

8

Curriculum Vitae

Claudio De Lazzari

PERSONAL INFORMATION	
First name(s) / Surname(s)	Claudio De Lazzari
Address(es)	
Telephone(s)	
Website	
E-mail	
Nationality	
Date of birth	
EDUCATION	
Title of qualification awarded	Biomedical Engineering
Name and type of organisation providing education and training	University "La Sapienza" Rome (Italy)
Dates	March 1993
Title of qualification awarded	Master in Artificial Organs
Name and type of organisation providing education and training	Centro di Cultura Scientifica "Ettore Majorana" di Erice, Trapani (Italy)
AWARDS	
	In November 2015 received the title of "DOCTOR HONORIS CAUSA" from the Board of Teaching University GEOMEDI (Georgia)
WORK EXPERIENCE	
Dates	04/04/2019 – 25/07/2019
Occupation or position held	Committee Member
Main activities and responsibilities	Evaluator & Expert Review for the Sardinia Region
Type of business or sector	Realization of pre-commercial procurement financed by POR FESR Sardinia 2014/2020. First priority axis SCIENTIFIC RESEARCH, TECHNOLOGICAL DEVELOPMENT AND INNOVATION. Action 1.3.1.
Name and address of employer	Sardegna Ricerche (https://www.sardegna ricerche.it/)
Dates	23/03/2019 – 10/05/2019
Occupation or position held	Evaluator
Main activities and responsibilities	Evaluator & Expert Review for the Sicily Region
Type of business or sector	PO FESR Sicilia 2014-2020 Azione 1.1.5.

Name and address of employer	REGIONE SICILIANA ASSESSORATO DELLE ATTIVITA' PRODUTTIVE. Dipartimento Regionale delle Attività Produttive Servizio 5. Innovazione tecnologica e politiche per lo sviluppo economico
Dates	01/12/2018 – 31/12/2018
Occupation or position held	Expert/Scientific consultant
Main activities and responsibilities	Evaluator & Expert Review of scientific projects/proposals for the Emilia Romagna Region
Type of business or sector	POR FESR EMILIA ROMAGNA 2014-2020 – Asse 1-Azione 1.2.2.
Name and address of employer	ASTER Innovazione Attiva (https://www.aster.it/)
Dates	01/03/2018 – 31/05/2019
Occupation or position held	Expert/Scientific consultant
Main activities and responsibilities	Evaluator & Expert Review of scientific projects/proposals for the Lazio Region
Type of business or sector	POR FESR LAZIO 2014-2020 – Creatività 2020.
Name and address of employer	Lazio Innova (Regione Lazio) http://www.lazioinnova.it/
Dates	06/06/2017 – 31/07/2017
Occupation or position held	Expert/Scientific consultant
Main activities and responsibilities	Evaluator & Expert Review of scientific projects/proposals for the Trentino Alto Adige Region. Ex-ante Evaluation. In itinere Monitoring. Post-ante Evaluation. Check In loco.
Type of business or sector	Industrial research and innovation activity
Name and address of employer	Provincia Autonoma di Trento – Servizio Istruzione e Formazione del secondo grado, Università e Ricerca https://ricercaintrentino.provincia.tn.it/
Dates	30/01/2017 – Today
Occupation or position held	Expert
Main activities and responsibilities	Experts for the Open (COST) Call OC-2016-2
Type of business or sector	External Experts to evaluate proposals is made by the COST Association
Name and address of employer	COST is the European framework supporting trans-national cooperation among researchers, engineers and scholars across Europe http://www.cost.eu/
Dates	27/01/2017 -- 10/11/2017
Occupation or position held	Member of the Commission Expert Group
Main activities and responsibilities	Evaluator & Expert Review of scientific projects/proposals for the Lazio Region
Type of business or sector	POR FESR LAZIO 2014-2020 – Life 2020.
Name and address of employer	Lazio Innova (Regione Lazio) http://www.lazioinnova.it/
Dates	15/11/2016 -- Today
Occupation or position held	Member of the Commission for the Evaluation of Master Thesis
Main activities and responsibilities	Member of the International Commission of Examinations for Master Thesis. International Biomedical Engineering Course of Study (AACHEN University). The Master's of Science program in Biomedical Engineering is an interdisciplinary course of study involving interaction between the natural sciences, medicine, and engineering.
Type of business or sector	University
Name and address of employer	RWTH Aachen University (Germany)

