

Views & Visions

A publication of Bowles Rice McDavid Graff & Love PLLC

North Central West Virginia

Biometrics, technology, health care research and federal facility developments fuel growth in North Central West Virginia

**Blanchette Rockefeller
Neurosciences Institute**



**Alan B. Mollohan
Innovation Center**



**West Virginia University
School of Medicine**



West Virginia University Rec Center



Institute for Scientific Research, Inc.

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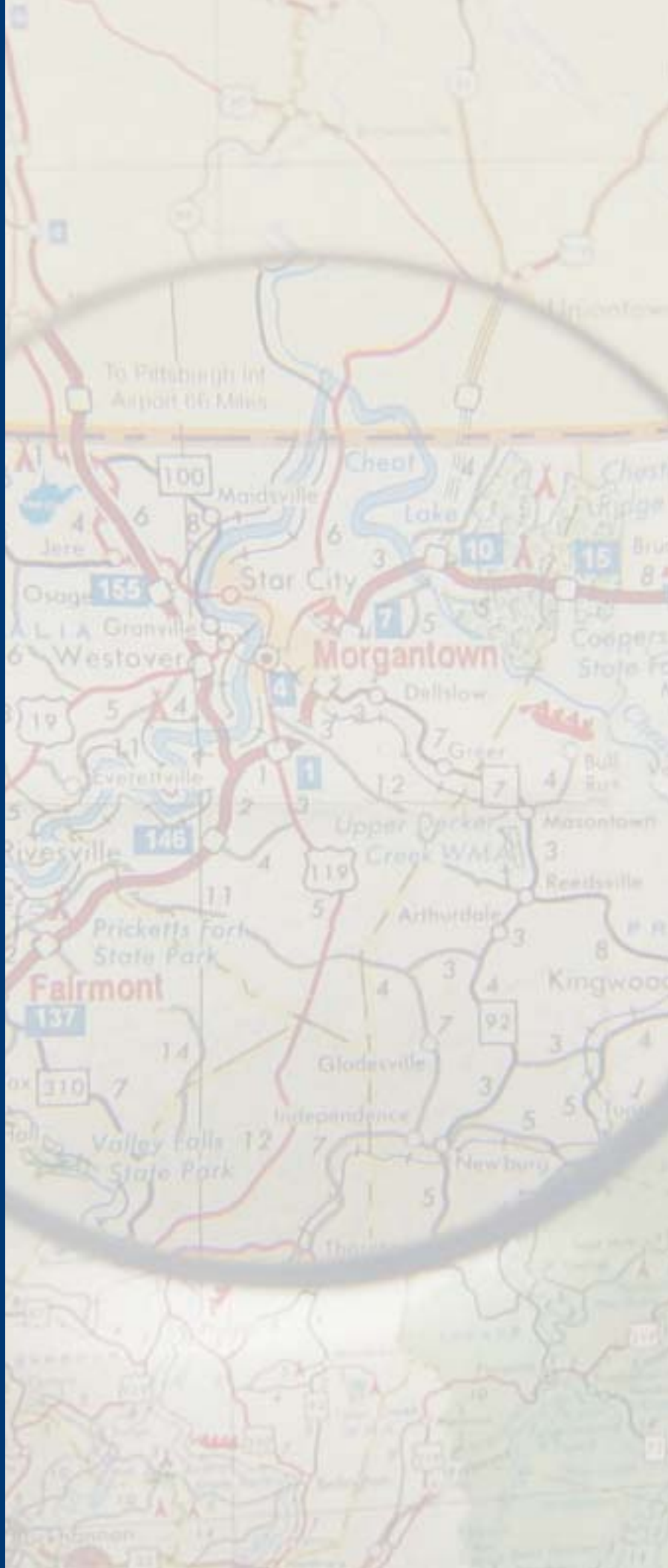
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A Message from Our CEO

Tom Graff, CEO

Bowles Rice McDavid Graff & Love PLLC



Tom Graff has served as Chief Executive Officer of the firm since 1986. His practice focuses on business, commercial, banking and mineral law. He is Chairman and President of the Chemical Alliance Zone and an active member of the Roundtable. Under his direction, the firm has grown from 30 attorneys in one Charleston office to more than 90 attorneys in six offices throughout West Virginia, Kentucky and Virginia.

I vividly remember the late summer day more than four decades ago when my parents delivered me and all of my belongings to my new home away from home at West Virginia University. Our day-long travel from southern West Virginia to the campus in the north central area of our state took our family through winding mountain roads, past farmlands and mill towns, glass factories and coal mines.

Today, parents make that same trip in less than half the time, traveling Interstate-79 and passing high-tech businesses, several state-of-the-art educational facilities and federal agencies to a campus that has expanded and now includes internationally recognized research centers and health care facilities. Communities in this region now focus on a high quality of life, including the arts, recreation and sports, and they have the facilities to support these interests. There certainly has been tremendous growth and development since I first arrived on that college campus, and we are pleased to highlight several of these exciting changes in this issue of *Views & Visions*.

In this issue, we are honored to feature an article by Congressman Alan Mollohan, who, along with Senators Byrd and Rockefeller, has brought millions of federal dollars into North Central West Virginia, and they continue to support the high-tech development throughout this region. Through their leadership, the "High-Tech Corridor" of West Virginia has grown and expanded to include several technology businesses.

We are also grateful to include articles from regional leaders of higher education institutions that have brought their vision to develop these campuses into a new century. We appreciate Presidents Bradley, Haden and Hardesty for sharing some of the new learning technologies and initiatives occurring on their campuses today.

In addition, the recent high level of construction activity, nationally recognized health care and research, and private, public and institutional projects are highlighted in articles by Coach John Beilein, Dr. Bob D'Alessandri, Patrick Esposito, Jim Estep, Mike Garrison, Dr. Caulton Irwin, Tom Jones, Mark Nesselroad, Kevin Niewoehner, Senator Mike Oliverio, Scott Rotruck, Dr. Bernie Schultz, Dr. Ernest Villafranca and Mac Warner. We are deeply grateful to each for sharing information on these fascinating projects with our readers.

This is indeed an exciting time. I could never have imagined the region where I spent my college days would have exploded into a nationally recognized high-tech center with such sophisticated research and cutting edge industries as discussed in this publication. But even more impressive to me is the spirit of the writers in this issue. It smacks of optimism, confidence and enthusiasm. It is that spirit that will carry the dreams of growth and development in North Central West Virginia to reality. I hope you enjoy this issue of *Views & Visions*, and that other regions of West Virginia catch that spirit sooner than later.





Alan B. Mollohan was born in Fairmont, West Virginia. He launched his first bid for the U.S. House of Representatives in 1982, and was sworn in the following January as a member of the 98th Congress. He has been reelected to each successive Congress. His top priority is economic development in the First District, working to diversify its base through high-tech, aerospace and government-service activities. Congressman Mollohan is a graduate of Greenbrier Military School, the College of William and Mary and West Virginia University's College of Law.

North Central West Virginia

In Praise of Public Investment

*Congressman Alan B. Mollohan
United States House of Representatives*

To visitors, the I-79 Technology Park seems a study in serenity. A family of Canada geese wanders the landscaped grounds of the gleaming, ultramodern buildings that are arranged, campus-style, in the gentle contours of this north central West Virginia valley.

But don't be fooled by appearances.

Behind the tranquil façade, a revolution is taking place. Native startups, established contractors, and nonprofit and government agencies are at work on a host of cutting-edge technology initiatives. It's a project list that would have been unimaginable a short decade ago, when "economic diversification" was little more than an intriguing concept in the Mountain State.

Yet today, North Central West Virginia is home to a surging technology sector, and the I-79 Technology Park is its private-sector flagship. As such, it is a welcome contributor to the region's economy – an economy characterized by "unusual opportunities," to borrow a phrase from the most recent regional forecast issued by West Virginia University's Bureau of Business and Economic Research.

Our transition to a more diversified economy is a subject worthy of serious study and reflection. Although there is not enough space here to tell the full story, it would be inexcusable to not acknowledge the incredible base-building work of Senator Robert C. Byrd.

Senator Byrd has strategically identified ways in which West Virginia's people and its institutions can, with the proper public investments, serve national needs that might otherwise go unmet. I am reminded of an observation made by Alexander Hamilton in the 1791 *Report on Manufactures*, regarded by many to be his most innovative report:

"Industry, if left to itself, will naturally find its way to the most useful and profitable employment. Whence it is inferred that manufacturers, without the aid of government, will grow up as soon and as fast as the natural state of things and the interest of the community may require.

Against the solidity of this hypothesis . . . very cogent reasons may be offered [including] the strong influence of habit; the spirit of imitation; the fear of want of success in untried enterprises; the intrinsic difficulties incident to first essays towards [competition with established foreign players]; the bounties, premiums, and other artificial encouragements with which foreign nations second the exertions of their own citizens . . .

To produce the desirable changes as early as may be expedient may therefore require *the incitement and patronage of government.*"

The government investments that Senator Byrd has secured for the region – primarily by attracting new federal operations and by directing resources to our academic institutions – place us in the

critical path of promising technologies. Thus, the Senator has provided a foundation on which our region can grow and prosper.

So how do we build on that tremendous base?

Let me first acknowledge that I am not an economist. However, I am an intense participant in economic diversification initiatives, and I am familiar with many of the impediments that must be overcome in order for those efforts to be successful. Based on the experience, I believe there are specific responsibilities which fall to each of us.

Our native high-tech businesses must develop viable plans for self-sufficiency, leveraging their past successes as they seek out new contracts in both the government and private-sector marketplaces.

On a related note, the large companies that operate in the region should locate more of their high-level work in West Virginia, in response to the increased sophistication of our native companies. Permanent regional headquarters should be considered, particularly by those with ties to the federal agencies that operate here.

Meanwhile, members of our financial community – whether headquartered here or outside the state – should be encouraged to reinvest in West Virginia more of the savings that they collect in our communities. We must make them increasingly sympathetic to the investment opportunities which exist here.

And, finally, our state and its leaders must maintain a focus on economic diversification – which means sizable investments in research, education and development. The \$200 million in economic devel-

opment grants, recently awarded through a competitive process, is a good example of how West Virginia can provide support for promising ventures. Governor Wise and the Legislature are to be commended for their strong leadership in this regard.

As we work to further diversify our region's economy, it is imperative that we continue to draw on the strengths of nonprofit organizations. Our success thus far demonstrates their unique capability to facilitate economic diversification through the nurturing of fledgling activities.

The federal government investments that Senator Byrd has directed to the region give us a special window of opportunity. We cannot afford to let it close. We must seek to keep it open by being responsible – and strategic – stewards of the resources that are before us. And that requires a strong partnership of our government, business, academic and nonprofit communities. ■



Photo by Erin Weible, ISR

ISR recently hosted Congressman Mollohan and NASA Administrator Sean O'Keefe, who toured the company's Fairmont facilities and the construction site of its new corporate headquarters and research center at Technology Park. Pictured here are (from left): Congressman Mollohan, Administrator O'Keefe, ISR President and CEO Kevin R. Niewoehner and ISR Chairman of the Board George J. Pederson.



Since becoming president of WVU in 1995, President Hardesty's administration has been marked by significant growth in research and sponsored program activities, sparked by investments in research infrastructure and laboratories. Service has been fostered through the addition of WVU Institute of Technology (1996), the creation of an affiliated hospital system (1997), the launching of a new medical campus in West Virginia's Eastern Panhandle, and the creation of the Blanchette Rockefeller Neurosciences Institute on the main campus.

American Higher Education: Modest Investment, Outstanding Return

*David C. Hardesty, President
West Virginia University*

If your financial advisors told you that a small investment now could pay dividends over a lifetime adding up to \$1 million or more, would you hesitate to invest? What if the plan also promised many intangible benefits, including a huge increase in knowledge, greater career satisfaction, and more opportunity to participate in civic and cultural activities?

In our current fluctuating economy, such an investment opportunity may seem too good to be true, but it exists — you can become an investor at the college or university of your choice.

The financial benefits of a college education are immense and increase with the level of education attained. According to U.S. Census figures based on 1999 salaries, high school graduates can expect to earn about \$1.2 million during their working lives. Those who earn a bachelor's degree can expect to earn nearly double that amount — \$2.1 million over the course of their careers. Those with a master's degree will earn \$2.5 million, on average, and doctoral and professional degree holders will earn an average of \$4.4 million.

College tuition and fees have continued to increase along with inflation in recent years, but higher education remains an exceptional value. West Virginia, in particular, has made a tremendous commitment at both the state and institutional level to making higher education accessible for all.

The state offers the merit-based PROMISE Scholarship Program, as well as need-based programs, and a college savings tool for parents and grandparents. Institutions have their own aid packages, with WVU alone committing \$4 million a year to its Scholars Program.

Improving access to higher education is important because the benefits go far beyond even increased earning power. In *Education and the Common Good* (Kentucky Long-Term Policy Research Center 2001), education policy analyst Amy L. Watts explores the social benefits of college education based on research conducted in Kentucky.

