Ball State University stands as a witness to wellness. We are committed to good health for ourselves and for those in our sphere of influence. Ball State acknowledges wellness as “a lifelong process emphasizing integration of body, mind, and spirit through acceptance of personal responsibility resulting in the improvement and enhancement of individual, organizational, and community health and well-being.”

This issue of BeneFacta is devoted to health and wellness through the life span as shown through the research and sponsored projects of Ball State faculty members. Through their study and outreach—from promoting children’s aerobic activities to employing the newest technologies for healthcare training to exploring the factors for healthy living in the later years of life—Ball State investigators are making a contribution to living well.

BeneFacta meaning literally great deeds, recognizes the scholarly and creative activities of Ball State University faculty that receive support from external sponsors.

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CONTENTS

WINNERS IN FITNESS AND FUN
Valerie Wayda / Anthony Mahon

HEALTH CARE FOR COMMUNITIES OF COLOR
Kathleen Russell

INFORMATION AGE NURSING
Kay Hodson-Carlton

DEDICATED TO THE UNDERSERVED
Carol Friesen

TOBACCO COOL-UP IN SMOKE
James McKenzie / Kelly Bishop-Alley

GOING GEOGRAPHIC TO IMPROVE NUTRITION
Alice Spangler

GUSTO FOR THE GOLDEN YEARS
Royda Crose

LIVING THE LANGUAGE OF DIVERSITY
Adele King

TAPES, TUBES, AND OTHER TECHNIQUES
Ollie Powers
WINNERS IN FITNESS AND FUN

by David Endicott

“Nice guys finish last.” So quipped Leo Durocher, the truculent but successful baseball player and manager. Durocher succinctly summed up an American maxim. When it comes to games and athletics—winning is the point. Little Leaguers learn the value of victory and practice it all the way through school. Many accept this philosophy as a good thing, arguing that a competitive spirit fuels the American way, that competition has encouraged innovation and creativity.

There are some, however, who ask, “But what about those who lose? What are we losing by placing so much stock in winning?” Educators in the School of Physical Education are engaged in projects involving children and physical activities, activities that are not aimed at winning. Valerie Wayda and Anthony Mahon are two researchers whose goals for children’s physical fitness and well-being are realized by another kind of success.

Valerie Wayda works with after-school, activity-based programs for boys and girls from grades three to five. Her research revolves around the questions What effect does competition and winning have on children? and How can physical activity be used to promote a greater sense of self-worth in children? Through grants funded by the Indiana Association for Health, Physical Education, Recreation, and Dance and from the National Association for Sport and Physical Education, Wayda has developed a systematic approach designed to help children gain self-esteem within the realm of physical education. Her program is being implemented at Longfellow Elementary School in Muncie and has also been used for the Ball State University Fit Kids Program, an after-school program directed by another colleague in the School of Physical Education, Arlene Ignico.
In Wayda's practical program, personal goal setting and achievement are the means by which children compete with themselves. Wayda explains, "What I have done is create a program that can be implemented through physical activity. We look at the children's individual goals and what they would like to accomplish. We encourage them to concentrate on their own performance." This focus enables children to build feelings of self-worth by emphasizing what they do well and how they are improving, rather than by rating one child's performance against another's. Wayda notes, "Everybody has certain things they excel at. We just try to focus on those things."

Roadblocks to the development of children's self-esteem are ingrained in the very social structure that surrounds them. She observes, "If you look at traditional games and other activities, one team is a winner and the other one isn't. In any type of competitive environment, at least 50 percent of the people are going to be losers—and nobody likes to lose."

A method that rates individuals based on improvement rather than on who wins can lead to a change in the win-lose paradigm in American physical education. Changing the system will be a challenge, however, for the pervasiveness of competition is wide and deep. Wayda measures her own progress just as she does the growth of her children's self-worth—by focusing on individual successes. A phone call from a parent indicating that the self-esteem program is having a valuable influence on his child's life is reward indeed.

Wayda's colleague, Anthony Mahon, has a different approach to the physical well-being of children. Mahon investigates how exercise training affects aerobic fitness in children, particularly those who have been identified as having low levels of physical fitness and endurance. The activities he promotes are directed toward a population that does not typically participate in such research projects—less active children.
The goal is to conduct an after-school fitness program "with an emphasis on fun and physical activity—just to keep the kids moving." Although laboratory measurements (body fat and aerobic capacity, for example) do not change dramatically, the field test measurements (such as one-mile run times and sit-ups, typically administered at the students' schools) do improve. Mahon explains, "The program does have some positive impact on the children's overall physical fitness, and the kids really enjoy themselves."

