# Dr. Vesna Zeljkovic Attains Tenured Full Professorship

The department would like to take this opportunity to congratulate Dr. Vesna Zeljkovic on achieving a full tenured professorship here at Lincoln University. Dr. Zeljkovic serves both the Department of Mathematical Sciences and the Department of Chemistry and Physics. Her research focuses on the field of signal and image processing, with extensive experience in developing mathematical models and novel algorithms to analyze



complex images for application in biomedical engineering, video surveillance, homeland security, national defense and industry.

Dr. Vesna Zeljkovic's research in image and signal processing has resulted in more than seventy proceedings, numerous journal and conference publications and two textbooks: "Análisis Estadístico con Modelos Gaussianos Aplicado a Osteoporosis: Aplicaciones de Biomédica" (in English, "Statistical Analysis with Gaussian Models Applied to Osteoporosis: Biomedical Applications," co-authored), and "Video Surveillance Techniques and Technologies". The latter book is intended for graduate students in the field of signal and image processing, and uses solutions and mathematical algorithms to solve motion detection and objection identification problems. Dr. Zeljkovic's research has been supported by NSF & DoD funded Grants. Elevated to IEEE senior member since 2014, she has provided leadership in IEEE professional society as an invited conference speaker, peer reviewer, session and workshop chair, workshop coorganizer and organizer, and Associate-Editor of HPCS IEEE Proceedings.

The faculty and Colleagues of the Department of Mathematical Sciences Congratulates Dr. Zeljkovic for her invaluable achievement and wishes her continued success at Lincoln University as she advances our students to competitive graduate studies and professional employment.

# Department Initiates New Intervention Plan for

## **Entry Level and Gatekeeper Courses**

This semester, the department faculty approved a new intervention plan for entry level and gatekeeper courses. This includes MAT-098, 102 and 106, which provide the level of quantitative literacy required for a well-rounded liberal arts education, as well as MAT-110 and 111, which are typically taken to prepare students for further quantitative literacy and future courses in STEM fields. The intervention plan incorporates a new Instructor's Handbook, which contains implementation guidance such as test protocols and grading rubrics, tips for integrating ALEKS, sample engagement reports, sample email templates for contacting non-attending students, procedures for identifying and assisting repeat students, and information on the newly revamped MAT 110 and 111 labs. Also included in the intervention plan are new lab manuals for the MAT 110 and 111 labs, which now focus on applications of algebra and precalculus to other fields such as biology, chemistry, economics, engineering, and health sciences. The intervention is focused on improving student attendance, participation and engagement to better enable student success. In addition, the new application-focused labs of MAT 110 and 111 will better prepare our students for future coursework in STEM and other disciplines.

The intervention plan will be implemented beginning this fall 2018. As part of the plan, the department will carefully monitor student performance throughout all entry level and gatekeeper courses. This data will be used to evaluate the plan's success and to identify any needed adjustments.



### Representative from Prudential Speaking at Math Club Mixer

On Tuesday, September 25, 2018, the Department of Mathematical Sciences and the Mathematics club had the pleasure of hosting Ms. Sherrice Massiah, Program Manager of Actuarial Talent Management at Prudential Financial Services. Ms. Massiah's visit began with a meeting with our own chair, Dr. Claude Tameze, where the two brainstormed about possible internship and job opportunities for Lincoln University students with a focus on Math majors.

In the afternoon, Ms. Massiah gave a presentation to the math majors and faculty of our department. Ms. Massiah began with a description of Prudential Financial Services and her role in the company. She discussed her professional journey, encouraging our students by explaining the early beginnings of her professional career and how she managed to rise up the



ladder and through persistence and hard work. She then discussed the different departments at Prudential and their various responsibilities. She focused heavily on the Actuarial department, where she manages the early talent programs. She later discussed the different internship and job opportunities available for our students pursuing an actuarial track.

# Department of Mathematical Science & University of

# Michigan ISR Graduate Study Partnership



On Tuesday, October 4, 2018, the Department of Mathematical Sciences had the pleasure of hosting Dr. Fredrick Conrad, the director of the Michigan Program in Survey Methodology. Dr. Conrad's visit began with a meeting with our own chair, Dr. Claude Tameze, where the two brainstormed about realizing common and complementary goals shared by Lincoln University's Department of Mathematical Sciences and University of Michigan's Institute for Social Research. The two were later joined by our faculty, who provided valuable input and feedback to the discussion. These meetings were followed by lunch at the Faculty Lounge. During the lunch the discussion continued regarding the possible summer research and internship opportunities available at University of Michigan Institute of Social research for Lincoln University students, particularly math majors.

In the afternoon, Dr. Conrad gave a presentation to the math majors and Math Club members. Dr. Conrad began with a description the field of survey methodology and the graduate program in survey methodology at the University of Michigan. He highlighted the importance of this field by referencing many common survey design errors, including the federal government's recent decision to add a citizenship question to our national census. Dr. Conrad then discussed what a program graduate does with a Master's degree in survey methodology and the possible job opportunities in the field. He also further elaborated on the background students need to join the program, the skills they acquire with Master's Program in Survey Methodology (MPSM), and what they need to succeed in this program. In addition to graduate opportunities in Survey Methodology, Dr. Conrad also discussed research opportunities at the summer institute in Survey Research Techniques. Frederick Conrad is a Research Professor in the Survey Research Center at the University of Michigan and in the Joint Program in Survey Methodology (JPSM) at the University of Maryland, as well Professor of Psychology at the University of Michigan. He is the director of the Michigan Program in Survey Methodology. He received a Ph.D. in psychology from the University of Chicago. His current research includes data collection with mobile, multimodal devices, adaptive user interfaces in web surveys, and interviewing techniques and interviewer-respondent interaction.



#### Department of Mathematical Sciences Faculty and Staff

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Dr. Tong Banh Dr. Moses Haimbodi

Dr. Ranjan Naik

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Dr. Vesna Zeljkovic