

PROF. ERNESTO IADANZA, PHD

Curriculum vitae

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Qualification Details

- 2013, **PhD** at the School of Doctorate in Telematics and Information Society, Department of Electronics and Telecommunications - University of Florence, 2013. Dissertation: "Integrated system for the clinical risk reduction in the diagnostic-therapeutic workflow of inward patients". Academic field ING-INF/06 (Biomedical Engineering)
- 2002, **Laurea** Degree (5 years degree) in Electronics Engineering with Biomedical curriculum (five years laurea) at the University of Florence in 2002. Dissertation: "ICT monitoring of a hospital renewal".

Current position

- **Associate Professor in Biomedical Engineering** at the Department of Medical Biotechnologies, University of Siena (Italy)
- **Director of the Bioengineering Lab** at the Department of Medical Biotechnologies, University of Siena (Italy) – <https://bioengineering.unisi.it>
- **GEV 09 Member (Bioengineering)**, ANVUR (Italy)
- **Teaching committee Member**, PhD in Medical Biotechnologies, University of Siena (Italy)
- **Teaching Committee Member**, Master in Medical Biotechnologies, University of Siena (Italy)
- **Inclusion Committee Member**, University of Siena (Italy)
- **Founding Partner**, Inception Srl, Innovative Startup and Spinoff of the University of Ferrara

Academic history

- **Senior Assistant Professor** (tenure-track) in **Biomedical Engineering** at the Department of Medical 2022-2025
- **Senior Research Fellow**, School of Engineering, University of Warwick 2021-2022
- **Adjunct Professor in** Clinical Engineering, School of Engineering, University of Florence, 2004-2022
- **Research Fellow** in Biomedical Engineering. Department of Information Engineering, University of Florence. 2002-2009 and 2013-2019
- **Professional Biomedical Engineer and Consultant**, 2002-2022
- **Qualified professional engineer** and registered as no. 5055 of the Professional Association of Engineers of Florence, Section A, Sectors of Civil/Environmental, Industrial and Information Engineering.
- **Research assignments** for the University of Florence, 2010-2022

Keynote Speeches

- "Microbiome data analysis", ICMBE 2024, 18th International Conference on Biomedical Engineering ICBME 2024, December 9-12, 2024, **Singapore**
- "MASTERCLASS - HTA of Medical Devices & Clinical Engineering", Clinical Engineering & HTA of Medical Devices International Symposium, October 23, 2024, **Sao Paulo**, Brasil
- "Proposal of an XML standard protocol for Evidence-Based Medical Equipment Maintenance", 9th European Medical and Biological Engineering Conference, EMBEC 2024, June 9-13, 2024, **Portoroz**, Slovenia
- "Clinical engineering: present and future", Congreso Internacional de Ingeniería Clínica, CONIC 2023, March 30-31, 2023, **Medellin**, Colombia
- "Interactions between Clinical Engineering and HTA: An Introduction", I Congress of Clinical Engineering and HTA in Medical Devices (CECATS), OCTOBER 20 - 22, 2021, **Brazil**, Online
- "Biomedical and Clinical Engineers: live and learn", IUPESM 2018 World Congress on Medical Physics and Biomedical Engineering, 3-8 Jun, 2018, **Prague** (Czech Republic)

- "Biomedical and Clinical Engineers the key to success is a wide knowledge" --- CMBEBIH, International Conference on Medical and Biological Engineering, 16-18 Marzo, 2017, **Sarajevo**, Bosnia and Herzegovina
- "Roadmap to the recognition of the role of clinical/biomedical engineering in healthcare. An update on the global and Italian situations". Clinical Engineering Conference, in Africa Health 2016, Jun 8-10, 2016, **Johannesburg**, South Africa

Invited Speeches

- KEYNOTE SPEAKER, 18th International Conference on Biomedical Engineering (ICBME 2024), **Singapore**, December 2024
- INVITED PLENARY SPEAKER, Die Zukunft der Medizintechnik: Bewirtschaftung und Instandhaltung mit neuen Technologien, **Göttingen** (Germany), 21-22 November 2024
- INVITED PLENARY SPEAKER, II International Workshop Management, Innovation, And Assessment Of Health Technologies In Medical Devices, **Botucatu** (Brasil), 25-26 October 2024
- KEYNOTE SPEAKER, 9th European Medical and Biological Engineering Conference (EMBEC 2024), **Portoroz** (SLOVENIA), June 2024
- INVITED PLENARY SPEAKER, XXIII Workshop Medicina Vascolare Fadoi Toscana L'internista E I Pdta Di Medicina Vascolare, **Firenze** (Italy), 19 April 2024
- INVITED PLENARY SPEAKER, Terzo Meeting Nazionale AIIC, Intelligenza Artificiale in Sanità: Sfide e prospettive per la salute dei cittadini, **Palermo** (Italy), 1 December 2023
- INVITED PLENARY SPEAKER, Medicina Digitale, Intelligenza Artificiale, Terapie Innovative: nuove opportunità per la gestione di vecchie malattie, **Firenze** (Italy), 24 November 2023
- INVITED SPEAKER, Webinar IFMBE: "Collaborative Decision-Making: Bridging the Gap between Digital Health and Clinical Engineering Teams", **Online**, 31 August 2023
- INVITED SPEAKER, Forum Sistema Salute FSS 2023, **Firenze** (Italy), 19-20 October 2023
- INVITED PANELIST, MEDICON 2023 & CMBEBIH 2023, **Sarajevo** (Bosnia and Herzegovina), 14-16 September 2023
- INVITED PLENARY SPEAKER, Convegno Nazionale Associazione Italiana Ingegneri Clinici (AIIC), **Firenze** (Italy), 10-13 May 2023
- INVITED PLENARY SPEAKER, Gruppo Nazionale Bioingegneria (GNB) XLI Annual School 2022 – Biomedical Engineering for Sustainable Development, **Bressanone** (Italy), 12-15 September 2022
- INVITED PLENARY SPEAKER, International Organization for Medical Physics (IOMP) / International Federation for Medical and Biological Engineering (IFMBE) Webinar, "Clinical Engineering Day 2022: Management and maintenance of medical technologies", October 19, **online**
- INVITED PANELIST --- Conference: IV WORLD HEALTH ORGANIZATION (WHO) GLOBAL FORUM ON MEDICAL DEVICES, 13-15 Dec 2018, **Vishakhapatnam**, India
- INVITED SPEAKER --- INCEPTION PROJECT 665220 - H2020 REFLECTIVE-7-2014 INCEPTION Cyprus course, 1 – 1 November 2018, **Nicosia** (Cyprus)
- INVITED PANELIST - INCEPTION PROJECT 665220 - H2020 REFLECTIVE-7-2014 INCEPTION Athens course, 6th – 7th November 2017, **Athens** (Greece)
- INVITED PANELIST and PLENARY SPEAKER --- World Health Organization – Third Global Forum on Medical Devices, Mag 2017, **Geneve**, Switzerland
- INVITED SPEAKER (Healthcare Technology Trends in Europe) - INVITED SPEAKER (Clinical Engineering Curricula: the IFMBE/CED Perspective and a Focus on Italian Academic Curricula) –
- INVITED SPEAKER AT ROUNDTABLE (Roundtable on HTA: Healthcare Technology Assessment on Medical Devices. Title: "Hospital-based HTA"), International IFMBE 6th European Conference of the International Federation for Medical and Biological Engineering (MBEC 2014), Sep 7 – 11, **Dubrovnik**, Croatia.
- INVITED SPEAKER AT ROUNDTABLE (Roundtable on Clinical Engineering. Title: "Clinical Engineering Role on Research"), International IFMBE 6th European Conference of the International Federation for Medical and Biological Engineering (MBEC 2014), Sep 7 – 11, **Dubrovnik**, Croatia.
- JUDGE FOR AWARDS SESSION (BES-SEC Design Award Session) --- The 16th International Conference on Biomedical Engineering, 7-10 December 2016, **Singapore**

