

THE BIRTH OF A NEW ACADEMIC PARTNERSHIP AT THE JOHNS HOPKINS UNIVERSITY MONTGOMERY COUNTY CENTER

Two unparalleled events have recently converged to create the new Johns Hopkins University Montgomery County Center. Never before in the University's history has a county government donated land and construction funds to help establish a comprehensive academic presence at a satellite campus in Maryland, and never before have three highly independent academic divisions been called on to engineer an academic partnership capable of giving birth and vitality to such a complex undertaking.

INTRODUCTION

American colleges and universities, now more than ever before in the history of higher education, are striving to engineer new and enduring relationships with private industry and government. The recent success of the University of Michigan's Technology Institute, Carnegie-Mellon's Software Engineering Institute, the University of North Carolina's Center for Biotechnology, and other similar initiatives confirms that partnerships between higher education and business and government can become immensely stimulating, productive, and beneficial. And now, because of the Montgomery County government's foresight and generosity, and because of the creativity of The Johns Hopkins University, the stage has been set for what will certainly become a regional center of academic excellence in Maryland—JHU's Montgomery County Center.

BACKGROUND

Montgomery County is one of Maryland's most populous and affluent jurisdictions. It borders on Washington, D.C., and is 34 miles southwest of Baltimore City. High technology, especially advanced electronics, telecommunications, and biotechnology, is the principal activity of more than 40% of the county's major private employers. About 13,500 companies, 325 of which have 100 or more workers, employ 235,000 in the county. Major business concentrations continue to expand along the Interstate 270 corridor in western Montgomery County and along the Route 29 corridor in the eastern county. More than 200 manufacturers of precision electronic instruments are also present. The county has become the home of an impressive cross section of world, national, and regional corporate headquarters and several massive federal research and development enterprises, including the National Institutes of Health, the Department of Energy, and the Naval Surface Weapons Center.

Montgomery County's positive influence on the economic growth of Maryland has accelerated in recent years, but it has done so in the context of a notable

dearth of higher education resources beyond Montgomery College, the county's outstanding community college, and Columbia Union College, a small liberal arts college affiliated with the Seventh Day Adventist Church. Over the years, this shortage of resources has frustrated and impeded corporate employers, who have found it increasingly difficult to enhance the skills of their employees, recruit highly talented new employees, or keep up with research that could assure future survival and innovation.

The county's belief that having a major research university in the area would be critical for future economic stability and development was confirmed during a series of consensus conferences sponsored in 1983 and 1984 by the Montgomery County Commission on Higher Education in Science and Technology. The commission, initiated by then-County Executive Charles W. Gilchrist, brought together leaders from the county's business sector and government and Maryland's academic community, including representatives of the faculty and administration of The Johns Hopkins University.

In 1984, JHU conducted a feasibility survey of about 800 chief scientists and engineers representing Montgomery County's high technology and federal research communities. The probe uncovered a remarkably high level of interest in and enthusiasm for graduate courses and noncredit programs in computer science, electrical engineering, and technical management. Interest was also expressed for graduate offerings in public health and business management. Those surveyed consistently emphasized how important it was for their employees to have access to courses at convenient times and location. The findings and other program possibilities were reviewed under the leadership of John Dearden, Director of the Office of Sponsored Projects for JHU, in a series of feasibility discussions involving representatives of the deans' offices for the G. W. C. Whiting School of Engineering, the School of Hygiene and Public Health, the School of Continuing Studies, the Peabody Institute, the

School of Arts and Sciences, representatives of the Applied Physics Laboratory, University administrators, leaders from the county's advanced technology community, the county executive, and members of the Montgomery County Council. I represented the School of Hygiene and Public Health in these and subsequent planning discussions.

UNIVERSITY PARTNERSHIP WITH GOVERNMENT AND BUSINESS

In June 1985, Montgomery County and JHU announced an agreement giving the University 36 acres of land at the Shady Grove Life Sciences Center just north of Rockville, Maryland, and \$5.1 million to plan, construct, and furnish an initial 44,000-square-foot instructional facility modeled after the Kossiakoff Center at APL. The Kossiakoff Center is the linchpin of the School of Engineering's Division of Continuing Professional Programs, the nation's largest part-time graduate degree program in engineering. As part of the agreement, the University would conduct at the new campus graduate credit and noncredit programs consistent with, but not limited to, the type envisioned from the survey and feasibility discussions.