Among Watts's findings:

- College-educated people are more likely to participate in community organizations and to assume leadership roles in community activities. They are also more likely to donate to charities, and they spend more hours participating in volunteer programs.
- The likelihood that someone is a registered voter increases with the amount of education he or she receives.
- Those with a bachelor's degree are less likely than high school graduates to smoke.
- Bachelor's degree holders are also more likely to read to their children on a daily basis; more likely to engage in entrepreneurial activity; more likely to

use computers and the Internet; and more likely to participate in cultural events.

- Those with higher education are less likely to enter the correctional system or require public assistance.

Clearly, higher education has major benefits for society, as well as for individuals.

Because of increased earnings, college graduates also contribute greater amounts to the tax base than those whose education stopped at high school graduation. Indeed, every \$1 invested in higher education pays significant dividends for the state and national economy. According to the National Association of State Universities and Land-Grant Colleges (NASULGC), the average return on every \$1 of state money invested in a member institution is \$5. (Of course, land-grant institutions derive revenue from sources other than appropriations; at WVU, state appropriations comprise only 33% of the total budget.)

The NASULGC study also shows that for every \$100 spent directly by a member institution, its employees, visitors and students spent another \$138 of their personal funds. This illustrates the multiplier effect on our state's investment in higher education. A fiscal year 1998 study estimated WVU's economic impact as \$1.3 billion. Since then, as the

University experienced dramatic increases in enrollment (up almost 2,400 since 1996 to a new record high), private giving (nearly doubled since 1996) and research (doubled since 1996), the economic impact of WVU has likewise increased.

The regional campuses also impact their local economies. For example, the economic impact of

WVU at Parkersburg was recently estimated at \$52 million.

Consider the impact of research alone. WVU earned \$134 million in external funding for research last year. This is money that is used to employ people and buy equipment. Protea, a cancer research company now operating in Morgantown, is a spin-off of WVU research in pro-

teomics. Several other companies are ready to set up in West Virginia when WVU's research and technology park is completed later this year. Over the past few years, WVU has stepped up its efforts on technology transfer — increasing the number of patents, license agreements, and subsidiary companies from its intellectual property.

West Virginians should expect nothing less from the state's foremost institution of higher learning, and we are working hard to meet and exceed such expectations. ■



A view of WVU's Woodburn Hall



As President and Chief Executive Officer of ISR, Inc., Mr. Niewoehner directs the daily operations of a growing staff of scientists, engineers, mathematicians, physicists, information technology specialists and support staff. He came to ISR in 1999 after a successful career with NASA, working for two years with Ford Aerospace in support of NASA's Space Station Program and nine years at NASA headquarters in Washington, D.C.

Bringing World-Class Research to the Mountain State

*Kevin R. Niewoehner, President & CEO
Institute for Scientific Research, Inc.*

West Virginia has always been a frontier. In the early part of America's history, it was the westward boundary, a place where civilization met the unknown. Later, during the Industrial Revolution of the 1800s, the region again found itself as a frontier, a place of new and exciting technologies that fueled a host of extractive, refining and manufacturing industries.

As America fought and won two world wars, West Virginia, its people and its abundant natural resources played a huge role, supplying brave soldiers on the battlefield and, on the home front, needed materials such as coal and steel.

Our greatness as a nation was built on West Virginia sweat and blood. But then times changed.

In the latter part of the 20th Century, West Virginia realized it could no longer count on the traditional industries that had sustained its people for so long — so the state looked to the future and found itself, yet again, on a frontier: the transformation to the Information Age.

What Is ISR? The Institute for Scientific Research, Inc. is one of West Virginia's fastest-growing companies, performing world-class research, from concept through development, across some of today's most fascinating scientific and engineering disciplines.

ISR conducts advanced research programs that benefit civilian, military and commercial entities nationwide. Our core competencies include Robotics and Intelligent Controls, Informatics and Computing Environments, Sensors and Mission Design, Energy and Space.

ISR has a proven track record with NASA and other large federal agencies with whom we work closely. Among our many programs, we've built and host one of the world's fastest supercomputers, from which NASA can view deep space phenomena, and have developed a "neural network"-based, onboard computer that is helping improve aircraft safety.

ISR employs about 100 multi-disciplinary scientists and research staff, a number that's expected to grow to several hundred by the time we move into our new headquarters and research facility.



Photo by Roy Baker, ISR

ISR built and hosts "Black Diamond," one of the world's fastest supercomputers. It performs more than 1 billion calculations per second and helps NASA visualize deep space data like black holes and collapsed stars.

North Central West Virginia

Simply put, our goal is to make ISR a premier R&D resource for the East Coast, by providing research opportunities that attract the best and the brightest, from within our state and across the nation.

ISR is an independent, not-for-profit company that believes there are no boundaries to the human imagination. And we're proving it, every day.

ISR's New Research Headquarters. To meet ISR's lofty goals and accommodate our rapid growth, we're now constructing a corporate headquarters and research facility with a design so advanced it is destined to rank among the finest research facilities in the U.S.

When completed in 2005, ISR's flagship facility will sit high atop the I-79 Technology Park in Fairmont, providing research space like no other for the engineers, mathematicians, physicists, information technology specialists and many others we employ in the search for scientific excellence.

With more than 250,000 square feet of space, ISR's new facility will include:

- Raised access floors
- Reconfigurable laboratory space
- Static and full-motion flight simulation
- Compartmentalized information facilities
- Manufacturing space for aerospace systems
- Wet-research areas to support bioinformatics
- Compact range for radar cross-section and antenna research
- High-performance networks for data and audio-visual environments
- 22,000 square feet of secure research laboratories located below ground

In addition, a large portion of the building will be accessible to the public — including a general reception area, a multi-purpose exhibition center, 218-seat educational conference auditorium, 120-foot tall observation tower, food services and modern wellness facilities.

What ISR Means to North Central West Virginia.

ISR's sophisticated and challenging agenda of multidisciplinary scientific R&D has successfully recruited to our state elite scientists and researchers, and dedicated administrative and support staff, from more than 15 states, coast-to-coast.

Among ISR's personnel, 13% hold a Ph.D., 24% have a Master's degree and 52% have earned a Bachelor's degree.

As ISR continues to grow, it will dynamically invigorate the regional economy, fueling the effort to diversify away from traditional extractive and heavy manufacturing industries to a more modern and economically viable high technology-based economy.

ISR's presence will inevitably enhance the research capabilities of nearby higher education institutions and will serve as a catalyst to sustainable economic growth in North Central West Virginia. Its presence will undoubtedly allow many native West Virginians to stay in state to work and raise their families.

Learn more about the Institute for Scientific Research, Inc., our research philosophy and our many programs at www.isr.us. ■



Photo by Roy Baker, ISR

Matt Campbell, an ISR researcher, makes a presentation using a multimedia display wall. Campbell is part of ISR's Informatics and Computing Environments project, which embodies such new technologies as high-performance computing, 3D visualization, virtual reality and more.



Before joining BRNI in 2001, Ernest Villafranca served as a consultant to Agouron Pharmaceuticals, Inc., joining the company in 1987 as Director of Protein Engineering. He performed research and development projects with Agouron (now Agouron-Pfizer), advancing in 1997 to Senior Director of the Neurodegenerative Disease Research Division, where he managed and directed research teams focused on Alzheimer's disease therapeutics. Dr. Villafranca has a background in biology and a Ph.D. in chemistry, and has completed studies and research in the areas of molecular biology, DNA technology and protein engineering.

North Central West Virginia

A New Paradigm for Neuroscience Research

*J. Ernest Villafranca, Ph.D., Executive Director & CEO
Blanchette Rockefeller Neurosciences Institute*

We are so accustomed to news about medical advances that we have come to expect them. Indeed, we should because these advances are working and making a huge difference in human society. Life expectancy at birth is the highest in human history, almost double what it was a century ago. And this is just the beginning. The solid commercial success of biotechnology, an industry that did not exist 25 years ago, is the harbinger of great new innovations in medical treatments to further prolong and enhance human life. Information and technology from the human genome, engineered cells, gene therapy and years of basic research remain essentially untapped. The resulting burgeoning medical potential will compel the creation of novel strategies as we struggle to bring the new discoveries to fruition.

In few other areas of medicine is this more obvious than in neuroscience. Research investments during the past decade, "the decade of the brain," have produced substantial new insights into the function and molecular mechanisms of the brain. Unfortunately, these insights have yet to produce significant treatments in the fastest growing and deadliest neurological diseases, Alzheimer's disease and stroke. Close examination of the process through which major new treatments are discovered and clinically developed reveals a widening gap between basic research and clinical application.

The scientific study applied to the conversion of lab bench knowledge to prod-

ucts directly affecting people is known as translational science. Traditionally translational science has been conducted in academic and basic research institutions as an addendum to their primary mission and in the pharmaceutical industry as a high-risk venture. For neuroscience the time is right to establish a new paradigm that accelerates new discoveries through translational science to produce tangible benefits more quickly for patients.

The Blanchette Rockefeller Neurosciences Institute (BRNI) is the first non-profit institute to focus on translational proof-of-concept research in neuroscience. This strategic position not only distinguishes BRNI from other neuroscience institutes but also offers many operational advantages. While adding value to new discoveries and inventions through cell and animal model research, BRNI lowers the risk for potential clinical developers.

Operating through strategic alliance agreements with basic research laboratories and innovative license agreements that share the risks and returns with clinical and commercial developers, BRNI becomes a global conduit through which potential new treatments can be channeled. In this way, BRNI furthers its mission to promote the advancement of new treatments as quickly as possible for patients in need.

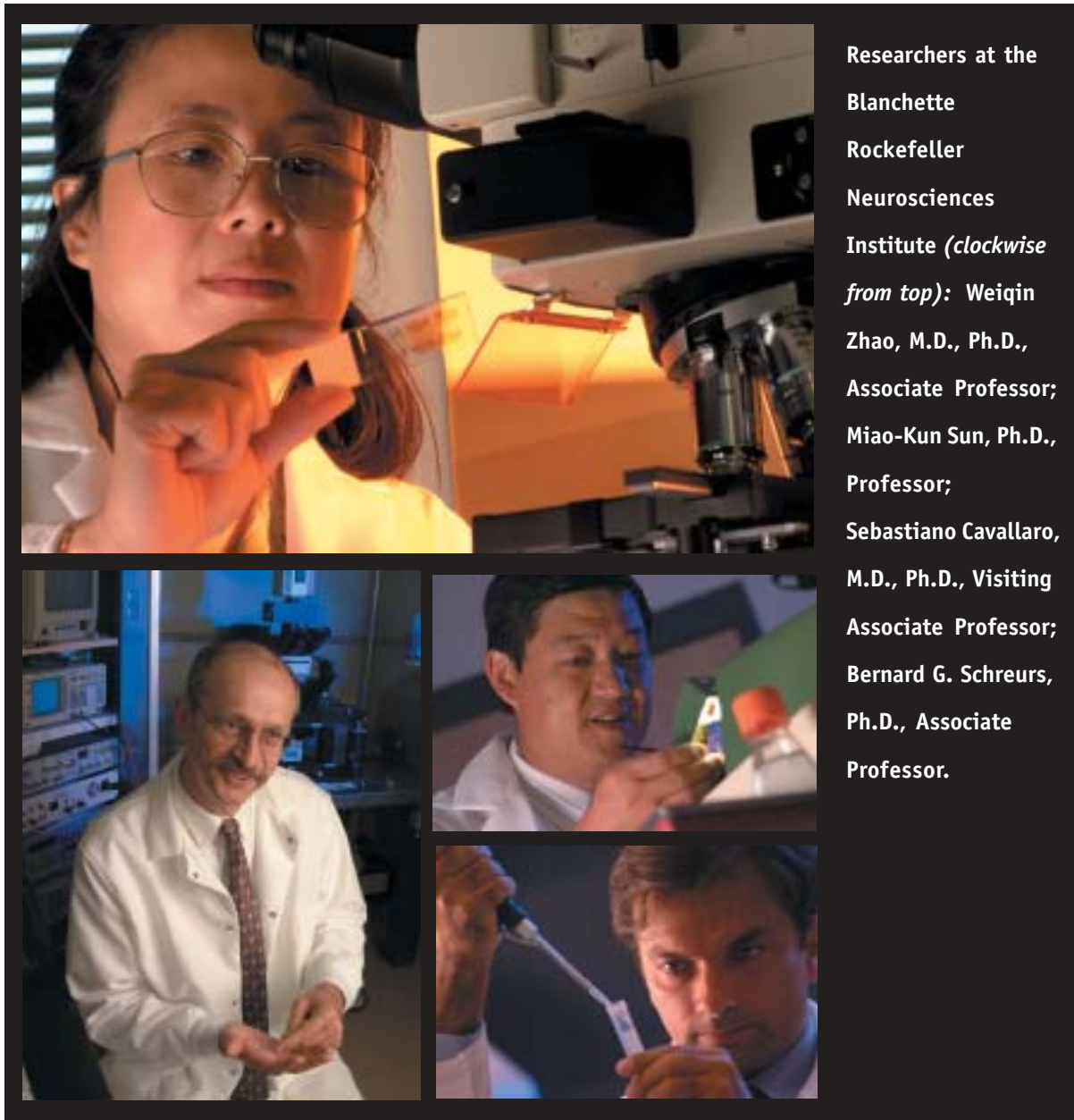
After only two years in operation, the development of this new paradigm is well under way. Already, 20 patent disclo-

tures and filings have originated from the BRNI laboratories and several new treatments for Alzheimer's disease are under development. Additionally, an Alzheimer's disease diagnostic is in the final stage of clinical development through a licensing arrangement with a commercial partner.