The recipient of a grant from the National Association for Sport and Physical Education, Mahon's more recent work has been to study aerobic fitness and physical activity in relation to risk factors for cardiovascular disease. Mahon has looked at the characteristics that predispose people to heart trouble, including obesity, high blood pressure, and high cholesterol levels. Mahon notes that these primary risk factors for cardiovascular disease have their origins in childhood, and his study examined the role of aerobic fitness and physical activity in controlling these factors at an early age. Mahon tested the fibrinogen level (an agent in the blood-clotting process) in the test group of children to determine the relationship, if any, between blood clotting and aerobic fitness and physical activity. Although the results did not directly link fibrinogen levels to fitness or activity, they did offer Mahon a clearer understanding of the importance of examining juvenile wellness to better address adult health. Mahon believes this is an important connection. "While my work has been across the board, I always come back to children's fitness and activity issues."

Though Mahon is a dedicated researcher, he is also committed to his students at Ball State and to their development as successful researchers. "I take pride in helping to build their vitae," he asserts, often inviting them to share a byline in a professional publication. Furthermore, he includes students as partners in his research. A mentor to Human Performance Laboratory graduate assistant Christopher Cheatham, Mahon was instrumental in garnering Cheatham's award from the Midwest Chapter of the American College of Sports Medicine for an investigation of cardiovascular responses in boys and men during high intensity exercise. "The student-teacher connection is a natural one that should be a vital component of education."
Kathleen Russell believes that when it comes to the health profile of various cultural communities, one contour does not fit all. After more than a decade of professional service and investigation, her experience with cultural groups has sensitized her to health conditions that disproportionately affect racial and ethnic minorities in Indiana. Further, as a committed teacher she realizes that her students need to be culturally aware to be effective professionals themselves. So Russell includes her students from the School of Nursing in a wide variety of initiatives in Muncie and Delaware County, especially those involving people of color.

Russell's dedication to issues of cultural diversity in health care can be traced to her work as an investigative reporter on minority health issues in Indianapolis for a public service television program, On the Street. She was also a special consultant to the Indiana State Department of Health where she collaborated with the Indiana Black Legislative Caucus in advocating minority health legislation. Russell continues even today to work in evaluative research for the Marion County Health Department to determine the effect of the Indiana Minority Health Coalition on addressing health disparities in communities of color in Indiana.

Russell's early research led her to examine why injury rates are higher in minority preschool children. A National Research Service Award from the National Institutes of Health enabled her to investigate perceptions of injury risks in children of minority mothers living in public housing. She found that the mother's perceived ability to prevent an injury was the strongest predictor of home safety practices. Subsequent funding, received from the National Institute of Child Health and Human Development, allowed Russell to analyze national childhood injury data to determine racial differences in repeat injuries for preschoolers. Findings from her injury research were early indicators of the need for nursing students and healthcare providers to consider cultural differences in preventing injuries in children.
One of her more recent projects tackles the problem of myths about cancer in the African American community. Funded by Cancer Services of Delaware County, Russell collaborated with Maria Williams-Hawkins of the Department of Telecommunications to produce a videotape that promotes the prevention and early detection of cancer by increasing awareness among African Americans of healthy lifestyles. In Indiana the overall cancer mortality rate for blacks is higher than for whites; males have a higher death rate from prostate cancer and females from breast and cervical cancer. Among the multiple risk factors associated with cancer in African Americans is limited early cancer detection, a phenomenon emphasized in the video. Intended to facilitate healthy intervention, the video involves personal stories told by African Americans who have had experiences with cancer and who can relate to their peers in the Muncie community.

In the classroom, Russell’s teaching extends beyond the textbook and reaches out to actual patients from minority groups or includes interviews and meetings with international students on campus. With funding by a Ball State University International Programs Endowment Grant, Russell planned a field study in Jamaica for graduate and undergraduate nursing students. In March 1999, Russell and a colleague took students to Jamaica to provide nursing care to clients in health clinics on the island. “An appreciation of a different people can be encouraged only by learning about and experiencing that culture,” Russell maintains. The students benefit from her extensive research experiences, and they are kept up-to-date on the newest developments in the field. Moreover, students gain understanding and acquire specific approaches to work with people of color. “I am aware that this is a long process, but I want my students to be culturally competent nurses.”
Throughout her distinguished tenure at Ball State University, Kay Hodson-Carlton's contribution to the field of nursing has been varied and transforming. Able to see the needs of nursing education ahead of the curve, she is also highly skilled at engaging community alliances and sponsorship in the preparation of future healthcare professionals—to the benefit of all the partners and the students in the School of Nursing.