Dates	05/10/2016 -- 20/07/2017
Occupation or position held	Expert/Scientific consultant
Main activities and responsibilities	Evaluator and Expert Review. Member of the Register of Experts in the Field of Innovation and Technology Transfer
Type of business or sector	POR FESR FVG 2014-2020. Projects submitted under the invitation to tender entitled "Incentives for "Standard" and "Strategic" projects. R & D to achieve through public-private- Maritime Technologies and Smart Health specialization areas"
Name and address of employer	Friuli Venezia Giulia Region "Direzione Centrale Lavoro, Formazione, Istruzione, Pari Opportunità, Politiche Giovanili, Ricerca e Università. Area Istruzione, Formazione e Ricerca"
Dates	21/10/2016 -- Today
Occupation or position held	Evaluator
Main activities and responsibilities	Evaluator & Expert Review of scientific projects
Type of business or sector	Oesterreichische Nationalbank (OeNB) Anniversary Fund (www.oenb.at/en)
Name and address of employer	OeNB Anniversary Fund is an Institution of the Austrian Central Bank which promotes projects in scientific research field
Dates	27/04/2016 -- 06/05/2016
Occupation or position held	Evaluator
Main activities and responsibilities	Evaluator & Expert Review of scientific projects
Type of business or sector	Financing research projects, on the basis of the "Banco di Sardegna Foundation" resources
Name and address of employer	University of Sassari (https://www.uniss.it/ricerca)
Dates	28/07/2015 -- 03/11/2015
Occupation or position held	Expert/Scientific consultant
Main activities and responsibilities	Evaluator and Expert Review.
Type of business or sector	POR FESR 2014-2020.
Name and address of employer	Regione Emilia Romagna (http://www.regione.emilia-romagna.it/fesr/por-fesr/por2014-2020/por-fesr-2014-2020)
Dates	25/02/2015 -- 30/03/2015
Occupation or position held	Expert/Scientific consultant
Main activities and responsibilities	Evaluator and Expert Review. Member of the Register of Experts in the Field of Innovation and Technology Transfer
Type of business or sector	POR FSE CALABRIA 2007-2013.
Name and address of employer	FINCALABRA S.P.A. (http://www.fincalabra.it/)
Dates	08/04/2015 -- Today
Occupation or position held	Member of the Joint Committee
Main activities and responsibilities	Scientific Expert
Type of business or sector	Member of the Joint Committee within the Framework Convention between the National Research Council and the University of Camerino
Name and address of employer	CNR (National Research Council)
Dates	01/12/2014 -- 30/12/2017