The purpose of JHU's Montgomery County Center would be to offer relevant, high-quality graduate studies and opportunities in continuing education, to foster interaction and collaborative research with the local research community, and to establish productive relationships with the county's corporate and civic sectors and with the federal, state, and local government.

PLANNING PARTNERSHIP

In 1985, the Montgomery County Center Advisory Committee (composed of academic deans and administrative officers of the University) and the Montgomery County Center Interdivisional Faculty Advisory Committee (composed of faculty representing the School of Arts and Sciences, the G. W. C. Whiting School of Engineering, the School of Hygiene and Public Health, the School of Continuing Studies, and the Peabody Institute) were created and chaired by Provost Richard P. Longaker to address key policy issues, provide broad oversight, and advise on the establishment of the new center. An advisory subcommittee made up of academic associate deans and office directors was also created. Convened by Stephen McClain, Associate Provost, this subcommittee worked as a task force to develop specific recommendations for the parent Montgomery County Center Advisory Committee. The committee reviewed and refined academic program plans, worked closely with the University architect to develop a planning statement for the first teaching facility, and formulated short- and long-range site development options for the new campus.

In January 1986, I was named Assistant Provost and Director of the Montgomery County Center. The advisory subcommittee continued to counsel me concerning the development of workable action plans for all marketing and media relations, an October 1986 ground break-

ing ceremony, and the center's organization, staffing, and budget. In November 1986, the Montgomery County Council voted to increase the center's planning and construction grant from \$5.1 to \$9.2 million, following some extensive, unexpected landscaping, design, and engineering mandates from the county planning board.

Also at this time the architectural design of the first teaching facility, the centerpiece of the new Montgomery County Center campus, was modified from its initial Homewood-like, Georgian, brick veneer to a more modern, sleek, polished glass and earth-tone granite facade. The interior remained unchanged. The advisory subcommittee provided valuable assistance in working out plans for the center's library services, handicapped access, academic program review hearings by the Maryland State Board for Higher Education, computer classrooms and equipment requirements, registration and orientation activities, building occupancy arrangements, and a September 1988 dedication ceremony. The subcommittee became the ideal forum within which to coordinate the developing relationships between JHU and Montgomery College, Hood College, the Montgomery County High Technology Council, the corporate community, and the county government.

In September 1988, the two original advisory committees were replaced by the Montgomery County Center Policy Committee, a much smaller group chaired by Provost John V. Lombardi and composed of the deans of the G. W. C. Whiting School of Engineering, the School of Hygiene and Public Health, the School of Continuing Studies, the Peabody Institute, the associate provost, and the assistant provost and director of the center. The advisory subcommittee's name was changed to the Montgomery County Center Operations Committee.

MARKETING PARTNERSHIP

Decisive action was taken early in 1987 by Dean David VandeLinde for engineering, Dean Stanley Gabor for continuing studies, and Associate Dean Andrew Sorensen for hygiene and public health, who agreed to establish a common start-up marketing budget and specific marketing priorities and guidelines for Montgomery County. Positive collegial relationships subsequently developed between the Directors of Marketing, Candice Dalrymple (engineering), Maris St. Cyr (continuing studies), and Jo Martin (hygiene and public health), and between those marketing directors and their respective divisional academic program directors, Associate Dean Alan Karr and William Ittner, John Baker, and Edyth Schoenrich. These affiliations enabled the participants to understand and appreciate each other's marketing needs and sensitivities, which resulted in a more coordinated and effective marketing strategy to advance the name, mission, and image of the University, each school, and the new center. The creative influence of this University-wide association permeated all marketing and public relations activities. Marketing specialists from the Montgomery County Office of Economic Development were constantly involved in all aspects of marketing strategy development, and the University's Office of Communications

and Public Affairs was instrumental in securing, from both inside and outside JHU, the necessary professional marketing support services that helped to solidify this special partnership.

ACADEMIC PARTNERSHIP

At its public hearing in Annapolis in February 1986, and with the full support of the Montgomery County executive and several leaders of the county's advanced technology community, the School of Engineering received from the State Board of Higher Education the preliminary endorsement it needed to begin offering complete master's degree programs in computer science, electrical engineering, and technical management in Montgomery County. The board granted full approval in March 1986. The School of Engineering then conducted a successful advance mail-in registration in June 1986 and in July hosted an open house at Montgomery College in Rockville for about 50 prospective students.