The success of BRNI also has tangible direct regional benefits. As a research and educational institution affiliated with the WVU Health Sciences Center, BRNI is supplying intellectual property and

trained experts to our incipient biotechnology industry for the economic development of West Virginia. By establishing a new and useful paradigm for the research and development process, BRNI enables our brightest researchers to affect the lives of people here and throughout the world.

For more information, please visit our website at www.brni.org. ■



**Researchers at the
Blanchette
Rockefeller
Neurosciences
Institute (clockwise
from top):** Weiqin
Zhao, M.D., Ph.D.,
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Miao-Kun Sun, Ph.D.,
Professor;
Sebastiano Cavallaro,
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Bernard G. Schreurs,
Ph.D., Associate
Professor.



Anthony P. Tokarz, a member in the Charleston office, focuses his practice on intellectual property, environmental and complex litigation involving scientific and technology-intensive cases. He serves as group leader for the firm's Intellectual Property Practice Group.

Who Owns the “Invention” in the High-Technology Environment?

*Anthony P. Tokarz, Esquire
Bowles Rice McDavid Graff & Love PLLC*

North Central West Virginia is an expanding hub of companies and educational institutions involved in high technology. In this dynamic environment and in the rush to derive the economic benefits from the development of high technology, some companies and educational institutions have assumed that any invention created by their employees or faculty¹ are owned by the company or the institution. This is not necessarily accurate. Under the democratic, free labor spirit of the American patent system, the inventor is the owner of the invention. Patent law embraced this concept of free thought by providing monopoly and profit to the ingenious. As Abraham Lincoln observed, patent law “added a fuel of interest to the fire of genius.”

Over time, the law has evolved to the point that in certain situations an employer will have ownership rights to an employee’s invention. Nevertheless, the law still leans somewhat in favor of the employee-inventor. For instance, general contracts of employment are not recognized as including the products of the employee’s imaginative genius. Usually, an employer will be entitled to own the products of an employee’s mechanical skill, but lines are drawn by the courts when the product of the employee’s inventive talent is the issue. In this regard, if the invention is related to the employment or business, the employee will still be declared the owner, and the employer

may only be given an implied license to use the invention, which is typically called a “shop right.”

In determining the extent of ownership or “shop right” of an employer in an employee’s invention, courts consider the following:

1. Inventions created as a result of the employer’s request and resources. Despite the presumption of ownership of the invention by the employee, if the employee was hired for the specific purpose of inventing a particular product or process, and this objective is obtained, the employer may be considered the owner of the invention. In this situation, an express contract providing the employer the ownership rights is usually not necessary.

2. General inventions which are created partially or completely with the employer’s resources, but which are not specifically requested by the employer. These general inventions are normally considered to be owned by the employee. Nevertheless, in these situations an employer may be provided a “shop right,” as described above. The extent of the employer’s “shop right” will depend upon the degree to which the employee actually used the employer’s resources in creating the inventions.

3. Private inventions created by the employee without the employer’s resources. An invention created by an

¹The ownership of inventions created by university graduate students presents a special category of issues which is beyond the scope of this article.



“business methods.” Given the number of employees who use computers in the workplace, the probability is high that an employee would access an employer’s computer to create such a patentable invention.

In the absence of an express and, more importantly, effective written contract between an employer and an employee covering the ownership of intellectual property, the ownership dilemma is compounded when dealing with these business-method inventions. For example, while

developing the computer-implemented invention, the employee also creates a written computer code for which the law provides a common law copyright. In the event that an ownership dispute arises and cannot be informally resolved, to certify ownership the employer will have to sue the employee under the common law theories of “hired to invent” and “shop right” rules for the invention and “work for hire” provisions of the Copyright Act for the computer code itself. Even though the subject matter of patentable inventions and copyrights are not inherently mutually exclusive, there are substantial differences in the two bodies of law. Thus, it is difficult to predict how the employer would fare in this litigation with the employee. The employer could end up owning both, or neither the invention nor the computer code or only one, rendering them both useless.

employee on the employee’s own time and without the employer’s resources is owned by the employee, even if the invention relates to the employer’s business. The employer will not be entitled to a “shop right.” However, if the invention relates to the employer’s business, the employee ordinarily will have the burden to prove that the employee created the invention and that the employer did not provide the employee with resources or information by which the inventor was able to create the invention.

A rapidly evolving fourth category pertains to those inventions created through the use of a computer. In the landmark decision of *State Street Bank and Trust Co. v. Signature Financial Group, Inc.*, the Federal Circuit held that a manipulation of financial data by a computer constituted patentable subject matter in that it produced a tangible, useable product. This decision caused a dramatic flood in the number of computer-implemented inventions, known as

Because of the uncertainties described above, many employers have used written contracts to assign the ownership of

(Continued on p. 17)



In addition to his work as Director of Industries of the Future-WV, Carl Irwin is division director for market enhancement and program development at the WVU National Research Center for Coal and Energy (NRCCE). He has a background in aeronautical engineering and holds a Ph.D. in mathematics. Dr. Irwin is coordinator for WVU research on the Polymer/Electronics Recycling project that is jointly managed with the Polymer Alliance Zone of West Virginia.

Industries of the Future

Caulton L. Irwin, Ph.D., Director
Industries of the Future

“There is probably no time in our history when it has been more important for America to have vital, strong and productive manufacturing industries.”

- David Satterfield, 5th Annual Industries of the Future-WV Symposium, December 6, 2001.

David Satterfield’s comment captures the response many have had to recent economic upheavals. In uncertain times, a nation develops a heightened awareness and an appreciation for its underlying strengths — strengths such as manufacturing and production that have evolved over decades.

West Virginia’s core manufacturing and production companies are part of the country’s struggling industrial base, yet these sectors produce materials and products that are critical to the economy of the state and security of the land. Most agree that both our economy and security will be diminished if we lose the capacity to produce aluminum, steel, chemicals, polymers and other basic materials and products.

Staying competitive means reducing costs, and for many basic industries energy represents a substantial percentage of total production costs. Energy-intensive industries are prominent in West Virginia, providing more than 75% of the manufacturing gross state product (GSP) and almost 65% of the state’s manufacturing jobs. Table 1 (*opposite page*) shows comparable data for several states.

West Virginia’s strength in energy-intensive industries makes us a key player in Industries of the Future (IOF), a U.S.

Department of Energy program dedicated to energy efficiency in manufacturing and production companies. But while an energy-intensive industrial base may provide the foundation upon which our future economy will be built, surviving into the future remains challenging. In addition to significant energy costs, we face global competition, costly new technologies, an aging workforce and increasingly stringent environmental regulations.

The Weyerhaeuser Company — the world’s largest producer of softwood and hardwood lumber — is an energy-intensive, natural resource-based manufacturer that faces all these challenges. Yet according to George Weyerhaeuser, Jr., Senior Vice President of Technology, one of their strategies is to build more “knowledge” into their products through research and development to become as energy efficient as possible, to manipulate wood fibers down to the molecular level, to create new and better products, *i.e.*, to build a better box!

In 1997, through a cooperative effort with West Virginia University, the West Virginia Development Office and the U.S. DOE Office of Industrial Technologies, West Virginia became the first state to launch its own IOF program (IOF-WV). (See <http://iofwv.nrcce.wvu.edu> for additional information on the program.) Since then, more than 30 other

states have initiated IOF programs, and West Virginia has become recognized as a national leader in this area. As we have found in West Virginia, the appeal of a state IOF partnership is that it has the flexibility to incorporate a state's particular industry profile, energy mix, and research strengths, *e.g.*, Iowa and corn-based products, Tennessee and the Oak Ridge National Lab, Washington and the Weyerhaeuser Company.

West Virginia's approach to sustaining a state IOF program is to continually link industry R&D needs, especially in energy and resource efficiency, with research expertise at WVU, national labs and private companies, and then to identify co-funding opportunities in federal and state programs. Over the past five years, IOF-WV research teams have obtained more than \$11.8 million in competitively awarded federal and state funding for projects with more than \$7.2 million in non-federal cost-share, for a total R&D program value to West Virginia exceeding \$19 million.

West Virginia companies such as Century Aluminum, Pechiney Rolled Products, Weirton Steel, Fenton Art Glass, Marble King, GE Specialty Chemicals, Dyna-Tech Adhesives, Bayer Chemical, SDR Plastics, Mullican Lumber, Hamer Lumber and Pellet Fuels, Westvaco, HK Castings, Kelly Foundry and Applied Industrial Solutions LLC have participated in IOF-WV projects. More than 25 WVU researchers have assisted with IOF-WV projects. Several projects have also enlisted expert assistance from the U.S. DOE national labs.

Results of IOF-WV projects range from immediate industrial energy assessments (free to small and medium-size manufacturing companies) to the potentially long-term benefits associated with the development of promising new metal alloys for use in galvanizing line hardware. Some projects are highly technical in nature, such as the development of new diagnostic and computer control systems to optimize aluminum

(Continued on p. 16)

Energy-Intensive Industries

	% of Total Gross State Product	% of Total Manufacturing Jobs
West Virginia	78%	64%
New Jersey	59%	40%
Pennsylvania	46%	39%
Ohio	42%	42%
Tennessee	38%	34%
Iowa	35%	23%
Kentucky	29%	35%
Washington	26%	25%

Table 1

(Irwin . . . continued from p. 15)

smelting. Other efforts are more policy-oriented, such as the IOF-WV metal casting group's successful initiative to have new DEP waste-management regulations implemented, permitting productive uses of spent foundry sand. This latter effort has saved one West Virginia metal casting company more than \$600,000 over a two-year period, and, according to the company

president, "has enabled me to weather the recession and stay in business."

Despite these and other successes across the country, some economic forecasters predict that because of global overcapacities, cheap offshore labor and the "new economy," traditional energy-intensive industries are dying on the vine. If these forecasts become reality, what would be the impact on national security, on the strength of the U.S. economy and on the potential for future industrial development?

Given West Virginia's unique role in the energy-intensive market, we have a strong rationale for addressing these questions. West Virginia can be a laboratory for the nation, assessing and developing projects and policies that give energy-intensive industries a chance to evolve in the economy of the future. What's good for West Virginia just may turn out to be good for the nation!



West Virginia's core manufacturing and production companies produce materials and products that are critical to the economy of the state and security of the land.

The objective of IOF-WV is to contribute to this process, to form R&D partnerships that follow the Weyerhaeuser example and to help energy-intensive industries become "knowledge-intensive" industries as well. IOF-WV can also be a vehicle for helping to increase awareness of the spectrum of products and materials that are currently produced in West Virginia, as well as the potential for building more high-value downstream manufacturing on our existing industry base.

The Sixth Annual IOF-WV Symposium will be held December 10-12, 2002, in Charleston, West Virginia, and the Third IOF-WV Day at the Capitol will be held February 7, 2003, in the Rotunda at the State Capitol Building. All who would like to be part of the evolution of West Virginia's basic industries are cordially invited to participate in these events. ■

(Tokarz... continued from p. 13)

an employee's invention. However, particularly in high technology information businesses, many companies have outgrown their original employee agreements. Also, in some situations, employees will refuse to execute an invention ownership assignment. This frequently occurs after an invention has been created by an employee and then discovered by the employer.

To avoid post-invention disputes with employees, employee invention assignment agreements can be provided as a condition of employment. However, some pre-invention assignment agreements are so broad in scope, they are unconscionable and therefore unenforceable. For example, agreements that assign the rights of in-

ventions unrelated to an employer's present or anticipated business and/or developed during the employee's own time and with the employee's own resources or where the value of the invention far outweighs the compensation paid to the employee.

Other provisions of employee invention assignment agreements can be a trap for the unwary. As an example, an agreement that prohibits the employee from competing with the company for a speci-

fied number of years after the employee's termination of employment requires the employee to assign to an employer all inventions made during the course of employment and within a specified number of years thereafter if the invention relates to the employer's business could be held unenforceable if adequate monetary compensation is not provided for the post-employment conditions.



Another concern is that the employee could still assign those rights to a third party, even if the employee had assigned the invention's ownership rights to the employer. If the third party paid value for the ownership rights without notice of the first assignment, the third party is deemed to be the owner of the inven-

tion. Therefore, employers should ensure that employee assignments are recorded. The federal patent statute provides that assignments of inventions pertaining to patent applications and patents may be recorded in the United States Patent and Trademark Office. Recording is voluntary, but the effect is similar to real estate recording statutes that protect the buyer against such transfers of title for value and without notice. ■



As President of Fairmont State College, Dan Bradley has devoted a significant part of his efforts to outreach activities to K-12 students and teachers (Upward Bound and NSF Young Scholars), which are an indication of the importance he attaches to helping students reach their education goals and potential. Prior to coming to Fairmont State in 2001, Dr. Bradley was Chancellor for Academic Affairs and Research of Montana Tech. He holds a Bachelor's degree in Biochemistry, a Bachelor's and Master's degree in Petroleum Engineering, and a Ph.D. in Physical Chemistry.