Occupation or position held	Evaluator
Main activities and responsibilities	Evaluator & Expert Review of scientific projects
Type of business or sector	"AGENDA DIGITALE & INDUSTRIA SOSTENIBILE" CALL Horizon 2020 (MISE)
Name and address of employer	CNR (National Research Council)-MISE (Ministry of Economic Development)
Dates	15/11/2012 -- 31/03/2015
Occupation or position held	Technical Officer
Main activities and responsibilities	Evaluator & Expert Review of scientific projects
Type of business or sector	CALL Made in Italy (MISE)
Name and address of employer	Invitalia- Italian national agency for investment promotion and enterprise development http://www.invitalia.it/site/eng/home.html
Dates	01/12/2014 -- 30/12/2017
Occupation or position held	Evaluator
Main activities and responsibilities	Evaluator & Expert Review of scientific projects
Type of business or sector	"FONDO CRESCITA SOSTENIBILE" CALL Horizon 2020 (MISE)
Name and address of employer	CNR (National Research Council)-MISE (Ministry of Economic Development)
Dates	18/02/2014 -- 31/07/2014
Occupation or position held	Members of the Commission Expert Group
Main activities and responsibilities	Evaluator & Expert Review of scientific projects/proposals
Type of business or sector	PAC (Piano Azione e Coesione) proposals in view of provision of pre-commercial public procurement procedures (MISE-MIUR)
Name and address of employer	Invitalia- Italian national agency for investment promotion and enterprise development http://www.invitalia.it/site/eng/home.html
Dates	02/03/2013 -- Today
Occupation or position held	Researcher
Main activities and responsibilities	Scientific Consultant
Type of business or sector	Scientific Consultant in Biomedical Engineering field
Name and address of employer	Department of Biomedical Science National Research Council – Piazzale Aldo Moro, 7 Rome http://dsb.cnr.it/Department/Staff.aspx
Dates	26/06/2012 -- 01/09/2018
Occupation or position held	Expert/Scientific consultant
Main activities and responsibilities	Evaluator and Expert Review for PAR-FAS projects. Member of the Register of Experts in the Field of Innovation and Technology Transfer
Type of business or sector	INNOVATION AND TECHNOLOGY TRANSFER. INFORMATION AND COMMUNICATIONS TECHNOLOGY.
Name and address of employer	Finanziaria Ligure per lo Sviluppo Economico - F.I.L.S.E. S.p.A. http://www.filse.it/
Dates	15/03/2010 -- Today
Occupation or position held	Researcher
Main activities and responsibilities	Scientific consultant
Type of business or sector	MEMBER of the Scientific Council

Name and address of employer	Inter-University Consortium National Institute of Cardiovascular Research (INRC). Via Irnerio, 48 Bologna http://www.inrc.it/consiglio-scientifico/
Dates	29/09/2008 -- Today
Occupation or position held	Expert
Main activities and responsibilities	MEMBER of the Register of EXPERTS & REVIEWERS of CINECA
Type of business or sector	INNOVATION AND TECHNOLOGY TRANSFER. INFORMATION AND COMMUNICATIONS TECHNOLOGY.
Name and address of employer	Ministry of Education, University and Research (M.I.U.R.) http://hubmiur.pubblica.istruzione.it/web/ricerca/home
Dates	20/02/2008 -- Today
Occupation or position held	Expert
Main activities and responsibilities	MEMBER of the Register of EXPERTS & REVIEWERS of M.I.S.E.
Type of business or sector	INNOVATION AND TECHNOLOGY TRANSFER. INFORMATION AND COMMUNICATIONS TECHNOLOGY.
Name and address of employer	Ministry of Economic Development (MISE). http://www.sviluppoeconomico.gov.it/index.php/it/
Dates	20/06/2007 -- Today
Occupation or position held	Expert
Main activities and responsibilities	Evaluator and Expert Review.
Type of business or sector	Expert on evaluation project proposals submitted to EUROPEAN COMMISSION. Expert on innovation procurement & process management, R&D&I strategy design, implementation and evaluation.
Name and address of employer	European Commission
Dates	30/12/1987 -- Today
Occupation or position held	Researcher
Main activities and responsibilities	Researcher
Type of business or sector	Researcher in Biomedical Engineering field
Name and address of employer	Institute of Clinical Physiology UOS of Rome National Research Council – Via Palestro, 31- 00185 Rome
Dates	31/01/2012 -- Today
Occupation or position held	Expert
Main activities and responsibilities	Evaluator and Expert Review
Type of business or sector	Expert to evaluate project proposals submitted to DEUTSCHE FORSCHUNGSGEMEINSCHAFT German Research Foundation
Name and address of employer	Deutsche Forschungsgemeinschaft DFG, German Research Foundation - http://www.dfg.de/en/index.jsp
Dates	30/10/2006 -- 31/12/2012
Occupation or position held	Researcher
Main activities and responsibilities	Scientific Consultant
Type of business or sector	Scientific Consultant in Biomedical Engineering field
Name and address of employer	Department of Medicine National Research Council – Piazzale Aldo Moro, 7 – 00185 Rome

