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Richard G. Bowker

Few activities are more central to the spirit of WKU than the scholarly and creative activities of our faculty and students, past and present. The rich diversity of their professional contributions reflects the spectrum of talent and expertise found in our educational community. In the following pages, you will find eight articles and four research briefs. Passion for the discipline, engagement in the enterprise of discovery, and a sense of contribution to society are expressed differently in the diverse disciplines, but nonetheless these important attributes characterize each of the WKU scholars in this magazine.

With his issue of the *Scholar* you will note a subtle change in name, but not in purpose. The new title *WKU Scholar* reflects our increasing contributions to the national and international communities of scholars as outlined in "Challenging the Spirit," the strategic plan of the University. Still, the goal of highlighting a few of the many remarkable scholarly and creative contributions of our academic community remains the same.

Choosing outstanding examples from many choices can be difficult. In his 1870 Report to the Buffalo Female Academy, Mark Twain describes the difficult task of choosing two student essays to honor. With humor (and uncharacteristic tact), he gives the students some advice on their work and offers his hope for a time when "...the question with committees will not be which composition to select for first prize, but which one they dare reject."

That is essentially the problem our Faculty Scholarship Council faces as it considers potential articles for the *WKU Scholar*. From perhaps twenty suggestions and nominations, members vote in several rounds to reduce the list to eight stories. It is enriching and interesting to participate in this process, but difficult to settle on so few choices.

Of his favorite student essay, Mark Twain offered: "It is a composition which possesses, also, the very rare merit of *stopping when it is finished*." Good advice, and I will take it. Read on and enjoy the articles.

Richard G. Bow

Interim Dean Graduate Studies and Research

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About the Cover

Ernest Hemingway, Plato, Miguel de Cervantes and Shakespeare are among the classical authors whose works remain relevant for today's students and culture, according to Dr. Nikolai Endres, WKU English faculty member.

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BY BOB SKIPPER



Dr. Jannice Owens Aaron

DR. JANNICE OWENS AARON SAYS SHE WAS "IN THE RIGHT PLACE AT THE RIGHT TIME" TO BECOME A PIONEER IN THE DIGITAL TRANSMISSION AND READING OF **DIAGNOSTIC IMAGES.**

DR. AARON, A 1974 GRADUATE OF WESTERN KENTUCKY UNIVERSITY, WAS THE MEDICAL DIRECTOR OF THE ST. ANTHONY MEDICAL CENTER IMAGING CENTER IN LOUISVILLE, KENTUCKY, WHEN IT WAS PURCHASED BY VENCOR HOSPITALS IN **1995. SHE CONVINCED THE NEW OWNERS** TO BEGIN A TELERADIOLOGY PROGRAM TO LINK THE FIFTY-FOUR VENCOR HOSPITALS IN FORTY-TWO STATES — THE LARGEST SUCH PROGRAM ATTEMPTED AT THAT TIME. "No one had done this in quite this magnitude or quite the way we were doing it," she said. "The technology was brand new. There was a steep learning curve. Some people didn't believe you could read something on a screen as well as, or better than, having the X-ray in hand."

Teleradiology is transmitting diagnostic images from one location to another over fiber optic cables or internet connection for reading and interpretation by a physician. Many smaller facilities cannot afford to keep a radiologist on staff twenty-four hours a day, or they might not have enough volume to justify having a radiologist on staff. They can transmit the images to a central reading facility and the results can be sent back to the physician, rendering "very good, very quick care," Aaron said.

Vencor, which is now Kindred Hospitals, was establishing long-term, critical care facilities. They needed someone to read radiological films to monitor patient progress. There is often not enough work to keep a fulltime person on staff to read the films, Dr. Aaron explained.

Because the technology was so new, there was a lot of trial and error. They experimented with different brands of transmission systems, and Dr. Aaron was able to work directly with software developers to help them understand needs and workflow.

"No one had done this in quite the magnitude or quite the way we were doing it," she said. "We had a lot of technical problems to work out. We worked closely with the company that produced the monitors and transmitted the images and eventually got most of the bugs worked out. The main thing is to maintain high standards and to have really high quality. I particularly like to be creative and to come up with creative solutions."

Once the system was in place, Dr. Aaron had to be licensed in every state and get medical privileges for each hospital involved in the program — fifty-four hospitals in forty-two states. "States vary significantly in their requirements for licensure," she explained, adding she had to travel to each state and meet face-to-face with members of licensure boards. "It was very interesting to see the differences from state to state."

"It's wonderful to be able to see what's happening inside the body. It's like magic,"

To counter some of the resistance to teleradiology, Dr. Aaron became the first person to publish a paper on a double-blind study that showed that physicians actually picked up more information from the monitors than from the films. "A film is fixed shades of gray," she said, adding that a monitor displays varying shades of gray and the contrast can be adjusted so that more information can be seen.

Now, Dr. Aaron estimates that teleradiology is used by ninety percent of hospitals. "Emergency physicians have become used to this and it is difficult for them to do without it," she said. The technology even allows her and other radiologists to read diagnostic images at home, which became a problem. It was getting to the point that Dr. Aaron and her partner were reading films at home at night, and then coming to work during the day. The solution was partnering with a group of physicians from India who went through the same training at Yale University. Since it is day in India when it is night in the United States, the images can be transmitted to India for reading when needed, she explained.

While the scale of Dr. Aaron's work in teleradiation was groundbreaking, it was not the first time she was considered a pioneer in the medical field. Even her beginning the pre-med program. But when Dr. Aaron graduated from high school, she didn't know what she wanted to study. She had another sister who was a nurse, so she became a nurse. Aaron decided she liked medicine, but didn't like nursing, so she came to WKU because of the reputation of its pre-med program, and because her husband (at that time) was in graduate school there. Her son Trent would often stay in the residence hall where her husband was a director.

in the pre-medicine program at WKU

Campbellsville, so she was familiar

with WKU. "I thought Western was

school." She often visited campus

the only university when I was in high

for sporting events, concerts, speech

contests, and her sister went through

nurse and a mother.

Dr. Aaron grew up in

was unusual in that she was already a

"People were incredibly supportive. I made every effort to do a little more than was expected because I never knew when I was going to have to be away because of a sick child," Dr. Aaron related. Trent was always with her and she chose where to live based on living next to someone she could trust to help with child care. "I always made it known that he was a priority and that worked for us."

After graduating from WKU, Dr. Aaron entered medical school at the University of Louisville. "It was a breeze compared to what I had been doing at Western," she said, adding she had been working while at WKU, but not while in medical school. Being a woman in medical school posed its own challenges, and sexist jokes and derogatory comments in class were not unusual. However, her class was

"People were incredibly supportive. I made every effort to do a little more than was expected because I never knew when I was going to have to be away because of a sick child."