North Central West Virginia

Enhancing Access to Higher Education in West Virginia

*Daniel J. Bradley, Ph.D., President
Fairmont State College*

Access to educational resources is vital to the future success of West Virginia's economy. Our state's higher education system is being called upon to provide access to the programs our clients want at times and places convenient to them. Let me tell you about two specific initiatives Fairmont State has launched to provide better service to employers and working-age adults. One addresses the issue of "time," the other seeks to offer support to our region's small business community.

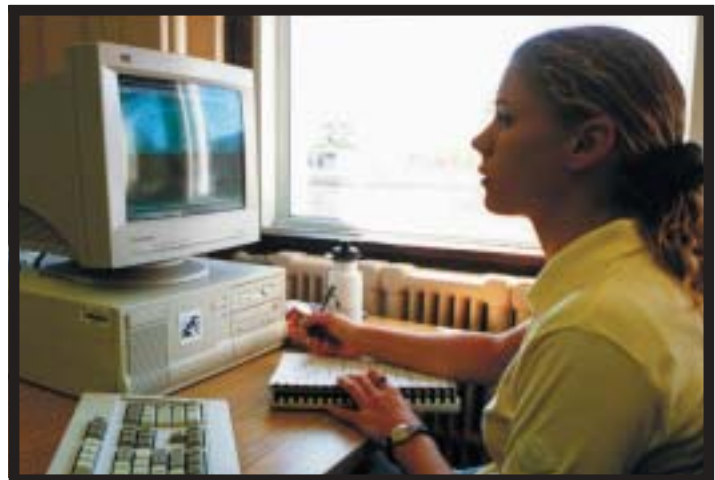
Time is a precious commodity, especially for employers and working-age adults. That's why our first initiative is to decrease the travel time involved in pursuing an education and increase the number of hours classes and instruction are available.

We are offering classes at more locations and at better times (including weekends and evenings). We are also increasing the number of "asynchronous delivery" courses available. With this type of delivery, the student and teacher never have to meet face to face. In fact, they may do all of their work at opposite ends of the day — or opposite ends of the world. With the internet and

today's electronic communication, this type of delivery is moving to the next level.

Fairmont State has adopted Web-CT, a software product that facilitates online delivery of classes. To date, more than half of our faculty have received training in the use of Web-CT, and the number of online courses available to the off-campus community continues to grow. It's already possible for a student to earn an Associate's degree without taking any traditional classes or visiting any of our physical sites.

Eventually, the availability and marketing of online courses may be all that is needed. However, many citizens and employers do not currently have the computer hardware or technical skills needed to successfully complete E-courses.



With FSC's Web-CT, it is now possible for students to earn an Associate's degree without taking any traditional classes or visiting any of the college's physical sites.

To help fill this void, Senator Roman Prezioso and others have helped us develop E-learning centers in cooperation with the public school systems in Preston and Randolph counties. Similar centers exist on the Fairmont Campus and at our Gaston Caperton Center in Clarksburg. A recent private grant from the Bowers Trust will allow us to develop another E-learning site in rural Marion County at the Mannington Community Center.

These E-learning centers will provide students with computers, printers, high-speed connectivity and facilitators. Students will be able to take courses offered by Fairmont State, as well as courses offered by partners such as the Kentucky Community and Technical College System and eventually any institution in the world. We hope to have these centers, which meet a crucial need for education and training in all eight counties of our community and technical college service region, within a few years.

Access to workforce training and small business development is at the center of our second initiative. The Fairmont State Community & Technical College's Regional Small Business Development Center (SBDC) has operations in Fairmont, Morgantown and Elkins and offers training in many communities throughout our region. Our SBDC has provided training to 436 individuals and 133 businesses in the past year. Our workforce training efforts last year, including the SBDC programs, benefited more than 2,700 people in almost 180 programs. That represents nearly 30,000 contact hours.

While these efforts will continue, we are also developing ways to respond to the very specialized training needs of some

individuals and companies. The cost of developing individual or unique training materials is often prohibitively expensive. This is especially true for small businesses. However, by partnering with American College Testing (ACT), we are able to provide computer-based workforce training and certification in more than 2,000 programs. This dramatically lowers the cost of providing specialized training for small businesses and individuals. Class size can be as low as one!

This training is available at our Center for Workforce Education, located at the I-79 Technology Park in Fairmont. In addition, more than 90% of these programs are available anywhere with adequate internet access — including an employer's place of business or a Fairmont State E-learning Center.

These two initiatives represent ways we are striving to take Fairmont State to our students and clients. We are no longer satisfied with being a passive resource, waiting for people to come to us. We are actively seeking new ways to develop our services and meet the educational needs of our region. ■



The institution now known as Fairmont State began as a private school in 1865 and became Fairmont State Normal School in 1867. The school became a four-year college in 1943, and in 1974 the Fairmont State Community & Technical College component was created. Today, Fairmont State, comprised of Fairmont State College and Fairmont State Community & Technical College, boasts an enrollment of more than 6,700 students and offers 80 baccalaureate degrees and 40 certificate and two-year degrees. The college has expanded to include the Gaston Caperton Center (Clarksburg), the Robert C. Byrd National Aerospace Education Center (Bridgeport) and the FSC&TC Regional Small Business Development Center (beside the Allan B. Mollohan Innovation Center).



William Haden became President of West Virginia Wesleyan in 1995. He is actively involved in several national efforts to improve higher education, including Project Kaleidoscope, an initiative to improve science and mathematics undergraduate education, and Campus Compact, to promote student volunteerism. He began his career in educational fundraising and has an extensive background in Development, Alumni Relations and Public Affairs.

West Virginia Wesleyan College

*William R. Haden, President
West Virginia Wesleyan College*

One mark of distinction for West Virginia Wesleyan College is its Information Technology program, often cited as a national model for an integrated approach to IT in higher education. The program at West Virginia Wesleyan is more than a laptop, more than the WWW; it is a comprehensive IT program that prepares students to be contributing citizens of West Virginia and the larger world, and to live and work in the knowledge society as leaders and innovators.

In 1996, the College committed to a 1:1 student to computer ratio. This has allowed our students to use the computer as a tool in their coursework and has allowed them 24/7 access to the technology resources 52 weeks a year.

Our information technology initiative is threefold in its approach, with 1) student access, 2) network reliability, and 3) robust information resources to support the academic needs of the College. It is this unique three-point approach that sets our program apart from so many other trends in higher education computing. Equipping all of our students and our entire faculty with equitable technology access, the information technology initiative has evolved in many different directions.

This broad approach to access has our faculty thinking in new directions for student assignments. The classroom environment remains very eclectic. Our students are encouraged to seek the methods of study that are best for them. Calculus students work with 3-D models on their laptops that are not available in a classroom with chalk alone. You will continue to see boards full of equations in the Math Department; the technology enhances the strong faculty to student interaction that takes place in the classroom. Students can mirror the work of their chosen profession while at the College; they conduct research, write and collaborate with standard software that they will continue to use far beyond their tenure at Wesleyan. The electronic environment enhances student and faculty communication in and out of the classroom. Electronic data collection and management, online library resources and full-text electronic journals enable students to gain skills in digital research and networking that is necessary to work in the information rich arenas to which they aspire.

West Virginia Wesleyan is an IBM Thinkpad University Program Participant. Upon each student's arrival on campus, they receive an IBM Thinkpad Laptop for individual use, a network account and access to the global community.

"We have worked very hard to add a technological edge that enhances the strong liberal arts foundation for which Wesleyan is known. Wesleyan students gain lifelong skills in information access, processing and management."

**- Karen R. Petitto, Instructional Technology Specialist
Assistant Professor of Educational Technology**

The access to information technology has enhanced many of our existing program areas. We have a strong commitment to service and the mobile computer has allowed students to take the computers out into the community and collect data for several different projects that have had a positive community impact. Nursing students have completed community health projects, and education students arrive at the public schools equipped with the tools they need to share information with K-12 students. Students have converted C92, our campus radio station, to a digital platform.

Many of the changes facilitated by technologies have been student initiatives or our response to the way students work. They are subtle changes, just as e-mail has replaced much of the communication within your organization and the migration from print to electronic publications. Much of what we do we just naturally do on the web. Student populations are highly nomadic — gathering and working in many different places. The information technology initiative has brought students together with the knowledge and the network.

We continue to stay poised to incorporate new learning technologies that will positively affect the teaching and learning process. One of our ongoing efforts is in testing wireless technologies that promise community wireless alternatives in the future. We partnered with another West Virginia company to build a wireless tower on our campus. This has attracted wireless vendors who are in need of beta testing grounds for their products. Wireless community access to the Internet is not yet a reality; but we are helping to shape the direction for this technology.

Many of our students rely on the mobile computer as an integral part of their internship program. Student interns now arrive at West Virginia companies equipped with their own electronic workstation. One of our most successful interns worked in the Office of the Governor of West Virginia and received the highest marks for readiness and acceleration in electronic data access, evaluation and management. Collaborative efforts in which faculty are involved are supported by students; student work on campus is much more robust than answering phones and filing data. Our student employees are truly gaining valuable skills that they will take away with them.

Students choose a small college to become engaged in the learning environment with faculty who are passionate about their field of study. We know that no field stands on its own in the world in which we live. Our first priority is teaching and learning; the information technology program helps to yield graduates who receive an excellent education and who are highly competitive in today's job market. Employers note that our graduates have the knowledge base they desire and a concise technological learning curve compared with graduates from other institutions. We will continue to provide West Virginia with responsible citizens who can sustain our natural culture and beauty, as well as forge the economic landscape for a successful future. ■

WEST VIRGINIA WESLEYAN COLLEGE

West Virginia Wesleyan is a private school located in Buckhannon, West Virginia. Originally known as the West Virginia Conference Seminary, the school opened September 3, 1890, and the first baccalaureate degrees were awarded in 1905. One year later, the name officially changed from Wesleyan University of West Virginia to West Virginia Wesleyan College, in honor of Methodism's founder, John Wesley. Students at Wesleyan are prepared through its curriculum of arts and sciences, preprofessional and professional studies, and its rich campus life program.



Under Mr. Estep's leadership, the WVHTC Foundation has undergone extensive reorganization, including an expansion of the I-79 Technology Park and a complete restructuring of the organization's education division and technology affiliate program. Prior to his appointment as President and CEO, Mr. Estep served for four years as Vice-President for research at the WVHTC Foundation. In that capacity, he was a key provider of the technical leadership behind the successful growth of the Foundation's multi-million dollar research programs.

North Central West Virginia

Economic Diversity through Technology

*James L. Estep, President & CEO
West Virginia High Technology Consortium Foundation*

Without question, traditional West Virginia industries such as energy and manufacturing will continue to play a major role in the future of West Virginia's economy. Governor Wise has demonstrated leadership over the last year with the creation of his energy task force to help chart a course for the future of West Virginia's energy sector.

However, few would argue that there must be continued *diversification* to have a truly healthy economy. It is not hard to notice that one of the significant diversification efforts in West Virginia has involved technology. Efforts to diversify West Virginia's economy with a technology sector have been most visible in the north central part of the state.

As a result of the vision and efforts of U.S. Senator Robert C. Byrd and First District Congressman Alan B. Mollohan, the economic landscape of North Central West Virginia has changed dramatically over the past decade, transforming the region from an economy dependent upon traditional industries to one of technological advancement and diversification. As a result, North Central West Virginia's technology sector is poised to explode, expanding throughout the state.

The success of the North Central West Virginia technology sector has involved many years of strategic positioning. One of the critical components of this positioning has been the growth of a Federal presence in the region. Thanks to early efforts by Senator Byrd, our state now includes some of the country's most re-

nowned and technologically sophisticated Federal agencies.

The Federal Bureau of Investigation, the Department of Defense, the Department of Energy, NASA, the National Institute of Occupational Safety and Health (NIOSH) and others are now located in West Virginia and serve as critical economic anchors. As anchors, they provide a conduit for key Federal procurements. Hundreds of millions of dollars have flowed through these organizations to the technology contractor community in West Virginia.

As this community matures and grows and becomes a greater presence, the impact will become even more substantial. The truly exciting part of this economic diversification component is that the economic impact realized from the federal anchors to date is only the tip of the iceberg of its potential. In addition, there are plans for other Federal anchors to join those already in the state.

Another very important strategic component to the success of the technology sector is a strong and diverse technology business community. A balanced business community provides the support infrastructure not only for the resident Federal anchors, but also provides a vehicle for high paying, high quality jobs. When organized correctly, the business community can leverage its efforts to fulfill its support role and to attract and bring in additional work from around the country and world — ultimately resulting in more jobs.

