit (partner)
FLAMIN-GO - <i>From pathobioLogy to synoviA on chip: driving rheuMatold arthritis to the precisioN medicine GOal</i> Funder: EU Call area: H2020-NMBP-TR-IND-2018-2020 Overall budget: € 5 821 613,75 Funding Period: 2021-24	The project proposes to overcome conventional clinical trials for testing the efficacy of novel treatment modalities through the development of an organ-on-chip platform. The approach uses patient biopsies to construct 3D models which mimic the complexity of the RA joint and can be tailored for each individual patient.	Member, UPO Unit (coordinator)
PREMURSA - <i>Precision medicine for musculoskeletal regeneration,</i>	The project combines ICT, biomedicine and material science	Member, UPO Unit (coordinator)

<p><i>prosthetics, and active ageing</i>  Funder: EU  Call area: H2020-MSCAITN-2019  Overall budget: € 3 348 405,36  Funding Period:2020-2023</p>	<p>competencies to increase the application of precision medicine approaches in the treatment of musculoskeletal disorders.</p>	<p>Responsible for PhD students  Secondments</p>
<p>EXCELL-MATER - <i>Twinning to excel materials engineering for medical devices</i>  Funder: EU  Call area: H2020-WIDESPREAD-2020-5  Overall budget: € 884 225,00  Funding Period: 2020-23</p>	<p>The activities will focus on biomaterials engineering and pursue collaborations with leading international institutions: Aalto University, Finland, Università del Piemonte Orientale, Italy, and AO Research Institute Davos, Switzerland. One top goal of the project is to address a translational gap in the development and utilisation of novel biomaterials for medical devices</p>	<p>Member, UPO Unit (partner)</p>
<p>SPACE- <i>SPatiotemporal and MechAnobiology controlled Microchannelled Periodontal Mimic deviCEs</i>  Funder: UPO  Call area: Fondi di Ateneo per la Ricerca (FAR).  Overall budget: € 30 000,00  Funding Period: 2019-21</p>	<p>The goal of this project is to create custom-made implantable devices for the restoration of the oblique periodontal ligament region using bioengineering and mechanobiology techniques.</p>	<p>PI of the Project</p>
<p>FORCE REPAIR - <i>Smart and multifunctional 3d printable pro-regenerative biological matrix modulating mechanotransduction as advanced therapy to treat skin chronic wounds</i>  Funder: EU  Call area: H2020-NMBP-TR-IND-2018-2021  Overall budget: € 5 083 466,00  Funding Period: 2022-25</p>	<p>The goal of this project is to create custom-made implantable devices for advanced wound healing following both biochemical induction and mechanotransduction by the materials mechanical properties.</p>	<p>Member, UPO Unit (partner)</p>

### Allocation of funds for Third Parties for Research activities

Due to the many national and international collaborations, AC was responsible for 2 contracts within the Third Parties funding.

1. Applicant: Intrauma S.p.A. Project: *Engineered Antibacterial Solutions for temporary Fixation devices (EASy-FIX)*. Requested services: specimens' biological characterization. (2021 - Budget: 10000 Euro).

2. Applicant: Politecnico di Torino. Project: *NATural molecules on the surface of bioactive materials FOR MOdulating the host REsponse to implants (NAT4MORE)*. Requested services: specimens' biological characterization. (2021 - Budget: 8000 Euro).

## Patents

1. Ferraris, S., Spriano, S., Cochis, A., Rimondini, L., Varesano, A., Vineis, C., Guarino, V., Ambrosio L. Superficie di titanio modificata, impianto medicale dotato di una o più di tali superfici e procedimento di realizzazione di una tale superficie. 2015. Deposito N. TO2015000070808, EP 2214732, PCT-IT2012-000237, IT-EU.
2. Savickiene, N., Jekabsone, A., Basaviciene, N., Smalinskiene, A., Baniene, R., Raudone, L., Savickas, A., Rimondini, L., Cochis, A., Skesters, A., Kowalczyk, M., Adamus, G., Dambrova, M., Eimont, R., Tylko, G., Osyczka, A.M. Idrogeli per Medicina Rigenerativa in campo Parodontale (Hidrogelis, skirtas periodontitui gydyti). 2019. Deposito N. LT2019050, LT-EU.

## Editorial activity

AC is actually Member of the Editorial Board of the International Journal of Applied Biomaterials & Functional Materials (ISSN: 22808000, IF=2.6), Section Biomaterials, Tissue Engineering

Following Editor's invitation, AC served as Guest Editor of the following Special Issue in International peer-reviewed Journals:

- Materials (ISSN 1996-1944, IF=3.6), Special Issue "Dental Implant Surface and Materials"
- Materials (ISSN 1996-1944, IF=3.6), Special Issue "Multifunctional Materials in Tissue Regeneration"
- Frontiers in Bioengineering and Biotechnology (ISSN 2296-4185, IF=5.8), Special Issue "Rational Design and Characterization of Innovative Multifunctional Biomimetic Materials"

Moreover, he regularly serves as Reviewer of different international peer-reviewed Journal in the Biomaterials and Regenerative Medicine filed such as: Applied Science, Coatings, International Journal of Molecular Sciences, Materials, Molecules, Nanomaterials, International Journal of Nanomedicine, Journal of Materials Chemistry B, ACS Biomaterials Science & Engineering, Biomaterials, Bioactive Materials.

