

Preeminent Ph.D. Fellowships in the Department of Earth & Environment, Institute of Environment, Florida International University and in the Dept. of Civil and Environmental Engineering of University of Florence in the area of hydrology, hydrogeology, groundwater modeling or related fields

Florida international University and the University of Florence in Italy have developed a Dual PhD program in which students enroll at both institutions and graduate with two PhD degrees: Earth Systems Science at FIU and Civil and Environmental Engineering at the University of Florence (UNIFI).

We have funded Institute of Environment Pre-eminent Fellowships for highly motivated applicants to enroll to the Dual PhD program. Accepted applicants will enroll at the Department of Earth and Environment, FIU (<https://case.fiu.edu/earth-environment/>) and complete the required courses before they enroll at the Department of Civil and Environmental Engineering, UNIFI, Italy (<https://www.indicee.unifi.it/index.php>). This international doctoral program opportunity is linked to the Italy-Florida Scientific Exchange, launched in 2017 jointly with the [WARREDOC research center](#) of Università for Foreigners of Perugia, on [“Water And Environmental Global Challenges: International Water Infrastructure And Security”](#).

Successful candidates will be supported with stipends and tuition waivers by FIU’s Institute of Environment Pre-eminent PhD Fellowship for up to 4 years. The course work at FIU will be counted towards the requirements at UNIFI. Successful applicants will develop a doctoral research program approved by the advisors from FIU and UNIFI. This will be one dissertation submitted and defended at FIU and UNIFI. The position starts in Fall 2022. Details about the Dual program can be found from Dr. Assefa M. Melesse, Graduate Program Director of the Department of Earth and Environment (melessea@fiu.edu). Successful applicants will also be accepted as Student Associates of the UNESCO Chair on Sustainable Water Security at the Institute of the Environment.

Eligibility: Applicants must have an MS degree in Science or engineering and have strong quantitative background. US citizenship is required (or Naturalized Citizens) .

Broad areas of research

The primary focus of proposed research for the graduate student is to conduct hydrologic/hydraulic and hydrodynamic modeling of the land phase of the hydrologic cycle with emphasis on surface water/groundwater interaction, water quality, and the linkage between ocean and the urban landscapes in areas affected by climate change and sea level rise. Both event and long-term simulations of the oceans and the urbanized regions with applications to flooding, water supply, ecological impacts and natural systems using both mechanistic and statistical models are included.

It is recommended that applicants have some background in engineering, mathematics, and statistics, use of data analysis tools such as Matlab, R, Python, GIS and interest in learning machine learning techniques

To Apply: All applicants must meet the minimum requirements of GPA set by the graduate admission of FIU and the Department of Earth and Environment. Information for applying to FIU Graduate School can be found here: <https://admissions.fiu.edu/how-to-apply/graduate-applicant/index.html>.

Prospective graduate students are encouraged to contact Dr. Rene Price (pricer@fiu.edu) or Dr. Jayantha Obeysekera (jobeysek@fiu.edu) first to discuss potential research projects and opportunities before applying. When contacting by email, please include the following items: 1) unofficial transcripts, 2) a brief cover letter describing your research experience, interests and goals; and 3) current CV/resume, including contact information for three references.

More about FIU: FIU is a R1 member of the State University System of Florida and an Equal Opportunity, Equal Access Affirmative Action Employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability or protected veteran status.

Drs. Rene Price and Jayantha Obeysekera are members of the Department of Earth and Environment working in the area of hydrology and hydrogeology (<https://case.fiu.edu/earth-environment/expertise/hydrology-water-resources/index.html>). Earth and Environment is a member of Institute of Environment (<https://environment.fiu.edu/research/index.html>), a pre-eminent program in environmental research in the US.