

Curriculum vitae

PERSONAL INFORMATION Chiara Fanciullacci

WORK EXPERIENCE

- 16/03/2020 – Present **Clinical Trials Unit - Office Manager – IRCCS Fondazione Don Carlo Gnocchi ONLUS**
IRCCS Fondazione Don Carlo Gnocchi Milan, Italy
IRCCS Fondazione Don Carlo Gnocchi Florence, Italy
- 01/09/2017–29/02/2020 **Postdoctoral Researcher**
BioRobotic Institute, Scuola Superiore Sant'Anna, Pisa (Italy)
Research program: "Clinical studies of wearable robotic systems for rehabilitation, assistance and / or strengthening of motor skills and design, development and experimental validation of methods for acceptability and usability assessment of robotic technologies for assistance, enhancement and motor rehabilitation"
- 04/11/2013–27/06/2017 **PhD in BioRobotics**
BioRobotic Institute. Scuola Superiore Sant'Anna, Pisa, Pisa (Italy)
- 15/03/2013–31/08/2017 **Research grant**
Neuroscience Institute of CNR of Pisa, Pisa (Italy), Pisa (Italy)
Neurorehabilitation Unit, University-Hospital of Pisa, Pisa (Italy)
Research program: "NEUROPLASTICITY-DRIVEN RECOVERY AFTER STROKE: ROBOTIC TECHNOLOGIES IN ANIMAL AND CLINICAL STUDIES" (Fondazione Cassa di Risparmio di Pisa).
- 11/2011–01/2013 **Psychologist**
Neurorehabilitation Unit, University - Hospital of Pisa, Pisa (Italy)
FISM 2011: "Robotic walking treatment effects on ambulatory capacity and on motor units activation in multiple sclerosis patients. A randomized controlled trial". Multicenter study in collaboration between Neurorehabilitation Unit, University - Hospital of Pisa and Rehabilitation Department of Ferrara.

EDUCATION AND TRAINING

- 11/2013–06/2017 **PhD in BioRobotics**
BioRobotic Institute, Scuola Superiore Sant'Anna, Pisa (Italy)
Thesis title: Brain reorganization after stroke and cortical correlates in motor control
- 06/2016–12/2016 **Fellowship**
Brain and Behaviour research group, University of Surrey, Guildford, Surrey, UK, Guildford (United Kingdom)
Research program: Study of neurophysiological mechanisms involved in the behavioural learning task.
- 12/2010–Present **Specialist training**
Scuola di Specializzazione in Psicoterapia Cognitiva ad indirizzo Costruttivista (CESIPc), Firenze (Italy)

Training course completed on date: December 2014

30/04/2011–Present **Registration with the Ordine degli Psicologi della Toscana, n° 6123**

09/2009–09/2010 **Post-lauream Internship**
University-Hospital of Pisa, Pisa (Italy)

16/07/2009 **Master's degree in Psicologia Clinica e della Salute (Clinical and Health Psychology)**
Università degli Studi di Firenze, Facoltà di Psicologia

11/2006 **Bachelor's degree in Scienze e Tecniche di Psicologia Clinica e di Comunità (Science and Techniques of Clinical and Community Psychology)**
Università degli studi di Firenze, Facoltà di Psicologia

PERSONAL SKILLS

Mother tongue(s) Italian

Foreign language(s)

UNDERSTANDING		SPEAKING		WRITING
Listening	Reading	Spoken interaction	Spoken production	
C1	C1	C1	C1	C1

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user
Common European Framework of Reference for Languages

Job-related skills

- Good knowledge and experience in relevant legislation and international guidelines of Good Clinical Practice (ICH-GCP);
- Regulatory submission management of clinical protocols: drafting and/or reviewing of documentation for the Ethics Committees and the Italian Ministry of Health;
- Good experience in drafting collaboration agreements and/or economic agreements (where applicable) between parties involved in a clinical study, and overseeing their finalization and approval process;
- Clinical Monitoring of the study
- Design and conduct research projects in medical and biotech fields (provide input for study protocol, edit check specifications, data analysis plan, final study report)
- Develop clinical protocols for innovative medical devices validation for motor rehabilitation, monitoring and assistance (definition of clinical hypotheses, endpoints, experimental procedures, inclusion/exclusion criteria, statistical analysis);
- Site Management primary point of contact and representative for clinical monitoring and site activities within the project, including Primary Sponsor contact
- Statistical data analysis;
- Psychological assessment and diagnosis; Design of questionnaires, surveys and tests; Interviews conduction;
- Acquisition and analysis of neurophysiological signals (electroencephalogram, electrooculogram). Software: EEGLab, NeuroScan, BrainVision;
- Application of non-invasive brain stimulation: transcranial magnetic stimulation (TMS) and electrical brain stimulation (tDCS, tACS, tRNS).