## Membership

AC is actually active member of:

- Italian Society for Biomaterials (SIB)
- European Society for Biomaterials (ESB).

## Participation to National and International Congresses

AC co-authored many Abstracts accepted for both Poster and Oral presentation in National and International Congresses dealing with Biomaterials and Tissue Engineering.

A list of the most important venues of the last 2 years is reported below:

- Maria A. Bonifacio, Andrea Cochis, Stefania Cometa, Piergiorgio Gentile, Annachiara Scalzone, Alessandro C. Scalia, Lia Rimondini, Elvira De Giglio. *Gellan gum-Honey-Diatom composite delivering resveratrol for cartilage regeneration under septic and oxidative stress conditions*. 6th world congress of the Tissue Engineering and Regenerative Medicine International Society (TERMIS), 2021, Maastricht, Nederland. Poster session.
- Beatrice Masante, Farah Daou, Stefano Gabetti, Giovanni Putame, Alessandro Sanginario, Eleonora Zenobi, Federico Mochi, Costantino Del Gaudio, Cristina Bignardi, Lia Rimondini, Andrea Cochis, Diana Massai. *Automated Parallel Bioreactor Platform Combining Perfusion and PEMF Stimulation*.



- 27<sup>th</sup> Congress of the European Society for Biomechanics (ESB), 2022, Porto, Portugal. Oral Communication.
- Beatrice Masante, Farah Daou, Stefano Gabetti, Giovanni Putame, Alessandro Sanginario, Eleonora Zenobi, Federico Mochi, Costantino Del Gaudio, Cristina Bignardi, Lia Rimondini, Andrea Cochis, Diana Massai. *Novel bioreactor providing tunable biophysical stimulation for bone mechanobiology investigations*. 9<sup>th</sup> World Congress of Biomechanics, 2022, Taipei, Taiwan. Oral Communication.
  - Scalia Alessandro, Cochis Andrea, Rimondini Lia, Costa Piero, Perero Sergio, Ferraris Sara, Spriano Silvia. *Innovative ZrO<sub>2</sub>-Ag nanometric layer on titanium alloy*. 21<sup>st</sup> National Congress of the Italian Society for Biomaterials (SIB), 2021, Lecce, Italy. Oral Communication.
  - Ziba Najmi, Elham Sharifikolouei, Andrea Cochis, Alessandro Calogero Scalia, Maryam Aliabadi, Sergio Perero, Lia Rimondini. *Assessment of antifouling and cytotoxicity properties of superhydrophobic Ag-Cu-Zr metallic glass coating*. 21<sup>st</sup> National Congress of the Italian Society for Biomaterials (SIB), 2021, Lecce, Italy. Oral Communication.
  - Ajay Kumar, Marta Miola, Jonathan Massera, Andrea Cochis, Lia Rimondini, Enrica Vernè. *Tellurium: a new active element for multifunctional bioactive glasses*. 21<sup>st</sup> National Congress of the Italian Society for Biomaterials (SIB), 2021, Lecce, Italy. Oral Communication.
  - Ksenia Menshikh. Ilijana Kovrlija, Marta Miola, Andrea Cochis, Lia Rimondini. *Synthetic pre-vascularized porous scaffold as an engineered environment for the in vitro osteosarcoma model*. European congress of the Tissue Engineering and Regenerative Medicine International Society (TERMIS), 2022, Krakow, Poland. Poster session.
  - Farah Daou, Beatrice Masante, Stefano Gabetti, Giovanni Putame, Eleonora Zenobi, Federico Mochi, Cristina Bignardi, Costantino Del Gaudio, Diana Massai, Andrea Cochis, Lia Rimondini. *Biological Evaluation of an In Vitro Biomimetic Platform Based on a Parallel Perfusion Bioreactor Designed to Test and Promote the Osteogenic Commitment of Cells and Biomaterials*. 32<sup>nd</sup> Annual Conference of the European Society for Biomaterials (ESB), 2022, Bordeaux, France. Poster session.
  - Maria A. Bonifacio, Stefania Cometa, Andrea Cochis, Annachiara Scalzone, Piergiorgio Gentile, Alessandro C. Scalia, Lia Rimondini, Piero Mastrotrilli, Elvira De Giglio. *A smart bioprintable Gellan Gum/Lignin hydrogel for cartilage regeneration*. European congress of the Tissue Engineering and Regenerative Medicine International Society (TERMIS), 2022, Krakow, Poland. Poster session.