- INVITED SPEAKER ("Un sistema esperto per il monitoraggio delle strutture ospedaliere: SEMIO") -
-- Convegno Istituto Internazionale di Ricerca: "La manutenzione negli ospedali e nelle strutture sanitarie", Oct. 28, 2010, **Milan**, Italy

International scientific societies membership:

IFMBE - International Federation for Medical and Biological Engineering

- Chair of the Health Technology Assessment Division, ex-officio Member of the Administrative Council

IEEE - Institute of Electrical and Electronic Engineers

- Senior Member

EMBS - IEEE Engineering in Medicine and Biology Society

- Senior Member

National scientific societies membership:

SIBIM - Italian Scientific Society of Biomedical Informatics

AIIMB - Italian Association of Medical and Biological Engineering

- Delegate for IFMBE

AIIC - Italian Association of Clinical Engineers

- Senior Member

GNB - National Group of Bioengineering

- Founding Member

SIAIS - Italian Society of Architecture and Engineering in Health Care

Prominent Roles in Scientific and Professional Societies/Fellowships

- 2022-2025, **CHAIR**, Council of Societies of the International Federation for Medical and Biological Engineering (IFMBE/CoS)
- 2023, **CHAIR**, Ad Hoc Working Group on communication within African BME Societies, International Federation for Medical and Biological Engineering
- 2020-2022, **International Scientific Committee Member**, WC2022 IUPESM World Conference.
- 2020-2022, **Education and Professional Standards Committee Member**, WC2022 IUPESM World Conference.
- 2018-2022, **CHAIR**, International Federation for Medical and Biological Engineering/HEALTH TECHNOLOGY ASSESSMENT DIVISION BOARD (IFMBE/HTAD)
- 2018-2025, **ELECTED MEMBER**, International Federation for Medical and Biological Engineering/HEALTH TECHNOLOGY ASSESSMENT DIVISION BOARD (IFMBE/HTAD)
- 2015-2022, **MEMBER OF THE ADMINISTRATIVE COUNCIL**
- 2018-2022, **Ordinary Member**, International Federation for Medical and Biological Engineering/Nominating Committee (IFMBE/NC)
- 2018-2022, **Ordinary Member**, International Union for Physics and Engineering in Medicine/EDUCATION AND TRAINING COMMITTEE (IUPESM/ETC)
- 2018-2022, **Ordinary Member**, International Union for Physics and Engineering in Medicine/HEALTH TECHNOLOGY TASK GROUP (IUPESM/ETC)
- 2015-2018, **CHAIR**, International Federation for Medical and Biological Engineering / CLINICAL ENGINEERING DIVISION BOARD (IFMBE / CED)
- 2015-2018, **CHAIR**, International Union for Physics and Engineering in Medicine/EDUCATION AND TRAINING COMMITTEE (IUPESM/ETC)
- 2015-2018, **INVITED MEMBER**, Working Group for Developing Countries of the International Federation for Medical and Biological Engineering (IFMBE / WGDC)
- 2013-2020 **Founder and coordinator** (2013-17, now deputy-coordinator) of the Biomedical Engineering Commission of the local Professional Engineers Association in Florence, Italy.
- 2012-2018, **ELECTED MEMBER**, International Federation for Medical and Biological Engineering / CLINICAL ENGINEERING DIVISION BOARD (IFMBE / CED)
- 2012-2015, **SECRETARY**, International Federation for Medical and Biological Engineering / CLINICAL ENGINEERING DIVISION BOARD (IFMBE / CED)
- 2012-2015, **CHAIR**, Nominating Committee, International Federation for Medical and Biological Engineering / CLINICAL ENGINEERING DIVISION BOARD (IFMBE / CED)
- 2012-2015, **MEMBER**, Nominating Committee, International Federation for Medical and Biological Engineering (IFMBE)

Mentoring

Since 2004, **Advisor of graduation theses**, Advisor of more than 200 graduation theses in Biomedical Engineering (five years degree), Electronic Engineering (three years and five years degrees), Industrial Design (three years degree), Postgraduate Master in Clinical Engineering (one year postgraduate course).