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Digital skills

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem solving
Proficient user	Proficient user	Basic user	Independent user	Independent user

Digital skills - Self-assessment grid

Good knowledge of Microsoft Office

Good knowledge of statistical analysis software SPSS and R

Basic knowledge of software MathWorks™ Matlab ed EEGLab

ADDITIONAL INFORMATION

Publications (last 6 years)

- Liuzzi P, Campagnini S, **Fanciullacci C**, Arienti C, Patrini M, Carrozza MC, Mannini A. Predicting SARS-CoV-2 infection duration at hospital admission: a deep learning solution. *Med Biol Eng Comput.* 2022 Jan 7;1-12. doi: 10.1007/s11517-021-02479-8.
- **Fanciullacci C**, McKinney Z, Monaco V, Milandri G, Davalli A, Sacchetti R, Laffranchi M, De Michieli L, Baldoni A, Mazzoni A, Paternò L, Rosini E, Reale L, Trecate F, Crea S, Vitiello N, Gruppioni E. Survey of transfemoral amputee experience and priorities for the user-centered design of powered robotic transfemoral prostheses. *J Neuroeng Rehabil.* 2021 Dec 4;18(1):168. doi: 10.1186/s12984-021-00944-x.
- Arienti C, Campagnini S, Brambilla L, **Fanciullacci C**, Lazzarini SG, Mannini A, Patrini M, Carrozza MC. The methodology of a "living" COVID-19 registry development in a clinical context. *J Clin Epidemiol.* 2021 Nov 14;142:209-217. doi: 10.1016/j.jclinepi.2021.11.022
- Arienti C, Brambilla L, Campagnini S, **Fanciullacci C**, Giunco F, Mannini A, Patrini M, Tartarone F, Carrozza MC. Mortality and characteristics of older people dying with COVID-19 in Lombardy nursing homes, Italy: An observational cohort study. *J Res Med Sci.* 2021 Jun 30;26:40. doi: 10.4103/jrms.JRMS_1012_20.
- **Fanciullacci C**, Panarese A, Spina V, Lassi M, Mazzoni A, Artoni F, Micera S, Chisari C. Connectivity Measures Differentiate Cortical and Subcortical Sub-Acute Ischemic Stroke Patients. *Front Hum Neurosci.* 2021 Jul 1;15:669915. doi: 10.3389/fnhum.2021.669915
- Arienti C, Brambilla L, Campagnini S, **Fanciullacci C**, Giunco F, Mannini A, Patrini M, Tartarone F, Carrozza MC. Mortality and characteristics of older people dying with COVID-19 in Lombardy nursing homes, Italy: An observational cohort study. *J Res Med Sci.* 2021 Jun 30;26:40. doi: 10.4103/jrms.JRMS_1012_20
- Sanz-Morère CB, Martini E, Meoni B, Arnetoli G, Giffone A, Doronzio S, **Fanciullacci C**, Parri A, Conti R, Giovacchini F, Friðriksson Þ, Romo D, Crea S, Molino-Lova R, Vitiello N. Robot-mediated overground gait training for transfemoral amputees with a powered bilateral hip orthosis: a pilot study. *J Neuroeng Rehabil.* 2021 Jul 3;18(1):111. doi: 10.1186/s12984-021-00902-7
- Pilla A, Trigili E, McKinney Z, **Fanciullacci C**, Malasoma C, Posteraro F, Crea S, Vitiello N. Robotic Rehabilitation and Multimodal Instrumented Assessment of Post-stroke Elbow Motor Functions-A Randomized Controlled Trial Protocol. *Front Neurol.* 2020 Oct 22;11:587293. doi: 10.3389/fneur.2020.587293
- Tramonti C, Imperatori LS, Fanciullacci C, Lamola G, Lettieri G, Bernardi G, Cecchetti L, Ricciardi E, Chisari C. Predictive value of EEG connectivity measures for motor training outcome in multiple sclerosis: an observational longitudinal study. *Eur J Phys Rehabil Med.* 2018 Oct 29. doi: 10.23736/S1973-9087.18.05414-X.
- Tramonti F, Bonfiglio L, Bongioanni P, Belviso C, Fanciullacci C, Rossi B, Chisari C, Carboncini MC. Caregiver burden and family functioning in different neurological diseases. *Psychol Health Med.* 2019 Jan;24(1):27-34.
- Genna C, Oddo C, Fanciullacci C, Chisari C, S Micera, Artoni F. Bilateral cortical representation of tactile roughness. *Brain Res.* 2018 Jun 13. pii: S0006-8993(18)30341-X.