Beginning her career as a social scientist and librarian, Hodson-Carlton only later came to the study and teaching of nursing. However, her background prompted a keen understanding of the role and management of information in nursing education. She has been a driving force in making the School of Nursing a front-runner in the integration of telecommunications and computer technologies in the nursing curriculum.

Together with committed colleagues, Hodson-Carlton has created the Health Care Learning Resource Center, a central hub of instructional activity for the school. This simulation center for student learning and faculty development replicates an actual hospital setting, complete with patient beds and an after-discharge apartment. Perhaps most significant are the computerized nursing practice applications. Hodson-Carlton explains, “Students need to be able to use the same electronic systems they will be using in the hospital and within a managed-care situation.”

To that end, Hodson-Carlton has worked hand-in-hand with Dlynn Melo, director of Clinical Information Systems at Ball Memorial Hospital, to implement parallel information systems. Ball State's center features a critical care/cardiac monitoring system with a set-up identical to that at the hospital. Most recently, a computerized clinical documentation system for patient charting has been installed in collaboration with the hospital and McKessonHBOC. That system is attached electronically to the training environment of Ball Memorial's Hospital Information System through a Wide Area Network. Melo notes “The students are using the same systems they will be when they 'cross the street' [to become employees].”
She further maintains, “This collaboration with Ball State is a win-win situation. The students have the opportunity to learn in the most up-to-date, realistic environment, and the hospital has the potential to gain future employees already partially trained.”

The Health Care Learning Resource Center has received additional support from a broad collaborative base: Sigma Theta Tau (the nursing honorary) supports electronic library networking among healthcare agencies; SpaceLabs supports a physiological monitoring system; Hill Rom has funded hospital furniture. Professionals across the country are eager to share information, and Hodson-Carlton has responded by leading a consortium of Indiana schools of nursing in holding a North American Conference on Learning Resource Centers in Nursing. The conference received funding from the Helene Fuld Health Trust.

Increasingly, nursing education is taking place “out there.” Nursing students travel, whether it be to clinical studies in hospital satellite sites or to clients in community-based healthcare settings within managed-care systems. Hodson-Carlton has been instrumental in program development and in garnering funding support for these outreach programs. An award from the Helene Fuld Health Trust, for instance, made possible portable laptops and printers for student use in community clinical settings and homes. Nursing instruction itself travels, as well. An early player in distance learning through interactive audio and video, Internet-delivered components (more than twenty-five courses are in various phases of web-based development) are becoming central to the curriculum. Two of the nursing degree programs (RN completion baccalaureate and master’s) are now available through the Internet. An Indiana Higher Education Telecommunication System program supported Hodson-Carlton and her colleague, Marilyn Ryan, in the development of a course delivered on the World Wide Web to enhance knowledge of cultural diversity in nursing education and practice.
Hodson-Carlton extends her reach across international boundaries as well. A former fellow for the Kellogg Foundation and the Partners of the Americas Leadership in International Development Program, Hodson-Carlton has worked in Brazil and Egypt for organizations such as the Partners of the Americas and the World Health Organization. She has also served as a consultant for the Fulbright Fellowships and as a member of the Board of Directors for the Indiana Partners of the Americas.

At home, Hodson-Carlton's goal for Ball State nursing students is simple: "We want them knowledgeable enough to be in on the design teams for the new practices that will accompany the ever-expanding technological advances in a field that is itself changing and evolving."

In Kay Hodson-Carlton, her students have a fine role model to do just that.
DEDICATED TO THE UNDERSERVED
by Jennifer Hawke

Although medical science continues to make progress in the treatment of cancer, some cancers remain insidious threats. Breast and cervical cancers still take more women’s lives than any other single kind of cancer, nearly twice as many as lung cancer. In the war against these often fatal diseases, however, one of the strongest weapons in the arsenal is early detection.

The Indiana Breast and Cervical Cancer Early Detection Program is an initiative of the Indiana State Department of Health designed to address this issue. A part of the National Breast and Cervical Cancer Early Detection Program authorized by Congress in 1991, the state program receives federal funding through the Centers for Disease Control and through the state of Indiana. The Indiana program, which deals with many issues and audiences, is designed to continue for a minimum of five years and has received more than one million dollars annually.

A well-funded venture, however, without enlightened leadership is not necessarily effective. Enter Carol Friesen, an epidemiologist and member of Ball State’s Department of Family and Consumer Sciences who conducts research and advises Indiana on the program’s primary objective and principal focus, cancer screening and early detection. Friesen analyzes data, tracks and reports survey results, refines data collection forms and methods of screening sites, and writes journal articles, all to ensure the most accurate, appropriate, and far-reaching effort to detect breast and cervical cancer early on.