- 2022-today, **PhD Supervisor (1 candidates)**, PhD Course in Genetics, Oncology and Clinical Medicine (GenOMeC), University of Siena (Italy)
- 2022-today, **PhD Supervisor (2 candidates)**, PhD Course in Medical Biotechnologies, University of Siena (Italy)
- 2021-today, **PhD Supervisor (1 candidates)**, PhD Course in Atomic and Molecular Photonics, European Laboratory for Non-Linear Spectroscopy (LENS), Florence (Italy)
- 2020-today, **PhD Supervisor (4 candidates)**, PhD Course in Information Engineering, University of Florence (Italy)
- 2018-today, **Visiting Professor and PhD Candidate supervisor (1 candidate)**, PhD Course in Engineering, Universidad EIA, Medellin (Colombia)
- 2015-today, **Visiting Academic, Laboratory Associate and PhD Candidates Supervisor (2 candidates)**, University of Warwick, UK, Applied Biomedical Signal Processing and Intelligent eHealth Lab, <https://warwick.ac.uk/fac/sci/eng/research/grouplist/biomedicaleng/abspie/>

Teaching

- Currently, Associate Professor in *BIOMEDICAL ENGINEERING*, University of Siena
- 2013-2022, Adjunct Professor in *CLINICAL ENGINEERING*, University of Florence, School of Engineering
- 2010-2013 *BIOMEDICAL INSTRUMENTATION*, University of Florence, School of Engineering, Degree in Electronics Engineering and Master Course in Biomedical Engineering
- 2010-2013 Adjunct Professor in *CLINICAL ENGINEERING*, University of Florence, School of Engineering, and Master Course in Biomedical Engineering
- 2009-2013 *Member of the Steering Committee, SECOND LEVEL (POST-MSc) Specialization Course in CLINICAL ENGINEERING*, University of Florence, School of Engineering
- 2009-2010 Adjunct Professor in *BIOMEDICAL INSTRUMENTATION*, University of Florence, School of Engineering, Degree in Electronics Engineering
- 2008 – 2011: Expert Member in BIOMEDICAL ENGINEERING for the State Exams for the Qualification to the Profession of Engineer (8 sessions), University of Florence
- 2008-2009 Adjunct Professor in *BIOENGINEERING AND ANALYSIS OF MOVEMENT*, University of Florence, School of Medicine, Degree in Physiotherapy
- 2007-2008 *Member of the Steering Committee, FIRST LEVEL (POST-GRADUATE) SPECIALIZATION COURSE IN CLINICAL ENGINEERING*, University of Florence, School of Engineering
- 2006-2010 Adjunct Professor in *CLINICAL ENGINEERING II*, University of Florence, School of Engineering, Master Course in Biomedical Engineering
- 2005-2009 *Seminars on BIOMEDICAL INSTRUMENTATION*, University of Florence, School of Engineering, Degree in Electronics Engineering and Master Course in Biomedical Engineering
- 2004-2008 Adjunct Professor in *TELEMATICS AND DOMOTICS*, University of Florence, School of Architecture

Editorial activities

- **Guest Editor in Special Issue** (scientific journal) "Advances in Artificial Intelligence, Machine Learning and Deep Learning Application", Electronics MDPI
- **Editor in Chief** (scientific book), "Clinical Engineering Handbook, 2nd Edition". Elsevier, 2019
- **Editor** (scientific book), "Clinical Engineering: from Devices to Systems". Elsevier, 2015.
- **Section Editor** (scientific journal), *Technology and Health Care*, IOP
- **Associate Editor** (scientific journal), PLoS ONE, PLOS
- **Associate Editor** (scientific journal), *Frontiers in Bioengineering and Biotechnology*, Frontiers
- **Associate Editor** (scientific journal), *Healthcare and Technology*, Springer
- **Associate Editor** (scientific journal), *Future Internet*, MDPI
- **Associate Editor** (scientific journal), *Journal of Advanced Biotechnology and Bioengineering*, Synergy Publishers
- **Associate Editor** (scientific journal), *Journal of Healthcare Engineering*, Hindawi

