

Mathematics Faculty Win Top University Honors **V**

David Minda, Ricardo Moena, and Siva Sivaganesan were all recognized for their outstanding work: **Minda** was named **Distinguished Teaching Professor** in 2015 shortly before his retirement, **Moena** was commended with a **2016 Faculty Award for Exemplary Contributions in Service to the University**, and **Siva** received the Graduate School's **Excellence in Doctoral Mentoring Award** in 2015.

A recipient of the Mrs. A.B. "Dolly" Cohen Award for Teaching Excellence (2001) and the Ohio Section of the Mathematical Association of America's Award for Distinguished College Teaching (2002) and named the UC Honors Program Teacher of the Year (2002), David Minda is known throughout campus as a professor who engages students with complicated subject material by creating dialogue with them - mixing detailed proofs with incisive questions to blend discovery learning and direct instruction. His commitment to mathematics education at all levels, from freshman courses to graduate courses, in mentoring relationships (both mathematical and pedagogical) with junior faculty and student teachers, and in collaborations on cross-college pedagogical initiatives, is a hallmark of his career. It has produced success in the classroom, innovation in the curriculum, strong connections with area high schools, and externally funded scholarship of teaching and learning (SOTL), and earned him the well-deserved status of Distinguished Teaching Professor. The training of future mathematics teachers and the professional development of in-service teachers has been especially important to him. This included designing and teaching courses for pre-service teachers, creating and delivering grant-funded professional development workshops for in-service teachers (together with former faculty member Charles Groetsch), and, alongside our colleague Steve Pelikan, teaching and continually improving courses to meet the needs of teachers enrolled in the department's Masters of Art for Teachers (MAT) program, as well as mentoring dozens of their MAT projects. Although Minda retired last summer, he will be teaching in the MAT program again this summer, and will invest in the program's future by helping to train a new generation of instructors in the methods and philosophy that have made the program such a success.

For a photo of Minda and his official citation, visit http://magazine.uc.edu/editors picks/recent features/faculty awards 2015.html

Ricardo Moena's colleagues in the department are familiar with his service to the department as the Director of Entry Level Mathematics. In that role he oversees the performance of 14 multi-section courses involving approximately 4000 students, and from time to time serves as course coordinator (for calculus, applied calculus, topics in math). Because retention and degree progress are linked to student performance in these crucial "gateway" courses, Ricardo tracks student success rates and seeks ways to improve them, whether through better placement methods or instructional innovation. His dedication to student success goes back to his tenure in the Department of Mathematics and Applied Sciences in the former University College, where he served as department head for ten years. His energy and collegiality are reflected in his long-time membership and leadership of the University Mathematics Committee, his work with high-school teachers leading dual enrollment math courses (college courses taught at local high schools for college and high school credit), and his leadership at the state level. Ricardo is extremely active and influential as Faculty Lead for Mathematics, tasked with establishing consistent learning outcomes for reviewing courses for state-wide transferability, and with making recommendations to the state on issues concerning college-readiness and post-secondary mathematics courses. He is a member of the national Partnership for Assessment of Readiness for Colleges and Careers (PARCC) Math Core Leadership Team and the State's facilitator for Complete College America. A thoughtful innovator and a data-driven problem-solver, Ricardo is set to dial his exemplary service up another notch as he becomes the department's new Assistant Head this summer.

For a photo of Moena and his official citation, visit http://magazine.uc.edu/editors_picks/recent_features/faculty_awards_2016.html

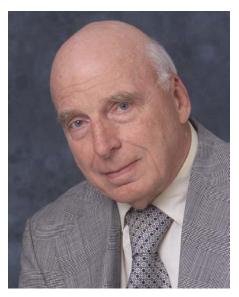
Bayesian statistician **Siva Sivaganesan** is the department's most prolific PhD advisor, having chaired 18 completed doctoral dissertations and currently supervising at least 5 more students. He has served on the doctoral committees of another 30 students in our department and in the departments of environmental health and quantitative analysis, and on more than 100 master's committees. As incredible as this output is, it is not the primary basis for his **Excellence in Doctoral Mentoring Award.** Many of his former



students wrote in support of his nomination. They expressed heartfelt gratitude for his mentorship and appreciation of the impact his guidance. Their descriptions of their interactions with him paint a picture of someone who is passionate about cultivating doctoral students' academic and professional growth, someone who enjoys the time he spends one-on-one with his students, maintains genuine interest in developing their strengths and in helping them overcome weaknesses, and who is tireless in helping them tackle and overcome technical problems. He is described by his students as always patient, supportive, encouraging, and inspiring. Siva developed an internship program with partnerships with Proctor and Gamble, Cincinnati Children's Hospital Medical Center, Medpace, and others to support and train PhD students in statistics, giving them valuable hands-on work experience side by side with industrial PhD statisticians on real biomedical health research. Siva encourages his students to take on real research questions that come up during their internships where they can apply their knowledge of the Bayesian methodology. It's no wonder that the expertise of his students is in great demand upon graduation. After graduation, he stays in contact with them and continues to mentor their professional development. Siva is truly a great doctoral mentor and exemplary role model.