In the first two planning years of the program, surveys indicated a clear need for women to be examined for breast cancer. According to the 1997 and 1998 Behavior Risk Factor Surveys (and in the preceding two years, as well), Indiana fell below the national median in several categories for testing, including women who have ever had mammograms, women over forty who have been examined for breast cancer by a physician, and women over age fifty who have had mammograms within the preceding two years.

The Indiana Breast and Cervical Cancer Early Detection Program target population is minority, low-income women between the ages of fifty and sixty-four living in rural areas. However, Friesen reports that younger women also have enrolled to receive Pap tests and, to a lesser extent, baseline mammograms. In 1998, sixty-nine sites in sixteen Indiana counties participated, including county hospitals and other healthcare clinics. These centers provide services such as mammograms, Pap tests, colposcopies, fine needle aspirations, and other diagnostic tests and are reimbursed at the state’s Medicare reimbursement levels.
Most women are referred to a site by a nurse, physician, or a family member, although recruitment efforts through other avenues are currently being implemented. In its second year of screening, from April 1997 to September 1998, the Indiana program enrolled more than one thousand women. The goal, says Friesen, is to enroll four thousand women per year through a growing number of participating sites.

In the battle against cancer, the patient is not the only target. The program also sponsors research and programs in the professional healthcare arena, including educational outreach for nurses and physicians, that cover topics such as the reading of mammograms and self-examination guidelines. In 1996, the Indiana program conducted a survey among physicians to measure continuing education needs and learned that nearly one half of physicians licensed after 1950 had not attended a breast or cervical cancer professional presentation for three or more years. In 1998, a study was initiated that was designed to measure how accurately medical laboratories in Indiana interpreted Pap biopsies and how thoroughly nursing programs in the state dealt with breast and cervical cancer.

Friesen discovered that her duties as a faculty member and as epidemiologist for the Indiana State Department of Health Breast and Cervical Cancer Early Detection Program make for a compatible career. By advising the state through in-depth analysis of data, the Indiana State Department of Health will achieve its goals to make better policy and program decisions for the public. In teaching her classes in nutrition, Friesen has the opportunity to influence students for the better, one-on-one. She declares, “I am so fortunate to be able to dedicate myself to my two loves, teaching and cancer prevention. How many people can be that lucky?”
TOBACCO COOL—UP IN SMOKE
by Jennifer Hawke

It is the number one cause of most health problems—the most costly and the most deadly. In Indiana alone, it costs the state $1.55 billion annually to treat related diseases, illnesses that often result in death. It is not a pretty picture. "It" is tobacco use.

Even more sobering is the fact that Indiana ranks in the top ten states in the country for the number of adult smokers. The smoking rate among Hoosier youths is higher than the national average.

There is a bright side, however. Tobacco use is also the number one preventable cause of disease and death. Many of the ill effects of smoking can be reversed merely by quitting smoking. Smoking cessation, however, is not easy to arrive at or to sustain. Creating and maintaining a smokeless environment can help.

Smokefree Indiana is a program to do just that—improve the quality of life in Indiana by promoting a tobacco-free lifestyle. One of seventeen state programs funded by the National Cancer Institute, Smokefree Indiana advocates creating smoke-free environments, restricting youth access to tobacco products, strengthening the regulation of advertising and of the promotion of tobacco, and increasing tobacco pricing to discourage tobacco use. The program was initiated by the state in 1991, and Ball State University assumed the management of the Indianapolis-based program from the Indiana State Department of Health in 1996.

James McKenzie of the Department of Physiology and Health Science is the program director for Smokefree Indiana. McKenzie is quick to point out that the program was created by a coalition and involves many groups, such as the American Heart Association, American Cancer Society, Indiana State Medical Association, and many community organizations, all contributing to a comprehensive initiative. In all, more than eight hundred coalition members are involved. Jeffrey Clark, Jerome Kotecki, and Martin Wood, colleagues from McKenzie's department, serve as consultants to the project.

Former students in the Department of Physiology and Health Science are well represented in the management of the Smokefree Indiana office, as well. Three of four professional staff members, including Managing Director Kelly Bishop-Alley, are Ball State graduates.
Bishop-Alley explains that Smokefree Indiana begins by pairing up with interested individuals or organizations in local communities. “We work very hard to get people in every county to be involved in the program,” she says. “When local citizens adopt the cause, things happen.” Bishop-Alley reports that when volunteers in Evansville protested having tobacco company sponsors for the annual Thunder on the Ohio hydroplane boat race, media coverage prompted the companies to drop their sponsorship the following year. In the city of Elkhart, council members voted to ban smoking in all public places, including city-owned vehicles. After three years of proponents advocating the designation of smoke-free public places, the Fort Wayne city council passed two ordinances prohibiting smoking in restaurants and in workplaces beginning in 1999.

