

ANNEX A R.D. no. 392 dated 26/07/2021

**PhD Course Coordinator:** Prof. Eugenio Guglielmelli **Duration:** 3 anni **Positions supported by scholarships:** 51

Scholarching	A Confunded by the University Compute Pic Medico of Pome and the CNIP on
Scholarships	4 Co-funded by the University Campus Bio-Medico of Rome and the CNR on FOE funds on the topic "Artificial Intelligence - Health and Life Sciences";
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	1 Co-funded by the CNR on FOE funds and by the CNR on IRIB funds on
	the topic of "Cognitive and motor rehabilitation of individuals with autism
	spectrum disorders or neurodegenerative diseases using AI-enabled robots" at
	the Messina site;
	1 Co-funded by the CNR on FOE funds and by the CNR on ISTI funds on the
	topic "Artificial Intelligence and intelligent systems for imaging and precision
	medicine" at the Pisa site;
	1 Co-funded by the CNR on FOE funds and by the CNR on IBIOM funds on
	the topic "Machine learning and predictive models in the integration of omics
	data for precision medicine", at the Bari site;
	1 Co-funded by the CNR on FOE funds and by the CNR on ICAR funds on
	the topic "Anthropomorphic robots and on-device conversational intelligence
	for home care and lifestyle improvement" at the Palermo site;
	1 Co-funded by the CNR on FOE funds and by the CNR on ISTC funds on
	the topic "Project Achlys: Application of the Meta-Reinforcement Learning
	framework to precision medicine of major depressive disorder", at the Rome
	site;
	1 Co-funded by the CNR on FOE funds and by the CNR on ISTC funds on
	the topic "Study of systems based on migratable Artificial Intelligence that
	adapt content and form according to the affective-cognitive state of the user
	and to different socio-technical contexts of assistance" at the Rome site;
	1 Co-funded by the CNR on FOE funds and by the CNR on INO funds on
	the topic "Deep learning for bioimaging", at the University Campus Bio-Medico
	of Rome;
	1 Co-funded by the CNR on FOE funds and by the CNR on ILC funds on the
	topic "Deep reading" at Pisa site;
	1 Co-funded by CNR on FOE funds and by CNR on SCITEC funds on the
	topic "Artificial Intelligence-based drug design and development" at Rome site;
	1 Co-funded by the CNR on FOE funds and by the CNR on IAC funds on the
	topic of "Using artificial intelligence to characterise complex biological systems,
	with particular reference to inflammatory and immune responses" at Rome site;
	1 Co-funded by the University of Rome "Tor Vergata" and by the University of Pisa on EEO funds on the topic "Noval neuromorphic architectures for
	Pisa on FFO funds on the topic "Novel neuromorphic architectures for
	unsupervised, adaptive and resilient therapy, control, and augmentation of brain
	functions";
	1 Co-funded by the University of Rome "Tor Vergata" and the University of
	Pisa on FFO funds on the topic "Generative, therapeutic "telepathy": deep