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the first large class of women, twelve of them. They began standing up to even the professors who tried to make it difficult on the women, she said. "The women in my class just wouldn't take that. Times have certainly changed."

Once in medical school, Dr. Aaron said she had a hard time deciding her specialty. "I enjoyed every rotation," she asserted. She liked pediatrics, but became too emotionally involved in physicians by leasing and staffing facilities. "It really works well."

Dr. Aaron described radiology as a visual field that requires tremendous self discipline to look at every image intently. "It requires a phenomenal background in anatomy to be able to detect what is normal and what is abnormal," she explained. For people who are artistic and visual, reading is easier than for those who are not innately visual. "I was not one of

"No one had done this in quite this magnitude or quite the way we were doing it."

the children. She decided cardiology was a lifestyle that was incompatible with being a single parent. She then decided that radiology would offer more regular hours that would go better with parenting. "It was a great decision!"

She completed residencies at the University of Louisville and Yale University and a fellowship at Harvard Medical School. She was a staff physician at several hospitals before becoming the chair and medical director of St. Anthony Medical Center in Louisville. She also began teaching at the University of Louisville where she became chair of Diagnostic Radiology — one of three women to hold such a position at the time in the United States. In 1999, Dr. Aaron was recognized for her accomplishments and inducted into the WKU Hall of Distinguished Alumni.

As her career progressed, Dr. Aaron wanted to go into something a little less demanding and began working with outpatient centers. She now works with a group of six doctors providing teleradiology for six small hospitals. "We try to have the best equipment and the best credentials," she said. They are starting to partner with other those visual people," she said, adding she developed systems such as checkoff lists for different kinds of images so that she wouldn't miss anything.

Many of the advances in digital imaging started in the medical fields, especially in radiology, which she says is the fastest growing specialty in health care. When she started medical school, CAT Scans were just starting to be used. As a resident, MRIs were starting. She was one of the first physicians in the world to publish articles about and interpret MRIs. At that time, X-rays involved a laborious process of shooting, developing, reading, and storing. Success depended on good positioning and technique. Now, positioning and technique are still important, but the images are digital files and can be immediately accessed on a computer, she said.

"It's wonderful to be able to see what's happening inside the body. It's like magic," Dr. Aaron said. In the early days, "so much of medicine was good guessing."

One concern she has about radiology is a lack of direct patient contact. "You can't lose that personal touch," she said. Even though the patient can be on the other side of the country, or the world, she still remembers that she is dealing with people. "When we see something, we will still call the physician and discuss what we found. That's a key to good health care. That's become a very rewarding part of teleradiology," she said. This interaction with the physician helps fill the gaps created by not interacting with the patient. And sometimes doctors will send the patients to her so she can explain what she's found in the images.

"There's no substitute for persistence and hard work.



Benefits of Integrated Classrooms

BY CAROL CUMMINGS

SYLVIA DIETRICH, ASSISTANT PROFESSOR OF INTERDISCIPLINARY EARLY CHILDHOOD EDUCATION AT WESTERN KENTUCKY UNIVERSITY, BEGAN HER CAREER AS AN ELEMENTARY AND MIDDLE SCHOOL SPECIAL EDUCATION TEACHER. DURING THOSE YEARS, SHE HAD SEVERAL TYPICALLY DEVELOPING CHILDREN COME INTO HER CLASSROOM TO SERVE AS PEER TUTORS TO THE CHILDREN WITH DISABILITIES. SHE BEGAN TO COMBINE HER SPECIAL EDUCATION CLASSES WITH OTHER CLASSES OF CHILDREN THE SAME AGE AND BECAME INTERESTED IN THE ALLIANCES THAT BEGAN TO FORM BETWEEN TYPICALLY DEVELOPING YOUNG PEOPLE AND YOUNG PEOPLE WITH DISABILITIES.

"I started to wonder if those connections developed in the early years, and, if so, were they typical of other friendships of kids that age, or did they look more like tutor/tutee or helper relationships," she explained. These observations led her to consider a related topic in her doctoral studies: social experiences of children with and without disabilities in an inclusive preschool setting. This is still one of her primary research interests today. In her studies, Dr. Dietrich observed children playing together in a preschool setting. Their play habits were like those of all children; they played soccer, worked puzzles, wrestled, or engaged in "make believe" activities, such as pretending to be Superman, a pirate, or even a mommy.

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"I discovered that, in these inclusive classrooms, kids engaged in friendships that were reflective of characteristics of other relationships during that age span," she said. "These relationships do exist and they look like relationships between typically developing children. They develop in the same way and go through the same stages of friendships. Some continue and some dissolve, just like all relationships." Dr. Dietrich said children with and without disabilities benefit from the number of professionals who deliver services in an integrated classroom, as well as highly trained teachers who are grounded in child development and instructional strategies and practices for kids with and without disabilities.



But how did she know for sure they were actual reciprocal friendships? "Throughout my observations, children both with and without disabilities initiate contact, play, and inquire about friends if they are absent," Dr. Dietrich said. "In interviews, children identified their peer as their friend and discussed qualities that made that person a friend. Parents also reported that their child talked about the peer at home, and the children spent time at one another's homes in social situations."

Dr. Dietrich said preschool children — with and without disabilities — reap abundant benefits from an integrated classroom. "Integrated classrooms are reflective of society, neighborhoods, and communities where individuals both with and without disabilities live, work, and play," she said. "Children with disabilities have opportunities to interact with typically developing peers and practice social skills, enhanced language skills, and exposure to varied learning experiences. By the same token, kids without disabilities have the opportunity to develop understanding and compassion and learn about individuals with differences."

Finally, Dr. Dietrich said children with and without disabilities benefit from the number of professionals who deliver services in an integrated classroom, as well as highly trained teachers who are grounded in child development and instructional strategies and practices for kids with and without disabilities. Besides her preschool classroom research, Dr. Dietrich is also involved with the Center to Inform Personnel Preparation Policy and Practice in Early Intervention and Pre School Education. The purpose of this Center is to collect, synthesize, and analyze information related to:

- certification and licensure requirements for personnel working with infants, toddlers, and preschoolers who have special needs and their families;
- the quality of training programs that prepare these professionals; and
- the supply and demand of professionals representing all disciplines who provide both ECSE and EI services.

"Information gathered will be used to identify critical gaps in current knowledge and to design and conduct a program of research at the national, state, institutional, and direct provider level to address these gaps," Dr. Dietrich explained. "This program of research and policy formulation will yield information vital to developing policies and practices at all levels of government, including institutions of higher learning. By researching issues related to teacher preparation, we design teacher preparation programs that prepare highly qualified individuals who, in turn, provide services to our very young children."

