DOCTOR OF PHILOSOPHY (PHD)PROGRAMME IN

SCIENCE AND TECHNOLOGY FOR ENVIRONMENT AND HEALTH(STAS)

Coordinator: ProfFrancesco Maria Guadagno, guadagno@unisannio.it

Interested applicants are encouraged to contact the coordinator for information on research topics

FACULTY & ADMINISTRATION			**Department: *Scienze e Tecnologie* [Science and Technology]**
DURATION			3 years (36 Months)
POSITIONS AVAILABLE (16)			
ORDINARY POSITIONS (8)	With University Scholarship	No. 6 (six)	To participate in the selection the candidate, under penalty of exclusion, must expressly indicate in the application the topic for which he intends to present the project. The candidate may choose a maximum of 3 topics, including those listed below relative to places with additional scholarship (PON and POR).
	Without University Scholarship	No. 2 (two)	

RESEARCH TOPIC for ordinary positions

1) Study of the role of endocrine disruptors in the development of endocrine-metabolic and tumoral human pathologies. Role of the endocrine disruptors in the development of human endocrine-metabolic diseases and cancer.

2) Bioactive molecules from sustainable sources: Recovery, Characterization and Enhancement.
Bioactive molecules from vegetable and animal matrices: Recovery, Characterization and Valorization.

3) Analysis of changes in cellular and mitochondrial metabolism in tumor cells exposed to nutraceutical substances. Study of the cellular and mitochondrial metabolism variations in cancer cells treated with nutraceuticals

4) New methods of integrated study in monitoring and remediation of contaminated soils.
New methods of integrated studies in monitoring and remediation of contaminated soils.

5) Study of the interactions between plant organisms and the biotic and abiotic components of the environment through multidisciplinary approaches.
Multidisciplinary approaches.

6) Study of stratigraphic geology and sedimentology near sites of cultural interest for the reconstruction of the natural scenery. Study of stratigraphic geology and sedimentology near sites of cultural interest for the reconstruction of the natural scenery.

7) Vascular biology, natural compounds and cardiovascular prevention.Vascular biology, natural compounds, and cardiovascular prevention

8) Biostratigraphy, paleoceanography and paleoclimatology of the Neogene and / or Quaternary.
Biostratigraphy, paleoceanography and paleoclimatology of the Neogene and / or Quaternary

9) Study of natural and induced seismicity. Study of natural and induced seismicity

10) Conformational stability of biological and synthetic macromolecules: experimental and theoretical studies. Conformational stability of biological and synthetic macromolecules: experimental and theoretical studies

11) Identification of early markers of the dysmetabolic syndrome and systemic inflammation. Identification of early markers of the dysmetabolic syndrome and systemic inflammation.

12) The use of Cladosporoles in prostate cancer: antiproliferative effects and metabolic reprogramming. Cladosporols in prostate cancer: antiproliferative effects and metabolism reprogramming.

POSITIONS WITH ADDITIONAL SCHOLARSHIP (8)

Positions* with additional scholarship funded by PON RI FSE-FESR 2014-2020 "Innovative PhD Program with Industrial Characterization" (3)	***RESEARCH TOPIC:*** *Ecosystem services for sustainable mobility: green highways*	*N. 1*	***** *The additional positions with scholarship will be activated only if really founded by the MIUR. The candidate, under penalty of exclusion, may indicate only one research topic chosen from those proposed.*
	RESEARCH TOPIC: *Generation and development of single-chain natural antibodies for diagnostic and therapeutic applications*	N. 1	
	RESEARCH TOPIC: *Functional adipokine-hepatocin interaction in dysmetabolies: cell models, biomarkers and endocrine factors*	N.1	

Positions* with additional scholarship funded by POR CAMPANIA FSE 2014-2020 "PhD Program with Industrial Characterization" (5)	***RESEARCH TOPIC:*** *Innovative systems for the integrated monitoring of linear infrastructures at risk: experimentation of remote sensing and low-cost sensors*	*N. 1*	***** *The additional positions with scholarship will be activated only if really founded by the Campania Region. To participate in the aforementioned type of position it is necessary to be born and / or resident in the Campania Region. The candidate, under penalty of exclusion, may indicate only one research topic chosen from those proposed.*
	RESEARCH TOPIC: *Development and applications of moss biosensors of polycyclic aromatic hydrocarbons pollution*	N. 1	
	RESEARCH TOPIC: *Wild edible plants in Campania: enhancement, nutritional and toxicological characteristics, prototypal strategies for industrial implementation*	N.1	
	RESEARCH TOPIC: *Production of sustainable functional feed: effects on animal welfare, nutraceutical quality of production and consumer health*	N.1	
	RESEARCH TOPIC: *Nutraceuticals in the treatment of hypothyroidism and related diseases in adults / elderly*	N.1	

Programme Entry Requirements

Italian second level (Masterequivalent) graduate degree ("laureamagistrale")
or foreign degree deemedequivalent to an Italian second-level degree in one of the scientific disciplines relevant to the PhD Programme disciplinary areas

<table>
<tr><td rowspan="3">Selection-Admissions: Policies & Procedures</td><td colspan="3">Evaluation of Qualifications and Oral Test</td></tr>
<tr><td>Evaluation of qualifications by reviewing submitted candidate Curriculum Vitae and relevant documentation</td><td>Up to 40 points</td><td>a) Final graduatingmarks and Dissertation Topic (up to 30 points);
b) Other (up to 10 points)
● Reference letter(s) by scholars external to the University;
● Publications;
● Otherstraining and/or research activities undertaken
● Foreignlanguage certifications and other certifications</td></tr>
<tr><td>Oral Test Interview</td><td>30 to 60 points</td><td>The interview (oral test) will last approximately 20 mins. Applicants are invited to prepare a presentation,of up to 15 mins, on the chosen research topic, including use of audiovisual media. Candidates' English language skills and proficiency will also be evaluated on this occasion.

Candidates would need to achieve a minimum grade of 30/60 in the interview in order to pass the oral test.

The interview may be conducted via "teleconference" for foreign applicants or for Italian applicants where circumstances so warrant, which should be justified on the basis of appropriate documentationsubmitted with the request.</td></tr>
<tr><td rowspan="2">Selection-Admission Tests: Schedules</td><td colspan="3"></td></tr>
<tr><td>Oral Test</td><td colspan="2">Oral Test (interview) dates, times and venues will be announced by way of a notice published on the University website at:http://www.unisannio.it/it/studente/laureato/dottorato-di-ricerca

No later than no later than 9 October 2018</td></tr>
<tr><td>Address for submitting application and supporting documentation</td><td colspan="3">Ufficio “Segreteria e Protocollo” [Secretariat and Protocol Office], Università degli Studi del Sannio [University of Sannio], Complesso Immobiliare denominato “Palazzo San Domenico”, Piazza Guerrazzi, no 1 – 82100 Benevento.</td></tr>
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