2009 K-State Undergraduate Lecture Series in Mathematics

Lectures by ten mathematics alumni, a visiting professor, and two of our faculty and staff were the highlights of the 2009 Undergraduate Lecture Series in Mathematics at Kansas State University.

Donald Adongo, Ph. D. in Mathematics 2008, advised What You Can Do with Your Math Degree. He explored many areas open to math majors including careers as actuaries, operations researchers, statisticians, mathematical biologists, animators, government workers, professors, and teachers. He also discussed ways that would contribute to success in those areas. Donald is Professor of Mathematics at Murray State University in Murray, Kentucky.

Roger Bey visited Kansas State and gave a presentation on Careers in Finance and Operations Management for Math Majors. He discussed the interrelationship between mathematics and finance, and said that math majors are ideal candidates for graduate programs and careers in finance. Roger is Professor and Chairman of the Department of Finance and Operations Management at the University of Tulsa.

Jacqui Cooper spoke on The Career Fair, Internships, and Co-op Work Experiences. Jacqui is Assistant Director of Career and Employment Services at K-State.

Marianne Korten gave three talks: How To Be the Best Math Student You Can Be; Undergraduate Research; and Graduate Studies in Mathematics. Marianne is a Professor of Mathematics at K-State.

Mark Lesperance, B. S. in Mathematics 1990 and M. S. in Mathematics 1991, gave A Delicious Introduction to Auto Rates and the Actuarial Profession. He described some great opportunities to utilize math and statistics in a challenging and rewarding actuarial career. He outlined the types of problems that actuaries solve and used snack packs of M&M's to help explain the complexities of insurance pricing. Mark prices crop insurance and develops new products as an Actuarial Analyst for Producers Agriculture Insurance Company in Amarillo, Texas. He also teaches courses at K-State to prepare students for the first four actuarial exams and the Time Series VEE.

Gary Lortscher, B. S. in Feed Technology 1963, and Betty Lortscher, M. S. in Textiles and Clothing 1971, gave a presentation entitled West African Experiences. They described their nearly 10 years of work in Guinea and Nigeria, West Africa; Gary as an agriculturist with the Peace Corps and USAID and Betty as a teacher with the Canadian International Development Agency. Gary is President and Betty is Secretary - Treasurer of Lortscher Agri Service, Inc. in Bern, Kansas.

Eric Mann, B. S. in Mathematics and Statistics 2006, spoke on Finding an Actuarial Internship. He covered how to: pass an actuarial exam; do well at college; look for companies to apply to; prepare a resume and cover letter; and interview. He focused on the resources available at K-State to make oneself a great internship candidate. Eric is an Actuarial Analyst for Allstate Insurance in Mount Prospect, Illinois. He currently is doing graduate studies for an M.S. in Statistics at K-State in order to shift his career focus to that of a statistical modeling role.

Brian Pasko, M. S. in Mathematics 2001 and Ph. D. in Mathematics 2006, described The Mathematical Process. He used the undergraduate article A Strategy for a Class of Games by R.S. Pierce to illustrate the process of picking, piecing, and solving interesting problems. He said that math is not just facts, formulas, and theorems. It is also beautiful, powerful, and fun! Brian is Professor of Mathematics at Eastern New Mexico University in Portales, New Mexico.

Julie Pool, M. S. in Mathematics 1994, described some Difficulties that Generation Y Members Are Facing as They Enter the Workforce. She discussed the four generations that are currently in the work force, and how the entry of Generation Y into the work force is changing things. She also covered corporate culture, electronic communication devices, why "Gen Y" is known as "The Entitlement Generation", and what Managers are looking for when they hire new college graduates. Julie is Director of Information Technologies at Koch Pipeline in Wichita, Kansas.

Chris Schroeder, M. S. in Mathematics 1998 and Ph. D. in Mathematics 2002, gave a talk entitled If Monkeys Ran the Collegiate World. He explained recent changes in high school math teaching in Kentucky and asked if we replaced the bureaucrats and administrators who are in charge of setting standards for mathematics students with a group of monkeys, would the results be at least as good as they are now? In a parallel theme, he described the research of Thomas Callaghan, Peter J. Mucha, and Mason A. Porter [Notices of the American Mathematical Society 51, 887-893, (2004)] which showed that monkeys random walking by following simple probability rules would do as well at ranking college football teams as the BCS rating system. Chris is Professor of Mathematics at Morehead State University in Morehead, Kentucky.

Lane Senne, M. S. in Statistics 2005, spoke about Careers Using Mathematics and Statistics in the Pharmaceutical Industry. He described how clinical trials are vital to the drug development process. He explained how mathematics plays a large role in the collection and handling of data and in the creation and programming of clinical databases and datasets for analysis. He said that government and the pharmaceutical industry are the top two employers of statisticians. Lane is Senior Biostatistician for PRA International in Lenexa, Kansas. PRA International is a contract research organization that provides clinical drug development services to pharmaceutical and biotechnology companies.

Evan Stewart, B. S. in Mathematics 1965, gave a talk entitled Curiosity is the Ants in the Pants of Life. He said that better questions result in better answers, improve communications, and speed evolution and that better questions result from the use and study of mathematics. He posed questions about the movement of drilling platforms and aircraft wings, the penetration of computers and mobile devices in education, and the growth of telecommunications, internet usage, computing power, and data storage and retrieval. Evan is Vice President and Chief Information Officer of B/E Aerospace, Inc. in Winston-Salem, North Carolina. B/E Aerospace is the world's largest provider of commercial and business jet interiors.