Dr. Dietrich's third research interest relates to what's going on in the field — current practices in early childhood classrooms. "Currently, technology has been effectively integrated into the preschool classroom with computers, learning centers, presentation of stories, and one-on-one computer instruction," she said. "The trend is to take that technology to the next level, making curriculum available to diverse learners. The classrooms are employing 'active boards' and software programs to facilitate transitions from one activity to the next."

Dr. Dietrich is interested in the long-term implications of current classrooms — beyond the immediate community of WKU to the field at large. "I bring information on best teaching practices back to the classroom to my students," she explained. "We serve our various constituents, such as Head Start, the Big Red School, and area preschools, and it serves and informs the field at large. When I look at our students, I see them striving to make a difference."

Dr. Dietrich received both her B.S. in Special and Elementary Education and her M.A. in Special Education from Eastern Kentucky University. She received her Ph.D. in Special Education and Inclusive Early Childhood Education from the University of Tennessee.

How her work affects the average citizen is the guiding question that drives all of her research interests. "I want to make sure that what I do reaches beyond just me and makes kids' futures better and brighter."

Learning a Second Language

BY TOMMY NEWTON

AS DIRECTOR OF WESTERN KENTUCKY UNIVERSITY'S TEACHING ENGLISH AS SECOND LANGUAGE PROGRAM, ALEX POOLE KNOWS THE VALUE OF — AND THE DIFFICULTY IN — LEARNING A NON-NATIVE LANGUAGE.

In fact, his goal as an applied linguist "is to find solutions to problems people have with learning a second language."



Alex Poole

Dr. Poole received a first-hand lesson after meeting his future wife, Doris, a native of Colombia, during graduate school at the University of Northern Iowa. By marrying into a family that speaks Spanish not English, "the language was chosen for me," he said.

"A lot of my research is not only informed by what I saw as a need for others when they were learning a new language but also by the questions I had," Dr. Poole said. "In some ways, I've probably been the biggest beneficiary of my own research.

"My research has helped me pursue professional goals but also has enriched my personal life by being able to communicate with my wife's family and understand their culture." Improving communication and developing a better understanding of cultures is what drives Poole's research and scholarly activities. His research falls into the following areas:

- Finding the optimal way of teaching grammar to second language students, especially English as Second Language (ESL) students.
- Making people more efficient readers with reading strategies to improve comprehension and understanding of texts.
- Enhancing bilingual education in the United States as the number of immigrants increases.



Dr. Poole is conducting his research all over the world in places like China, Korea, and Colombia with participants ranging in age from high school students to adults in their fifties. "For me, the thing that has enabled me to do research internationally is the fact that I am bilin-

gual," he said.

During a trip to Colombia last year to work with students who want to be English language teachers, Dr. Poole delivered his lectures in Spanish. "I know what is going on in other locations and can empathize with students who are trying to learn English," he explained.

"Doing this research has helped me bring my knowledge and experiences to teach ESL

students here and to help them be better readers, but doing research at the international level helps me understand the political, economic, and social circumstances," he said.

"Doing this research has helped me bring my knowledge and experiences to teach ESL students here and to help them be better readers, but doing research at the international level helps me understand the political, economic, and social circumstances." Dr. Poole also tries to pass along that experience to his students in writing or grammar courses who want to study abroad or work overseas. Unless students know and use a second language, they truly aren't going to understand other people or their culture by relying on translators or interpreters, he said.

Dr. Poole, who is teaching his one-year-old daughter to be bilingual, is concerned that U.S. schools don't begin foreign language instruction until middle school or high school when students become more self-conscious about how they sound speaking a new language.

"Sometimes that's where my research really concerns me," Dr. Poole said. "When I go abroad, I see students studying English and doing well, but I come home and there's very little language education going on here because it's not given much funding or much attention. How are we going to become a competitive society?"



"The majority of Americans haven't learned another language or studied one extensively so they'd understand how difficult it is... Immigrants know they must learn English but learning a language is a hard process, especially if you're an adult."

In his research and in his own life, Dr. Poole knows that learning a second language becomes more difficult as people get older and that children of immigrants have always learned English more quickly than their parents or grandparents.

Dr. Poole is troubled by the push for English-only laws in the United States. "The majority of Americans haven't learned another language or studied one extensively so they'd understand how difficult it is," he said. "Immigrants know they must learn English but learning a language is a hard process, especially if you're an adult."

In the early twentieth century, few immigrants even graduated from high school and didn't need extensive English language skills to work in most unskilled labor jobs, he said. "The first generation of immigrants always struggles," said Poole.

Again, Dr. Poole has first-hand knowledge about that aspect of language. Dr. Poole grew up in Sioux City, Iowa, but his grandmother, whose family had lived in the Ukraine, spoke Yiddish. He was fascinated by the stories told by his father and his grandmother and developed an interest in knowing people from other cultures.

He had friends from Pakistan, Syria, Turkey, Mexico, and Greece, and would seek out foreign exchange students in school. "When I was growing up, I remember hearing accents and other languages. I would ask my friends to say things to me in their language. All the different sounds were amazing. I really thought people who knew another language were geniuses and it was so cool," Dr. Poole said.

In high school, Dr. Poole participated in trips to Great Britain and Germany but he didn't really experience a second language until he took a Russian class at Augsburg College in Minneapolis and went on a monthlong study abroad trip to Russia. "Even though I didn't achieve proficiency in Russian, I got to use it, which was almost a mystical feeling for me," Poole said.

After graduating from college, Dr. Poole taught English to middle school students in Israel for a few months. "I got to realize how people in difficult conditions with far fewer opportunities than the average American has were really doing pretty well." That solidified Dr. Poole's idea that learning a second language required hard work and new strategies for teaching. He returned to the United States and began pursuing a master's in teaching English as second language at the University of Northern Iowa and later earned his doctorate in linguistics at Oklahoma State University.

In working with graduate students wanting to become ESL teachers, with principals and teachers wanting advice on teaching English to immigrants, or with students wanting to learn a second language, Dr. Poole offers one common piece of advice: "Read, read, read."



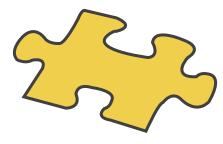
By learning to read

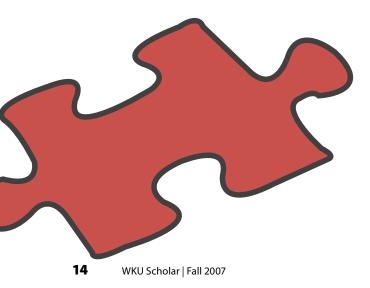
texts written in English or a non-native language, students will hear the words, learn their spelling, learn grammar, and learn pronunciation. "Find materials which are interesting and have content that the language learners already know," Poole suggested. "They will be interested and motivated to read books, magazines, and newspapers and will be acquiring English skills. The more children read the more quickly their English proficiency improves."

