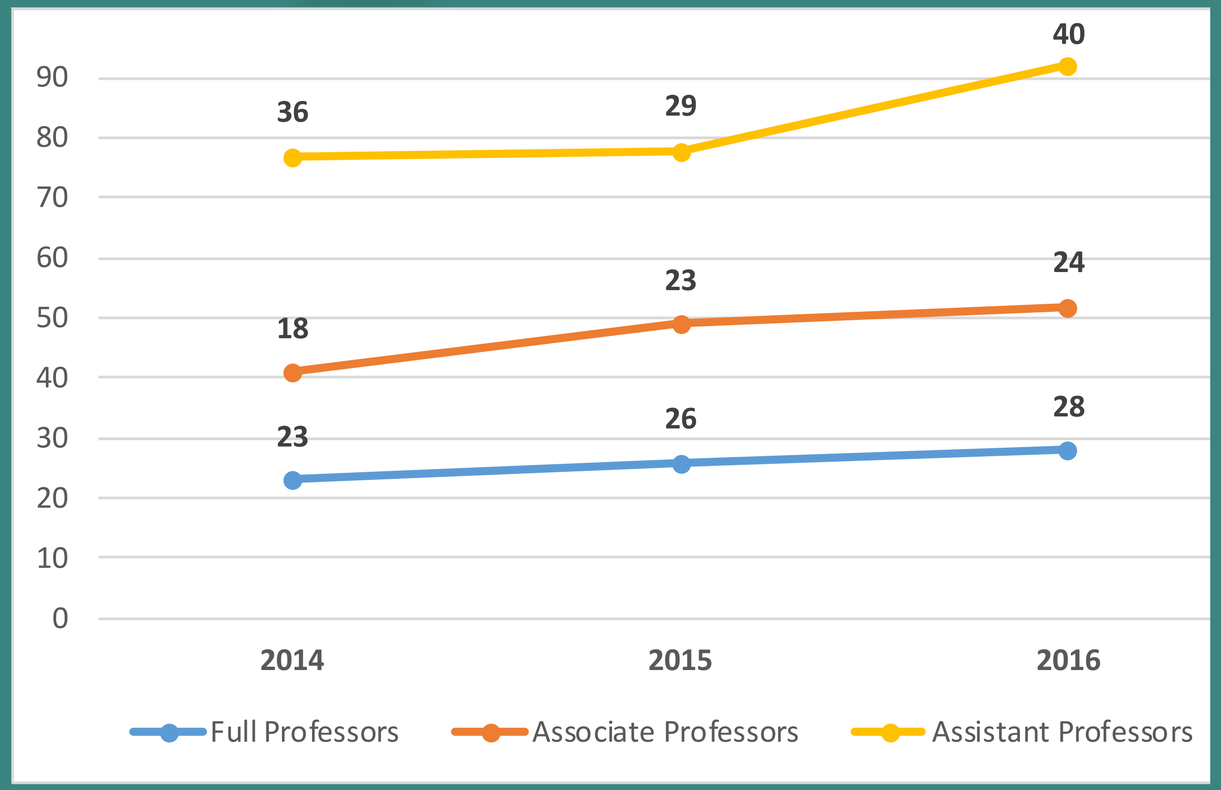
GIORNATA DELLA RICERCA UCBM

Department of Medicine and Surgery
2016 Research Activities

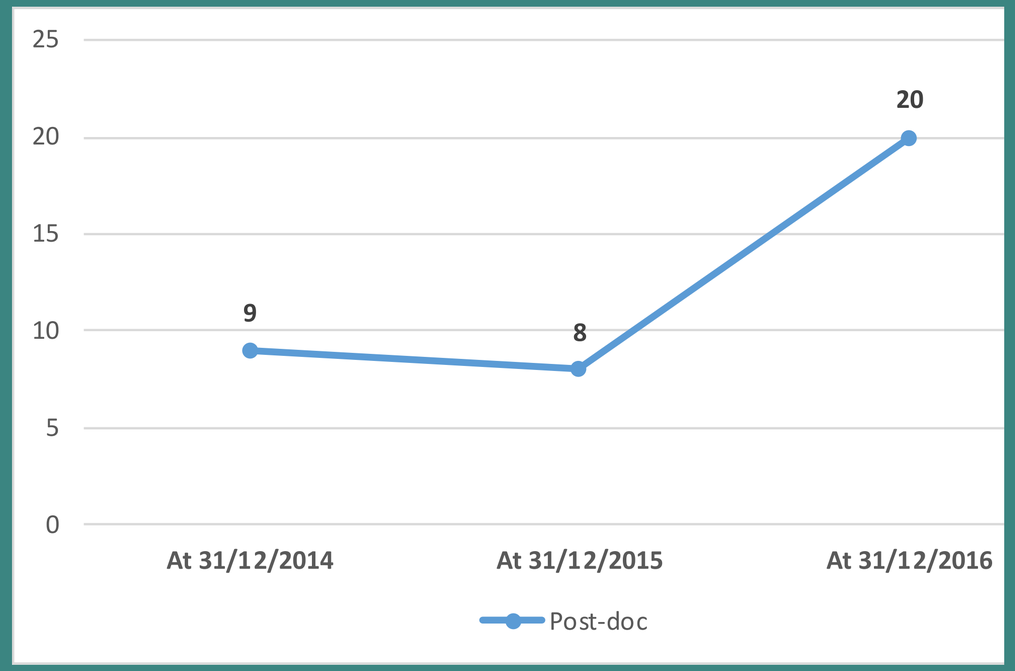
Prof. Vincenzo Di Lazzaro

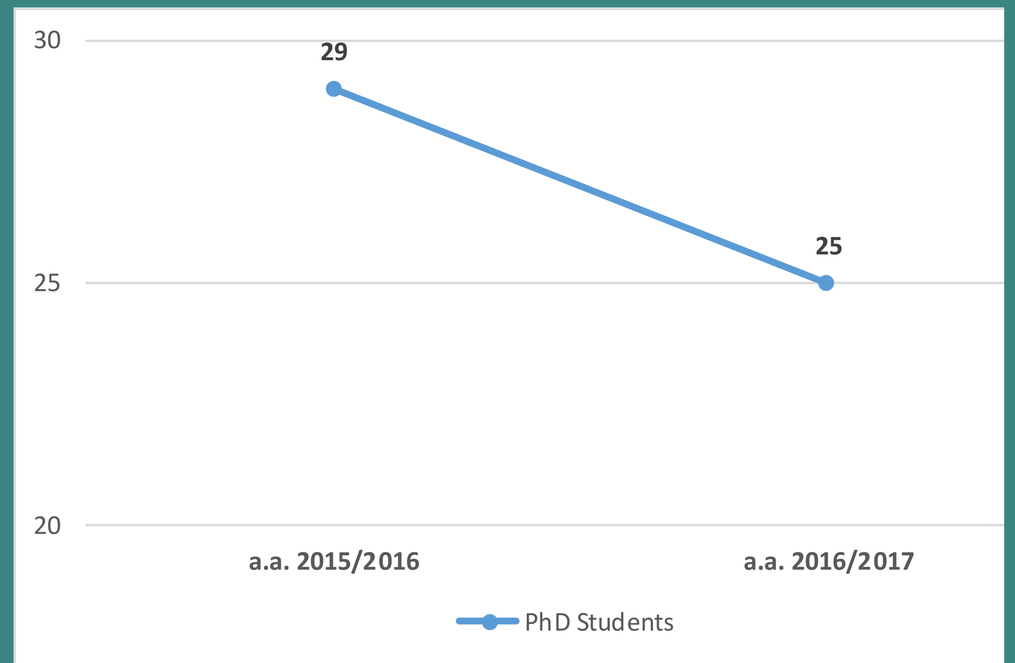
Research Coordinator of Department of Medicine and Surgery

The Department of Medicine and Surgery



	2014	2015	2016
Full Professors	23	26	28
Associate Professors	18	23	24
Assistant Professors	36	29	40





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UNIVERSITÀ CAMPUS BIO-MEDICO DI ROMA

2015

UCBM Author/s	Journal	IFN
✓ Pozzilli	New England Journal of Medicine	15
✓ D'Amelio	Molecular Psychiatry	15
✓ Plotti ✓ Angioli	Lancet	15
✓ Pedone ✓ Antonelli	New England Journal Of Medicine	15
✓ Patti	New England Journal of Medicine	15

2016

UCBM Author/s	Journal	IFN
✓ Mangiacapra ✓ Lauria Pantano ✓ Pozzilli ✓ Di Sciascio	Circulation	15
✓ Santini	Journal of Clinical Oncology	15
✓ Mangiacapra	Journal of the American College of Cardiology	15
✓ Covino	Journal of the American College of Cardiology	15
✓ Santini ✓ Tonini	New England Journal of Medicine	15
✓ Borghi	Lancet	15
✓ Pozzilli	The Lancet Diabetes and Endocrinology	15








In 2015 → 5 paper with IFN equal to 15

Vs.