Smokefree Indiana staff help train community leaders in various tobacco control programs including advocacy, youth activities, grant writing, coalition structure, and smoking cessation facilitation. To supplement its efforts, the organization makes available advocacy kits, materials entitled “How to Make Your Community Smokefree,” for the purpose of bolstering local efforts to effect change for the better.

Why did Ball State become involved in the support and management of Smokefree Indiana? James McKenzie maintains that the project is consistent with the wellness mission and commitments of the university and his department. “First of all, we are doing something that is needed and good for the state of Indiana. Secondly, the project provides Ball State faculty with firsthand, practical examples for our teaching. Finally, this program creates meaningful internship experiences that allow our students to learn more about program advocacy as they prepare to become health educators.”

From Kelly Bishop-Alley’s point of view, the partnership with Ball State University has been a plus for Smokefree Indiana in several ways, including ease in administering and hiring staff. “The affiliation with Ball State has allowed us to do much more,” says Bishop-Alley. “It has opened up incredible doors. In fact, other state programs would like to have similar relationships with universities in their states.”
GOING GEOGRAPHIC TO IMPROVE NUTRITION

by Jennifer Hawke

In our country, a modern-day land of milk and honey where food is abundant and affordable, good nutrition is something most Americans take for granted. We are well fed; indeed, we are excessively fed in many cases. However, there is a population—the oldest among us—that, even in the face of plenty, is at risk nutritionally. Fortunately for Indiana, a concerned professional armed with up-to-date electronic tools has been able to address the issue confronting many Hoosier elderly.

While working as a nursing home dietitian, Alice Spangler, professor of Family and Consumer Sciences and chairperson of the department, discovered that many of Indiana's elderly are suffering nutritional inadequacies. She became convinced that there was a need to track the nutritional status of older citizens while they were still living in their own homes. She also realized that to bring about desired dietary changes, comprehensive data collection procedures and sophisticated analysis were required. Moreover, to bring about any desired changes, results needed to be convincingly communicated to healthcare planners, providers, and policy makers.

Spangler embarked on a mission to improve the health and nutritional status of seniors in the state. In collaboration with the Indiana Bureau of Aging and InHome Services, Spangler launched an extensive statewide survey, gathering information from more than twelve thousand older Indiana residents from ninety-two counties over a two-year period. Spangler's study focused on two groups of older adults: senior citizen homebound meal participants and independent-living seniors taking part in congregate or community meal programs. Respondents were asked about their intake of calories and other nutrients as well as related information, such as whether they ate alone, how many medications they took, or if illnesses had changed eating habits. The survey was the initial step in determining the extent to which these participants, aged 60 to 106, were at nutritional risk.

Spangler found a complex distribution of high nutrition risk among the counties of the state. In addition, she was able to describe precisely where certain conditions existed. The information was analyzed using contemporary computer technology, the university's Intergraph MGE, which is a Geographic Information System (GIS). By incorporating survey results, pertinent United States census material, and other data, such as availability of community resources, the GIS technology created a graphical mapping of the state, pinpointing counties, even ZIP code areas, with particular levels of nutritional need. Rather than appearing merely as data in rows and columns, the information took on new life when coupled with GIS visual mapping.
“The GIS analysis has given us a different way of looking at the data and has assisted people in communities by identifying key areas of need,” relates Spangler. The number of people completing the surveys makes this a significant study as well. “Having the depth of a twelve thousand-plus survey database allows us to look at various aspects of the study and make recommendations accordingly,” she says.

During the past few years, Spangler has presented the results to many communities across the state. By presenting the survey results geographically, Spangler has been able to convey the nutritional needs of older citizens in a way that prompts community leaders to take measures to address these needs. For instance, the board of directors of the Area 6 Council on Aging for Delaware County was able to identify locations where there was high nutritional risk. However, it would have been difficult to set up a site for congregate or group meals. Instead, they worked with area restaurants and created a system of meal vouchers for seniors. In another district, Adams County, where the elderly were shown to be at particular risk, the county cooperative extension office hired additional personnel to plan and provide more senior programs, including nutritional ones.

“This unique look at data has generated much attention,” says Spangler. The state Administration on Aging has shown the report to several directors in other states in the event that they may want to model their own studies on it. At home in Indiana, there is still further potential for GIS analysis of Spangler’s work. She has recently received funding from the American Association of Family and Consumer Sciences to examine more closely the nutrition needs of older African Americans in the study.