Dates	23/01/2007 -- 23/01/2012
Occupation or position held	Member of the research network
Main activities and responsibilities	Researcher
Type of business or sector	National Network Research TissueNET
Name and address of employer	Institute of Biomedical Technologies-- National Research Council -- Piazzale Aldo Moro, 7 – 00185 Rome
Dates	30/08/2011 -- Today
Occupation or position held	Expert
Main activities and responsibilities	Evaluator and Expert Review
Type of business or sector	Expert to evaluate project/proposals submitted for the public tender in research and experimental development and innovation 2011 for the Programme of the Technology Agency of the Czech Republic
Name and address of employer	Technology Agency of the Czech Republic - Evropska 2589/33b 160 00 Prague 6 Czech Republic http://www.taftie.org/content/ta-cr-czech-republic
Dates	18/07/2011 -- Today
Occupation or position held	Expert
Main activities and responsibilities	Evaluator and Expert Review
Type of business or sector	Expert to evaluate project in the context of the «Framework Programme for Research, Technological Development and Innovation 2009-2010» (DESMI 2009-2010). DESMI 2009-2010 IS CO-FUNDED BY THE REPUBLIC OF CYPRUS AND THE EUROPEAN REGIONAL DEVELOPMENT FUND
Name and address of employer	National Research Programmes Unit Research Promotion Foundation (Cyprus) - Strovolos Avenue 123 Post Code 2042 Strovolos Nicosia CYPRUS
VISITING FELLOW	
1988; 1995; 1999	INSTITUTE OF BIOCYBERNETICS AND BIOMEDICAL ENGINEERING. POLISH ACADEMY OF SCIENCES (IBIB-PAN)
1991;1992	NATIONAL INSTITUTES OF HEALTH (N.I.H.). NATIONAL HEART, LUNG, AND BLOOD INSTITUTE. BETHESDA, MARYLAND (U.S.A.)
2006	IWATE PREFECTURAL UNIVERSITY. FACULTY OF SOFTWARE AND INFORMATION SCIENCE. IWATE, JAPAN
VISITING PROFESSOR	
2004;2006;2008	POLSKA AKADEMIA NAUK -INTERNATIONAL CENTRE OF BIOCYBERNETICS. POLISH ACADEMY OF SCIENCES (IBIB-PAN)
2009	IWATE PREFECTURAL UNIVERSITY. FACULTY OF SOFTWARE AND INFORMATION SCIENCE. IWATE, JAPAN
2015;2016	RWTH AACHEN UNIVERSITY, MEDICAL FACULTY (AACHEN-GERMANY)
2015	TEACHING UNIVERSITY GEOMEDI, MEDICAL FACULTY (TBILISI-GEORGIA)
<p>From 2011 Head of "Telecardiology & Clinical Applications of Numerical Modeling of Biological Systems" Research Unit of the Inter-University Consortium: National Institute for Cardiovascular Research (INRC). Via Irnerio, 48 Bologna. http://www.inrc.it/telecardiologia-applicazioni-cliniche-di-modelli-numerici-di-sistemi-biologici-claudio-de-lazzari/ The Research Unit consists of researchers from several Italian universities and researchers of the National Research Council (C.N.R.)</p>	