In 2016 → 7 paper with IFN equal to 15

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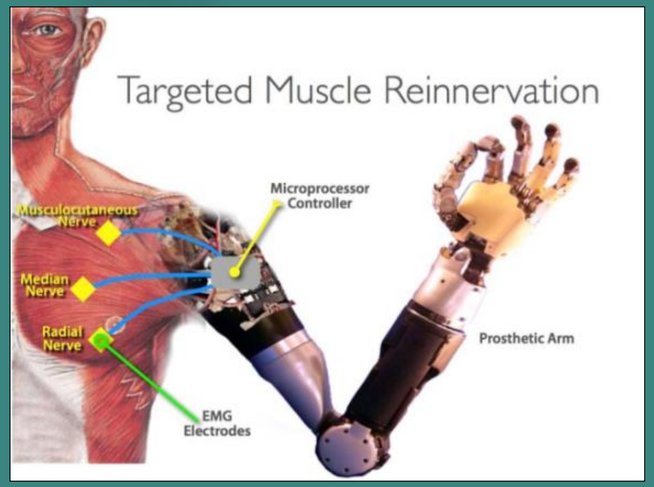
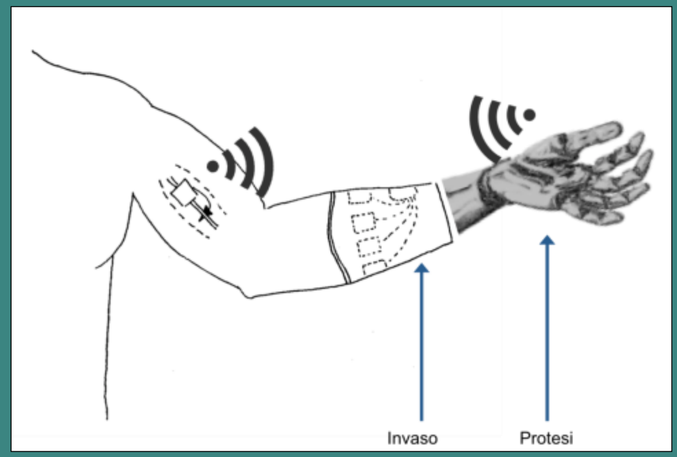
Research Projects in collaboration with INAIL





PCR 1/2 – “ New methodologies in the limb amputation treatment for the implementation of bionic prostheses”

PPR AS 1/3 – “Control of upper-limb prosthesis with neural invasive interfaces”

Research Units involved:

- ✓ Biomedical Robotics and Biomicrosystems
- ✓ Orthopedic and Trauma Surgery
- ✓ Physical and Rehabilitation Medicine
- ✓ Neurology, Neurophysiology, Neurobiology
- ✓ Neurophysiology and Neuroengineering of Human-Technology Interaction

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Interdepartmental Research Projects

UNIVERSITÀ CAMPUS BIO-MEDICO DI ROMA

"A novel approach to identify COPD phenotypes, forecast clinical course and plan the therapeutic strategy"

- Funding body: Fondazione Roma
- Coordinator: Research Unit of Geriatrics
- Partners: Research Unit of Geriatrics, Research Unit of Diagnostic Imaging, Research Unit of Electronics for Sensor Systems and Research Unit of Computer System and Bioinformatics

"Biomechatronic hand prostheses endowed with bio-inspired tactile perception, bi- directional neural interfaces and distributed sensori-motor control"

- Funding body: Italian Ministry of Education, University and Research
- Coordinator: Research Unit of Biomedical Robotics and Biomicrosystems
- Partners: Research Unit of Tissue Engineering and Chemistry for Engineering, Research Unit of Measurements and Biomedical Instrumentation, Research Unit of Computer Systems and Bioinformatics, Research Unit of Orthopaedic and Trauma Surgery and Research Unit of Neurology, Neurophysiology and Neurobiology.

