

The Virgin Islands Consortium

Dr. Joanne Sylvia Luciano Is UVI's New Professor Of Data Science

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The University of the Virgin Islands on Thursday welcomed Dr. Joanne Sylvia Luciano to its college of science and mathematics arm, according to a release the institution of higher learning issued. Dr. Luciano, the UVI said, will work in the department of Computer and Computational Sciences to develop curriculum in data science.

According to the release, this multidisciplinary field blends data inference, algorithm development, and technology in order to solve analytically complex problems. Data science is ultimately about using this data in creative ways to generate business value while being sensitive to and respectful of data privacy, data security, data stewardship and the ethical use of data. The incoming professor has so far proposed two new

courses in Health Web Science and will be teaching a special topics course in data science this spring, UVI said.

"We are very pleased to have Dr. Luciano working with us. She has been working with a team of faculty from computer science, mathematics, and business to submit a proposal to National Science Foundation (NSF) for support in developing interdisciplinary programs in Data Science," said the Dean of College of Science and Mathematics, Dr. Sandra Romano. "Their work is exciting and would provide some great opportunities in Data Science for our students. We're very much looking forward to Dr. Luciano working with us on Data Science projects that will provide a lot of interesting opportunities for both faculty and students."

Dr. Luciano's research uses computational modeling and the World Wide Web to improve health care and advance medical discovery. Dr. Luciano is an experienced technology consultant to major hospitals, biotechnology and pharmaceutical companies.

"The focus of my research is to create technologies that make it easy to do interdisciplinary by utilizing semantic technologies that maintain the context of data.

"There is an urgent need to shorten the time it takes to bring basic science research results to practice, and to get the clinical or field observations back to the research lab for further analysis," she said. "To do this, technologies need to be in place that allow scientists to better represent, reuse, and communicate their data."

As recent as this year, 2018, Dr. Luciano has been a Visiting Associate Professor at Indiana University, a post she held since 2016, UVI said. As a faculty member of the School of Informatics, Computing and Engineering, she taught courses in the Data Science Program. During her tenure, Dr. Luciano developed the curriculum for graduate courses in data science such as Data Science for Drug Discovery, Health and Translational Medicine, Real World Data Science with Eli Lilly and Company, Applied Data Science, and independent study courses with graduate students while she continued her research in Health Web Science and Precision Medicine.

"My students gain a competitive advantage because of my experiences in industry, government, and as an academic researcher, particularly in the new and rapidly evolving areas such as healthcare analytics, where research and teaching are closely intertwined," Dr. Luciano said. "This is where the knowledge to be taught is changing rapidly; I know this well and update my curriculum each semester to reflect these changes."

Dr. Luciano was a Research Associate Professor and Deputy Director of the Web Science Research Laboratory at Rensselaer Polytechnic Institute, 2010-2013. While there, she founded the field of Health Web Science, initiated a multidepartment collaboration to integrate state-of-the-art technologies to deliver a personalized response to depression, a major health burden, and co-taught graduate courses in Advanced Semantic Technologies and Semantic e-Science.

The new professor is a graduate of Boston University in Boston, Mass., where she obtained a Ph.D. in cognitive and neural systems in 1996, a Master of Science degree in Computer Science in 1987 and a Bachelor of Science degree in Computer Science in 1982. Prior to her enrollment at Boston University, Dr. Luciano earned her high school diploma from John Dewey High School, an experimental high school in Brooklyn, N.Y.

Dr. Luciano's teaching experience spans over 41 years across Indiana University Bloomington, Ben-Gurion University of the Negev, Rensselaer Polytechnic Institute, Boston University, Metropolitan College and Boston University, College of Arts and Sciences.

"My students derive great benefit from the combination of my experience and knowledge, and the enthusiasm and sincerity of my teaching," said Dr. Luciano.

Her wealth of research experience has also been from the professional domain. Over the past four decades, she has held directorship positions in both corporate and academic institutions from as early as 1982. The new faculty member has 15 years of service on several academic and professional boards between 2003-2018. She was the lead author of a book entitled *Health Web Science*, has two US Patents, published over 50 peer-reviewed research articles, book chapters, ontologies, presentations, tutorials, and information artifacts. In the humanities, Dr. Luciano is on the Advisory Board of "We Did It For You! Women's Journey through History."

Dr. Luciano has held lead roles in facilitating over seven successful grant applications. She has also mentored five graduate students and four undergraduate students who led successful research under her tutelage. She has also been the recipient of honors from distinguished institutions, one of which is being named a *Robert Wood Johnson Foundation Health Policy Fellow Finalist* in 2014.

UVI said its department of Computer and Computational sciences is committed to helping students excel academically and achieve productive careers in computing related fields through programs in academics, research and community service. Faculty are committed to lifelong learning and scientific research in their focus areas, academic and pedagogical advancement, and outreach to the local community through service and enhanced opportunities in computing and information technology related fields.