encoding, decoding and multi-human transmission of emotions and experiences through multimodal physiological data and manipulation of space-time
perception". 1 Co-funded by the University of Rome "Tor Vergata" and by the University of Pisa with FFO funds on the topic "Integrating symbolic knowledge and neural
learning for personalized accurate, explainable and ethical medical decision making";
1 Co-funded by the University of Rome "Tor Vergata" and the University of Pisa with FFO funds on the topic "Human Robot Voice-mediated Interaction:
toward linguistically aware robots for rehabilitation therapies";
1 Co-funded by the University of Bari and the University of Pisa with FFO
funds on the topic "Identifying biological pathways of psychiatric risk from genes to cognition via AI";
1 Co-funded by the University of Bari and the University of Pisa with FFO funds on "Behavioral and non-invasive Biometrics for health, disease and well-
being: from illness prediction to monitoring and rehabilitation";
1 Co-funded by SISSA Scuola Internazionale Superiore di Studi Avanzati and the University of Pisa on FFO funds on the topic "AI applications in
neuroscience for health";
1 Co-funded by SISSA Scuola Internazionale Superiore di Studi Avanzati and the University of Pisa with FFO funds on the topic of "AI applications to
biological and chemical-physical systems for health";
1 Co-funded by SISSA Scuola Internazionale Superiore di Studi Avanzati and
by the University of Pisa with FFO funds on the topic "Applications of AI and
Machine Learning for health and life sciences";
2 Co-funded by the University of Eastern Piedmont and the University of Pisa
on FFO funds on the topic "Artificial Intelligence - Health and Life Sciences";
2 Co-funded by the University of Catania and the University of Pisa on FFO funds on the topic "Explainable AI";
1 Co-funded by the University of Turin and the University of Pisa with FFO funds on the topic "AI-enabled ECG in cardiovascular disease";
3 Co-funded by the University of Turin and the University of Pisa on FFO funds on the topic "Artificial Intelligence - Health and Life Sciences";
1 Co-funded by the University of Pavia and the CNR on FOE funds on the theme "Development of machine learning algorithms and data fusion methods
for modelling coronary atherosclerosis risk";
1 Co-funded by the University of Pavia and the CNR on FOE funds on the
theme "Artificial Intelligence - Health and Life Sciences;
1 Co-funded by the University of Messina and the University of Pisa with FFO
funds on the topic of "Artificial Intelligence for Digital Diagnostics";
1 Co-funded by the University of Campania "Luigi Vanvitelli" and the
University of Pisa with FFO funds on the topic of "Cloud-Edge Intelligence,
Deep Learning and Semantic Graph techniques for Network Medicine"; 1 Co-funded by the University of Tuscia and the University of Pisa with FFO
funds on the topic of "Development of digital tools based on artificial
intelligence to support people with specific learning disorders";
1 Co-funded by Luiss Guido Carli and CNR on FOE funds on the topic of
"Machine learning algorithms";
1 Co-funded by the University of Molise and the University of Pisa with FFO

funds on the topic "AI-based illness prediction at cell and tissue scale"; 1 Co-funded by the University of Reggio Calabria and the University of Pisa on
FFO funds on the topic "Explainable/Interpretable Approaches to Deep Learning of Biomedical Data";
1 Co-funded by the University "Gabriele d'Annunzio" Chieti-Pescara and the
University of Pisa on FFO funds on the topic "Advanced mathematical modeling of biological omics datasets through deep learning";
1 Co-funded by the National Institute of Nuclear Physics and the CNR on
FOE funds on the topic "Development and interpretability of artificial intelligence algorithms applicable to medical imaging and cognitive processes in
the brain";
1 Funded by C.O.T. Cure Ortopediche Traumatologiche SpA on the theme "Artificial Intelligence - Health and Life Sciences";
1 Funded by the University of Genoa on the topic "Computational methods for
data and image analysis in biomedicine"; 1 Funded by the Scuola Superiore Sant'Anna on the topic of "Adaptive controls
for hand prostheses".
1 Funded by the University of Rome "Tor Vergata" with funds from the European project H2020-KATY on "Personalized Medicine through Artificial
Intelligence: accuracy, transparency and ethical issues related to the learning of complex decision models";
2 funded by the University of Catania on "Explainable Deep Learning Models In the Biomedical Domain";
1 funded by the University of Catania on "Agent Based Modeling and Machine Learning approaches for in silico trials development in Multiple Sclerosis";
1 funded by the University of Catania on "Artificial Intelligence in Public Health";
1 Funded by Politecnico di Milano on HBP SGA3 GA 945539 funds on the
topic "Brain simulations bioinspired neural networks for large brain simulations including multiple areas, starting from the thalamocortical loop and the
cerebellum";
1 Funded by Humanitas University of Milan on the topic "Integration of imaging pathological anatomy and genomics data for the prediction of cancer
imaging, pathological anatomy and genomics data for the prediction of cancer disease trajectories using explainable models".