But schools also must help the young child's parents and older family members learn English, Dr. Poole explained. "It is extremely important for the child's educational success that the parents can speak a fair amount of English. If the parents learn to speak English, they can do the things that enrich a child's success in school, such as helping with homework or communicating with teachers and school administrators."

CONNECTING THROUGH THE AGES

BY CAROL CUMMINGS







WHEN STUDENTS TAKE DR. DANA BURR BRADLEY'S INTRODUCTION TO GERONTOLOGY CLASS AT WESTERN KENTUCKY UNIVERSITY, THEY ARE EACH REQUIRED TO INTERVIEW AN OLDER ADULT AND PRESENT THEIR FINDINGS TO THE CLASS. FOR MANY OF THESE STUDENTS, THIS IS A SIGNIFICANT EXPERIENCE THAT HELPS THEM LINK THE THEORETICAL WITH THE PRACTICAL, AS THEY TAKE THE CONCEPT OF AGEISM AND EXPLORE THAT WITH AN OLDER ADULT.

Dr. Bradley shared the story of a football player who interviewed his grandmother, painting a vivid picture with the stories he told about her and the things he brought to share. His presentation included a poster with pictures, pieces of her jewelry, and a scarf, and Dr. Bradley described it as "vital and alive," as it poignantly displayed both the connection the student had to his grandmother and the connection she had to her community.

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Dr. Dana Burr Bradley

"Eighty-five percent of my students interview a grandparent," she explained. "This helps students develop a personal appreciation of their family history and helps them understand that the consequences of what they do as college students will affect them for the rest of their lives."

And that is what Bradley's work is all about. As J. Clifford Todd Professor of Longevity and Healthful Living and

Director of the Center for Gerontology, Dr. Bradley serves as a self-proclaimed "incubator and spark plug for WKU as it develops programs for an aging society and spearheads ideas for healthy aging and wellness." Dr. Bradley's goals are to create interest in aging on campus and build on important initiatives that are already in place.

"The potential for an engaged older life depends on what you do when you're younger," she explained. "This work even affects undergraduates, as I encourage them to make lifestyle changes, get plenty of exercise, quit smoking, and drink more water. All of these things add up to the potential for good health, as does the way you handle stress in your daily life and find balance in all things you do." According to Dr. Bradley, WKU's Center for Gerontology emphasizes the concepts of healthy communities, healthy lifestyles, and healthy aging as outlined within three strategic goals. These goals are to prepare new generations of aging advocates to work with individuals, older adults, their families, and their communities; to contribute to new knowledge on aging populations, cohorts, and communities in Kentucky and the southeast through the conduct of applied aging research; and to enhance the lives of older adults and their communities through the dissemination of community-based research, best practices, and sponsorship of programmatic activities.

Dr. Bradley says her work invites people to imagine what aging might be like, versus thinking about aging as a period of decline. "Often when we talk about aging, members of our society picture people with many chronic illnesses who are living their last years by themselves or in a nursing home," she explained. "Not that this image is inaccurate, but for the majority of Americans, aging doesn't have to be equated with gradual decline. The reality is that aging is a lifelong process and there are many things we can do individually to ensure that our lives are healthy, active, and productive."



WKU's interdisciplinary Gerontology minor is a program that effectively brings various disciplines together. "No one discipline owns true understanding of aging," she explained. "We better understand when we look through different lenses, and every college has people with expertise. My challenge is to get to know them better and draw on the expertise that is already in place."

Dr. Bradley, who serves as an associate professor of Public Health, has always had a keen interest in healthy aging. "My parents were forty-two when they had me, so I was the child of older parents," she explained. "My entire young life was spent with people who were considerably older than I was. To me, aging is a normal experience. Very few people have an accurate concept of aging as a fluid, permeable part of every day life. "

Having lost her mother when she was six years old, Bradley was raised by her father, who was an estate planning attorney. She also spent time with her two grandmothers, both of whom lived well into their eighties. Because her father's primary source of income was from preparing wills and handling legal affairs of estates, Dr. Bradley developed an early understanding of the continuity of life and death.

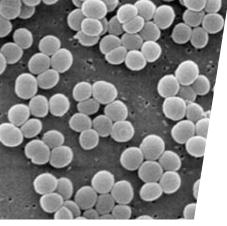
One of her research interests relates to voluntarism in older adults. "As you look at the pool of volunteers, they are aging," she explained. "That is the dominant demographic in our country, and non-profit agencies have to learn how to recruit retirees and meet their needs."

Therefore, Dr. Bradley has worked to help community agencies develop programs to build relationships with and connect with the growing retiree pool. "It is bad practice to treat all volunteers the same," she continued. "We must create educational experiences for them. Retirees enjoy acquiring new knowledge and sparking their creativity, and community organizations need to find ways to stimulate that." Dr. Bradley also serves as co-editor for the new Journal of Aging, Humanities, and the Arts, which celebrated its inaugural issue in June 2007. The official publication of the Humanities and Arts committee of the Gerontological Society of America, the goal of the journal is to foster a dialogue between the humanities and arts and the biomedical, psychological, behavioral, and social sciences to challenge stereotypes, further understanding of the aging process, and provide creative approaches to the exploration of issues pertaining to aging.

"We are very excited about this new journal," Dr. Bradley said. "It will be cutting edge and WKU honors students are currently developing a website for the journal to make it interactive, with e-news, blogs, updates, and downloads."

Dr. Bradley received her B.A. in History and Biology from the University of Rochester. She received both her M.S. and Ph.D. in Applied History and Social Science from Carnegie-Mellon University and completed the Management Development Program at Harvard University.

Dr. Bradley calls her position the best job she's ever had. "Life gives you opportunities, and it's all a matter of recognizing them and taking advantage of them," she said. "One of the most exciting things about my position is having the opportunity to listen carefully to what people say they need and then to create opportunities. I enjoy working with others who care about the aging experience. Growing old is truly the most universal, yet most diverse, of experiences."



Staphylococcus aureus



Dorris Hutchison (1940)

Searching for **Pearls**

Ilustrations by Corey Lamp

Dorris J. Hutchison's curiosity about the world around her began at an early age. "As a child, I realized there is beauty and wonder in this world when I found a pearl in a mussel on the bank of the Ohio River." That was in 1930. That curiosity blossomed into a distinguished career as a microbiologist, educator, and cancer researcher.

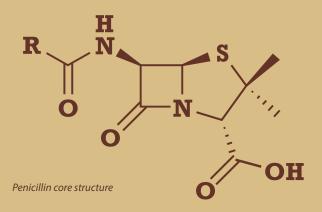
Dr. Hutchison, a 1940 Western Kentucky State Teachers College honors graduate, enjoyed the outdoors as she grew up in Carrsville, Kentucky, on the Ohio River. She recounts stories of her brother landing a 100-pound catfish, of watching a snake eat a frog, of loving to grow flowers, and of working in her garden.