One of the most exciting aspects of this scenario is that the employees of these technology businesses, in turn, become fertile ground for entrepreneurs and hot new start-up companies. When directed towards the development of commercial products and services, the wealth creation potential becomes very attractive, which is at the very heart of economic development. The challenge, then, is to provide the “right resources” to harvest this opportunity.

Enabling a strong, balanced and diverse technology business community is perhaps the most challenging component of a technology-based economic diversification effort. While there is no “wrong or right recipe” for accomplishing this objective, there are some fundamental components that must be addressed in some capacity.

West Virginia innovators. Services include product evaluation, assistance in business planning, market analysis, market strategy development and access to seed or early stage investment capital. In short, the INNOVA Commercialization Group seeks to cultivate the state’s entrepreneurial climate.



Over the last decade, efforts at the West Virginia High Technology Consortium (WVHTC) Foundation have evolved to provide a framework for addressing this challenge. The framework the WVHTC Foundation has evolved to support its mission includes five key areas: research and development, commercialization, workforce development, affiliate services and technology park development.

The WVHTC Foundation’s **research and development** division’s focus is to expose the technology business community to cutting edge high potential technologies.

The WVHTC Foundation recently announced the creation of *INNOVA*, its **commercialization** division. *INNOVA* is designed to advance economic growth by increasing the number of new products introduced into the marketplace by

The WVHTC Foundation’s **workforce development** program is focused on recruitment and continuing education. The WVHTC Foundation’s **affiliate services** program is being enhanced to serve the technology community more efficiently, with services including legal, accounting, travel services, training and education opportunities, and group health insurance, to mention a few.

One of the most significant efforts is the development of the **I-79 Technology Park**. The goal is to develop the I-79 Technology Park into one of the premier technology business parks in the country.

These five key areas will continue to prompt high tech growth and economic development in the north central region and throughout West Virginia. ■

The Alan B. Mollohan Innovation Center is a \$12 million, 110,000 square-foot office complex located in the heart of the high-tech corridor in Fairmont. Opened in 1996, the Center is a public-private partnership dedicated to facilitating the continued growth of high-technology jobs in West Virginia. Its principal function is to provide much needed high-technology office and laboratory space, unavailable elsewhere in the region, for the increasing number of technology companies wishing to locate in West Virginia.



J. Thomas Jones was recently appointed to the position of Chief Executive Officer of West Virginia United Health System. He previously served as CEO of Genesis Hospital System, Inc. and as Executive Director and CEO of St. Mary's Hospital, both located in Huntington, West Virginia. Mr. Jones is also the former Administrator/COO of Wheeling Hospital. He holds a Bachelor's degree in Business Administration and a Master's degree in Hospital Administration.

The Present and Future of Health Care in North Central West Virginia

*J. Thomas Jones, CEO
West Virginia United Health System*

West Virginia United Health System (WVUHS) was developed in the 1990s for its members to work collaboratively to address the health issues of then, of today, and of tomorrow.

WVUHS joins the resources of West Virginia University Hospitals (WVUH), and Clarksburg's United Hospital Center (UHC). WVUHS has a unique opportunity to partner the efforts of community-based health care with medical education and research, to better the health of North Central West Virginia and beyond. Collectively, we have 710 beds, 470 staff physicians and 4,468 employees, making WVUHS the second largest employer in West Virginia.

WVUHS's vision is to "bring health care providers together to improve the health of the communities we serve, by delivering quality, cost-effective health care, and supporting medical education and research."

The WVUHS partnership embodies the not-for-profit model of health care, dedicated to sustaining access to quality health care by continually reinvesting in facilities and services locally. Not-for-profit organizations have a higher calling to provide care for everyone. This year WVUHS facilities will provide more than \$15 million in charity care for those unable to pay.

A key aspect of improving the health status in the region is improving access to services. WVUH provides a range of specialized services, including neonatal in-

tensive care, subspecialty pediatric care, and sophisticated neurosurgical procedures. These services, along with the highest level of trauma services, truly make WVUH a "safety net" hospital for the region and the state. WVUH is also working with Monongalia General Hospital, United Hospital Center, and Camden-Clark Memorial Hospital to provide heart services around our state.

United Hospital Center will shortly begin offering life saving interventional cardiology services on-site with surgical support from WVUH. UHC is among the first in the nation to utilize "camera in a pill" technology for non-invasive diagnosis of certain small intestine disorders. UHC is one of only a few hospitals in West Virginia providing a full range of post-hospital services, including a residential assisted living facility and nursing home services.

But the impact of WVUHS is felt beyond our region. WVUHS facilities serve residents from every county in West Virginia, as well as from Pennsylvania, Maryland, Ohio, Virginia and Kentucky. The cutting-edge neurosciences program at WVUH attracts patients from as far away as Israel, Greece, and Italy. WVUHS also supports the development of cancer research at WVU that will be unparalleled. West Virginians will soon have access to unique cancer treatments that people outside of the state will seek as well at the Mary Babb Randolph Cancer Center.

WVUHS has developed a regional view of health care, leading to ambitious plans



WVUHS joins the powerful resources of West Virginia University Hospitals (WVUH) and Clarksburg's United Hospital Center (UHC). The cutting-edge neurosciences program at WVUH attracts patients from around the globe, while UHC is among the first facilities in the nation to utilize the advanced "camera in a pill" technology for non-invasive diagnosis of certain small intestine disorders.

to upgrade system facilities. WVUH has become the first West Virginia hospital in more than a decade to request 70 additional beds to meet increased demand. This \$75 million expansion will also add needed operating rooms and intensive care units to meet growing demand. No special rate increases will be needed for this expansion.

Plans are also under way for the new United Hospital Center, the first "21st Century" hospital in West Virginia. If approved, UHC will be the first large replacement hospital built in the state in more than fifteen years. UHC will be built with future health care needs in mind: outpatient services will be arranged in "medical mall" fashion for coordination between services and easy access for our aging population. UHC is now among the lowest cost hospitals in West Virginia and is projected to have charges lower than average even with construction of a new facility.

In addition to strategic benefits of partnership, WVUHS has delivered cost savings that its members could not achieve individually. By combining purchasing contracts and standardizing some items, WVUHS has already saved in excess of \$2.2 million. With centralization of supply-chain processes this fall, WVUHS

will save an estimated additional \$7 million over the next few years.

The future is bright for WVUHS and consequently for health care delivery in the region. WVUHS is open to additional partners who are a strategic and a cultural fit. Additionally, WVUHS has a vision of continuing to dramatically enhance access to cardiac, neuro, and oncology services in the region, in conjunction with physicians in the WVU School of Medicine and those in private practice.

There are daunting challenges facing the health care industry today in West Virginia. These challenges include rising medical malpractice insurance rates, the financial woes of PEIA and the Medicaid program, and the scarcity of physicians, nurses and other health providers. The future of health care in our state will include the challenges of today and unknown changes that will emerge over time.

WVUHS believes the best way to address the problems of today, and tomorrow, is to do our best to create that future in partnership with like-minded hospitals and physicians to sustain and improve the health status of citizens in the region. ■



Patrick R. Esposito, Sr., is the President of Whitman Augusta and the Chief Executive Officer of Augusta Systems, a Morgantown-based start-up energy technology company. Esposito serves as chairman of the West Virginia Governor's Energy Task Force and as co-chairman of the Southern States Energy Board Task Force on Electric Utility Restructuring. He also represents West Virginia on the National Coal and Power Systems Committee and the Southern Global Strategies Council.

Research Ridge: Community Makes a Difference

*Patrick R. Esposito, Sr., CEO
Augusta Systems*

The first step in the quest for sustainable economic development in West Virginia involves providing the tools that can help businesses to succeed. A key tool, as defined by the mantra of the retail sales industry, is location, location, location.

In Morgantown, we at Whitman Augusta set out to provide just such a tool, the right location, for the leaders of the region's burgeoning energy and environmental technology sector. As the sister company to Augusta Systems, an energy technology start-up company itself, we understood the demands and physical requirements necessary for the success of technology-based businesses. The result was a first for Morgantown: Research Ridge, a campus-style research and business park built using the most up-to-date energy efficient technologies, including ultrasonic and infrared sensors, along with fiber optic service, data ports and radiant heating.

Strategically located adjacent to the U.S. Department of Energy's National Energy Technology Laboratory (NETL) — home to the federal government's fossil energy research programs — Research Ridge houses 12 science and technology companies, including global leaders CTC, EG&G and SAIC. As many of these companies are Department of Energy contractors, the close proximity to the laboratory, plus the collegial atmosphere at Research Ridge, has helped to spur collaborative research, development and commercialization of energy and environmental technologies. With the

dynamic interplay between public and private-sector researchers at NETL and at Research Ridge, we have planted the seeds of what can blossom into a thriving energy and environmental technology cluster in the Morgantown area.

In so doing, we believe that Research Ridge plays an important part in the overall efforts to expand the knowledge-based economy in North Central West Virginia, whether that growth involves energy technologies, IT, biometrics, or any of the dozens of possible success stories being written across the region. Most likely, growth will involve the hand-in-hand development of these clusters and businesses. What is good for one sector is good for all of these sectors.

It is this spirit of community and possibility that brought Research Ridge into existence in the first place. Research Ridge was developed to provide a communal location, with a relaxed atmosphere and the necessary amenities, where knowledge workers can communicate, collaborate and thrive.

My work as chairman of the Governor's Energy Task Force, and as a team member with the researchers at NETL and Research Ridge, has proven to me that West Virginia can remain a leader in its traditional strengths, such as the supply and delivery of energy, but can also outdistance its competitors in new arenas, such as the research, development and commercialization of new energy technologies. The deciding factor will be the

support that our entrepreneurs and researchers receive from our communities.

We believe that Research Ridge has been able to provide such support for the science and technology leaders in the Morgantown area. In fact, because of the success of these businesses and the continued growth of regional research, we have announced plans to expand Research Ridge. Over the next three years, Research Ridge will double in size, providing further opportunities for business collaboration and job growth.

Our experiences with Research Ridge and with the energy and environmental research community have proven to us that North Central West Virginia has the talent, the tools and the commitment that can spur economic growth. Our region is well on its way to turning dreams into reality. That reality starts with community. It is what makes, and has always made, West Virginia strong. ■

Bowles Rice is Proud to be an Active Part of North Central West Virginia's Growth and Success!

Bowles Rice is proud to be a part of the growth and bright future that is North Central West Virginia. We have had offices in North Central since 1990, and several of our lawyers have practiced in the region for much longer than that.

Bowles Rice represents many clients in this region, including individuals, businesses, health care providers, developers, public entities and new economy businesses participating actively in the high-tech and biotech arenas. Additionally, members of our firm teach at the WVU School of Law as Adjunct Professors and serve on WVU's Board of Advisors, and we also actively participate in and contribute to the many dynamic communities in North Central West Virginia.

At Bowles Rice, we are proud to be a part of North Central and to contribute to the success of our clients and the entire region.



Mark Nesselroad is CEO of Glenmark Holding, LLC, a commercial real estate development and investment company. He serves as President of the Monogalia Vounty Schools Foundation, Inc. and Vice-President of the Campus Neighborhoods Revitalization Committee.

Mylan Park: A North Central West Virginia Treasure

*Mark Nesselroad, CEO
Glenmark Holding LLC*

When the first pitch of Anker Fields Spring 2000 was lobbed over the donated 30.5 acres of Anker Energy's reclaimed surface mine, it was the beginning of far more than a baseball game. What started as a plan among friends to provide baseball and softball practice facilities for local high school students has become one of the most exciting and multi-faceted developments in all of North Central West Virginia.

The park has since exploded into 15 projects under construction or on the drawing board and 320+ beautiful acres of prime property slated for future development. In addition to enhancing the educational, cultural, and recreational resources of local communities, these projects are sure to bring a tremendous economic boost to the area and State economy.

Spearheading the effort is the Monongalia County Schools Foundation, Inc. (MCSF) is a non-profit, 501(C) 3 legal organization formed in 1999 to support the sports facility needs of the area high school programs. MCSF now does business as "Mylan Park" with a much broader mission and more diversified focus.

Education remains a main focal point of the Foundation and its mission. The county school's Alternative Learning Center (ALC) is now housed in Mylan Park, and the new transportation center for school busses will opened there in

November. A site has been selected for a new elementary school and community-based educational activities center. Sports fields and facilities have been designed to benefit school programs as well as the community at large. Each of these relationships is uniquely crafted to provide maximum benefit to all participants.

Recreational needs are being fulfilled with Anker Baseball and Softball Complex plus a new seven field complex for soccer, football, and lacrosse due for completion in Spring 2003. The West Virginia Miracle Sports Complex, a uniquely designed field for children and adults with physical and mental disabilities is under construction and will be the second one of its kind in the United States.

A recently completed cross-country course is utilized by area high schools and middle schools as well as WVU. A mountain bike course is the next to be designed. A Horse Park is also in the master plan and will provide space for equine competitions as well as a multitude of multipurpose community events.

A site has been identified for construction of a new SteppingStones facility. Long respected as a premier organization serving the recreational needs of the physically and mentally challenged, SteppingStones will ensure tat Miracle Complex and other park facilities are enjoyed for years to come.