At Ball State University, Spangler’s research has made an impact on the education of dietetic students, both undergraduate and graduate, who observed and even took part in the study and methods of their professor. She reflects on her contribution to the state, to her profession, to her students, and to older persons: “When you are devoted to your life’s pursuit, you don’t always know where your work and career path will take you.”
"Resilience is the ability to adapt to a system," states gerontologist Royda Crose in her book, *Why Women Live Longer than Men... and What Men Can Learn from Them*. "Rather than the old competitive notion of survival of the fittest, the longevity of a species seems to be based more on the ability to be open to and to contribute to the well-being of the whole system, to fit in constructively rather than to be independently hardy or dominant." Resilient, adaptable, open, and constructive describe not only a way to live long but to live well. As a psychology professor and associate director of the Fisher Institute for Wellness and Gerontology, Crose examines issues of health and aging. Her research from a feminist perspective addresses what increasing numbers of graying Americans, both male and female, are intensely concerned about: living healthier, longer.

She brings fresh insight to the field by examining some of the gender differences in the natural process of aging and drawing inferences from her research to apply to other aspects of aging as well. According to Crose, most research on the national level focuses primarily on the physical dimension of growing older. Crose's study, however, establishes seven life dimensions or lifestyle factors. These include physical fitness and wellness, emotional support, intellectual development, relationships and socialization, occupational satisfaction, spiritual enrichment, and environmental awareness. Her work is an attempt to relate physical health to other dimensions in the overall health of an individual. Crose believes that traditional male behavior and overall health philosophy (the denial of pain, emotion, and tenderness in their feelings for others) are primary factors in their shorter life spans compared to women. Those very traits that our culture has generally accepted as "feminine" are those that cross life dimensions and promote longevity, maintains Crose. "Women build social supports, and the women's movement has given them more options for doing that."

Crose's background in feminist psychology, gerontology, and wellness has shaped her research questions and made her aware of gaps in the knowledge base. In particular, why has feminist psychology focused so little attention on issues concerned with the aging process of women? In order to better understand the lives of women living with chronic illness, with funding from the John W. Anderson Foundation, Crose and colleague Phyllis Gordon from the Department of Counseling Psychology and Guidance Services investigated the day-to-day challenges facing women enduring chronic illness. The researchers brought to light common grievances expressed by the women, and they
applied their research findings in an instructional videotape. The video, "Beyond Coping: A Model for Counseling People with Chronic Illness," is a resource for counselors, social workers, students, and health professionals who work with those suffering from chronic illnesses, but who may not necessarily understand the quality-of-life issues associated with those illnesses. Counselors are better equipped to provide meaningful guidance after witnessing actual client group discussions.

In addition to funded studies of women and aging, Crose received a grant from the Administration on Aging to develop an innovative demonstration project to increase services to low-income minority elders in the Muncie community. Her involvement in the Muncie community is further played out in the proposed Center for Vital Aging, a community center for older people that will offer holistic health programs based on Crose's multidimensional model.

In the classroom, Crose finds that her students' work has affected their relationships with their families for the better. They have a more comprehensive understanding of health, including health at the end of life, a phenomenon students (or most people) do not find easy to think or talk about. However, Crose finds that the "health" of a person close to death or with a terminal illness may actually be better than that of someone who is well. Wellness, even in dire circumstances, reflects much more than the physical dimension of living.

Issues of death and dying are the subject of an Indiana Public Radio series for which Ball State received funding from the Benton and Robert Wood Johnson Foundations and which was co-directed by Crose and Indiana Public Radio General Manager Stewart Vanderwilt. The series, Sound Choices: Health Care Decision Making at the End of Life, explores issues surrounding the complex end-of-life choices that affect every family.

The Fisher Institute for Wellness and Gerontology will continue to be instrumental in the evolution of Ball State's commitment to the study of wellness, particularly living well in the later years of life. For the past eleven years, the annual Kirkpatrick Memorial Conference on Aging has been a cornerstone event for the institute and is testimony to Crose's efforts and influence. Royda Crose, resilient, adaptable, open, and constructive, vigorously pursues qualitative research that has an impact on her students, her community, and her field.
Adele King, French scholar and winner of the 1998 Researcher of the Year award, cannot be narrowly described. Her academic and cultural interests exceed the boundaries of any one country, language, or discipline. King teaches Modern French Literature, Non-Western Civilization, and the French Language and Literature of Africa, Canada, and the Caribbean. As her course titles indicate, she incorporates international inquiry into the academic enterprise. Her years of teaching and research in France, England, Nigeria, Canada, India, and New Zealand have shaped her interest in the culture and literature of many diverse countries. Her experiences abroad have significant application for her students today. King declares, “It is gratifying to be able to support my teaching with the research I am doing. Students need to be made aware of the wealth of cultures existing outside the United States.”