- **Section Editor** (scientific journal), *International Journal of Clinical Engineering and Health Technology Assessment* (CEHTA), Ed. IFMBE (discontinued)
- **Editorial Board Committee Member** (scientific journal), *China Medical Devices Journal*
- **Guest Editor in Special Issue** (scientific journal), *Healthcare and Technology*, Springer
- **Guest Editor in Special Issue** (scientific journal), *Electronics*, MDPI
- **Editorial review board** in several international scientific journals
- **Editorial review board member in international conferences:**
 - IUPESM WC 2022, World Congress on Medical Physics and Biomedical Engineering, 10-18 June 2022, Singapore
 - IEEE EMBC 2022 "44th Annual International Conference of the IEEE Engineering in Medicine and Biology Society", Glasgow, Scotland (UK), July 11 – 15, 2022
 - Florence HERI-TECH 2022 - the Future of Heritage Science and Technologies, 18-20 May 2022, Florence, Italy
 - BIODEVICES 2022 - "XVI International Conference on Biomedical Electronics and Devices", Online
 - IEEE EMBC 2021 "43th Annual International Conference of the IEEE Engineering in Medicine and Biology Society", Virtual, October 31 – November 4, 2021
 - BIODEVICES 2021 - "XIV International Conference on Biomedical Electronics and Devices", 11-13 Feb 2021, Prague, Czech Republic
 - Program Committee of the Mediterranean Forum Data Science conference (MeFDATA2020), 24 Oct 2020, Sarajevo, Bosnia and Herzegovina
 - 11th APCMBE 2020, 25-27 May 2020, Okayama, Japan
 - BIODEVICES 2020 - "XIII International Conference on Biomedical Electronics and Devices", 24-26 Feb 2020, La Valletta, Malta
 - Florence HERI-TECH 2020 - the Future of Heritage Science and Technologies, 13-15 May 2020, Florence, Italy
 - ICBME 2019 - The 17th International Conference on Biomedical Engineering, 9-12 December 2019, Singapore, <http://www.icbme.org/conference-programme>
 - XV Mediterranean Conference On Medical And Biological Engineering And Computing (MEDICON 2019), Sep 2019, Coimbra, Portugal
 - ICBHI 2019 - Future Trends in Biomedical and Health Informatics & Cybersecurity in Medical Devices, Apr 2019, Taipei, Taiwan
 - CMBEBIH 2019 – International Conference on Medical and Biological Engineering, May 2019, Banja Luka, Bosnia and Herzegovina
 - BIODEVICES 2019 - "XII International Conference on Biomedical Electronics and Devices", Feb 2019, Prague, Czech Republic
 - TMM_CH2018 Transdisciplinary Multispectral Modelling and Cooperation for the Preservation of Cultural Heritage, Oct 2018, Athens, Greece
 - IUPESM conference WC2018: World Congress on Medical Physics and Biomedical Engineering 2018, June 3 - 8, Prague (Czech Republic)
 - 19-21 Jan, 2018, Funchal, Madeira (Portugal)
 - BIODEVICES 2018 - "11th International Conference on Biomedical Electronics and Devices"
 - September 2017, San Paolo, Brasil
 - ICEHTM17, Second International Conference on Clinical Engineering and Health Technology Management,
 - NBC 2017 & EMBEC 2017, joint conference of the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics (NBC) 2017 and the IFMBE European Medical and Biological Engineering Conference (EMBEC) 2017, June 2017, Tampere, Finland
 - XIV Mediterranean Conference On Medical And Biological Engineering And Computing (MEDICON 2016), Mar-Apr 2016, Paphos, Cyprus
 - IUPESM conference WC2015: World Congress on Medical Physics and Biomedical Engineering 2015, June 7 - 12, Toronto, Canada
 - IEEE EMBC 2015 "37th Annual International Conference of the IEEE Engineering in Medicine and Biology Society", Milano, Italia, August 25 - 29, 2015
 - IEEE EMBC 2014 "36th Annual International Conference of the IEEE Engineering in Medicine and Biology Society", Chicago, Usa, August 26 - 30, 2014
 - IFMBE XIII International Mediterranean Conference on Medical and Biological Engineering and Computing (MEDICON 2013), Sevilla, Spain, Sep 25 – 28, 2013
 - IEEE EMBC 2013 "35th Annual International Conference of the IEEE Engineering in Medicine and Biology Society", Osaka, Japan, July 3 - 7, 2013
 - IFMBE conference WC2012: World Congress on Medical Physics and Biomedical Engineering 2012, May 26 - 31, Beijing, China
 - IEEE EMBC 2012 "34th Annual International Conference of the IEEE Engineering in Medicine and Biology Society", San Diego, USA, August 28 - September 1, 2012
 - IEEE EMBC 2011 "33th Annual International Conference of the IEEE Engineering in Medicine and Biology Society", Boston, USA, August 29 - September 4, 2011
 - IEEE EMBC 2010 "32TH Annual International Conference of the IEEE Engineering in Medicine and Biology Society", Buenos Aires, ARGENTINA, 1-4 Sep 2010

- IEEE EMBC 2009 "31th Annual International Conference of the IEEE Engineering in Medicine and Biology Society", Minneapolis, USA, 2-6 Sep 2009

Awards/recognition

- **2022, Best 2022 Manuscript Award** (Journal article: "Medical devices nomenclature systems: a scoping review". International Federation for Medical and Biological Engineering, 2022)
- **2022, Best 2022 Manuscript Award** (Conference paper: "Sentiment Analysis for Performance Evaluation of Maintenance in Healthcare (CMBEBIH 2021). International Federation for Medical and Biological Engineering, 2022
- **2020, ACCE Student Paper Competition** - American College of Clinical Engineering, 2020 Student Paper Competition – International Master division. USA. February, 2020.
- **2019, IFMBE/CED 2019 Clinical Engineering Teamwork Award.** This award from the International Federation for Medical and Biological Engineering / Clinical Engineering Division recognizes an individual that fostered and facilitated cooperation between healthcare technology managers to successfully achieve outstanding impact on the clinical engineering field.
- **2019, Best Paper Award, Student Competition** - CMBEBIH 2019, Banja Luka, Bosnia and Herzegovina. May, 2019
- **2019, Best work**, Health Technology Challenge - ICT and Medical Informatics category, International Clinical Engineering and Health Technology Management Congress - ICEHTMC 2019, Roma, Italy. October, 2019
- **2018, Best Paper ICT and Digital Heritage** for the paper "Handling huge and complex 3D geometries with Semantic Web technology", International Conference Florence Heri-Tech: the Future of Heritage Science and technologies. May 16-18, 2018, Florence (Italy)
- **2017, Elevated to Senior Member, IEEE** (Institute of Electrical and Electronic Engineers) and **EMBS** (Engineering in Medicine and Biology Society) in 2017. "IEEE Senior Membership is an honor bestowed only to those who have made significant contributions to the profession".
- **2017, AAMI AWARD** (Association for the Advancement of Medical Instrumentation) 2017 to the Clinical Engineering Division of International Federation for Medical and Biological Engineering (IFMBE/CED), chaired by Dr. Iadanza, for their support in the global development of Clinical Engineering.
- **2013, IBM FACULTY AWARD 2013** for the project CARE – Chronic heArt failuRe ManagEment: an AI-based integrated platform for the remote management of patients with Chronic Heart Failure

Technology transfer

Spinoff companies

Founding partner of Inception Srl, academic Spinoff of the University of Ferrara, Innovative Startup.