SCIENTIFIC PROJECTS	
Dates	01/06/2017 - 31/08/2018
Project Title	INTEROMICS Heart Failure: "in silico" and "in vitro" mesenchymal stem cell study
Role	Principal Investigator
Web Site	http://www.interomics.eu/
Financed by	Ministry of Education, University and Research (MIUR) Prot. N. 0081575/2017 del 12/12/2017
Involved organizations	National Research Council of Italy; Sapienza University (Rome)
Dates	01/2016 -- Today
Project Title	Telecardiologia & simulazione in medicina
Role	Principal Investigator
Web Site	https://intranet.cnr.it/intranet/istituti/pdgp/progprev2016-2018/Anagrafica_progetto_intra.html?id_prog=19806
Financed by	National Research Council of Italy (CNR)
Involved organizations	National Research Council of Italy, Sapienza University (Rome), AACHEN University; Cardiocentro Ticino (Lugano, Switzerland); Consorzio Interuniversitario Istituto Nazionale per le Ricerche Cardiovascolari (Bologna); Dipartimento di Matematica, Università degli Studi di Torino; Teaching Geomedi University (Tbilisi, Georgia); Medizinische Universitaet Innsbruck (Austria); Sapienza Università (Roma) – Facoltà di Ingegneria; Sapienza Università (Roma) – Dipartimento di Scienze Cardiovascolari, Respiratorie, Nefrologiche, Anestesiologiche e Geriatriche.
Dates	01/2016 -- Today
Project Title	Telecardiologia & simulazione in medicina
Dates	07/2009 - 06/2012
Project Title	Simulatori Numerici di Ausilio all'Attività Clinica
Role	Scientific Head
Web Site	
Financed by	Istituto Nazionale per le Ricerche Cardiovascolari (Bologna)
Involved organizations	National Research Council of Italy (CNR); Istituto Nazionale per le Ricerche Cardiovascolari (Bologna); U.O. di Cardiologia dell'Università Sapienza (POLO PONTINO).
Dates	04/2013 -- Today
Project Title	Telecardiologia & Applicazioni Cliniche di Modelli Numerici di Sistemi Biologici
Role	Principal Investigator
Web Site	http://www.inrc.it/telecardiologia-applicazioni-cliniche-di-modelli-numerici-di-sistemi-biologici-claudio-de-lazzari/
Financed by	Consorzio Interuniversitario Istituto Nazionale per le Ricerche Cardiovascolari (Bologna)
Involved organizations	National Research Council of Italy, Sapienza University (Rome), AACHEN University; Consorzio Interuniversitario Istituto Nazionale per le Ricerche Cardiovascolari (Bologna); Teaching Geomedi University (Tbilisi, Georgia)
Dates	07/2009 - 06/2012
Project Title	Simulazione Numerica dell'Interazione tra Sistema Circolatorio, Dispositivi per l'Assistenza Meccanica al Circolo e Dispositivi per la Ventilazione Meccanica Assistita
Role	Scientific Head
Web Site	

Financed by	National Research Council of Italy (CNR)
Involved organizations	National Research Council of Italy (CNR); Istituto Nazionale per le Ricerche Cardiovascolari (Bologna); U.O. di Cardiologia dell'Università Sapienza (POLO PONTINO).
Dates	06/1989 - 06/1993
Project Title	Digital Simulation of the Cardiovascular System and Ventricular Assist Device
Role	Scientific Head
Web Site	
Financed by	National Research Council of Italy (CNR)
Involved organizations	National Research Council of Italy (CNR); Institute of Biocybernetic and Biomedical Engineering – Polish Academy of Science; Medicina e Chirurgia II (Sapienza University); National Heart, Lung, and Blood Institute (Bethesda USA); Istituto di Chirurgia del Cuore e dei Grassi Vasi (Sapienza University).

BIOGRAPHICAL SKETCH

Graduated in Electronic Engineering at the University of Rome 'La Sapienza'. Specialization in Biomedical Engineering. Since 1987 he is researcher at the Italian National Research Council (C.N.R.). After having joined the Institute for Biomedical Technologies (ITBM), he now joins the Institute of Clinical Physiology in Rome (IFC). He is Head of "Telecardiology & Clinical Applications of Numerical Modeling of Biological Systems" Research Unit of the National Institute for Cardiovascular Research (I.N.R.C.).