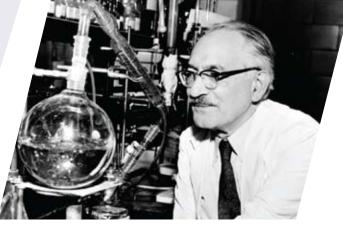
Then, after graduating from a four-room school with six seniors, she arrived at Western in a neighbor's 18-wheeler and was left there by herself. "I didn't cry," she said. "I was brave." Dr. Hutchison said she felt lost during her first year at WKU. "I just could not find what I wanted to do," she said. Her second year, though, she took zoology and botany, which included bacteriology. "That was absolutely fascinating," she said. "I had never seen a microscope before. I was thrilled."

She thought she might become a medical doctor and began a pre-med curriculum. She then became an

assistant for Dr. L.Y. Lancaster, the father of WKU's premed program. She said her four years at WKU "laid the groundwork" for her later success. Although she was accepted into medical school at Vanderbilt University, she began to rethink her path. "Women were not well received in medical school," she said. Instead, she took a teaching fellowship at the University of Kentucky, where she earned a master's degree in 1943.

It was at this time that papers began appearing on the antibiotic penicillin, a microorganism that could kill





Dr. Selman A. Waksman





Dr. Dorris Hutchison WKU Hall of Distinguished Alumni inductee, 2003

" I was looking for how we can use what we have in a more effective way, I was still looking for pearls. "

other microorganisms. This influenced her thesis, which dealt with the search for other antagonistic organisms in well water in Fayette County, Kentucky, and led to her first publication.

Dr. Hutchison began teaching microbiology at Russell Sage College in New York. While at Sage, she met Dr. Selman A. Waksman, a pioneer in the discovery of new antibiotics, during a talk at the New York State Health Department. "I wanted to go to work for him because he was on the forefront of antibiotic research," Dr. Hutchison said. Dr. Waksman helped her land a new position teaching at Vassar College.

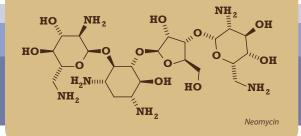
While at Vassar, Dr. Hutchison kept in contact with Dr. Waksman. As men returned from military service at the end of World War II, opportunities for women to advance became fewer, she said, so she joined Dr. Waksman by taking a research fellowship at Rutgers University. It was there that she earned her doctorate in 1949.

Dr. Waksman, his students, and associates isolated a number of new antibiotics, such as actinomycin, streptomycin, and neomycin. Streptomycin and neomycin proved useful in the treatment of many infectious diseases, including tuberculosis. The patent on streptomycin has been listed as one of the ten patents that shaped the world. Dr. Hutchison was the only female among a group of thirteen students engaged in the research.

Some strains of tuberculosis, however, proved resistant to streptomycin, and Dr. Hutchison began looking for other antibiotics to treat those strains. She said her work led to the isolation of "the best rat poison in the world" because the antibiotics were lethal. "The key was to find a dose high enough to cure the disease without killing the patient," she explained. She said she spent hours testing antibiotics against streptomycin-resistant tuberculosis and had to be under constant medical monitoring because of the exposure. And because the work required the use of a Bunsen burner, she often stripped down while working in the lab "and the guys in the lab would try to peek through the blinds," she said, laughing.

Dr. Hutchison's claim to fame at Rutgers came in 1949 with the development of neomycin, which is still used as a primary antibiotic. Dr. Waksman received the Nobel

Acute Leukemia



" The timing was worked out in my lab. You basically kill the subject and rescue it. "

Prize in Physiology or Medicine in 1952 for his work in antibiotics and Dr. Hutchison said she "got the glory for the tuberculosis work."

In 1951, Dr. Hutchison joined Sloan-Kettering Institute for Cancer Research, where she continued until her retirement in 1991. Her research centered on agents effective against leukemia, especially strains that had become resistant to other drugs. "I was looking for how we can use what we have in a more effective way," she said. "I was still looking for pearls."

She said her personal major contribution was the development of a cancer treatment using methotrexate with Citrovorum Factor (CF) rescue. A patient is given a sufficiently high dose that is lethal, which is countered with a vitamin at the appropriate time. "The timing was worked out in my lab," Dr. Hutchison said. "You basically kill the subject and rescue it."

She said this is one of the accomplishments of which she is most proud. During her research career, she wrote more than 130 publications dealing with chemotherapy, treatment of tuberculosis and leukemia, and other cancerrelated topics. She is included in Who's Who in the World, American Men and Women of Science, Who's Who in America, and Who's Who of American Women.

Other honors include the Dr. Dorris J. Hutchison Graduate Fellowship at the Cornell University Graduate School of Medical Science; WKU Hall of Distinguished Alumni; Bronze Medal Award from the American Cancer Society, Westchester Division; and Philippe Foundation Fellowship. Her hometown of Carrsville named its community center for her and Cornell named a student lounge for her.

In addition to her research, Dr. Hutchison was an active volunteer. She served on numerous boards and committees, including as president of the New York Society of Kentucky Women. She also established the Dorris J. Hutchison Scholarship at WKU for women interested in the sciences. And while she said her academic career, including positions at Cornell and Wellesley College, was not world shattering, it was "very satisfying."

CH BY CAROL CUMMINGS



OF SPECIAL INSTRUCTIONAL PROGRAMS, **BECAME INVOLVED IN EDUCATION AND** LITERACY BY FOLLOWING AN INDIRECT PATH. SHE FIRST TRAINED AS A SOCIAL

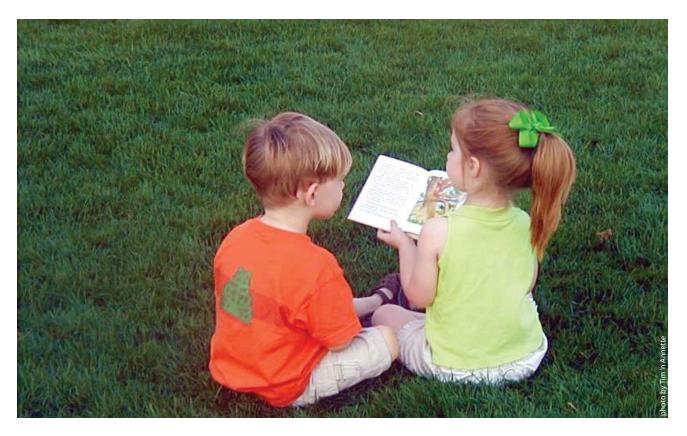
Sherry Powers

WORKER AND CHILD WELFARE SPECIALIST, AND WORKED SEVERAL YEARS IN THAT CAPACITY BEFORE SHE BEGAN TO CONSIDER OTHER WAYS SHE MIGHT MAKE A DIFFERENCE.