Academic joint labs

Founding member of Eidolab, academic joint lab between the University of Florence and Imaginalis Srl

Patents

INVENTOR AND APPLICANT – WORLD PATENT "PROGRAMMABLE ELECTRO-MEDICAL SYSTEM I [SYSTÈME ÉLECTRO-MÉDICAL PROGRAMMABLE]": WO2010007640. Inventor(s): FORTUNA DR DAMIANO [IT]; MASOTTI LEONARDO [IT]; MANETTI LEONARDO [IT]; MIRABELLA CARLO [IT]; **IADANZA ERNESTO** [IT]; DORI FABRIZIO [IT] + Applicant(s): EL EN SPA [IT]; FORTUNA DR DAMIANO [IT]; MASOTTI LEONARDO [IT]; MANETTI LEONARDO [IT]; MIRABELLA CARLO [IT]; IADANZA ERNESTO [IT]; DORI FABRIZIO [IT] +

Registered Software

- 2022, SIAE (Italian Society for Authors and Editors) registration of software as author and owner. N°: 017018. Software title: "ASSO – ANALISI DELLE STRUTTURE E DEGLI SPAZI OSPEDALIERI".

- 2017, SIAE (Italian Society for Authors and Editors) registration of software as author and owner. N°: 012083. Software title: "S.A.C.S. SISTEMA ANALISI CONSISTENZE STRUTTURALI".
- 2008, SIAE (Italian Society for Authors and Editors) registration of software as author and owner. N°: D006098. Software title: "S.A.C.S. SISTEMA ANALISI CONSISTENZE STRUTTURALI".

Research Grants

Dates	Funder/Co-funder	Project title	Role
2023-2024	EU Horizon 2020	OHIO – Odin Hospital Indoor cOmpass. Open Call issued and executed under the ODIN project GA 101017331	Coordinator and Principal Investigator
2022-2024	University Hospital of Siena (IT)	Platform for the computerized management of the hospital "Le Scotte"	Coordinator and Principal Investigator
2021-2024	EU Horizon 2020	ODIN SMART HOSPITALS - Leveraging AI based technology to transform the future of health care delivery in Leading Hospitals in Europe. GA 101017331	Task leader
2016-2019	Ministry of University and Research (IT) – PRIN 2015	Design and implementation of a software platform dedicated to the early diagnosis and screening of genetic ocular diseases in pediatric age	Principal Investigator
2013-2017	EU FP7	STREAMER – GA 608739 - FP7-2013-NMP-ENV-EeB	Consultant
2016-2019	EU Horizon 2020	INCEPTION – GA 665220-H2020	Task leader
2008-2009	Tuscany Region (IT) - DOCUP Ob. 2 years 2000-2006, Measure 1.7 "Transfer of innovation to SMEs" and Action 1.7.1 "Networks for technology transfer".	OMNIA - OPTO-MECHATRONIC NETWORK IN MEDICAL APPLICATIONS,	Consultant
2009-2010	Tuscany Region (IT) - DOCUP Ob. 2 years 2000-2006, Measure 1.7 "Transfer of innovation to SMEs" and Action 1.7.1 "Networks for technology transfer".	ABOVE research project - Applied Biomedical Opto-mechatronic Virtual Enterprise	Consultant
2007-2008	Meyer Children's Hospital	Development of methodologies of analysis of the healthcare processes and feasibility studies of technological solutions supporting the diagnosis and care process	Investigator
2007-2008	Meyer Children's Hospital	Feasibility study and experimentation of an active rfid	Investigator

		system for the identification and traceability of patients and assets within the Meyer university hospital	
2013-2018	University Hospital of Siena (IT)	Analysis of spaces and structures of the polyclinic "Le Scotte"	Principal Investigator
2002-2009	University Hospital Careggi in Florence (IT)	Definition of a structural and organizational model of the redevelopment process of the careggi hospital	Principal Investigator

International congresses and summer schools:

Organizer and speaker, often invited and keynote speaker, on technological topics in many conferences (mainly international) from 2003. Particular mention should be made of the prestigious participation as keynote speaker at the World Congress of Biomedical Engineering and Medical Physics IUPESM 2018. Below is a detailed list.

- **CONFERENCE CHAIR** --- MEDICON 2026, XVII Mediterranean Conference on Medical and Biological Engineering and Computing, 2026, Siena, Italy
- **PROGRAM COMMITTEE MEMBER** – GNB 2025, IX Congress of the National Group of Bioengineering, June 16TH – 18TH, 2025, Palermo, Italia
- **SCIENTIFIC COMMITTEE MEMBER** – IUPESM WC 2025, World Congress on Medical Physics and Biomedical Engineering, September 29th – October 4th 2025, Adelaide, Australia
- **SCIENTIFIC COMMITTEE MEMBER** – EMBEC 2024 - 9th European Medical and Biological Engineering Conference, June 9th – 13th, 2024, Portoroz, Slovenia
- **SCIENTIFIC ADVISORY COMMITTEE MEMBER**, ICBHI 2024, 6th International Conference on Biomedical and Health Informatics 2024, Oct 30th to Nov 2nd, Tainan, Taiwan, 2024
- **SCIENTIFIC COMMITTEE MEMBER, EDUCATION AND PROFESSIONAL STANDARDS COMMITTEE MEMBER** – IUPESM WC 2022, World Congress on Medical Physics and Biomedical Engineering, June 10th - 17th 2022, Singapore
- **INTERNATIONAL PROGRAM COMMITTEE MEMBER** --- BIODEVICES 2022 - "XV International Conference on Biomedical Electronics and Devices", Online
- **TECHNICAL PROGRAM COMMITTEE MEMBER** --- Florence HERI-TECH 2022 - the Future of Heritage Science and Technologies, 10-20 May 2022, Florence, Italy
- **INTERNATIONAL PROGRAM COMMITTEE MEMBER** --- BIODEVICES 2021 - "XIV International Conference on Biomedical Electronics and Devices", 11-13 Feb 2021, Prague, Czech Republic
- **PROGRAM COMMITTEE MEMBER** - Program Committee of the Mediterranean Forum Data Science conference (MeFDATA2020), 24 Oct 2020, Sarajevo, Bosnia and Herzegovina
- **INTERNATIONAL ADVISORY COMMITTEE MEMBER** --- 11th APCMBE 2020, 25-27 May 2020, Okayama, Japan
- **INTERNATIONAL PROGRAM COMMITTEE MEMBER** --- BIODEVICES 2020 - "XIII International Conference on Biomedical Electronics and Devices", 24-26 Feb 2020, La Valletta, Malta
- **TECHNICAL PROGRAM COMMITTEE MEMBER** --- Florence HERI-TECH 2020 - the Future of Heritage Science and Technologies, 13-15 May 2020, Florence, Italy
- **SCIENTIFIC COMMITTEE MEMBER** --- ICBME 2019 - The 17th International Conference on Biomedical Engineering, 9-12 December 2019, Singapore, <http://www.icbme.org/conference-programme>
- **CONFERENCE CO-CHAIR, SCIENTIFIC COMMITTEE MEMBER** --- ICEHTMC19, III International Conference on Clinical Engineering and Health Technology Management, 21-22 Oct, 2019, Rome, Italy
- **PROGRAM COMMITTEE MEMBER and TRACK CHAIR (Clinical Engineering and HTA)** --- XV Mediterranean Conference On Medical And Biological Engineering And Computing (MEDICON 2019), Sep 2019, Coimbra, Portugal
- **SCIENTIFIC ADVISORY COMMITTEE MEMBER** --- ICBHI 2019 - Future Trends in Biomedical and Health Informatics & Cybersecurity in Medical Devices, Apr 2019, Taipei, Taiwan
- **PROGRAM COMMITTEE MEMBER** --- CMBEBIH 2019 – International Conference on Medical and Biological Engineering, 16-18 May 2019, Banja Luka, Bosnia and Herzegovina
- **INTERNATIONAL PROGRAM COMMITTEE MEMBER** --- BIODEVICES 2019 - "XII International Conference on Biomedical Electronics and Devices", 22-24 Feb 2019, Prague, Czech Republic