His main research interest is in the field of biomedical engineering (modeling of the cardiovascular and respiratory systems for research, educational and clinical applications; modeling of mechanical circulatory and ventilatory assist devices; telecardiology assistance; e-Learning for health care professionals).

He acts as project evaluator and reviewer in the UE e-Health sector. He is project evaluator, reviewer for: Deutsche Forschungsgemeinschaft German Research Foundation; The Technology agency of the Czech Republic and Cyprus Research Promotion Foundation.

He is project evaluator, reviewer and expert for different Italian public administrations: "Ministero dello Sviluppo Economico in Innovazione Tecnologica"; "Ministero dell'Istruzione dell'Università e della Ricerca MiUR"; Calabria, Emilia Romagna, Sicily, Sardegna, Friuli Venezia Giulia, Lazio, Toscana, Trentino Alto Adige Liguria and Campania regions.

He is author of more 180 international referred articles, many chapters in books and he is editor of seven books. He has served in many Program Committees in international conferences, and he is reviewer for several international journals. Actually, he is in the scientific council of the National Institute of Cardiovascular Research (I.N.R.C.) and he is bioengineering "Scientific Consultant" for the Department of Biomedical Science of the C.N.R. He received (2015) the Doctor Honoris Causa degree from Teaching University Geomedi (Georgia).

TOPICS OF INTEREST

CARDIOVASCULAR SYSTEM MODELING: R&D on software to implement numerical and hybrid simulators (numerical/hydraulic and numerical/electric) of the cardiovascular system. Clinical data validation.

RESPIRATORY SYSTEM MODELING: of heart-lung interaction during mechanical ventilation and mechanical circulatory assistance. Thoracic artificial Lung (TAL) and Extracorporeal Membrane Oxygenation (ECMO): R&D on numerical and hydraulic models. Clinical data validation.

CARDIAC RESYNCHRONIZATION THERAPY (CRT): R&D on a numerical model of the cardiovascular system enables to reproduce severe and moderate heart failure (HF) and the effects of cardiac resynchronization therapy (CRT) using a biventricular pacemaker. The software will be useful for cardiologist to optimize pacemaker temporization.

VENTRICULAR ASSIST DEVICES PROTOCOLS: R&D on Ventricular Assist Devices (VADs) protocols for the management of pulsatile and continuous flow VADs: "in vitro" test for pulsatile/continuous flow pumps.

ECHOCARDIOGRAPHIC IMAGING: R&D of echocardiographic imaging in order to implement software for improving idiopathic pulmonary arterial hypertension (PAH) management. Evaluation of new right ventricular strain index. Clinical data validation.

R&D ON ONTOLOGIES IN THE FIELD OF CARDIOVASCULAR ENGINEERING: Applications on mechanical assist devices, heart valves and biomedical equipments. R&D on ontologies applied to pharmacovigilance to analyse adverse experiences related to drug assumption.

TELECARDIOLOGY: Telecardiology pilot study designed for students in order to prevent cases of sudden cardiac death (SCD). R&D on wearable device enables to acquire and send in-real time several haemodynamic parameters and electrical signals. The device is equipped with a software enabling to predict (using numerical models) starting from measured data, haemodynamic and energetic parameter values that cannot be directly measured.

E-LEARNING AND MEDICAL SIMULATION TRAINING (MST): courses for medical clinical and biomedical engineer students and for physicians and other medical professionals (i.e. Cardiologist, Cardiac Surgeons, Anaesthesiologists, Family medicine physicians, Clinical perfusionists, nurses, etc.).

NUMERICAL STEM CELL THERAPY: R&D on a numerical model to analyse nutrient transport and cardiac stem cell proliferation in an ischemic area of the heart. Simulation of stem cell therapy for different types of HF. In silico and in vitro study.