King’s many publications include an edited volume of essays on Albert Camus, a study on women’s writing (French Women Novelists: Defining a Female Style), and a work about Paul Nizan (Paul Nizan: Ecrivain). She also edits a refereed academic journal, Women in French Studies, with international circulation, and she encourages articles on women writers in French from outside metropolitan France. Currently, she is engaged in research on a francophone writer from Guinea in West Africa, Camara Laye, a project that started in 1980 when she published The Writings of Camara Laye. Her investigation questions Camara Laye’s authorship of a major work of African literature, Le regard du roi (The Radiance of the King), and whether or not the creator of the work may actually be a European or even several contributors.
Chairperson of the Department of Modern Languages and Classics from 1991 to 1994, King brought to Ball State unique experience in curriculum development, having headed French Studies for the School of Humanities in Lagos, Nigeria, for three years. King continuously incorporates her living and research experiences in her teaching and administrative work. "Languages live through the cultures that use them," she states. "Introducing students to a foreign culture helps them to complement the concept of language with actual characteristics of a different way of life."

Her next project has her once again traveling to France, where she will gather information from people of African origin who live in the northern regions of France. There she will attempt to determine whether and how members of this population are influenced by the two different cultures of their heritage. Her students will continue to benefit from the experiences of a gifted professor dedicated to a world of research, and they may discover yet another publication by Adele King.
Electronic technologies have become fixtures in the world of music composition, providing countless new musical resources. Although much has been written about the musical and cultural effects of electronic music, little research has appeared on the interactions that occur between the composers and these new technologies. Ollie Powers from the School of Music fills this void with his dissertation, "Interactions between Composers and Technology in the First Decades of Electronic Music, 1948–1968." Winner of the Ball State University Distinguished Dissertation Award, Powers combines historical research on electronic music technique with analysis of technological procedures as they influenced composers and their work.

Reflecting on the modern world and its dependence on electronic sounds in television commercials, film, and other soundtracks, Powers explores the roots of the electronic music phenomenon and demonstrates how equipment in the 1950s and 60s defined and changed the music it created. As Jody Nagel of the School of Music explains, “Dr. Powers’s research and conclusions are highly relevant within the field of modern music. As music becomes increasingly electronic, the more urgent it is to have a grasp of the beginnings of this significantly new way of going about making music. By having a keen understanding of the roots of electronic music technique, we may know more clearly from where we have come, where we are, and where we might be going.”

Powers’s work impresses not only because of its comprehensive nature, but also through its concentration on minute detail. Examining the influences of electronic equipment and the procedures of classical studio technique on the resulting music, Powers meticulously analyzes selected electronic compositions in terms of the equipment employed. Among the areas examined are disc technology, magnetic tape, oscillators and generators, modulators, and techniques of spatialization in multichannel works. In addition, the timely study instructs by Powers's ability to distinguish and identify the use of certain kinds of equipment within specific portions of a composition. According to Nagel, "Ollie did not stop with merely giving his opinion of the matter; he demonstrated, by duplicating actual early electronic techniques, the correctness of his assertions."

Powers’s work has already become required reading in several classes in Ball State's undergraduate music engineering curriculum. It is not surprising that this outstanding work joins its predecessors as a distinguished dissertation.
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Lyric Studios
Motorola
Muncie Star Press
Nutrient Technology Corporation
Performance Dynamics
PITSCO
Portland Forge
Roche Diagnostics Corporation
Sport for All Korea Association
Telegonic
Trophy Resources, Inc.

COLLEGE OR UNIVERSITY

Indiana University
Indiana University-NIGEC
Purdue University
The Ohio State University
The University of Toledo