- **INTERNATIONAL ADVISOR, INVITED PANELIST, ORGANIZER OF WORKSHOPS E PARALLEL SESSIONS** --- IV WORLD HEALTH ORGANIZATION (WHO) GLOBAL FORUM ON MEDICAL DEVICES, 13-15 Dec 2018, Vishakhatapnam, India
- **SCIENTIFIC COMMITTEE MEMBER** --- TMM_CH2018 Transdisciplinary Multispectral Modelling and Cooperation for the Preservation of Cultural Heritage, 10-13 Oct, 2018, Athens, Greece
- **INVITED SPEAKER** --- INCEPTION PROJECT 665220 - H2020 REFLECTIVE-7-2014 INCEPTION Cyprus course, 1 - 1 November 2018, Nicosia (Cipro)
- **SCIENTIFIC COMMITTEE MEMBER** --- Collaborative Biomedical Engineering for Open Source Medical Technologies, 1-2 Sep, 2018, Pisa (Italia)
- **KEYNOTE SPEAKER** --- IUPESM 2018 World Congress on Medical Physics and Biomedical Engineering, 3-8 Jun, 2018, Praga (Repubblica Ceca)
- **INTERNATIONAL ADVISORY BOARD MEMBER AND SPEAKER** --- IUPESM 2018 World Congress on Medical Physics and Biomedical Engineering, 3-8 Jun, 2018, Praga (Repubblica Ceca)
- **INTERNATIONAL PROGRAM COMMITTEE MEMBER** --- BIODEVICES 2018 - "11th International Conference on Biomedical Electronics and Devices", 19-21 Jan, 2018, Funchal, Madeira (Portogallo)
- **INVITED PANELIST** - INCEPTION PROJECT 665220 - H2020 REFLECTIVE-7-2014 INCEPTION Athens course, 6th - 7th November 2017, Athens (Grecia)
- **INVITED PANELIST and PLENARY SPEAKER** --- World Health Organization – Third Global Forum on Medical Devices, Mag 2017, Ginevra, Svizzera
- **PROGRAM COMMITTEE MEMBER, STUDENT PAPER COMPETITION BOARD MEMBER** --- ICEHTMC17, II International Conference on Clinical Engineering and Health Technology Management, 21-22 Sep, 2017, San Paolo (Brasile) <http://www.icehtmc.com/html/en/faculty.html>
- **SCIENTIFIC COMMITTEE MEMBER and SPEAKER - SESSION CHAIR** ("HTA, medical device R&D, manufacturing and procurement: compete or collaborate?") - **SPECIAL SESSION CHAIR** ("Clinical Engineering Revisited: Towards a White Paper") --- NBC 2017 & EMBEC 2017, joint conference of the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics (NBC) 2017 and the IFMBE European Medical and Biological Engineering Conference (EMBEC) 2017 11-15 Giugno 2017, Tampere, Finlandia <http://embec2017.org/scientific-committee/>
- **PROGRAM COMMITTEE MEMBER** --- CMBEBIH, International Conference on Medical and Biological Engineering, 16-18 Marzo, 2017, Sarajevo, Bosnia ed Erzegovina <http://cmbebih.com/AboutUs/Committees>
- **KEYNOTE SPEAKER** --- CMBEBIH, International Conference on Medical and Biological Engineering, 16-18 Marzo, 2017, Sarajevo, Bosnia ed Erzegovina <http://cmbebih.com/Speakers>
- **INVITED SPEAKER** (Healthcare Technology Trends in Europe) - **INVITED SPEAKER** (Clinical Engineering Curricula: the IFMBE/CED Perspective and a Focus on Italian Academic Curricula) - **JUDGE FOR AWARDS SESSION** (BES-SEC Design Award Session) --- The 16th International Conference on Biomedical Engineering, 7-10 December 2016, Singapore, <http://www.icbme.org/conference-programme>
- **KEYNOTE SPEAKER** (Keynote presentation: Roadmap to the recognition of the role of clinical/biomedical engineering in healthcare. An update on the global and Italian situations) --- "Clinical Engineering Conference", in Africa Health 2016, Jun 8-10, 2016, Johannesburg, South Africa
- **PROGRAM COMMITTEE MEMBER - TRACK CHAIR** (Track 10: "Clinical Engineering and HTA") - **SESSION CHAIR** (Sessione "Clinical Engineering") - **SPEAKER** ("Risk Management Process on a New Microwave Thermal Ablation Device: Assessment and Follow Up") **ROUND TABLE PANELIST** (Round table discussion on BME policy goals and activities in EU and worldwide) **ROUND TABLE PANELIST** (Building bridges between more and less developed CE associations) --- IFMBE XIV Mediterranean Conference On Medical And Biological Engineering And Computing (MEDICON 2016) Marzo-Aprile 2016, Paphos, Cipro <http://medicon2016.org/programme.html>
- **PROGRAM COMMITTEE MEMBER and SPEAKER** --- ICEHTMC15 International Clinical Engineering and Health Technology Management Congress 2015, Oct 21-22, 2015, Hangzhou, Cina.
- **PROGRAM COMMITTEE MEMBER and SPEAKER** --- Summer School on Health Technology Assessment (HTA), Sep 8-10, 2015, Warwick, United Kingdom <http://www2.warwick.ac.uk/fac/sci/eng/research/grouplist/biomedicaleng/abspie/hta>
- **SESSION CHAIRMAN and SPEAKER**: Track 16: Clinical Engineering, Clinical Physics, and Patient Safety. Session SP093 - Health Technology Assessment and Cost Effective Technologies for Developing Countries and Usability and Human Factors Engineering for Medical Devices and System Design: Part 1 --- International IUPESM conference WC2015 - World Congress on Medical Physics and Biomedical Engineering, Jun 7-12, 2015, Toronto, Canada
- **SESSION CHAIRMAN** (Session "Clinical Engineering and Health Technology Assessment"), **SPEAKER** ("Clinical Engineering Certification and Education in Italy"), RELATORE ("EUREKA: A Web Based Search Engine for Hospitals"), **INVITED SPEAKER AT ROUNDTABLE** (Roundtable on HTA: Healthcare Technology Assessment on Medical Devices. Titolo relazione: "Hospital-based HTA"), **INVITED SPEAKER AT ROUNDTABLE** (Roundtable on Clinical Engineering. Titolo relazione: "Clinical Engineering Role on Research") --- International IFMBE 6th European Conference of the International Federation for Medical and Biological Engineering (MBEC 2014), Sep 7 - 11, Dubrovnik, Croatia.
- **SPEAKER** --- IEEE EMBC 2014 "36th Annual International Conference of the IEEE Engineering in Medicine and Biology Society", Chicago, Usa, August 26 - 30, 2014
- **SPEAKER** ("Medical software: are clinical engineers ready to face the challenge?") --- Second WHO Forum on Medical Devices, Nov 22-24, 2013, Ginevra, Svizzera

