



Dennis Kernahan

## UNIVERSITY-CORPORATE COLLABORATION

HOW DOES ECONOMIC development impact the University, the greater Charlottesville region, and the Commonwealth of Virginia? David Kalergis, director of GATEWAY VIRGINIA, and Dennis Kernahan, Advisor for New Economic Development, both provide unique and complementary responses to this question.

### Gateway Virginia

In December 1997, U.Va. President John Casteen III announced the inauguration of Project Gateway, an important new initiative to encourage closer links between the University's research faculty and Central Virginia's

growing high-technology business community. In early 1998 David Kalergis became its director and now, to emphasize the University's long term commitment to the endeavor and its maturation from a "project," the initiative has been named GATEWAY VIRGINIA.

David Kalergis envisions GATEWAY VIRGINIA as a vehicle to encourage entrepreneurial activities based on advanced technological research in Central Virginia. Its role is to create links between business and venture capital communities, and to develop infrastructure to support new business ventures. Overwhelming attendance at the first meeting of the newly-formed Charlottesville Venture Group reveals a shared interest in organizing a venture capital network to help finance new high-tech companies in this region. Through GATEWAY VIRGINIA local (and prospective) businesses will have access to information about University research and resources. Kalergis believes that corporate collaborations are important to the future of the University research enterprise.

### Economic Development Advisor

As the University's Advisor for New Economic Development, Dennis Kernahan aims to promote better relationships between faculty and the business community. Working part-time and reporting to Gene Block, Vice President of Research and Public Service, Kernahan sees three parts to his mission: to identify inconsistencies and gaps in the University's policies on intellectual property (especially improving mechanisms for technology transfer); to facilitate collaborations with business; and to recommend ways to facilitate economic development.

Kernahan will help the University create a systematic approach to dealing with industry and entrepreneurs and will guide the University in developing an infrastructure that encourages corporate collaboration. He sees opportunities emerging primarily in the high-tech and computer industry companies quoted on the NASDAQ exchange and believes that the role of the Internet in the business and industrial world has not been fully explored. In addition, Kernahan predicts that service industries will continue to flourish in Northern Virginia and will be the source of new business partners for the University and our faculty. By forming affiliations with the information services, biometrics, informatics and high-technology markets and by helping to establish new partnerships between faculty and industry, he will ensure that the University benefits as more information technology finds its way to the marketplace.

By implementing Gateway Virginia and by employing an Economic Development advisor, the University is taking steps to ensure that the potential benefits of developing and improving University and community/business relationships is realized. ■

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*Dennis Kernahan is available to help faculty at the very early stages of the development of an idea, and can be reached via email at [dk4f@virginia.edu](mailto:dk4f@virginia.edu) or by phone at 924-3990.*

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**FARISS SAMARRAI** has recently joined the University News Services Office as a science writer. It is his mission to write about exciting new developments in all fields of research, and to develop the information into news releases for national publication and to present it to radio and television news producers when this is appropriate.

Please contact Mr. Samarrai by e-mail at [samarrai@virginia.edu](mailto:samarrai@virginia.edu) to discuss your research with him if it is at the point where it could benefit from a national news release.

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Louis T. Rader

## LOUIS T. RADER PROFESSORSHIP FULLY ENDOWED

IN THE APRIL ISSUE of *Opportunities*, it was stated that over the years six U.Va. faculty members had been elected to the National Academy of Engineering. In fact there have been seven. The very first to be so honored, and the one omitted in April, was Louis T. Rader, who achieved this honor in 1970, helping to elevate the School

of Engineering and Applied Science to a new national ranking.

Mr. Rader led a distinguished career in the burgeoning computer industry. He brought General Electric to Waynesboro in 1954, where a

new manufacturing plant was opened under his management and then five years later left to become vice president of International Telephone and Telegraph Company, after which he became president of the Univac division of Sperry Rand. In 1964 Rader returned to GE and Charlottesville as vice president of GE's computer operations.

These successes led Dean Lawrence Quarles in 1969 to invite Rader to chair the

Department of Electrical Engineering. Not having much research experience, Rader questioned his ability to lead an academic department, but Quarles responded that Rader's strong interpersonal skills were needed to manage the rapidly expanding department. Rader accepted the challenge on the condition that he receive a joint appointment in the Darden School of Graduate Business Administration. He taught industrial management to graduate students for many years until state restrictions obliged him to stop and then continued in Darden's Executive Program until 1997.