FEDERAL

California Institute of Technology,
Jet Propulsion Laboratory
Council for International Exchange of
Scholars
Institute of Museum and Library Services
National Endowment for the Humanities
National Science Foundation
United States Department of Commerce
United States Department of Education
United States Department of Health and
Human Services
United States Geological Survey
United States Forest Service
<table>
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<tr>
<th><strong>FOUNDATION</strong></th>
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<tbody>
<tr>
<td>American Psychological Foundation</td>
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<tr>
<td>Ball Brothers Foundation</td>
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<td>Benjamin V. Cohen Memorial Fund</td>
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<td>BSU Foundation</td>
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<td>Coca-Cola Foundation</td>
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<tr>
<td>Community Foundation of Muncie and Delaware County, Inc.</td>
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<td>Kauffman Foundation</td>
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<td>Lilly Endowment</td>
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<td>National Athletic Trainers' Association</td>
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<td>Research and Education Foundation</td>
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<td>Radio and Television News Directors Foundation</td>
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<td>Retirement Research Foundation</td>
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<td>W. K. Kellogg Foundation</td>
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<th><strong>NON-PROFIT</strong></th>
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<tbody>
<tr>
<td>American Association of Family and Consumer Sciences</td>
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<tr>
<td>American Council on Education</td>
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<td>Ball Memorial Hospital</td>
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<td>Cambridge House</td>
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<td>Cardinal Health System, Inc.</td>
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<tr>
<td>Center for Mental Health</td>
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<tr>
<td>Central States Universities, Inc.</td>
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<tr>
<td>Corporation for Public Broadcasting</td>
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<tr>
<td>Delaware County Coordinating Council, Inc.</td>
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<tr>
<td>Eta Sigma Gamma</td>
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<tr>
<td>Filson Club Historical Society</td>
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<tr>
<td>Fox River Valley Pony Club/Horse Trails</td>
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<tr>
<td>Great Lakes Athletic Trainers Association</td>
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<tr>
<td>Habitat for Humanity International</td>
</tr>
<tr>
<td>Head Start Action, Inc.</td>
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<tr>
<td>Historic Madison, Inc.</td>
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<tr>
<td>Huntington Library</td>
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<tr>
<td>Indiana Academy of Science</td>
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<tr>
<td>Indiana Association for Child Care Resource and Referral</td>
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<tr>
<td>Indiana Campus Compact</td>
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<td>Indiana College Network</td>
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<tr>
<td>Indiana Combined Training Association</td>
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<tr>
<td>Indiana Council for Economics Education</td>
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<tr>
<td>Indiana Minority Health Coalition</td>
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<td>Indiana Space Grant Consortium</td>
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<tr>
<td>Delta High School</td>
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<tr>
<td>Greater Lafayette Area Special Services</td>
</tr>
<tr>
<td>Indianapolis Public Schools</td>
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<tr>
<td>Muncie Community School Corporation</td>
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<tr>
<td>Muncie Indiana Transit System</td>
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<tr>
<td>Northeast Indiana Special Education Cooperative</td>
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<tr>
<td>Region VI Tech Prep Consortium</td>
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Indiana Vector Control Association
Lambda Alpha
Middle East Studies Association
Midwest Holmes Partnerships
Muncie Community Schools
Muncie Symphony Orchestra
Muncie Urban Enterprise Association
National Writing Project
New Hampshire Academy of Applied Science
Petrified Forest Museum Association
Public Broadcasting Service
United Way/Community Service Council

STATE

Governor's Commission for a Drug Free Indiana
Indiana Arts Commission
Indiana Commission for Higher Education
Indiana Department of Commerce
Indiana Department of Education
Indiana Department of Natural Resources
Indiana Family and Social Services Administration
Indiana Higher Education Telecommunication System
Indiana State Department of Health
Indiana State Library
Office of the Commissioner of Agriculture
Ball State University was founded as a state institution in 1918, when the Ball family bought and donated to the state of Indiana the campus and buildings of the Muncie Normal Institute. In 1922 the school became Ball State Teachers College.

In 1965 the Indiana General Assembly renamed the institution Ball State University in recognition of its growth in enrollment and physical facilities and the variety and quality of the programs in its colleges.

Today Ball State offers a strong undergraduate liberal and professional education and graduate programs of high quality. More than 140 major and minor areas of study are offered through its seven colleges.

The College of Business, accredited by the American Assembly of Collegiate Schools of Business, offers applied programs of breadth and depth and opportunities for selected concentration in a business discipline.

The College of Communication, Information, and Media, the university's newest college, established in 1996, prepares communication professionals to face the challenges and opportunities of the Information Age.

The College of Fine Arts offers solid professional preparation for careers in visual art, music, theatre, and dance.

The College of Sciences and Humanities presents a broad liberal arts curriculum and preprofessional preparation through many branches of learning.

Teachers College, one of the largest teacher education programs in the nation, is ranked among the top ten education institutions in the United States.

For more information about BeneFacta or sponsored research, contact the Office of Academic Research and Sponsored Programs at

(765) 285-1600
(765) 285-1624 Fax
www.bsu.edu/oarsp

The information presented here, correct at the time of publication, is subject to change.

Ball State University practices equal opportunity in education and employment and is committed to diversity within its community.