"As a social worker, I became interested in how the whole cycle of low literacy affected families and children," Dr. Powers explained. "So I went back to school, earned my teacher certification, and spent several years teaching."

Along the way, Dr. Powers knew she wanted to become a reading specialist in an elementary school, so she obtained her master's in that area, taught classes, and consulted on reading issues. As a result, she considered yet another career path, as she obtained her doctorate in Instructional and Administrative Reading Specialization. This led her to WKU in 1999, where she served as a Visiting Assistant Professor, an Assistant Professor of Literacy, Associate Professor, and beginning in 2003 as Department Head.

"It was hard to leave the elementary classroom, but I enjoy working with teachers and helping them make a difference," she said.



In her doctoral studies, Dr. Powers looked at research related to reading achievement for struggling readers, particularly as it related to culturally responsive instruction and learners from diverse background. In 1999 she got involved in the Kentucky Early Reading Incentive Grants (ERIG) research project, a six-year study that program is designed to improve the reading achievement of Kentucky's primary students. In 2005, SB 19 charged the Collaborative Center for Literacy Development (CCLD), the leadership team of which Dr. Powers is a part, to create a comprehensive research agenda to consider the impact of various

"It was hard to leave the elementary classroom, but I enjoy working with teachers and helping them make a difference."

looked at reading achievement of struggling readers in the classrooms and at teachers who had received training for implementing specific reading programs. When the ERIG cycle was completed, Kentucky changed its literacy program to Read to Achieve, and Powers was once more a leader and principal investigator in that initiative.

Established by Senate Bill (SB) 19, Kentucky's Read to Achieve (RTA) reading and intervention programs on student achievement in reading. During the 2005-2006 school year, CCLD conducted a statewide study of approximately 213 schools that received grant funds as part of Read to Achieve.

"Culturally responsive instruction is designed to meet the needs of individual learners, and especially learners from diverse backgrounds," Dr. Powers explained. "We are

learning more about how kids learn, and developing instructional practices and curricula that are designed to capitalize on how a variety of students go about learning. Teacher preparation in the area of culturally responsive instruction coupled with effective literacy instruction assists teachers in further developing and understanding effective literacy pedagogy and practice. Good reading instruction should never be about programs. Programs are only resources, and the teachers must be able to effectively use them. The most current focus of the RTA research (2007-2008) is designed to help us identify these promising literacy practices for struggling readers that increase student achievement and learning."

Data sources included the Group Reading and Diagnostic Evaluation (GRADE) reading achievement test, which is administered twice a year to all primary students, and an online teacher survey. In addition, twenty case study schools were selected for

a more detailed evaluation, which included classroom evaluations, interviews, and a library survey. A total of 9,003 students received Read to Achieve instruction, 6,681 of whom received it as an intervention service.

"Students who received Read to Achieve (RTA) services made strong gains from fall to spring on the GRADE assessment," Dr. Powers said. "Gains decreased for each grade level, meaning that younger students made greater gains than older students. In addition, fifty-five percent of students who received RTA services scored at or above average on the spring GRADE test, which means they were no longer considered struggling readers by the state after having received RTA services." Dr. Powers cautioned that the reading achievement gap remains and in some instances continues to widen. One contributing factor is that students at all grade levels are making gains, however struggling readers from diverse backgrounds are not making uniform gains with mainstream student populations.

"With RTA, as with most educational programs, the most important component is teachers," Dr. Powers said. "Their knowledge base and their understanding of promising practices in literacy instruction have a great impact on student learning."

Dr. Powers added that it is important to continue to emphasize teacher professional development to ensure

that intervention teachers are highly trained to meet the instructional needs of a diverse group of children who struggle. She also said that such training builds in components for holding teachers accountable, as they evaluate the effectiveness of what they teach.

Participating in this statewide initiative has been a positive experience for WKU and for Dr. Powers. "It gives us a presence at a statewide level, alongside Research I institutions," she acknowledged. "It also helps me know how to speak on behalf of children and schools at a political level and make recommendations on financial support that is provided for teachers and students. The governor and the legislature take our research into consideration when they look at how to design funding."

Dr. Powers received her B.A. from Asbury College. She obtained Montessori Teacher Certification from St. Nicholas Training Centre in London, England, and her K-4 and 5-6 certification in Elementary Education from Eastern Kentucky University. She earned both her M.A. in Elementary Education and Reading Specialization and her Ed.D. in Instruction and Administration Reading Specialization from the University of Kentucky.

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SPECIAL INSTRUCTIONA

PROGRAMS

For Dr. Powers, the greatest benefit is in the wisdom she can impart to her students. "Everything I learn I go back and teach my students, giving them a better sense of what's going on in schools and which instructional practices demonstrate the greatest benefit to children," she explained. "They become better teaching professionals and are better able to prepare students."

CLASSICAL INFLUENCES

BY TOMMY NEWTON

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Dr. Nikolai Endres

FROM PLATO, HOMER, AND SHAKESPEARE TO OSCAR WILDE AND GORE VIDAL, NIKOLAI ENDRES IS SURROUNDED BY THE CLASSICS.

The shelves of his Cherry Hall office at Western Kentucky University are filled with classical literature. But they aren't sitting there gathering dust. Dr. Endres uses the classics not only for his research but to show today's

students how classical literature influences modern writing and culture.

"I believe that texts that are 2,000 years old can still teach us something," said Dr. Endres, an associate professor of world literature in WKU's English Department. "Sometimes people question that, but I tell them that the Bible is more than 2,000 years old and it is used to teach us something."

Dr. Endres' research reflects a fundamental belief in the importance of ancient literature to our time. He is able to use his knowledge of languages (Ancient Greek, Latin, German, French, and Italian) and his classical background to interpret modern works.

In 1993, Dr. Endres received his "Zwischenprüfung" (or equivalent to an American bachelor's degree) in English, French, and Classics from Albert-Ludwigs-Universität in Freiburg, Germany. He earned his master's (1996) and doctorate (2000) at the University of North Carolina at Chapel Hill.

His master's thesis was entitled "Eros in the Closet: Platonic and Greek Love in Oscar Wilde's The Picture of Dorlan Gray." His dissertation was entitled "Failures of Love: Plato and Platonism in E.M. Forster, Thomas Mann, and André Gide."

"A professor at UNC got me interested in classical literature and its reception in modern times," he said. "As a researcher, you have to carve out a niche."

In his dissertation, Endres explores the appropriations of Plato's discourses on love, investigates the politics of sex and gender in antiquity and modernity, and looks at how Platonic love figures as a homoerotic signifier.