Website: <u>http://grad.uc.edu/content/dam/grad/docs/Publications/annual_report/2015-</u> <u>Annual-Report-high-res.pdf</u> (Graduate School Annual Report 2015)

Professor Chalkley Retires ▼



Roger Chalkley Retires After 54 Years as Faculty Member

Professor Roger Chalkley retired at the end of Spring Semester 2016, concluding a career as a faculty member in the Mathematical Sciences Department at UC that began in 1962. Roger's UC connections go back even further than that, as he entered UC as a freshman in chemical engineering in 1949, graduating in 1954 with the highest GPA among the graduating seniors in chemical engineering. Roger continued on at

UC, earning his masters in mathematics in 1956, and his doctoral degree in mathematics in 1958. Roger notes that his link to UC goes back further still: his father earned a degree in mechanical engineering from UC in 1914, one of the earliest participants in UC's co-operative education program.

Following the completion of his PhD, Roger worked as the mathematician for the Reactor Experimental Engineering Division of Oak Ridge National Laboratory for a year, and then spent a year as a post-doc at University of Zurich / ETH in Zurich, Switzerland. Roger's first full-time faculty appointment was as an assistant professor at Knox College in Galesburg, Illinois, where he worked for two years before landing a position back in the Mathematical Sciences Department at UC, where he spent the remainder of his career.

Roger's career has been focused on the study of relative invariants for differential equations, and his research has culminated in the publication of a series of three extensive monographs, published by the American Mathematical Society in 2002, 2007, and 2014. Roger explains "My research is unusual because, instead of fragmenting mathematics by rushing lots of short papers into publication, I have avoided superficiality by concentrating on difficult problems whose solutions enabled me to completely redevelop and unify the subject of relative invariants for differential equations in a series of three monographs. Previous research on that subject was done primarily during the years 1879-1889 by Edmond Laguerre, Georges-Henri Halphen, Andrew Forsyth, and Paul

Appell. They had presented isolated examples of considerable interest. In particular, G.-H. Halphen was awarded the Grand Prize of the French Academy of Sciences in 1881 for his use of invariants to recognize various linear differential equations for which desirable transformations exist. My interest in that subject began in 1957 when I read some of the 1879-1889 publications. Then, it became compelling when I noticed a lack of general results and became aware of the numerous negative efforts after 1889 to advance the subject. Thus, I was truly fortunate to have found a fascinating area for research and to have had sufficient time to develop it."

Following retirement, Roger hopes to learn the use of software for Wikipedia with the aim of becoming a reliable contributor, working to correct and improve current articles, and then to write additional articles about significant mathematical discoveries that have been overlooked to date. He expects as well to maintain his interests in natural history, continue to enjoy playing golf with long-time friends and colleagues, visit areas with unusual geology, and of course to continue to advance his mathematical research.

Recent and New Retirees **v**

The past two academic years have seen a number of long-time faculty members embrace retirement. Here is a brief synopsis of their careers and post-retirement plans and activities.

Jeanne Bowman retired at the end of Fall Semester in 2014. She earned her BA from Walsh College in Ohio and her MS in Mathematics from Ohio University, and came to UC in 1980 after first teaching at Flagler College in Florida. Jeanne's career at UC is distinguished by the many UC Colleges in which she has served. Jeanne joined UC as a faculty member in University College's Mathematics and Applied Sciences Department. She became a faculty member in the College of Applied Science when University College closed, and when CAS merged with the College of Engineering, Jeanne moved to the Mathematical Sciences Department in A&S. Since retiring, Jeanne has enjoyed being able to spend more time on art, music, and reading, as well as significant travel with her husband. She volunteers at the local library as well.

Roger Chalkley, our longest-serving department member, retired at the end of Spring Semester 2016. He first came to UC as a student in 1949 as an undergraduate in Chemical Engineering, received his PhD in mathematics from UC in 1958, and joined the faculty as an assistant professor in 1962. You can read much more about his long career and affiliation with UC in an accompanying article.

Jeesen Chen joined the Department of Mathematical Sciences in the fall of 1981 and retired at the end of Spring Semester 2015. Jeesen earned his BS from Taiwan University and received his PhD in Statistics from Purdue University in 1981. Jeesen regularly taught graduate statistics and probability courses. Although his PhD was in statistics, his interests aligned best with those of the probability faculty, and the expertise he shared in the probability seminar and with graduate students via their PhD committees was greatly admired and appreciated. Jeesen continues to work on mathematics and plans to spend part of his retirement in Taiwan.