A large natural bowl created in the mining reclamation process is slated for de-

The Mountaineer Balloon Festival at Mylan Park



The Mountaineer Balloon Festival, which now takes place at Mylan Park, became a reality in 1984. Since then the festival has grown from 24 balloons/sponsors to 50 balloons (total capacity), 45 sponsors, 5 race sponsors, and a "Nite Glow."

Balloonists come from eight states: Ohio, Maryland, Virginia, North Carolina, Michigan, Connecticut, and West Virginia. The Festival receives national attention and draws crowds of nearly 30,000 people. The area's most unique and colorful event, which includes carnival rides, arts and crafts, souvenir and concessions and a petting zoo, is now in its 19th year.



Photography by Jan Berkow

velopment as a five thousand-seat amphitheater. The park is now a prime site for area events such as the Mountaineer Balloon Festival, the East Coast University Mini Baja competition as well as dog shows, picnics, and much, much more.

The success of this effort has been due to the wide cross-section of respected business and civic leaders who continue to be giving of their time and expertise.

This volunteer energy coupled with the financial backing of individuals, businesses, foundations, and public entities, is making Mylan Park a growing success and source of West Virginia pride. ■



Before being elected President and CEO of the Morgantown Area Chamber of Commerce, Scott Rotruck served as Chairman of the Chamber and spent fifteen years in the energy sector. He also served for two years as the economic development director and senior adviser to President Hardesty at West Virginia University. Mr. Rotruck was appointed to the Governor's Energy Task Force in 2001, and serves on the executive committee for the WV Council for Community and Economic Development. He is Chairman of the West Virginia Jobs Investment Trust.

North Central West Virginia

West Virginia: Many Regions — One State

*Scott Rotruck, President & CEO
Morgantown Area Chamber of Commerce*

Let me say up front that I love this state, absolutely all of it. I hold more optimism than ever for our future. With that set forth, I will share some thoughts about The Mountain State, especially some exciting developments in North Central West Virginia.

But first, how do we get our arms around the whole state, where like an extended family, we have a great diversity of needs, talent and resources?

First, we should seek to understand the unique resources and challenges of the many distinct areas of our state. Then, we must meet the challenges and leverage our assets through the state's community and economic development strategy called **West Virginia: A Vision Shared**. We are **one** state, so we must engage in an ascending order of partnerships at the local, regional and state levels, which in a state of limited financial resources, but unlimited economic potential, ultimately help create and support **A Vision Shared**.

North Central West Virginia has many community and economic development initiatives, such as Morgantown's Vision 2020 Program and the I-79 Strategic Planning Group, both of which have a strong record of coordinating talent and other resources, with excellent cooperation among the public, private, academic, labor and business sectors. This collaboration yields the strength of five-axis woven Kevlar, creating an inviting climate for high-technology growth.

Access to a Skilled and Educated Workforce: North Central West Virginia is blessed with abundant educational resources, including a U.S. Top 100 School System in Monongalia County, as well as West Virginia University's increasing enrollment and Fairmont State College's unique educational programs for the burgeoning aerospace industry near Benedum Airport. Additionally, the PROMISE Scholarship continues to encourage academic achievement, increasing enrollment in our colleges and uni-



Among the many improvements taking place in North Central West Virginia is the development on Morgantown's Wharf District along the Monongalia River. The \$186 million waterfront project includes the Caperton Trail, the 18-floor Radisson Waterfront Hotel and Conference Center, the Hazel Ruby McQuain Park and the WVU Visitors Resource Center.

versities and, perhaps most importantly, ensuring that West Virginia's "best and brightest" will contribute to a better and brighter future for us all.

Proximity to World-Class Research Institutions: As economic dominance by knowledge-based goods and services continues to accelerate, West Virginia is developing a strong presence in such industries. WVU has been designated a Doctoral Research University Extensive institution by the Carnegie Foundation for the Advancement of Education, placing the University in the top tier of educational research institutions in the country. This intellectual capacity is being focused on solving real problems, with the broadest research potential being leveraged when teamed with other regionally located entities, such as the National Energy Technology Laboratory, National Institute of Occupational Safety & Health, Institute for Scientific Research, the West Virginia High Technology Consortium and the FBI Criminal Justice Identification System, to name a few.

An Attractive Quality of Life: Quality of life can mean many different things to many different people. Fortunately, West Virginia offers a wide variety of settings and experiences to accommodate a diverse range of tastes. Appreciation of this high quality of life by the world outside West Virginia was evident when Bizjournals.com selected Morgantown as the #1 Small City in America. The economic development significance of the quality of life is captured in the creed of a very successful venture capital company called Village Ventures, where they say, "find smart people in bucolic settings and add money."

Access to Capital: It is critical for West Virginia to have indigenous capital to

help fund its growth. Otherwise, many promising opportunities may gravitate to out-of-state funding sources. In the last few years, West Virginia has developed significant, new capital resources which should prove very valuable to the North Central region. These include the \$30 million New Millennium Fund at the West Virginia Jobs Investment Trust, the addition of several new capital programs under the West Virginia Economic Development Authority and the participation of several new private sector capital companies.

A Great Place to Live, Learn, Work and Play:

North Central West Virginia is a great place to live, learn, work and play. Thanks to the leadership of Congressman Alan Mollohan and the work of the West Virginia High Technology Consortium in expanding technology along the I-79 Corridor, many exciting opportunities have been created and many more are soon to follow.

A skilled and educated work force, substantial research, a superb quality of life, and new, capital investment dollars — all organized and leveraged through an ascending order of coordinated development initiatives — has indeed made the region a very fine candidate for growth and economic opportunity. ■



Economic growth and opportunity in West Virginia are fueled by a skilled and educated workforce, substantial research, quality of life and new, capital investment dollars.





Robert M. D'Alessandri, M.D., is Vice-President for Health Sciences and Dean of the School of Medicine at West Virginia University. A specialist in infectious diseases and general medicine, he is a fellow of the American College of Physicians and a diplomate of the American Board of Internal Medicine. Dr. D'Alessandri has long been active in health policy issues nationally and in the State of West Virginia, working closely with elected officials and policymakers to improve access to health care in our state and across the nation.

North Central West Virginia

New Research Partnerships Power Regional Economy

*Robert D. D'Alessandri, M.D., Dean
West Virginia University School of Medicine*

Ten or fifteen years ago, the role of an academic health center seemed set in concrete. Train doctors, nurses, dentists, other health professionals, run a big hospital, do some good research. For half a century, this pattern served us well — providing the trained people to deliver health care in our communities, serving as the hospital of last resort for the very sick and the very injured, and launching the ideas and concepts that others put to use in developing new drugs and treatments.

We're still doing all those things. Their value is undiminished. But there's a whole new side to what we do at the WVU Robert C. Byrd Health Sciences Center that is changing the face of northern West Virginia.

We're entrepreneurs. We're bringing together investors, foundations, brilliant scientists on and off campus, and public and private enterprise to create new economic and scientific entities that not only develop ideas, but also bring them to the marketplace — creating jobs and advancing health care at the same time.

It's not an easy transition for some. The clear lines that once divided the campus from the marketplace are now blurring. Institutions that once saw themselves as rivals may become partners. People who are allied with the University also have responsibilities to others — stockholders, other campuses and independent foundations — that may lead to conflict or disagreement.

But it's a step that has to be taken to move West Virginia University and the health research effort here to a higher level. The pace of progress in health care has quickened to the point where the path from the laboratory bench, to the research trial, to the marketable product must often be taken in months rather than decades — and those who do not adapt to this new pace will always be two steps behind.

By establishing the Blanchette Rockefeller Neurosciences Institute at WVU — in cooperation with Johns Hopkins University — Senator Jay Rockefeller gave us a sturdy push in this direction. The Rockefeller Institute, from the day of its creation, was a hybrid of philanthropy, science and business. Today, it's making headlines by developing a simple test for Alzheimer's disease — one that was subject to the rigorous scientific tests required by academia, but will be developed by the independent corporation that was set up to bring the Institute's work into the marketplace.

Variations on this model will power the next evolution of the economy of North Central West Virginia. Our Mary Babb Randolph Cancer Center researchers are among the leaders in a new field of science — proteomics — which promises to give doctors the power to tailor cancer drugs to match the protein structure of the cells in an individual patient. We're working with a start-up firm — financed by seasoned veterans in the biotech industry — that will take the proteomics technology developed at WVU and put

it into the hands of researchers across the world.

On campus, we have to build the facilities and faculty that will continue to power this research-based growth. We have an ambitious plan for more than \$250 million in campus improvements over the next 10 years. We're building a new library, a home for the Blanchette Rockefeller Neurosciences Institute, a larger cancer center and more and better research labs.

Our efforts — and our successes — are attracting more and more external research funding to WVU.

The Howard Hughes Medical Institute has helped us build a new transgenic research facility and funded new research faculty positions. The National Institutes of Health designated two Centers of Biomedical Research Excellence at WVU — one in our cancer center, the other, in sensory neuroscience, in collaboration with Marshall University.

The designations brought with them some \$20 million in long-term research funding.

The state of West Virginia has also, of late, recognized the importance of research in building a 21st century economy, and has begun to include research funding in the state budget.

Research at WVU is by no means limited to health care. The efforts of our engineering, biometrics, agriculture and other researchers are also starting to flower in new directions. The synergy of these efforts is creating a community of scientists on and off campus who support and encourage each other, contribute to the intellectual and cultural development of the region, and create demand for high-quality housing, food, consumer goods, entertainment and other needs that ripples across the economy.

It's an exciting time to be at WVU. ■



The WVU School of Medicine educates health professionals, provides thousands of people with medical care, and conducts lifesaving research. WVU medical faculty and students are at the leading edge of scientific studies of the biological process of life — and at the forefront of efforts to bring health advances to residents of West Virginia's cities and rural areas.



Bernie Schultz is Dean of West Virginia University's College of Creative Arts and Professor of Art History. He was Chairperson of the Division of Art from 1989 to 1994, and served as the Associate Dean for Academic Affairs in the College of Creative Arts from 1994 to 2000. Schultz has been recognized as a distinguished teacher and has received grants for curriculum development. He is a frequent speaker on topics relating to his research and to arts administration.

West Virginia University's College of Creative Arts: On A Mission

*Bernie Schultz, Dean
West Virginia University College of Creative Arts*



"The mission of the faculty and staff of the College of Creative Arts is to advance the visual and performing arts. We advocate life-long appreciation, understanding, and involvement in the arts as a medium in which the diversity of human experience is expressed, examined, and valued.

We accomplish our mission by being a student-centered college, educating succeeding generations of artists, teachers, and scholars through excellence and innovation in performance, exhibition, scholarship, and the dissemination of creative research. We provide exceptional opportunities for critical engagement in the arts to the citizens of West Virginia and beyond."

The faculty, staff, and students of West Virginia University's College of Creative Arts (CCA) are on a mission — a mission which was re-defined and affirmed earlier this year.

The arts are a profound form of human communication. Guided by this understanding, we are driven by a passion to advance the arts and their meaning in people's lives and, through the education of our students, to lead in creating the future of the arts.

But while our mission is direct, its actualization is complex and multi-layered. Our faculty are nationally and internationally prominent. This past year alone, they exhibited, performed, or gave presentations all across the U.S. and in more than a dozen countries. Many faculty occupy key positions on state and national committees and professional organizations, advancing education in the arts.

Our graduates are distinguishing themselves in their fields. Chris Sperandio, an Art alumnus, exhibited his work in the Museum of Modern Art in New York City in May; Missy Hairston, beginning her career as a comedic performer, from the Division of Theatre and Dance, recently won the competition for "Funniest Person in Queens" and was runner-up for "Funniest Person in New York"; and James Valenti, a Music graduate, was one of four winners of the Metropolitan Opera National Council Grand Finals in April.

But while the College of Creative Arts and the Creative Arts Center bring international recognition to our state, we remain mindful of our special responsibility to the citizens of West Virginia. Each year, the College sponsors hundreds of activities throughout our State, from scholarly lectures on the arts to performances of "The Pride," our beloved marching band. These activities reach thousands of West Virginians.



The WVU College of Creative Arts is comprised of the Divisions of Art, Music, and Theatre and Dance, three professionally accredited and nationally recognized programs in the Arts. The College of Creative Arts educates future artists, teachers and scholars through excellence and innovation in performance, exhibition, instruction and creative research.

As part of this ongoing effort, CCA has forged partnerships with a number of regionally-based professional arts organizations. A partnership with the Pittsburgh Symphony Orchestra, announced in March, will open opportunities for our music students. We have recently entered a more comprehensive partnership with Oglebay Institute in Wheeling, one of the most respected institutions in our nation. We are pursuing additional partnerships throughout West Virginia and we are thrilled that the WVU Symphony Orchestra will perform as part of the opening celebrations of Charleston's Clay Center in February 2003.

While the arts greatly contribute to the quality of life for West Virginians, they are also value-added professions. A 1999 survey funded by the National Endowment for the Arts confirmed the significance of the CCA and the Creative Arts Center to the community and the region with a 95% overall approval rating from respondents. Local, regional and national studies have conclusively proven that the arts generate economic development.