Since same-sex love was unspeakable, what Oscar Wilde termed "the love that dare not speak its name,"



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same-sex desire had to be conveyed in a code. Endres says the two most important literary models were Plato's erotic dialogues and the Biblical story of Sodom and Gomorrah.

In the future he plans to write on Platonic love in Mary Renault's The Charloteer, Patricia Nell Warren's The Front Runner, and Yukio Mishima's Forbidden Colors.

Dr. Endres also is interested in the Roman novel Satyricon by Petronius and how it has been used in modern literature — for example, The Waste Land by T.S. Eliot and The Great Gatsby by F. Scott Fitzgerald.

An essay Dr. Endres wrote about one of Gore Vidal's novels, *The City and the Pillar*, led to a friendship and research opportunities with the noted American author. Dr. Endres has visited Vidal's Los Angeles home and has been given permission to study the author's personal papers at Harvard.

"That's a great experience for me since I'm a classicist and the whole idea of contacting a living author isn't something you can do with the classical authors," Dr. Endres said. He has in his possession a couple of letters from Vidal, which he always shows his students when he teaches Vidal.

Dr. Endres is able to share what he learns about classical authors with his students to show how the classics are still relevant. For example, he said, "Antigone's choice between a divine law and a man-made decree raises fundamental questions about obedience to authority and conflicting loyalties. Socrates teaches us to beware of the sophists, who can make the weaker argument appear stronger, just like all the double-talk of political rhetoric. Theseus, in Euripides' play Hippolytos, wonders how we arrive at truth. Rather than consult an oracle, we, like Theseus, prefer to engage in cross-examination and debate. In the 21st century, we believe that reason (logos) can get us anywhere, but technical disasters (Chernobyl, Challenger, or the Concorde), or miscarriages of justice, or the application of the word 'unreasonable' to dismiss minorities should make us pause. Theseus finds out - too late for him - that there is a higher power that human beings should never ignore."

"Enhancing the quality of life is one of our educational requirements. I think that's what reading a book does. Technology makes classical literature widely available online. I believe in the use of technology as long as it advances learning."



Dr. Endres, who came to WKU in 2002 after two years at University of the Ozarks, teaches a mythology class and also teaches world literature, literary criticism, and gay and lesbian studies.

When he teaches masterpieces of world literature from antiquity to modernity, he must immerse himself in a new literary world nearly every week. The classes include Homer and Virgil, Boccaccio and Chaucer, Dante and Milton, Cervantes and Rabelais, Shakespeare and Goethe, Flaubert and Kafka, Mann and Sartre, Faulkner and Allende, Joyce and Woolf, Fitzgerald and Steinbeck, Kawabata and Mishima, and Morrison and Achebe.

"A course I would like to teach in the future is 'The Classical Background of American Literature and Culture," Dr. Endres said. "Our political structure comprises a Senate located on Capitol Hill. George Washington was known as Father of his Country, a literal translation of *pater patriae*, the honorific name bestowed on Cicero and other Roman heroes. Thomas Jefferson, an outstanding educator among the Founding Fathers and deeply steeped in classical literature, modeled his life and home (Monticello or "little hill") on the ideal of a Roman gentleman. The Great Seal of the United States bears three Latin quotations: *e pluribus unum* ('out of many, one''), *novus ordo seclorum* ("a new order of the ages" as celebrated in Virgil's Eclogue IV), and *annuit coeptis* ("[God] has favored our enterprise," an adaptation of the *Georgics*). Countless townships bear Greek and Roman origins, such as Cincinnati or Carthage. The myth of Manifest Destiny, of a New Eden, originates not only in Genesis, but also in the *Aeneld*, where Jupiter promises Aeneas an *imperium sine fine*, an empire without limitations."

Dr. Endres is also interested in finding ways to use his research in the classroom and in using technology to help students develop their appreciation of the classics. "Enhancing the quality of life is one of our educational requirements," Dr. Endres said. "I think that's what reading a book does. Technology makes classical literature widely available online. I believe in the use of technology as long as it advances learning."

For example, when his mythology class is studying Ovid's Metamorphoses, students can use technological tools to learn "how pervasive the influence of mythology is in our popular culture," he said. They can find that popular songs are inspired by mythology; nicknames of sports teams (Tennessee Titans) go back to mythology; and even numerous company names (like Nike or Hades, a heating company) are influenced by mythology.

"If you look at ads for perfume, you often see a woman coming up out of the water, which is inspired by the birth of Aphrodite," Endres said.

As a teacher, Dr. Endres strives to make the classics more relevant to students. In *Metamorphoses*, several characters change into animals or other objects as their true nature is revealed. "Metamorphosis results in clarification." Dr. Endres encourages his students to choose villains and transform them. "That's just one way to make a difficult book more accessible," he said.

Dr. Endres' efforts are paying off. 'The literature courses I teach are always full," he said.

In a world where high-tech and cutting-edge are the buzzwords, "I find that students are very much interested in classical literature," Endres said.

"I think there will be a new revival of reading. I can't think of anything more exciting than reading a good book," he said. "We literature teachers may not save lives, but we make them more pleasant."

SCIENTA ono



BY TOMMY NEWTON

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DR. GENE SHEARER IS CONSIDERED TO BE AN OUTSTANDING SCIENTIST, A SUPERSTAR OF IMMUNOLOGY, AND A MAN WHO HAS MODIFIED THE FACE OF AIDS RESEARCH. DR. SHEARER HAS WORKED AT THE NATIONAL CANCER INSTITUTE, PART OF THE NATIONAL INSTITUTES OF HEALTH (NIH), SINCE 1972 AND HAS BEEN A SENIOR INVESTIGATOR IN THE EXPERIMENTAL IMMUNOLOGY BRANCH. SINCE THE MID-1980s, HIS RESEARCH HAS FOCUSED ON AIDS/HIV AND HE HAS BECOME ONE OF THE MOST-CITED AIDS RESEARCHERS.

However, none of this would have happened if Dr. Shearer had not taken advantage of a second chance at college offered to him at Western Kentucky University. "I have a long history of going to school," he said. "Western is a very important part of my career."

After graduating from Wayne County High School in 1955, Shearer spent one year at Berea College then three more years at the University of Cincinnati in pursuit of an engineering degree. As his grades suffered, he dropped out of college. Subsequently, his father contacted Western Registrar Dero Downing, a family friend.



Dr. Downing reviewed Shearer's transcript and allowed him to enter Western but placed him on academic probation for a year. That second chance, and the

Dr. Gene Shearer ('61)

fact that both his parents and several other family members were Western graduates, was all it took for Shearer to excel. In two years, he received his bachelor's degree in biology and chemistry with a minor in mathematics.

"If I had not been able to come to Western, I would never have earned a bachelor's degree," Dr. Shearer said. "Lots of other schools wouldn't have taken me, but Western did."