KEYNOTE LECTURES

- ✓ **Lecture title: "Modeling and Simulation Support for Cardiovascular and respiratory systems".**
RWTH AACHEN UNIVERSITY, MEDICAL FACULTY (Aachen-Germany). (2016)
- ✓ **Lecture title: "Medical education: Simulation in clinical teaching and learning".**
TEACHING UNIVERSITY GEOMEDI, MEDICAL FACULTY (Tbilisi-Georgia). (2015)
- ✓ **Lecture title: "Screening in Italy for Sudden Cardiac Death Prevention: A Telecardiology Pilot Project".**
RWTH AACHEN UNIVERSITY, MEDICAL FACULTY (Aachen-Germany). (2015)
- ✓ **Lecture title: "TELECARDIOLOGY THE SERVICES AS A MODEL IN TELEMEDICINE".**
"SAPIENZA" UNIVERSITY OF ROME. 2ND ITALIAN-RUSSIAN FORUM OF THE INNOVATIONS ON "STRATEGIES FOR COOPERATION, INVESTMENT AND DEVELOPMENT - TELEMEDICINE and TELEDIDACTIS -".
The meeting is sponsored by "Sapienza" and the Center for Russian Studies of the Russkiy Mir Foundation in Moscow, in cooperation with Cemas (Center for research cooperation with Eurasia, the Mediterranean and sub-Saharan Africa) and EURISPES (Institute of Political Studies, economic and social). The Rector's Palace, Hall of the Academic Senate, Rome (2012).
- ✓ **Lecture title: "CARDIOSIM[®]: Numerical Simulator of the Cardiovascular System".**
4TH INTERNATIONAL SYMPOSIUM ON SOFTWARE TECHNOLOGY ---IWATE PREFECTURAL UNIVERSITY - FACULTY OF SOFTWARE AND INFORMATION SCIENCE" (Iwate-Japan). (2009)
- ✓ **Lecture title: "CARDIOSIM[®]: an e-learning software to study simultaneous effects of VAD and Mechanical Ventilatory assistance".**
POLSKA AKADEMIA NAUK -INTERNATIONAL CENTRE OF BIOCYBERNETICS-. 101ST ICB Seminar on "DEVELOPMENT OF CIRCULATORY AND RESPIRATORY SUPPORT -FROM CLINICAL PROBLEMS TO MODELLING-". Warsaw, Poland. (2008)
- ✓ **Lecture title: "A Family of Circulatory Computers Models developed to analyse and predict Physiopathological Events: application to Microcirculatory and Ventilatory Assistance".**
POLSKA AKADEMIA NAUK -INTERNATIONAL CENTRE OF BIOCYBERNETICS-. 88TH ICB Seminar on "CIRCULATORY AND RESPIRATORY PROCESSES –MODELLING, MECHANICAL ASSISTANCE AND APPLICATIONS IN ANESTHESIA, INTENSIVE CARE AND BIOFEEDBAK ". Warsaw, Poland. (2006)
- ✓ **Lecture title: "A new software platform to study the cardiovascular and respiratory systems".**
2ND INTERNATIONAL SYMPOSIUM ON SOFTWARE TECHNOLOGY ---- IWATE PREFECTURAL UNIVERSITY - FACULTY OF SOFTWARE AND INFORMATION SCIENCE" (Iwate-Japan). (2006)
- ✓ **Lecture title: "A family of circulatory models developed to analyze the effects produced by VAD and/or mechanical ventilation assistances on haemodynamic variables".**
POLSKA AKADEMIA NAUK -INTERNATIONAL CENTRE OF BIOCYBERNETICS-. 77TH ICB Seminar on "HEART AND LUNGS ASSISTANCE – STATE OF THE ART". Warsaw, Poland. (2004)

COPYRIGHT SOFTWARE

✓ C. De Lazzari, D. Stalteri:

CARDIOSIM® Website (2011-2019). (<https://cardiosim.dsb.cnr.it/>) Original website platform regarding the implementation of the cardiovascular software simulator titled **CARDIOSIM®**. Database system: design, access, implementation, & management.