Regional data report that for every \$1 spent on the arts, \$7 - \$9 are generated in the local economy, in restaurants, hotels, shops, etc. We currently are engaged with another partner, Arts Monongahela, in assessing the economic impact of the arts in the Morgantown area.

The arts have been part of the fabric of education at West Virginia University for over 100 years. As we enter our second century of enhancing the educational experience at WVU, our mission is defined, our vision is before us and the promise is bright. ■





Michael A. Oliverio II was born in Fairmont, West Virginia, and earned his Master's in Business Administration from West Virginia University. He was elected to the West Virginia House of Delegates in 1992, and then ran successful bids to the West Virginia State Senate in 1994, 1998 and 2002. Senator Oliverio is a Captain in the United States Army Reserves.

North Central West Virginia

The Stars are Shining Bright on North Central West Virginia

*The Honorable Michael Oliverio
West Virginia State Senate*

Never before has there been so much interest and so much investment in North Central West Virginia. With success stories in several economic areas, the region is poised to become even stronger in the years to come.

As for education, the region is home to the state's largest university, West Virginia University, and its largest college, Fairmont State College. Both are at or near their highest enrollment ever, and are actively pursuing new growth strategies. Hundreds of millions of dollars are being poured into facility needs at the university and the college to accommodate the growing enrollment and the variety of programs and services being offered. One shining example stands in Morgantown, where the new Student Recreation Center is now available to thousands of WVU students. The \$34 million complex provides multi-faceted recreational opportunities and serves as a recruiting tool for faculty, staff and students. An expansion of the library at WVU, more classrooms and residence halls at Fairmont State, and an expanded aerospace training facility in Bridgeport await new students.

When you talk about health care, no region in the state can compare to the offerings of North Central West Virginia. Ruby Me-

morial Hospital in Morgantown is preparing for a nearly \$100 million expansion to make available new clinical services and facilities for patients. In Clarksburg, The United Hospital Center is preparing to build an entirely new facility near I-79. In addition, Fairmont is pursuing an opportunity with a for-profit hospital chain, in which a \$100 million facility may be built near the South Fairmont exit.

Health care facilities not only provide services to citizens throughout our state and beyond, they also create tremendous economic opportunities. Ruby Memorial alone hired over 750 new employees this year and will continue to grow with the facility improvements coming soon.

Efforts have been made to develop specializations in the areas of cancer research and neuroscience research. Both fields have generated millions of new research dollars for our community. Beyond that, they present unique opportunities



WVU's \$34 million Student Recreation Center

to discover cures to the diseases of the body and mind.

We still mine coal in North Central West Virginia! Last year alone, Monongalia County mined more coal than even Logan County. The mining industry's presence in North Central West Virginia creates jobs that provide good wages and competitive benefits. The many spin-offs associated with the mining industry strengthen the region as a whole.

When it comes to manufacturing, no better example exists than that of Mylan Pharmaceuticals. Last year, Mylan filled more prescriptions than any drug company in America. With over 1200 employees in Morgantown, Mylan is one of the state's largest employers and is responsible for a significant portion of the state's payroll taxes.

New to the region are the aerospace and technology industries. The I-79 Technology Park has served as an incubator for many small high-tech companies. The newest addition coming is the Institute for Science Research. In short order, they will employ three to four hundred people. In addition to the private sector successes, the federal investment of the FBI and NASA facilities employ thousands.

Over the last decade, thousands of jobs have been created in these two industries, yet the future promises to bring thousands more employment opportunities. Fairmont State College's aerospace training program has enabled West Virginians to receive their training close to home and then work in the industry within the region.

Even our tourist activities seem to have exploded over the last two decades. When I was a child growing up in Mor-

gantown, there were few festivals to attend throughout North Central West Virginia. Beyond the Buckwheat Festival, there seemed to be few opportunities and activities during the weekend. However, over the last twenty years a variety of festivals have emerged. One of my seasonal favorites is Morgantown's Balloon Festival, where hot air balloons form a spectrum of color across a bright blue fall sky.

Yet one of the biggest investments in North Central West Virginia is the development along the Monongahela River in Morgantown. The WVU Foundation's seven-story administration building and Visitors Resource Center and the Radisson Hotel's eighteen-story building tower over the many developments in the Wharf District. An amphitheater, made possible

by the generous contributions of Hazel Ruby McQuain, has already been home to the Wheeling Symphony. Among the many developments along the river, my favorite, though, remains Oliverio's restaurant.

I doubt that few places in the country with a population base of about 250,000 can boast the amenities, services and resources that North Central West Virginia has to offer. While the stars have always shone over North Central West Virginia, they now appear to be glowing even brighter. ■



Through a combination of cutting-edge technology and traditional West Virginia hospitality, the WVU Visitors Resource Center, located along Morgantown's Wharf District, features two round table-like devices that, when tilted, move computerized maps of Morgantown on the circular surfaces and identify city highlights. A screen that slides along the room's wall shows videos promoting different aspects of WVU.



Mac Warner is married to the former Debbie Law of Charleston, and they have four children, Steven (16), Krista (15), Lisa (12) and Scott (9). Mac is a co-managing partner in The Square at Falling Run, LLC. Mr. Warner received his law degree from WVU College of Law, and earned an LLM in International Law from the University of Virginia, and an LLM in Military Law from The Army JAG School. Mr. Warner is a graduate of West Point, and served in the United States Army for 23 years, retiring in 2000 as a Colonel.

The Square at Falling Run: Where Corporate America and Academia Meet

*Mac Warner, Developer
The Square at Falling Run*

David Hardesty recognizes it. So does Dan Angel. That is why the President of WVU is creating a research park and doing everything in his power to set the proper social atmosphere at the state's flagship institution. That's why the President of Marshall University argues the need for West Virginia to embrace and further our lead in biometric research and development. Both leaders recognize the answer to West Virginia's economic future is creating the proper nexus between Corporate America and Academia — for when business, academia and young energetic minds intermingle in close proximity, an economic and entrepreneurial explosion merely awaits a few well-placed sparks.

Why the Catalyst Around Universities?

"The most fertile ground for growth is our universities."

— Dan Angel, President of Marshall University

Historically, we send children to post-secondary educational institutions for two reasons: **learning** and **socialization**. Together, these twin pillars form "the university experience." Today, however, the brick and mortar buildings that are our traditional houses of **learning** are being challenged by a technological tidal wave. Any number of high-tech video, TV, computer or other communication devices can transmit the raw data of **learning** to anywhere in the world.

So, why would students pay to attend a college when, at a fraction of the price, they could sign on to a virtual interactive classroom and get the best informa-

tion from a recognized world leader in their particular field? The answer is found in the second pillar of the university experience: **socialization**. Unlike learning, **socialization** cannot take place virtually, impersonally or via the Internet. With **socialization**, we immerse our youth in the array of human experiences outside the family and outside the geographic community where they were raised. This is what a university campus has always offered and will always offer. Nothing can supplant it. Children will always have the need to leave the nests, **socialize**, interact and learn to make decisions for themselves. The universities that can effect positive **socialization** will survive; those that don't will perish, victims of the information revolution.

The best universities have known it for years, and the gap between good institutions of higher learning and the mediocre will widen in the future over **socialization**. Consider for a moment: *Harvard Square* in Cambridge, MIT's *Kendall Square*, Yale's *Chapel Square* in New Haven, Princeton's *Palmer Square*, and *The Lawn* at the University of Virginia. At the same time, consider universities with a business or research and development component in close proximity: Penn's *Sansom Commons* in Philadelphia; the *Research Triangle* between Duke, UNC, and NC State; *Easton Town Center* near Ohio State; NC State's *Centennial Park*; and the list continues. Top-tier universities invest in creation of "town squares" that provide open space for retail, commerce, students and professors to aggregate.

Morgantown has a chance right now to change its image like never before. It was recently recognized as the number one small town in America. Our Congressional delegation is as strong as any in this nation, and they ensure WVU is a top recipient for R&D grants. Already well known for our health care facilities, WVU will soon join the list of universities with a research park. This addition, along with being one of our country's land grant institutions, will continue to distinguish WVU as a leader in higher education. WVU has also just completed a Recreational Center that is second to none, and our Rails to Trails project is magnificent. But the thing that has plagued Morgantown for decades is its poor image in housing. It is time for Morgantown and WVU to provide our citizens and our students a world-class focal point for **socialization**. It is time to build *The Square at Falling Run*.

Business and Economics.

"Some regard private enterprise as if it were a predatory tiger to be shot. Others look upon it as a cow that they can milk. Only a handful see it for what it really is: the strong horse that pulls the whole cart."
— Winston Churchill

Recently the WVU College of Business and Economics inducted into its Hall of Fame Richard Adams, Ogden Nutting, Verl Purdy, Bray Cary and Charles Ryan. B&E Dean Jay Coats opened the cer-

emony with Churchill's quote. As the horse that pulls the whole cart, businesses provide the tax base that allows governments to build civic buildings and infrastructure, businesses compensate employee salaries so they can provide for their families, and businesses respond to demands with new innovations and market-driven supplies. Everyone prospers when business flourishes.



The Square at Falling Run is a 40-acre, \$244 million development adjacent to the downtown campus of West Virginia University.

Now, for the connection between Business and Academia.

"No one does more good, for more people, in more ways, and in more places around the State of West Virginia, than does West Virginia University."

— Verl Purdy, President of AGDATA Inc.

Dan Angel argues, "University researchers are there to design and develop innovations, students are there to learn and test ideas, and expensive, high-tech equipment is there, which would be impossible for entrepreneurs to purchase on their own . . . The most fertile ground

(Warner . . . continued from p. 39)

for growth is our universities!” Simply stated, the connection is obvious between the mission of all institutions of higher learning to educate, and the end result of putting that education to work via quality jobs to enhance the community at large.

The demographic and economic trend lines cannot be ignored – especially in West Virginia. We have lost an average of 44 people per day for over 20 years. West Virginia remains at, or near, the bottom of far too many economic indicators. We must find a way to maintain a proper population base, attract businesses and reverse those trend lines. The issues are interconnected, and the solutions will be multidimensional. As a land-grant institution, part of WVU’s student-oriented mission is to promote business and conduct research and development.

So, why have I spent 2/3rds of an article about a mixed-use development talking about universities and business? Because The Square at Falling Run is *the place* where this will best happen for the State of West Virginia. The linchpin to the entire economic situation for our Mountain State lies at the heart of improving the University experience – everyone benefits when the institutions of higher learning are enhanced. WVU has been, and must continue to be, at the heart of solving this State’s economic problems.

The Square at Falling Run.

“Start your day without starting your car!”
— Advertisement for Birkdale Town Center near Charlotte, NC

Imagine a state of the art retail/office/housing/entertainment complex housing the best of Corporate America. Yes, For-

tune 500 companies, national retailers, executive education facilities, mixed with local retailers. Envision thousands of undergraduate students, hundreds of graduate students and numerous honors and international students — all living above the storefronts, but yet literally across the street from where 80 percent of their classes are located. Intermixed and living within minutes of these same students, hundreds of faculty and staff, and other local residents live so that they pass by these offices, shops and housing units on the way to University and downtown jobs. All of these people can get out of bed, walk to coffee and bagel shops, and proceed to their offices *without starting their car!* At lunch, they meet friends, students and business associates at outdoor cafes, while people-watching around the town square. After work, they can dine at any number of restaurants, catch a movie, and window shop before turning in for the night. Their car becomes an option, not a necessity, and the pedestrian presence enhances the quality of life.

The specifications and layout of The Square at Falling Run are breathtaking. It is a 40-acre, \$244 million development adjacent to the downtown campus. This public-private partnership will drastically enhance the renaissance of downtown Morgantown that is already under way. The grounds of The Square will extend the green spaces of WVU while providing pedestrian thoroughfares that create the student- and pedestrian-friendly aura long missing on our downtown campus. The Square at Falling Run will provide two new gateways to WVU, one at the Sunnyside intersection at Campus Drive, and one from the Mileground on Route 119. This development will propel WVU and



Artist renderings of The Square at Falling Run, with views from the campus of West Virginia University.

Morgantown to the forefront of university experiences for **socialization**.

Conclusion

“This is a powerful tool that can help us invest in new jobs and revitalize communities across the state.”

— Governor Bob Wise, speaking on Amendment One

President Hardesty has worked tirelessly to enhance the reputation of WVU. He oversaw the constructive changes of the once unruly “Pit,” he initiated the nationally-acclaimed “Up all Night” program, he replaced the unwieldy Grant Street block party with Fall and Spring Fests, and he and his wife Susan have initiated a highly successful Parent’s Club. Clearly, President Hardesty has a vision for proper university **socialization**. Meanwhile, the City of Morgantown has cleaned up the unsightly warehouse dis-

trict along South University Avenue and turned that into a showcase now known as the Wharf. The city has made great strides in rezoning and clearing the way for new development inside Morgantown, and the state has adopted a constitutional amendment, Amendment One, that will allow private enterprise to finance large-scale projects such as The Square at Falling Run and the infrastructure required to make such projects a success.