## Academic and Didactic Activity

Since Academic year 2020-2021 AC has been involved in different classes included in the Oral Hygiene, Physiotherapy and Medical Biotechnologies UPO Degree courses. The CFU number in charge to AC is moved from 4 in the A.A. 20-21 to the current 7 of the A.A. 21-22. The organization of the sector is the S.S.D. MED/50. The detailed list of courses/academic year (A.A.) is reported below:

### A.A. 2020-2021 (source: U-qov)

1. MS0832 - Tecniche di base di supporto vitale - BLS - Basic life support techniques – BLS  
Corso di studio: 1846 - FISIOTERAPIA (ABILITANTE ALLA PROFESSIONE SANITARIA DI FISIOTERAPISTA)  
CFU: 1.0; Settore: MED/50
2. MS1746 - Tecniche di Igiene orale I (tecnologie e materiali) - Oral Hygiene Techniques I  
Corso di studio: 1847 - IGIENE DENTALE (ABILITANTE ALLA PROFESSIONE SANITARIA DI IGIENISTA DENTALE)  
CFU: 3.0; Settore: MED/50

➤ Students' evaluation: 3.6/4 (mean value of all courses).



#### **A.A. 2021-2022 (source: U-qov)**

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1. MS0832 - Tecniche di base di supporto vitale - BLS - Basic life support techniques – BLS  
Corso di studio: 1846 - FISIOTERAPIA (ABILITANTE ALLA PROFESSIONE SANITARIA DI FISIOTERAPISTA)  
CFU: 1.0; Settore: MED/50.
2. MS1746 - Tecniche di igiene orale I (tecnologie e materiali) - Oral Hygiene Techniques I  
Corso di studio: 1847 - IGIENE DENTALE (ABILITANTE ALLA PROFESSIONE SANITARIA DI IGIENISTA DENTALE)  
CFU: 3.0; Settore: MED/50
3. MS1756 - Tecnologie e materiali per conservativa ed endodonzia (tecnologie e materiali) - Materials and technologies for restorative dentistry and endodontics (materials and technologies)  
Corso di studio: 1847 - IGIENE DENTALE (ABILITANTE ALLA PROFESSIONE SANITARIA DI IGIENISTA DENTALE)  
CFU: 1.0; Settore: MED/50
4. MS1751 - Tecnologie e materiali per igiene orale II (tecnologie e materiali) - Materials and technologies for Dental Hygiene II (materials and technologies)  
Corso di studio: 1847 - IGIENE DENTALE (ABILITANTE ALLA PROFESSIONE SANITARIA DI IGIENISTA DENTALE)  
CFU: 2.0; Settore: MED/50

➤ Students' evaluation: 3.7/4 (mean value of all courses).

#### **Students, PhD and Post-doc supervising**

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AC served as supervisor of both experimental and compilation Thesis of students coming from different UPO courses, PhD students and post-doc as detailed below:

- Supervisor or co-supervisor of 8 students from the Medical Biotechnologies course, experimental Thesis, A.A. 2020-21.
- Supervisor of 1 student from the Biotechnology course, experimental Thesis, A.A. 2021-22.
- Supervisor of 1 student from the Oral Hygiene course, compilation Thesis, A.A. 2021-22.
- Supervisor or co-supervisor of 4 PhD students from the UPO Program of Food and Health and Aging, A.A. 2020-23, XXXV and XXXVI cycles.
- Supervisor of 1 post-doc students holding a Personal Marie-Curie Fellowship (Dr. Elham Sharifikolouei) in collaboration with Politecnico di Torino (Prof. Monica Ferraris).

#### **Academic Membership and Activities**

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AC joined the UPO Department of Health Sciences (DiSS) of which is an active member.

Moreover, he was included in the Board of different DiSS working groups as well as he participated in many events related to Academic institutional venues. A list of the most important activities is reported below:

- Member: Department of Health Sciences
- Board: UPO CAAD Scientific Committee (2022 to date)
- Member: Degree Course Council in Oral Hygiene, Physiotherapy
- Member: Graduation Commission in Biotechnology, Medical Biotechnologies
- Member: Scientific Technical Committee of the UPO4Sustainability Interdepartmental Center (2021- to date)
- Board: Admission test to the Degree Courses of the Health Professions (2020, 2021)
- Member: DiSS Commission for Third Parties

- Member: DiSS Commission of selection for the evaluation of applications for the awarding of research scholarships and research fellowships

### **Third Mission activities**

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AC has been involved in public activities sponsored by UPO dedicated to the non-professional stakeholders.

- Virtual Indo-Italy Conference on Cell, Tissue and Organ Engineering. 2019. Open event dedicated to the overview of innovative biomedical technologies. Broadcasted on YouTube, >2500 students from University and high school participants in the live broadcast from Italy, India and UK.
- Lessons dedicated to high school's students. A.A. 2020-21 and 2021-22. Title: *Nuove frontiere nella medicina rigenerativa per osso e cartilagine*.
- UPO CAAD and Local Industries meeting. 2021. An open event organized by the municipality of Novara in collaboration with the UPO Enne3 business incubator to discuss about UPO technologies exploitation for local industries.

Novara, 27-09.2022

Andrea Cochis



## Complete list of publications (source: Scopus)

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