

- EST. 1837 -

SCHOOL OF BIOLOGY SECTION OF ECOLOGY & TAXONOMY

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Athens, 12/03/2024

PhD FELLOWSHIP IN AQUATIC MICROBIAL ECOLOGY

HORIZON FUNDED PROJECT (HORIZON-MISS-2023-OCEAN-SOIL-01-01) PATH4MED: DEMONSTRATING INNOVATIVE PATHWAYS ADDRESSING WATER POLLUTION IN THE MEDITERRANEAN AGRO-HYDRO-SYSTEM

Brief project description: Water quality and availability are pressing issues that affect human health, disrupt ecosystem services, limit production and inhibit economic growth. The ever-increasing demand for food in Europe and worldwide is leading to intense agricultural and livestock production, resulting in increased pressure on soil and water systems, which are at risk of degradation. At the same time, the availability of water is decreasing due to water use for agriculture and deterioration of the ecological quality of water systems. Thus, the development of efficient, fast, cost-effective and high-resolution ecological quality indicators for the assessment of the ecological status of water systems subjected to agricultural pressures is considered critical. With the development of such indicators, it will be possible to directly evaluate sustainable agriculture strategies, and management and restoration practices of soil and water resources of Mediterranean basins. The project aims to apply innovative molecular eDNA approaches for the development of such indicators to link the effects of abiotic stresses and basin management practices on water ecosystem functions and services.

Principal Investigator: Asst. Prof. Savvas Genitsaris, genitsar@biol.uoa.gr, +30 210 727 4249

Job description

The position is available for 36 months starting on 1st September 2024 or later, with a possible extension of 6 months.

The main working tasks of the successful candidate will be:

- To perform water sampling from various aquatic systems
- To microscopically examine the water samples towards ecological quality assessment based on classical indicators
- To perform analysis on -omics datasets (eDNA sequencing and bioinformatics)
- To explore known and novel taxonomic and functional microbial diversity from aquatic systems of the Mediterranean region
- To develop DNA-based water quality indicators
- To write scientific papers and present the research in scientific conferences

Key criteria for the assessment of candidates

- MSc in biological sciences or related fields
- Knowledge of phytoplankton taxonomy and ecology
- Knowledge of bacterioplankton ecology
- Fieldwork experience

Desired skills

- Experience in molecular tools used in microbial ecology (PCR, sequencing)
- Experience in bioinformatics
- Willingness to actively participate in sampling campaigns
- Experience in microscopy analyses and microbe cultivation
- Strong English command

Terms and place of employment

Recruitment and Terms of appointment will be done according to the national rules and regulations. The stipend of the fellow will be covered through the appointed personnel costs of the European-funded project Path4Med.

The place of employment is the School of Biology of the National and Kapodistrian University of Athens.

Application procedure

The application must be submitted by mail to genitsar@biol.uoa.gr and must include:

- 1 full CV, including studies, research experience and possible publications in scientific journals or conferences
- 1 short letter of intent
- 2 academic references

The National University of Athens wish our staff to reflect the diversity of society and thus welcomes applications from all qualified candidates regardless of age, gender, race, religion or ethnic background

The deadline for applications is 29.03.2024. Applications received later than this date will not be considered.

After the expiry of the deadline for applications, the PI will evaluate all applications and select the best three candidates based on the quality of the candidates' previous training, qualifications, skills, and relevance to the project. The best three candidates will be interviewed by the PI, who will select the best applicant for the position. The applicants will be notified of the final selection and will be given 7 days to accept or decline.

Questions for specific information about the position, please contact Asst. Prof. Savvas Genitsaris (email: genitsar@biol.uoa.gr, +30 210 727 4249)