- Fanciullacci C, Bertolucci F, Lamola G, Panarese A, Artoni F, Micera S, Rossi B, Chisari C. Delta power is higher and more symmetrical in ischaemic stroke patients with cortical involvement. *Frontiers Human Neuroscience*. 2017 Jul 28;11:385.
- Artoni F, Fanciullacci C, Bertolucci F, Panarese A, Makeig s, Micera S. Unidirectional brain to muscle connectivity reveals motor cortex control of leg muscles during stereotyped walking. *NeuroImage*. 2017 Aug 4. pii: S1053-8119(17)30581-5.
- Thibaut A, Simis M, Battistella LR, Fanciullacci C, Bertolucci F, Huerta-Gutierrez R, Chisari C, Fregni F. Using Brain Oscillations and Corticospinal Excitability to Understand and Predict Post-Stroke Motor Function. *Front Neurol*. 2017 May 10;8:187.
- Genna C, Oddo CM, Fanciullacci C, Chisari C, Jörntell H, Artoni F, Micera S. Spatiotemporal Dynamics of the Cortical Responses Induced by a Prolonged Tactile Stimulation of the Human Fingertips. *Brain Topogr*. 2017 May 11.
- Fanciullacci C, Straudi S, Basaglia N, Chisari C. The role of psychological well-being in multiple sclerosis rehabilitation. *Eur J Phys Rehabil Med*. 2017 Feb;53(1):105-113.
- Lamola G, Fanciullacci C, Sgherri G, Bertolucci F, Panarese A, Micera S, Rossi B, Chisari C. Neurophysiological Characterization of Subacute Stroke Patients: A Longitudinal Study. *Front Hum Neurosci*. 2016 Nov 16;10:574.
- Straudi S, Fanciullacci C, Martinuzzi C, Pavarelli C, Rossi B, Chisari C, Basaglia N. The effects of robot-assisted gait training in progressive multiple sclerosis: A randomized controlled trial. *Mult Scler*. 2016 Mar;22(3):373-84.

Participation in funded research projects

- CYBERLEGS Plus Plus "The CYBERnetic LowEr- Limb CoGnitive Ortho-prosthesis Plus Plus" (GA n. 731931). Project involved partners: Scuola Superiore Sant'Anna (SSSA); Université catholique de Louvain (UCL); Vrije Universiteit Brussel (VUB); Univerza v Ljubljani (UL); Fondazione Don Carlo Gnocchi (FDG); Össur (OSS); IUVO S.R.L (IUVO).
- INAIL MOTU "Protesi robotica di arto inferiore con smart socket ed interfaccia bidirezionale per amputati di arto inferiore". MOTU Project involved partners: INAIL – Centro per la sperimentazione ed applicazione di protesi e presidi ortopedici – Area ricerca e formazione; Scuola Superiore Sant'Anna – Istituto di BioRobotica; Fondazione Don Carlo Gnocchi, Firenze; Università di Bologna - Dipartimento di Ingegneria dell'Energia Elettrica e dell'Informazione.
- RONDA "Robotica indossabile personalizzata per la riabilitazioNe motoria Dell'arto superiore in pAzienti neurologici". FAS Salute 2014 program. Project involved partner: Scuola Superiore Sant'Anna, Pisa; Ist. Neuroscienze CNR, Pisa; Neurorehabilitation Unit, University - Hospital of Pisa.
- "Effect of an automatic personalized robot-assisted rehabilitation on cortical organization and on muscle activity after cerebral injury": Multicenter Clinical Trial in collaboration between Neurorehabilitation Unit, University-Hospital of Pisa and Division on Neurorehabilitation, HUG of Ginevra and BioRobotic Institute, Scuola Superiore Sant'anna, Pisa.
- "Neuroplasticity and Functional Recovery post stroke: using robotic technology in animal model and clinical study" (GRANT 158/2011). Multicenter Clinical Trial in collaboration between Neurorehabilitation Unit, University-Hospital of Pisa, Neuroscience Institute CNR Pisa and BioRobotic Institute, Scuola Superiore Sant'anna, Pisa.
- "Robotic walking treatment effects on ambulatory capacity and on motor units activation in multiple sclerosis patients. A randomized controlled trial" (Multiple Sclerosis Italian Society - GRANT 2010/R/6). Project patterns: Neurorehabilitation Unit, University - Hospital of Pisa; Rehabilitation Department of Ferrara.

Firenze, 27/08/2024

