

DECRETO DEL RETTORE

Anno Accademico 2020/2021 N. 382 del 16/07/2021

PHD-AI.IT (HEALTH AND LIFE SCIENCE AREA) XXXVII CYCLE A.Y. ACADEMIC YEAR 2021-2022 SUPPLEMENT AND AMENDMENTS OF RECTORAL DECREE NO 296 OF 14/06/2021

The RECTOR

Considering article of law 30/12/2010 no. 240, containing regulations regarding the organization of universities, academic

staff and recruitment, as well as the mandate to the Government promoting the quality and efficiency of the

University system;

Considering the Rectoral Decree 24/04/2020 no. 276, with the issue of the Regulations regarding PhD Courses of the

Università Campus Bio-Medico di Roma, pursuant the provisions established by the Law no. 240/2010;

Considering the Rectoral Decree 14/06/2021 no. 296, with which the Doctoral Course on Artificial Intelligence - Health

and Life Science Area (PHD-AI.IT) was launched;

Considering that art. 9, paragraph 4, of the Rector's Decree n. 296 of June 14, 2021, provides that the number of

scholarship seats available may be increased if funding is available from other universities, public or private

institutions, provided that their formalization occurs within 15 July 2021;

Considering approval of competent authorities, relating to the financing of no. 7 additional National PhD scholarships in

Artificial Intelligence (Health and Life Sciences Area);

Considering the opportunity of making such grants available for the PhD course on Artificial Intelligence - Health and

Life Science Area (PHD-AI.IT) - XXXVII cycle, Academic Year 2021-2022;

Considering the need to integrate the call for bids;

HEREBY DECREES

Article 1 (Increase of scholarships)

The number of scholarships and seats relating to the National PhD course in Artificial Intelligence (Health and Life Sciences Area) for the XXXVII cycle referred to in the call for bids stated in the foreword, is increased as indicated in Annex A to this Decree, which displays the final number of scholarships.



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Art. 2 (Dissemination of the call)

- The present call is available on the following websites:
- Official website of Università Campus Bio-Medico di Roma:
 http://www.unicampus.it/didattica/offerta-formativa/dottorati-di-ricerca/bandi-di-concorso.

Rome, July 16th 2021

General Manager of the University signed Dr. Andrea Rossi

The Rector signed Prof. Raffaele Calabrò

Digitally Signed Document



ANNEX A R.D. no. 382 dated 16/07/2021

PhD Course Coordinator: Prof. Eugenio Guglielmelli

Duration: 3 anni

Positions supported by scholarships: 51

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";
- 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 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 wellbeing: 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 disease trajectories using explainable models".