- **SPEAKER** --- IEEE EMBC 2013 "35th Annual International Conference of the IEEE Engineering in Medicine and Biology Society", Osaka, Japan, July 3 - 7, 2013
- **LOCAL PROGRAM COMMITTEE MEMBER, SPEAKER** (Sessione 5 - Workshop Didattico tra le Facoltà di Ingegneria e Architettura. Titolo relazione: "Un'esperienza di studio comune tra laureandi ingegneri e architetti per la sanità") --- 5° Congresso Nazionale S.I.A.I.S., Oct 24-26, 2013, Firenze, Italia
- **INTERNATIONAL SCIENTIFIC COMMITTEE MEMBER, SPECIAL SESSION PROPOSER** (Clinical and non-clinical decision support systems in healthcare), **SESSIONS CHAIR** (Session "SS2 – Clinical and Non-Clinical Decision Support Systems in Healthcare", Session "Clinical Engineering and Health Technology Assessment / Health Technology Policy and Assessment II"), **SPEAKER** ("Effects Of Combined Use Of A Patient-Tracking System And A Smart Drug-Dispenser On The Overall Risk Of The Diagnostic-Therapeutic Process", "Risk Management Process In A Microwave Thermal Ablation System For CE Marking", "LICENSE: Web Application For Monitoring And Controlling Hospitals' Status With Respect To Legislative Standards", "Medical Equipment Design and Safety") --- MEDICON 2013, XIII Mediterranean Conference on Medical and Biological Engineering, Sep 25-28, Siviglia, Spagna
- **SPEAKER** ("Random Forest for Automatic Assessment of Heart Failure Severity in a Telemonitoring Scenario"), **SPEAKER** ("The Diagnostic-Therapeutic Process. Workflow Analysis and Risk Management with IT Tools") --- 35th Annual International Conference of the IEEE Engineering in Medicine and Biology Society EMBC13 in conjunction with 52nd Annual Conference of Japanese Society for Medical and Biological Engineering (JSMBE)
- **SPEAKER** ("Telematic Integrated System to Perform Drugs Prescription and Administration Reducing Adverse Drug Events") --- 34th Annual International IEEE EMBS Conference August 28 - September 1, 2012, Hilton Bayfront Hotel in San Diego, California, USA
- **TRACK CHAIR** (erroneamente indicato come Ernesto Yadanza: Track 19.05 "Health Technology and Patient Safety"), **SESSION CHAIRMAN** (Session TH.19/05.1 "Health Technology and Patient Safety - A", Track 19: 'Clinical Engineering'), **SPEAKER** ("Electromagnetic Compatibility: RFID and Medical Equipment in Hospitals"), **SPEAKER** ("Drugs Administration: How to Reduce Risks to Patients"). --- International IFMBE conference WC2012: World Congress on Medical Physics and Biomedical Engineering 2012, May 26 - 31, Beijing, China.
- **SPEAKER** ("A Smart RFId Device for Drugs Administration") --- 2nd World Congress on Pharmaceutics & Novel Drug Delivery Systems, Feb 20-22, San Francisco, USA
- **SPEAKER** ("Dalle reti del cervello alle reti in mobilità") --- Fondazione per la Ricerca e Innovazione UNIFI - Workshop Mobilità, Ricerca, Imprese, Oct 12, 2011, Sesto Fiorentino (Firenze)
- **SPEAKER** ("An RFID smart container to perform drugs administration reducing adverse drug events") --- EUROPEAN IFMBE MBEC 2011, Sep 14-18, 2011, Budapest, Ungheria
- **VISITING PROFESSOR** (Titolo relazione: "La progettazione di sistemi ICT per la medicina: adesso cambia tutto") --- Regione Toscana SUMMER SESSION PROGRAMME 2011 "ICT&Life Sciences - Nuove frontiere delle Scienze della Vita attraverso le tecnologie informatiche", Aug 29 - Sep 10, 2011, Pisa
- **SPEAKER** --- IEEE EMBC 2011 "33th Annual International Conference of the IEEE Engineering in Medicine and Biology Society", Boston, USA, August 29 - September 4, 2011
- **SPEAKER** --- IEEE EMBC 2010 "32TH Annual International Conference of the IEEE Engineering in Medicine and Biology Society", Buenos Aires, ARGENTINA, 1-4 Sep 2010
- **SPEAKER** ("Electromagnetic interferences (EMI) from active RFId on critical care equipment") --- THE 12TH MEDITERRANEAN CONFERENCE ON MEDICAL AND BIOLOGICAL ENGINEERING AND COMPUTING – MEDICON 2010, May 27-30, 2010, Chalkidiki, Grecia
- **INVITED SPEAKER** ("Un sistema esperto per il monitoraggio delle strutture ospedaliere: SEMIO") --- Convegno Istituto Internazionale di Ricerca: "La manutenzione negli ospedali e nelle strutture sanitarie", Oct. 28, 2010, Milano
- **SPEAKER** ("Un sistema esperto per il monitoraggio delle infrastrutture critiche ospedaliere") --- 3° CONGRESSO NAZIONALE SIAIS (Società Ingegneria e Architettura in Sanità): "INNOVAZIONE, ETICA E QUALITÀ NELLA PROGETTAZIONE: Modelli di Sviluppo per l'Architettura e l'Ingegneria in Sanità"
- **SPEAKER** ("Un approccio non convenzionale al monitoraggio delle consistenze strutturali ospedaliere") --- SECONDO CONGRESSO NAZIONALE SIAIS (Società per l'Ingegneria e l'Architettura in Sanità), Sep 18-20, Catania
- **LOCAL ORGANISING COMMITTEE MEMBER** --- MAVEBA 2007, MODELS AND ANALYSIS OF VOCAL EMISSIONS FOR BIOMEDICAL APPLICATIONS 5th INTERNATIONAL WORKSHOP, Dec 13-15, 2007, Firenze, Italy
- **SCIENTIFIC COMMITTEE MEMBER, SPEAKER** ("La formazione delle professionalità per i servizi di ingegneria clinica - Il panorama attuale e sviluppi futuri") --- Convegno "L'ingegneria Clinica in Toscana: 10 anni di esperienza e futuri orientamenti", Sep 27, 2007, Firenze
- **SPEAKER** ("A hospital structural and technological performance indicators set") --- XI Mediterranean Conference on Medical and Biological Engineering and Computing, MEDICON 2007, Jun 26-30, 2007, Ljubljana, Slovenia
- **SESSION CHAIRMAN** (Session "Healthcare Technology Management and Decision Support Systems II", Track 24: 'Clinical Engineering'), **SPEAKER** ("Hospital Health Care Offer. A Monitoring Multidisciplinary Approach"), **SPEAKER** ("The Role of Bioengineer in Hospital Upkeep and Development") --- International IFMBE conference WC2006: World Congress on Medical Physics and Biomedical Engineering 2006, Aug 27 - Sep 1, Seoul , Korea.
- **SPEAKER** ("Optimised GSVD for dysphonic voice quality enhancement") --- MAVEBA 2005, MODELS AND ANALYSIS OF VOCAL EMISSIONS FOR BIOMEDICAL APPLICATIONS, 4th INTERNATIONAL WORKSHOP, Oct 29-31, 2005 Firenze, Italy
- **SPEAKER** ("How to improve Gantt charts with risk analysis features. An application to health activities transfers"), **SPEAKER** ("Monitoring methods in complex upgrade process management of a hospital structure