Interdepartmental Research Projects (2)

"Engineering physiologically and pathologically relevant organ Models for the INvestigation of age related Diseases (MIND)"

- Funding body: Italian Ministry of Education, University and Research
- UCBM Partners: Research Unit of Heart Surgery, Research Unit of Tissue Engineering and Chemistry for Engineering

"Cells-on-chip technologies for the study of the endocannabinoid system in an in vitro model of tumor/immune system interaction"

- Funding body: Italian Ministry of Education, University and Research
- Coordinator: Research Unit of Tissue Engineering and Chemistry for Engineering
- UCBM Partners: Research Unit of Oncology, Research Unit of Biochemistry and Molecular Biology

"Towards intervertebral disc regeneration: mesenchymal stem/stromal cells with a novel bioactive hydrogel based approach"

- Funding body: Italian Ministry of Health
- Coordinator: Research Unit of Ortopaedics and Trauma Surgery
- UCBM Partners: Research Unit of Hematology, Stem Cell Transplantation, Transfusion Medicine and Cellular Therapy and Research Unit of Tissue Engineering and Chemistry for Engineering

Interdepartmental Research Projects (3)

"Daily at-home follow-up of Parkinson's disease patients motor performance through robotic and portable devices"

- Funding body: Italian Ministry of Health
- UCBM Partners: Research Unit of Neurology, Neurophysiology, Neurobiology, Research Unit of Biomedical Robotics and Biomicrosystems

"Cell-on-Chip technology as a novel tool to investigate the crosstalk between cancer and immune cells: role of the transcription factors Interferon Regulatory Factor 1 and 8 (IRF1, IRF8) in melanoma as a model system"

- Funding body: Italian Ministry of Health
- UCBM Partners: Research Unit of Tissue Engineering and Chemistry for Engineering and Clinical Pathology and Microbiology

"Use of computer support for the evaluation and monitoring of kinase inhibitors in the course of treatment for Chronic Lymphoid Leukemia and Lymphoma Follicular"

- Funding body: GILEAD Health Program
- UCBM Partners: Research Unit of Hematology, Stem Cell Transplantation, Transfusion Medicine And Cellular Therapy and Research Unit of Computer Systems and Bioinformatics

Cardiovascular Science

Clopidogrel Versus Ticagrelor for Antiplatelet Maintenance in Diabetic Patients Treated With Percutaneous Coronary Intervention: Results of the CLOTILDIA Study (Clopidogrel High Dose Versus Ticagrelor for Antiplatelet Maintenance in Diabetic Patients).

IF = 17,2

Effects of Prasugrel Versus Clopidogrel on Coronary Microvascular Function in Patients Undergoing Elective PCI.