Thanks to the support of Rader's many admirers, colleagues and friends, the Louis T. Rader Professorship in Electrical Engineering was fully endowed this year. Mr. Rader's own generous contributions have funded endowments to recognize outstanding students in electrical engineering, chemical engineering, civil engineering, computer science, mechanical engineering, aerospace engineering and systems engineering. Prize winners are chosen for their excellent interpersonal skills and work ethic as well as for their academic achievement. These are the values that Louis Rader has embodied throughout his own long career, and that he seeks to encourage in students. His example is an inspiration to many engineering graduates each year. ■

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## *Endowments recognize outstanding students in electrical engineering, chemical engineering, civil engineering, computer science, mechanical engineering, aerospace engineering and systems engineering.*

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**DR. SHU MAN FU**, recently appointed chief of the division of Rheumatology in the School of Medicine, is also the recipient of a \$4.65 million grant from NIH to study the genetic causes of lupus. Systemic lupus erythematosus is a chronic auto-immune disease that afflicts more women than men and can cause the body to destroy its organs and skin.

The study will be undertaken collaboratively with researchers at the Mayo Clinic and Johns Hopkins University, and will include Drs. Kenneth Tung, Felicia Gaskin and Marcia McDuffie at U.Va. The grant recognizes U.Va.'s role as a specialized center for lupus research. Fu says that by combining clinical research and laboratory studies in the mouse, he hopes to be able to elucidate the mechanisms of this genetic, hormonal and possibly also environmentally - mediated disease.

## **CIT Funds ITIC with \$2 Million**

THE CENTER FOR INNOVATIVE TECHNOLOGY (CIT) recently awarded the University of Virginia and its partners, George Mason University, Christopher Newport University and Virginia Tech \$2 million to fund the Internet Technology Innovation Center (ITIC) for its initial five years. This virtual technical information center will assist companies with the development and employment of Internet products and services. Although ITIC's place of business will be the Internet, its administrative home will be in our own department of Computer Science.

Alf Weaver, professor of computer science will be director of ITIC, coordinating participating faculty from the four partner universities and putting together appropriate response teams for each company seeking assistance. These teams will analyze the situation, recommend strategies, and develop prototypes. Weaver has extensive background in creative use of Internet capabilities, in one case devising ways to bring medical expertise to remote areas via the Internet.

## RESEARCH DOLLARS INCREASE AT UVA *by Gene Block*

RESEARCH SUPPORT for the University had grown by nearly \$20 million from \$141 million in 1996 to \$163 million for fiscal year 1998, in spite of a static federal funding environment. This confirms my view that our investigators continue to engage in highly competitive research and are able to adapt creatively to the changing expectations for federal and foundation support.

Some interesting facts, all very positive, have emerged from analysis of this year's funding profile:

- A greater percentage of proposals submitted are being funded: In fiscal '96 the overall success rate was 68% and in fiscal '98 it was 74%.
- The absolute number of awards has increased by 15% in three years while the award average remains over \$81,000.

- Our success rate for proposals to foundations has improved from 53% to 63% and the absolute number of awards has increased from 254 to 307 (over 20%) in three years.

- A similar 20% increase in the number of awards from DHHS (385 in '96 to 463 in '98) has been the result, not of a dramatic change in the success rate (these increased only slightly from 68% to 74%), but from a healthy increase in the number of proposals submitted. (579 in '96 to 627 in '98).

I believe the University of Virginia can, and should, continue to seek increased research support. We should compete for the research center support offered by NSF and NIH and seek programmatic support from non-federal sources such as Hughes, Beckman, Packard and other foundations and institutes. I recognize, however, that in some cases our ability to attract research support is limited by research space and

the financial resources required to match large programmatic efforts. Without a robust matching program our investigators will not remain competitive and during the upcoming year I plan to seek ways, along with our deans, to address this important issue.

Finally, this is our first issue of *Research News*. In a time when the trend is towards increased use of web-based materials I thought carefully about whether paper copy still makes sense. In the end, I decided that we all spend enough time staring at cathode-ray tubes and solid-state displays. Hopefully you will find this "classically presented" material interesting and informative. I welcome your comments. ■

## researchnews

Research News is published by the Office of the Vice President for Research and Public Service.

Editor: Prudence Thorner

Photography: Tom Cogill

Layout: Susan Wormington



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Research and Public Service

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## UVA YEAR 2000



### Y2K compliance effort continues

THE EFFORT TO BRING THE UNIVERSITY'S research programs into Year 2000 compliance continues. The goal is to fully evaluate and resolve any potential problems with computers/ instrumentation and software by this December. Desktop computers and software have been a primary focus of this effort but attention is now shifting to research instrumentation and equipment with embedded microprocessors. These can oftentimes be identified by the requirement that the instrument requires the entry of time/date information at some point in its duty cycle.

The importance of faculty attention to the Year 2000 problem cannot be overemphasized. Federal funding agencies are sending out letters informing investigators that they are responsible for ensuring that equipment used in sponsored research will continue to function properly.

We recommend that you check out a new special site for researchers:

<http://www.virginia.edu/~year2000/y2kresearcher.html>