



William Tallon, Ph.D.

WKU's first hundred years has just past. The university is embarking on a new century that features the integration of teaching with research. This change in culture will influence the ability of our students to engage themselves with new modes of learning. It will enable them to meet potential employers as they engage in real time and real problem studies with the many industries and other employers in the region who are growing to rely on the faculty and student experience at WKU to build their businesses.

This model has taken off to enhance WKU's goal of becoming a prominent national university of choice with a strong international reach. As the new dean of the Gordon Ford College of Business at WKU, I am amazed at the myriad of opportunities for students to perform research and creative activities such as learning marketing techniques by doing surveys in local businesses and then discussing the results with business leaders. The numbers of student and faculty foreign exchange programs also amaze me. These opportunities enable faculty and students not only to embrace other cultures, but to enlarge their knowledge by learning how business is conducted abroad. This experience is what student engagement is all about. I am happy to be a part of the movement to increase the quality of student engagement.

I am delighted to see that the eight feature stories in this issue of *The Western Scholar*, or *The Scholar*, as it has come to be known, show faculty from each of our colleges at work on their research projects and with their students. Taken together, the stories illustrate what WKU is all about today,

and how its prominence is becoming manifold because of what our faculty and students are doing together during their undergraduate and graduate experience, and after they leave WKU as well.

WKU faculty are certainly well known in Barcelona, Spain, and nearby communities for work to make student learning more participative instead of the traditional memorization style. In this regard, Professors Cynthia Houston, College of Education and Behavioral Sciences, and Roxanne Spencer, University Libraries, explain their international venture on behalf of modernizing student learning. Their colleague from the Department of Curriculum and Instruction, Professor Kay Gandy, who you can see on the cover, is not standing on the moon but in one of our national parks as part of her excursion with her students across the America landscape. This trek enables Dr. Gandy to teach at sites that students would otherwise only see in pictures. Her story is an odyssey in itself and shows a new approach to learning through student engagement in real time.

Professor Rezaul Mahmood and his students in the Department of Geography and Geology in the College of Science and Engineering are perfecting one of WKU's applied research strengths in climatic studies. They are collecting temperature data to determine the need for people to water the soil based on temperature variations. Dr. Mahmood's enthusiasm, the quality of his students, and a \$1.5 million federal grant promise to make the physical geography that impacts our lives predictable. The story about long-time state climatologist Glen Conner tells us more about his lifelong work to unravel the mysteries of weather stations all over the United States. There is no question about Professor Conner's national reach on behalf of WKU. The intricacies of the calculations of Dr. Mahmood and Professor Conner and students are matched by the mathematical research of Professor David Benko who has solved a perplexing mathematical problem. His solution to "Hilbert's third problem" in geometry has put WKU on

the international map in mathematics. The newer problem of how to store data that we take from the web is being solved by Computer Science Professor Quangming Xing. Professor Xing and his students have created a database management system to compact and store data. Their collaboration is a vivid example of applied research and has enabled students to present papers on the work at professional meetings across the country.

There is also the link between predictability in our lives and the sweep of technological innovation. To what extent do we need to use technological devices and still keep our sanity? Professor Kumi Ishii in the Department of Communication in the Potter College of Arts and Letters has set out to supply some answers. Her story in *The Scholar* discloses what she has discovered about the usefulness of e-mail in our daily lives. After reading it, you will understand more about "the human side of the digital divide," as she calls it. Department of History Professor John Hardin communicates his research about the African-American role in Kentucky since it became the fourteenth state in 1794. His collaboration with historians across the state to produce the *Kentucky African American Encyclopedia* will enable students and citizens to understand our diversity and the significant contributions that African-Americans make to our culture.

Reviewing these stories, and the research briefs of faculty at the end of *The Scholar*, enabled me to grasp the dynamics of the integration of learning and student engagement that is occurring in my new home. I know that you will enjoy sharing our contributions to academe and perhaps realizing that these efforts are illustrative of the depth and sweep of academics at WKU. Our bicentennial century promises to be creative as we learn to live in the future to help the citizenry in the present.

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