✓ C. De Lazzari, R. Mimmo, A. Nicoletti, G. Tosti, G. Ferrari, F. Clemente, M. Guaragno:

CARDIOSIM® software (Interactive package software developed in order to study the interactions between the cardiovascular system and different mechanical circulatory and ventilatory assist devices. User: Research, Education and Study)

<https://brevetti.cnr.it/brevetti/reports/InfoTrovatoEn.jsp?nsrif=1327&dip=4>

Operating System (OS): *WINDOWS*

Programming language: *C++ e Visual Basic®.*

Copyright n. 001252 -----17/05/1999.

✓ C. De Lazzari, R. Mimmo, D. Ambrosi, G. Ferrari, G. Tosti:

CARDIOSIM® software (Interactive package software developed in order to study the interactions between the cardiovascular system and pneumatic ventricular assist device).

<https://brevetti.cnr.it/brevetti/reports/InfoTrovatoEn.jsp?nsrif=840&dip=4>

Operating System (OS): *MS-DOS*

Programming language: *TurboBasic.*

Copyright n. 320896 -----22/07/1991.

LIST OF PUBLICATIONS (papers published in the last six years)**De Lazzari is author of more 180 international referred articles.****(More than 120 first-name papers)**

1. **2019** C. De Lazzari, M. Capoccia, S. Marconi. How can LVAD support influence ventricular energetics parameters in advanced heart failure patients? A retrospective study .Computer Methods and Programs in Biomedicine, 172, 117-126. (<https://doi.org/10.1016/j.cmpb.2019.02.012>)
2. **2018** M. Capoccia, S. Marconi, C. De Lazzari. A Simulation Approach to Guide Therapeutic Intervention in Advanced Heart Failure PROCEEDINGS of BioMedEng18 Conference, 2018. p. 87 ISBN 978-1-9996465-0-9.
3. **2018** S. Marconi, C. De Lazzari. A Lumped Parameter Model of Airway/Lung Mechanics. PROCEEDINGS OF THE 30TH EUROPEAN MODELING AND SIMULATION SYMPOSIUM, 2018. (ISBN 978-88-85741-03-4). Edit by Affenzeller, Bruzzone, Jiménez, Longo, Merkuryev and Piera. 54-58.
4. **2018** S. Marconi, M. Ledda, A.M. Bersani, I. Giorgio, A. Lisi, E. Bersani, D. Andreucci, I. Genuini, D.M. Pisanelli, C. De Lazzari. Multidisciplinary Approach to Myocardial Regeneration: *In Vitro* and *In Silico* Studies of Stem Cells Behaviour. NEW TRENDS IN SOFTWARE METHODOLOGIES, TOOLS AND TECHNIQUES. PROCEEDINGS OF SOMET 2018. (ISBN 978-1-61499-899-0). Edit by H. Fujita, E. Herrera-Viedma IOS Press (Amsterdam), vol. 303; 121 - 134. doi: [10.3233/978-1-61499-900-3-121](https://doi.org/10.3233/978-1-61499-900-3-121)
5. **2018** D.M. Pisanelli, C. De Lazzari, I. Genuini. An Ontology of Mechanical Circulatory Assist Devices Aimed at the Realization of a Decision Support System. NEW TRENDS IN SOFTWARE METHODOLOGIES, TOOLS AND TECHNIQUES. PROCEEDINGS OF SOMET 2018. (ISBN 978-1-61499-899-0). Edit by H. Fujita, E. Herrera-Viedma IOS Press (Amsterdam), vol. 303; 507 - 514. doi: [10.3233/978-1-61499-900-3-507](https://doi.org/10.3233/978-1-61499-900-3-507)
6. **2018** M. Capoccia, S. Marconi, and C. De Lazzari. Decision-making in advanced heart failure patients requiring LVAD insertion: Can preoperative simulation become the way forward? A case study. Journal of Biomedical Engineering and Informatics, 4(2); 8-20. doi: <https://doi.org/10.5430/ibei.v4n2p8>
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