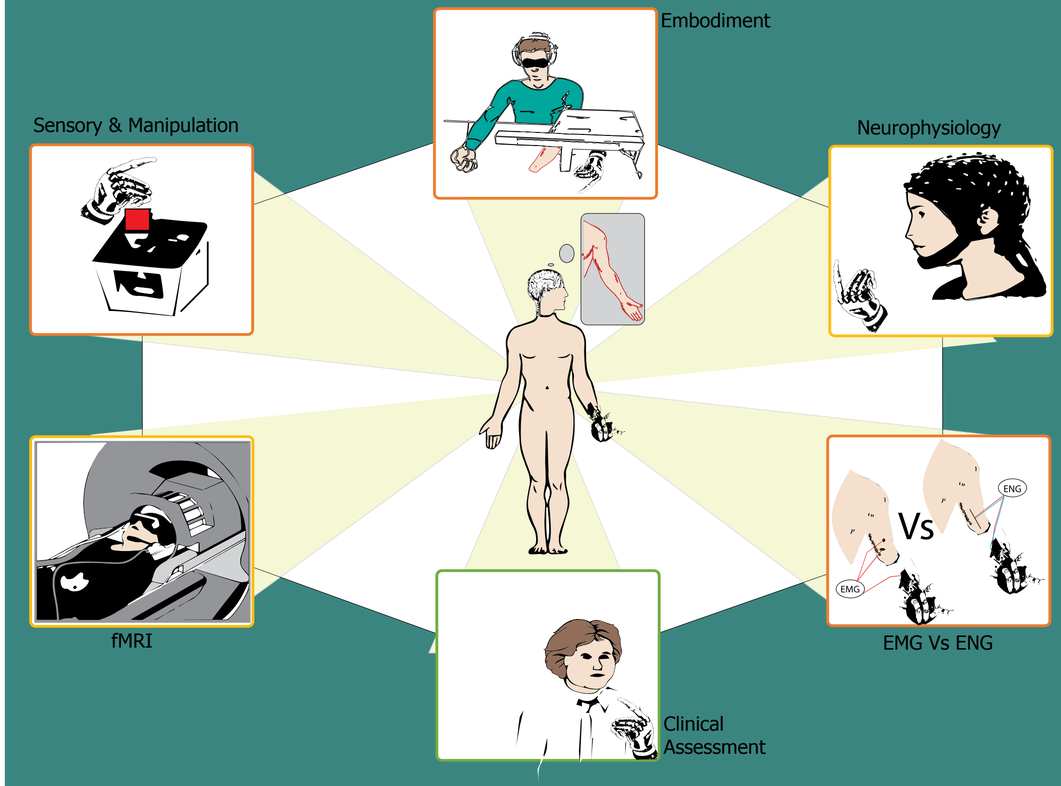
Dr. F. Mangiacapra

IF = 17,7

Neurophysiology and Neuroengineering of Human-Technology Interaction (NeXT Lab)
Head: Dr. G. Di Pino

- ✓ 2 researchers
- ✓ 3 Post-doc
- ✓ 1 PhD student

- ✓ Neurophysiological processes underlying complex interaction between the human nervous system and technological artifacts.
- ✓ Study on no longer humans as such, but modern humans in the era of the confluence with the technology, both in their physiological and pathological manifestations.
- ✓ Classical themes of system neurophysiology (motor control, body representation) using typical neuroengineering tools (modeling, objectification, automation)



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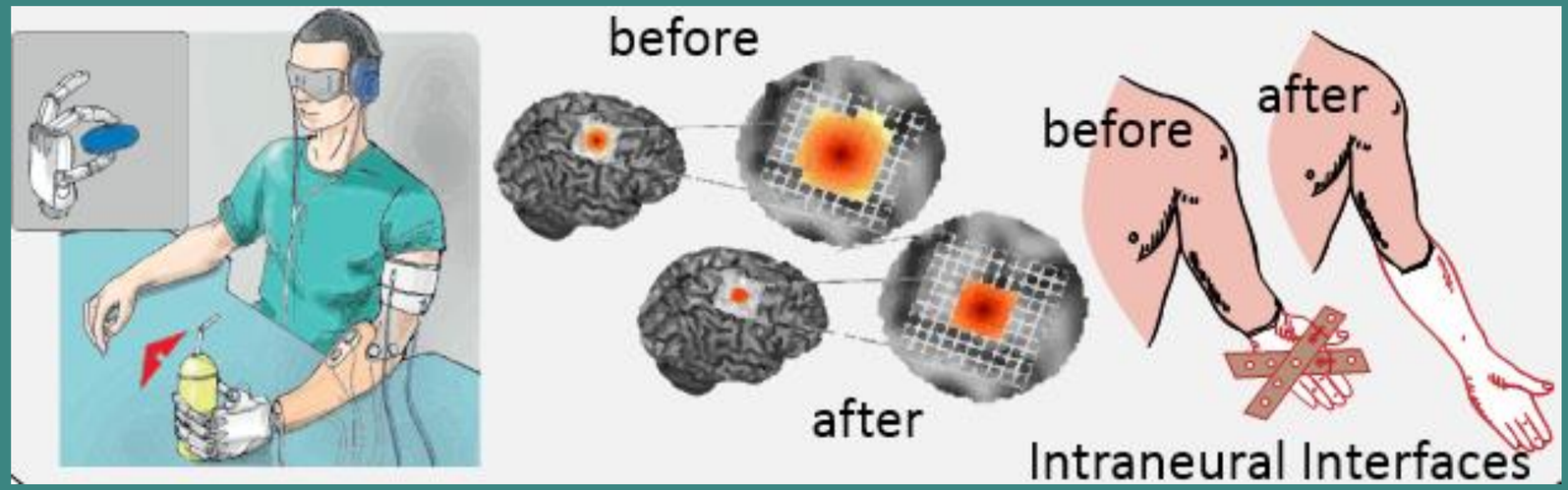
RESHAPE:
REstoring the Self with embodiable HAnd ProsthesEs



- ✓ Guidelines to design ‘embodiable’ prostheses and the demonstration in humans that their implementation results in a higher embodiment.
- ✓ Definition of the neural correlates of prosthesis embodiment.
- ✓ Proof of embodiment fostered by non-invasive brain stimulation.
- ✓ Demonstration that embodiment improves dexterity, aberrant plasticity and PLP.