Scott Dumas came to UC in 1990 and retired at the end of Spring Semester 2015. He earned his BS from Rice University, his MA from the University of Colorado – Boulder, and his PhD in Mathematics from the University of New Mexico. Since retirement, Scott has continued to teach for the department as a McMicken Professor. As Scott was the recipient of several teaching awards, including the Dolly Cohen Award for Excellence in Teaching, during his career at UC, this continued service is greatly appreciated by both the department and his students. Over the years Scott has collaborated with colleagues in France and Germany on problems in dynamical systems and applications to physics, and recently published a book he had long wanted to write, "The KAM Story," which was a feature in the last issue of The Right Angle.

Patrick McSwiggen came to the Department of Mathematical Sciences as a visiting assistant professor in the fall of 1989. He was appointed as a Taft Post-Doctoral Fellow for 1990-1991, and became a regular regular faculty member in our department in the fall of 1991. Pat's research is focused in the area of dynamical systems. He received both his undergraduate degree (1981) and his PhD (1990) in mathematics from the University of California at Berkeley. For most of his tenure in the department, Pat has maintained the department's computer/server, performing crucial behind-the-scenes tasks and troubleshooting network problems. On top of that, for the past ten years, Pat has served the department as the Assistant Department Head, in which role he was continually called upon to solve student, faculty, interdepartmental, and intercollege issues. Following his retirement at the end of Spring Semester 2016, Pat plans to join his wife and fellow math department faculty member Tara Smith, who is temporarily relocating to the DC area to serve as a program officer at the National Science Foundation.

David Minda began as a student at UC in the 1960s, earning BS and MS degrees from our department. David earned his PhD at UC San Diego in 1970, followed by a year as a post-doc at the University of Minnesota. He returned to UC as a faulty member in 1971. David has received many accolades for his research and teaching contributions. His research recognitions include election as a Fellow of the Graduate School (1994), receiving the McMicken Dean's Award for Distinguished Scholarship (1997), and being named as a Taft Professor (1999). You can read more about David's teaching recognitions in an accompanying article. David retired at the end of Spring Semester 2015, but continues his quarter-century of involvement with the department's summer MAT program for in-service secondary mathematics teachers. David finds time to enjoy his family, including his wife of over 40 years, Susan, their three children, and two grandchildren. He remains active in mathematical research and is working on completing a graduate-level text on conformal geometry with his co-author Alan Beardon.

Kathleen Strotman first came to UC after moving to Cincinnati from Minnesota in 1990. She initially taught at UC Blue Ash (then known as Raymond Walters

College). Kathy has been teaching for the Mathematical Sciences Department in A&S for over a decade, and she will be retiring at the end of Spring Semester 2016. Kathy received her BA in mathematics from Emmanuel College in Boston and her MS in mathematics from the University of Minnesota. Among the many courses Kathy has taught during her time at UC was a multivariable calculus class taught at Indian Hill High School for UC credit. After retirement, Kathy is looking forward to finding time to catch up on books she wants to read and to travel.

Claudia Taylor joined the UC faculty in 1986, moving to A&S from the College of Applied Science's Department of Mathematics and Physics in July of 2010. She earned her BA in mathematics from Catawba College in North Carolina and her MAT in mathematics from the University of Florida. Her first job was at Brevard Community College in Florida. While in the College of Applied Science, Claudia coauthored two calculus books with colleague Larry Gilligan and designed a special algebra and calculus sequence for the College of Business. Claudia's teaching career spanned more than 40 years when she retired at the end of Spring Semester 2015.

Mansoor Vejdani came to UC as a faculty member in the College of Applied Sciences in the fall of 1990, and joined A&S in the summer of 2010. He received his BS in mathematics and MS in statistics in Iran in the 1970s, and earned a PhD in Mathematics Education from Vanderbilt University in 1983. He taught at Vanderbilt and Tennessee State University before coming to UC. During much of his career, Mansoor worked on the problem of helping underprepared mathematics students succeed. Mansoor retired at the end of Spring Semester 2015.

In Memoriam: James Michael Osterburg **V**



James Michael Osterburg

June 1, 1944 – November 27, 2015

Jim Osterburg retired in 2012 after forty years of service to the Department of Mathematical Sciences. He passed away on November 27, 2015 after a valiant battle with pancreatic cancer. Throughout his career, Jim excelled as a teacher, a researcher, an administrator, and as a generous and dedicated colleague. He served in many roles such as coordinator of calculus, Math Bowl coordinator, and graduate program director, as well as five years as head of the department. His memorial was held May 21, 2016 at 1 pm in St. John's Unitarian Church in Clifton.