It is time to build this city, the state’s Flagship University and the people of West Virginia a world-class mixed-use development, focused on socialization, where Corporate America and Academia can meet.

It is time to build The Square at Falling Run. ■



Kim Croyle, a member of the firm, practices out of the Morgantown office and represents public entities throughout the state on matters such as the Open Governmental Proceedings Act, the Freedom of Information Act and the Pecuniary Interest Statute. She currently serves on the Monongalia County Board of Zoning Appeals.

Undertaking Development Projects in the Public Arena

*Kimberly S. Croyle, Esquire
Bowles Rice McDavid Graff & Love PLLC*

Have you ever been frustrated when trying to advance your development project through what seems to be an endless stream of government red tape? Who hasn't! At one time or another, it seems that all of us have questioned why it takes so long and why we must jump through so many hoops to complete a simple permitting process, zoning variance and the like. Contrary to popular belief, the government has not set up roadblocks simply to watch you struggle. Instead, our lack of understanding of the rules under which public officials must operate clouds our view of what those officials are trying to accomplish. In this article, we will debunk some of the myths surrounding government action by examining the stringent requirements of the Open Governmental Proceedings Act (OGPA) and providing some tips for working more effectively and efficiently within these parameters.

MYTH: I never seem to get an answer when I appear at meetings and explain what I want to do. They won't even discuss my project!

FACT: The Open Governmental Proceedings Act, also known as the Sunshine Law, limits public officials from acting upon an issue that does not appear on the agenda. This includes a prohibition against entering into discussions that may lead to a future vote on the item. If you attend a meeting, make a presentation during the delegations or public comment portion of the meeting, and expect to get a vote of the government

body, you are asking your public officials to violate the Sunshine Law.

TIP: There are two ways to avoid the above situation. One way is to meet with the entity's official Secretary well in advance of the meeting and ask to have your subject placed on the agenda. For those entities that hold regular meetings two or fewer times per month, that will mean the agenda must be published at least three business days prior to the meeting. Second, if you do not get on the agenda in advance, following your presentation, ask if your subject can be placed on the agenda for the next meeting. The government body may discuss the issue only to the extent necessary to determine whether official action may be needed, and, if so, reschedule it for another meeting.

MYTH: It's easier to get things done by inviting a few public officials to lunch and discuss my project there.

FACT: It may be easier, but it may also incur criminal penalties for the public official! Our courts and the Ethics Commission have found a violation of the Act when two or more public officials meet prior to a regularly scheduled meeting and discuss or review matters with the intent of the discussion to lead to official action. Penalties for violations of the Sunshine Law include criminal sanctions against public officials who willfully and knowingly violate the article. Further, any vote that is eventually taken may be voided. However, nothing prohibits members of a governing body from hav-

ing general discussions without the intent to conduct public business or without the intention for the discussion to lead to an official action.

TIP: Avoid even the appearance of impropriety when meeting with government officials. Again, instead of risking a violation, proceed through the proper channels to voice your ideas. Although it might seem to take a little longer, it is much easier than having to start again from square one after a vote has been voided.

MYTH: The Sunshine Law is so restrictive, public officials cannot even view my site.

FACT: Wrong! The Sunshine Law exempts from its definition of a meeting on-site inspections of projects or programs. Care must be taken, however, that conversations during on-site inspections do not lead to discussion of prospective official action.

TIP: Continue to invite public officials to view your site. Although a picture may say a thousand words, nothing can replace an on-site inspection to show your audience what you have planned.

MYTH: The Sunshine Law applies only to the governing body of the public agency and not to its committees, so there is no need to comply with the Act when I meet with the zoning committee or planning committee.

FACT: Public agencies are defined by the Act to include “any administrative or legislative unit of state, county or municipal government, including any department, division, bureau, office, commission, authority, board, public corporation, section, committee, subcommit-

tee or any other agency or subunit of the foregoing, authorized by law to exercise some portion of executive or legislative power.” Thus, any committee of state, county or municipal government must comply with all of the requirements set forth by the Act, including notice to the public of the meeting.

TIP: When in doubt, assume that the meeting is one which requires compliance with the Sunshine Law.

As explained by the Legislature in its declaration of legislative policy behind the Open Governmental Proceedings Act:

“ . . . public agencies in this state exist for the singular purpose of representing citizens of this state in governmental affairs, and it is, therefore, in the best interest of the people of this state for the proceedings of public agencies to be conducted openly, with only a few clearly defined exceptions. The Legislature hereby further finds and declares that the citizens of this state do not yield their sovereignty to the governmental agencies that serve them. The people in delegating authority do not give their public servants the right to decide what is good for them to know and what is not good for them to know. The people insist on remaining informed so that they may maintain control over the instruments of government created by them.” ■



Michael S. Garrison was appointed as Chief of Staff to Governor Bob Wise in 2001. He currently holds the distinction of being the youngest Chief of Staff in the Nation. Prior to this appointment, Mr. Garrison served as the Cabinet Secretary of the Department of Tax and Revenue.

A native of Marion County, Mr. Garrison graduated with honors from West Virginia University with a degree in Political Science and English, and earned his Doctorate of Jurisprudence with honors from West Virginia University School of Law.

North Central West Virginia: Leading the Mountain State in the Information Age

*Michael S. Garrison, Chief of Staff
Governor of West Virginia*

I have learned many things in the past several months, thanks to countless helpful West Virginians. Here under the gold dome of the Capitol, and throughout our state, individual citizens and interest groups as varied as the Business Roundtable to the AFL-CIO, have helped me to better understand the keys to making West Virginia a success. Of the numerous lessons I have learned, one of the most strongly voiced is the necessity of recognizing the individuality and unique nature of each particular region of the Mountain State.

What works in Preston County may fail in Pocahontas County. A creative idea, unable to get off the ground in the Ohio Valley, may well be a success in the Eastern Panhandle. As we work to foster growth and economic development, the unique strengths of each part of West Virginia must be a factor in the decisions made by both government and the private sector.

Growing up in North Central West Virginia was a wonderful experience. Marion County, where I was raised, was filled with great people who thrived in an industrial-based community that was heavily reliant upon coal-based jobs. While the great people of North Central West Virginia still remain, much of the industrial base has moved out of the region. And although coal is still vital to the area, the stage is set for growth in other sectors. As the economic base of North Central West Virginia shifts from traditional mineral extraction and heavy industries to one focused on products and

service technologies, our regional leaders from this area are poised to take advantage of the transformation.

North Central West Virginia and the I-79 Corridor are blessed with the necessary underpinnings and successful infrastructure to become a state and international leader in several exciting new industrial sectors. The I-79 High Tech Corridor sustained its job growth in 2001, and the region looks to post continued jobs, income and population gains during the next several years. Any resident who travels I-79 on a regular basis, or even for the occasional Mountaineer game, cannot help but notice with pride the significant expansion in the counties of Monongalia, Marion, Harrison and Lewis. And as Chief of Staff to Governor Bob Wise, I am pleased to work with a governor who shares my enthusiasm and excitement for the good things that are happening in my native region of West Virginia, as well as a commitment to strengthening an already growing area of our state.

Thanks to significant work by Congressman Alan Mollohan, as well as Senators Byrd and Rockefeller, the location of the Federal Bureau of Investigation's Criminal Justice Information Services Division in Harrison County has sparked a technology explosion in the region. The FBI Center contains the largest fingerprint database in the world and has recently initiated a new five-year \$56 million technology refreshment contract with Lockheed Martin. Moreover, the facility is exploring possibilities in biomet-

rics, the science of identifying people using their unique physical traits like fingerprints, hand geometry and eyes. To keep up with the most recent developments in technology, the Center has developed partnerships with other North Central entities like the Biometrics Fusion Center in Bridgeport and West Virginia University in Morgantown.

Building upon these core partnerships, the West Virginia High Technology Consortium Foundation, located in Marion County, supports the emergence of a high technology business base by filling the gap between the federal government market and local small businesses. The WVHTC Foundation has created a world-class consortium of innovative organizations that are focused on building these relationships.

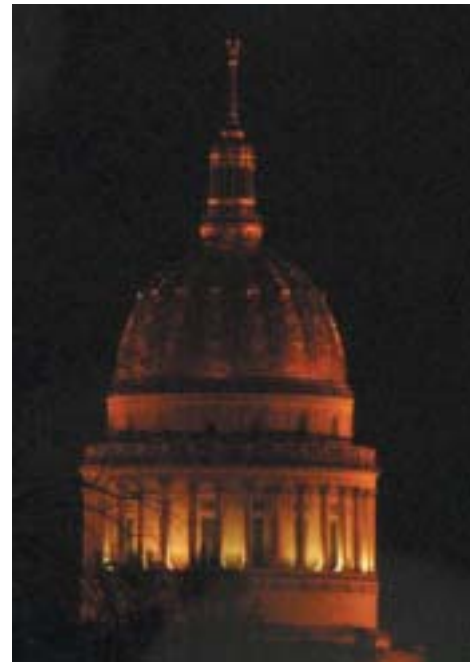
Ethentica, by Security First Corporation, is one of the most exciting new companies being attracted to North Central West Virginia. The company's biometrics center, to be developed in Fairmont, will provide government and industry with the security tools needed to ensure that America is as well-protected as technologically possible. Just as the FBI Center has partnered with the WVU Forensics program, Security First will join with the new National Biometric Security Project, which will soon be established in Morgantown through the efforts of Senator Robert C. Byrd and Governor Wise.

Our Economic Development team is working every day to promote our state. The founder of Ethentica by Security First Corporation, CEO Mark O'Hare, recently spoke of West Virginia "becoming the Silicon Valley of biometrics." The region has some of the lowest unemployment rates in the state and some

of the highest levels of education. This strong work force and wealth of educational resources make the area very attractive to businesses from around the world.

This sort of economic development, based on regional strengths and organized around similar industries, is a good blueprint for efforts in other parts of the state. Simply convincing a company to build a factory or a warehouse on a plot of land is not enough. As government officials and private citizens, we must all work to see that the best efforts are made to ensure the success of these ventures, and work to build upon what has been shown to work in a particular region.

We have seen tremendous growth in the region. The reorganization of business tax credits, especially the new Research and Development Credit, has helped many companies start up in (or expand to) the area. Governor Wise considers "selling West Virginia" one of his most important duties, and he has proven himself a very good salesman. He knows, however, as do I, that none of these advances would be possible without the cooperation of the state's educational institutions, local governments, civic and professional organizations, and the business and labor community. Most important are the small entrepreneurs and businessmen and women that put in long hours and their own fortunes. They are growing not only their own companies, but also the future of the area and our state. ■





John Beilein was named West Virginia University's 20th head basketball coach in April 2002. A 1975 graduate of Wheeling Jesuit, Beilein had been serving as head coach at Richmond when he was asked to replace retired coach Gale Catlett. He has crafted his trade at nearly every level — community college, NAIA, Division II and Division I. Beilein, who has never been an assistant coach at any level, ranks among the Top 30 in victories among Division I head coaches. The 2002-03 season marks his 25th season as a collegiate coach.

North Central West Virginia

Shooting for Excellence in Sports and Education

*John Beilein, Head Coach
West Virginia University Men's Basketball*

This is a very exciting time at West Virginia University and for our men's basketball program. Our future is unlimited as we continue to strive to be one of the very best universities and athletics programs in the United States. I think that, as you read on, you will see why I am excited and proud to be a coach at West Virginia University.

First of all, I am so enthused to be at WVU and coach in the prestigious BIG EAST conference. The BIG EAST is one of the premier conferences in America, and we welcome the opportunities and challenges that are now presented to us.

As for the coming season, I believe we have a chance to develop into a very exciting team.

Playing in the BIG EAST, along with a rugged non-conference schedule, gives us one of the toughest schedules in school history, but I'm confident that we will improve throughout the season.

During my brief time at WVU, I have found that the student-athletes here are young people who experience the enjoyment and thrills of competing

on the highest level, both on the court and in the classroom. They are coached by men and women who have the desire and responsibility to be educators at an institution committed to their total development.

The hub of most activity for our student-athletes is the WVU Coliseum, long recognized as one of the finest athletic facilities in the country. It has gotten even better with recent renovations, and more significant improvements are planned for the future.

When playing in front of a packed arena, there's a feeling there that is hard to describe. We will have many top 25 teams visit West Virginia in the years to come and will look forward continuing rivalries with our conference opponents.

As I look to the year ahead, the most important goal is to graduate our student-athletes. In my 19 years of coaching Division I and II basketball, every one of my seniors have earned their degrees. My vision is to continue this at WVU. The education they receive and the experiences that they have will enrich their lives forever.

As you continue to follow Mountaineer basketball, I am certain you will get a sense of the traditions and qualities synonymous with our University and our basketball program. It's a great time to be a Mountaineer!



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Bowles Rice is pleased to announce that the following attorneys have joined our firm:



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New Faces in the Legislature



Congratulations to our own Corey Palumbo, who was elected to the West Virginia House of Delegates. Corey, a litigator, is an Associate in our Charleston office.



Views & Visions

North Central West Virginia

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