After leaving Western, Dr. Shearer entered graduate school at the University of Tennessee and received his doctorate in 1967. He also worked at the Oak Ridge National Laboratory, and then completed postdoctoral training at Roswell Park Memorial Institute in Buffalo, New York, and the Weizmann Institute of Science in Rehovoth, Israel. In 1972, he joined the NIH.

"I like to tell people that this is the only full-time job I've ever had,"



President Ransdell presents Dr. Shearer with a plaque at his induction into the 1999 Hall of Distinguished Alumni.

Dr. Shearer said of his career at the National Cancer Institute. While his research has evolved over the years, the focus has remained on immunology — or "the science that tries to understand how we fight bacteria, how we fight viruses and how we fight cancer," Shearer explained.

In 1983 and '84, Dr. Shearer became interested in AIDS/HIV, a then-new disease that was attacking the body's defense system and making national headlines. "What we're essentially doing now and have been for twenty-five years is trying to understand what makes the system fail," he said.

This research has proven to be exciting and challenging. "When we started, we didn't know what was causing it," he said. And, in those early days, Dr. Shearer often considered dropping the project but realized it was too important to abandon. His research interests focus on cellular immunology and analyses of protective mechanisms against HIV infection and immune dysregulation seen in AIDS and autoimmune disease.

Dr. Shearer and his research team have recently developed immunologic mechanistic models which contribute to the loss of the T cells that protect against infections, including the HIV virus that causes AIDS. "We're still a long way from having all the answers," he said.

And Dr. Shearer may not be around the NIH to find all the answers. Dr. Shearer, seventy, plans to retire in January or February 2008. "Right now I'm at a high point of our work and I'd like to go out on the top of my game," he said.

Shearer has authored or coauthored more than 430 medical periodicals, research papers, or books since 1964, and has served on the editorial boards of two scientific journals. His NIH honors include an NIH Director's Award, a Technology Transfer Award, and a cash award for twenty-five years of service on various National Cancer Institute animal committees. He was appointed to the Senior Biomedical Research Service in 1998.

In retirement, Shearer hopes to spend more time with his three grandchildren but he also expects to work as a consultant and/or adviser for other researchers or possibly as a Scientist Emeritus at the NIH. "I have trained approximately fifty young people from all over the world during the years," he said of the doctoral students, postdoctoral fellows, and other research colleagues. "I get a lot of enjoyment from my scientific children and grandchildren."

Dr. Shearer also encourages students interested in scientific research to follow their dreams. He mused, "I've been very fortunate because I didn't really have those dreams, but they came true anyway."

RESEARCH BRIEFS

How Does Technology Change Who We Are?



Jim Berger, an assistant professor in Special Instructional Programs, has been awarded a Regular Faculty Scholarship to do an exploratory study to determine

Dr. Jim Berger

just how adult learners adapt to new technology. Dr. Berger posits that technology is imbedded with cultural values of the dominant culture. As newcomers to the technology attempt to learn and use these technologies, they face the choice of adapting to the scripts, modifying those scripts, or rejecting them. If users follow imbedded scripts, there is potential for users to face pressure to adapt their actions to enhance the performance of the technology. This adaptation carried out over several behaviors could modify thinking and beliefs at the individual level. If users attempt to modify the scripts, they face the dangers of the technology performing

less well than desired, or worse, being dangerous. If users reject the use of the artifact altogether, they face alienation and ostracization from society. Individuals who reject or who are unable to afford the use of such technologies as computers, the Internet, telephones, and cell phones, are often considered to be out of the "mainstream" of society. Dr. Berger believes that his project will add to understanding how groups of people from various cultures are changed by the use of technology, and he hopes to find differences in how members of different cultures view technology's use. This study is timely for adult learners who might be marginalized unless they learn how to use technology for career advancement.



Teacher Discourse during Foreign Language Instruction

WKU's strong international programs require the best in foreign language instruction to give students every advantage when they go overseas as part of their academic programs; and instructors should be familiar with best teaching practices to ensure students are well prepared when they study abroad.

Dr. Carol Wilkerson, Professor and Head of the Department of Modern Languages, is undertaking a research project through a Faculty Scholarship to explore language instruction at WKU, with likely implications for programs throughout the country. Research on her topic is limited. She plans to explore the issues related to teachers' choice of language for instruction and teacher anxiety about language proficiency, and to address ways to encourage teaching in the target language.

International Students' Health Study

Each year, college campuses in America welcome an increasing and diverse population of international students. Grace Larty, assistant professor of public health, is using her Faculty Scholarship award to study factors influencing the health promotion behaviors of these students.

People from different environments and backgrounds have unique ideas and cultures. International students enrich the cultural diversity on American college campuses, increase the revenue of these colleges, and contribute to the development of their native countries. International students speak different languages and have unique social, economic, and health concerns. Hard as they try, often these students are not able to assimilate the culture of the host country. Facilities to promote and improve healthy behaviors are in place on most college campuses but there are no studies indicating how often international students use these facilities.

Having experienced life on an American campus as an international student herself, Grace Lartey will conduct



a study of international students' health. Dr. Lartey is especially interested in studying the impact of the new culture of the American university upon international students. Variables studied will be nutrition, exercise, and the use of health care services. She will try to determine the barriers and the benefits of healthy practices. International student centers throughout the United States and elsewhere will be interested in her discoveries.



Native Filmmaking and Cultural Protocols

Kristin Dowell, assistant professor of anthropology, will study the incorporation of indigenous cultural protocols within the media practices of Native filmmakers with her Faculty Scholarship award. This new project builds upon her previous research with urban Aboriginal filmmakers in Vancouver, British Columbia. She studies how Native filmmakers, historically misrepresented in mainstream media, reclaim the screen to tell Native stories while strengthening Native cultural identity, community, and kinship off-screen. She is developing a comparative ethnographic research project to analyze the impact of national policy in Canada and the United States on the ability of Native filmmakers to produce and distribute their work.

She is developing a second research site in Santa Fe, the center of Native art production in the United States, to determine how Native artists, activists, and filmmakers use media to document oral histories and maintain cultural traditions. Research at this site will enable Dr. Dowell to compare the impact of media within the Native art world in Santa Fe with the strong role of media in Vancouver's Aboriginal art world. Much of her evidence will be derived from viewing Native films, speaking with local Native artists and filmmakers, and mapping the spaces of Native media production in Santa Fe.

Additionally, Dr. Dowell is organizing "Sovereign Screens: Global Indigenous Media," an international indigenous film festival to be hosted by the School for Advanced Research in Santa Fe in June 2008. In addition to the Faculty Scholarship Award, Dr. Dowell's research has been supported by the Ethel-Jane Westfeldt Bunting Fellowship at the School for Advanced Research.