

Letter from the Dean

Autumn is a time of reflection, as we acknowledge the seasonal cycle of life and renewal on our planet. The academic life goes through a similar cycle of germination, growth, and reseeding. In higher education our perennial challenge is to identify and nurture intellectual talent, ensuring continuation of the cycle of learning and discovery. Many of us who chose a life of scholarship owe thanks to parents and educators for planting the seed of interest in the mystery and wonder of discovery. In conjunction with the College of Education and Human Services, the CoSM is actively engaged in providing science and math content instruction for pre-service teachers. New paradigms of content delivery emphasize inquiry over memorization and are guided by educators who share their enthusiasm for STEM (Science, Technology, Engineering, and Mathematics) disciplines with K-12 students. These teachers, who embrace the concept of discovery-based learning, demystify the scientific process for their students, providing the proper conditions for these young scientific seedlings to thrive.

It is well documented that extracurricular enrichment activities are important in cementing students' interest in science and mathematics. Because broadening participation in science and

mathematics is a national imperative, we work diligently to provide out-of-classroom science experiences such as Science Fair, TechFest, and Exploring Science. This past summer, through our participation in the Ohio Science and Engineering Alliance, we trained several minority interns in research labs; and we partnered with the College of Engineering and Computer Science to launch a bridge program that better prepares entering minority students for the rigors of college instruction. Extracurricular opportunities for undergraduates increase their self-confidence and enhance their success in STEM areas of study. Undergraduate research opportunities are widely available to our students, allowing them to work one-on-one with professors. Other enrichment opportunities for undergraduates include academic competitions and participation in student science-clubs. At the graduate level, our students perform original research guided by our resident scientists/professors. These activities provide academic fertilizer which helps our undergraduates grow intellectually and excel scientifically.

The long-term result of this intense cultivation of students is a Wright State presence in classrooms and colleges across the United States and the world. And,



as you will learn in this issue of *Equation*, in some cases the fruit hasn't fallen far from the WSU tree! At least two of our faculty members are Wright State graduates who began their careers in the College of Science and Mathematics and now have come full circle. As they share their love of science with students, the cycle of discovery is renewed.

Excellence from Within...

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science fair project at Carroll with sparking his interest in science and specifically DNA research. Steve said he was fascinated with the scientific method and the ability to manipulate DNA. Steve's research involves the study of genes associated with cancer. Steve is the Director of the Center for Genomic Research at WSU and was previously the Director of the Gene Expression Laboratory.

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Steve chose WSU for his education and later as a base for his research because of its academic and research strength, as well as its being the place to conduct the type of work he is interested in. Steve is dedicated to his family, as well as his science in his laboratory. His wife and family in Dayton was another strong reason to stay in Dayton.

Steve enjoys his role as a mentor and emphasizes to students that science requires a strong commitment. It is more than a job, and you have to be excited about the work. "The hours are long and one must learn to deal with the roller coaster nature of the work; the good times are great but the bad times can be tough. Learning to maintain a positive outlook in spite of the emotional valleys is crucial."

Steve is particularly proud of the students he has graduated over the years. One is already an assistant professor and another one is on track to earn that title. He has several students in the field doing research.



CoSM was one of the sponsors of the Wright State University Alumni Association Legacy Scholarship Golf outing in August, and several CoSM alumni participated, including Mike Zimmerman and Tom Hughes. The first four individuals to send an e-mail to cosm@wright.edu will be our guest at the golf outing in 2005!