using Information Technology tools") --- MEDICON and HEALTH TELEMATICS 2004, Xth Mediterranean Conference on Medical and Biological Engineering, lug 31- Aug 5, 2004, Ischia (Napoli)

- **SPEAKER** ("Health Facilities Monitoring Methods in Management of a Multi Project Hospital Upgrading Process") -- - IFMBE World Congress on Medical Physics and Biomedical Engineering ; August 24 - 29, 2003, Sydney, Australia

Scientific publications

Author of 230+ publications, on scientific journals, international conference proceedings, books and book chapters.

Some of them are accessible here:

https://www.researchgate.net/profile/Ernesto_Iadanza

<http://orcid.org/0000-0002-7291-4990>

<https://scholar.google.it/citations?user=YCPtV78AAAAJ&hl=it&oi=ao>

Citation and impact indexes (Scopus):

(2.9.2025 - <https://www.scopus.com/authid/detail.uri?authorId=56256047500>):

Citations	1661
H-index	22

Citation and impact indexes (Google Scholar):

(27.5.2025 - <https://scholar.google.it/citations?user=YCPtV78AAAAJ&hl=it&oi=ao>):

Citations	2289
H-index	27
i10-index	60

In compliance with the GDPR and Italian Legislative Decree no. 196 dated 30/06/2003, I hereby authorize the recipient of this document to use and process my personal details for the purpose of recruiting and selecting staff and I confirm to be informed of my rights in accordance to art. 7 of the above mentioned Decree.

Siena, September 2nd, 2025

Ernesto Iadanza, PhD