After a well-attended registration, the G. W. C. Whiting School of Engineering officially established JHU's teaching presence in Montgomery County in September 1986—two years before the Montgomery County Center would open its doors. With the help of Robert Parilla, President of Montgomery College, David VandeLinde made a strategic decision to lease and renovate temporary classroom and computer laboratory space at the Rockville campus of Montgomery College. This gave Dean VandeLinde, Roger Westgate (former Associate Dean), Alexander Kossiakoff, and other APL faculty members in the School of Engineering's Division of Continuing Professional Programs an opportunity to measure more precisely the county's demand for their graduate programs.

By the end of the 1986–87 academic year, 513 students were enrolled for graduate courses in engineering, and the School of Hygiene and Public Health (the nation's first and largest, and the most prestigious of its kind in the world) announced plans to offer a select number of graduate courses at Montgomery College. During this same period, working closely with the School of Hygiene and Public Health and the School of Continuing Studies, Dean VandeLinde again took the lead by helping to develop the specifications and design requirements for the Montgomery County Center's computer classroom facilities. Because of its heavy reliance on such facilities, the School of Engineering would later purchase the much needed start-up computer hardware and would encourage students and faculty from the School of Continuing Studies and the School of Hygiene and Public Health to use those facilities for their own instructional purposes.

At the close of the 1987–88 academic year, the School of Engineering reported 730 graduate course registrations at Montgomery College. The early and continuing success of the school's master's degree programs is largely due to the efforts of the APL-based Continuing Professional Programs faculty, and particularly Program Chairmen Lee Edwards, Alexander Kossiakoff, Kishin Moorjani, Vincent Sigillito, and James Stadter, who as-

sumed the onerous task of nurturing and guiding three new Montgomery County master's degree programs while fulfilling their concurrent APL responsibilities. Their consuming interest offered a consistent series of courses and instructors that would meet the same high standards of quality demanded throughout the Continuing Professional Programs. Additionally, because of the outstanding efforts of Edyth Schoenrich, Director of Professional Programs, David Paige, Director of the Master of Public Health Degree Program, and the pioneering spirit of Professors Helen Abbey, Donald Cornely, Karen Davis, and other senior full-time faculty, the School of Hygiene and Public Health reported 168 graduate course registrations of their own. In June 1988, that school obtained the preliminary endorsement of the State Board of Higher Education to offer its Master of Public Health Degree Program in Montgomery County. The full board granted final approval later that same month.

Several untimely developments involving temporary classroom space and construction surfaced in the fall of 1988. Unexpected delays with classroom renovation and construction at Montgomery College forced the School of Engineering to move most of their spring classes to space at a local intermediate school and later to a nearby hotel. Several courses of the School of Hygiene and Public Health had to be scheduled in classrooms located near a noisy gymnasium. Students and faculty of both schools complained, and spring enrollments dropped slightly. Surprisingly, during the summer of 1988, under similar classroom conditions, 170 engineering students, 84 more than the previous summer, registered for courses. Also, because of a six-month delay created by unresolved issues of the construction budget, building redesign, and material fabrication, no slack remained in the center's tight 16-month construction schedule.

Fortunately, through the expert intervention of Robert Schuerholz, JHU Executive Director of Facilities Management, and the Whiting-Turner Construction Company, the newly built Montgomery County Center teaching facility officially opened as planned on 8 September 1988. By the close of the 1988–89 academic year, graduate course registrations, including those for the summer of 1988, reached about 1100 for the School of Engineering and about 500 for the School of Hygiene and Public Health.

The School of Continuing Studies, the third academic division of JHU to establish a presence in Montgomery County, achieved 513 graduate course registrations for the 1988–89 academic year, a remarkable accomplishment for Dean Stanley Gabor and his faculty and staff, in view of the tremendous pressure created by the concurrent demand to establish new academic programs at the school's downtown Baltimore and Montgomery County centers.

The School of Continuing Studies also established a tradition at the Montgomery County Center with its fall lecture series, Science and Technology in a Global Perspective, and its spring lecture series, Science for the 21st Century. Free, open to the public, and sponsored by several major firms in the county, the series examined key

issues in science and technology. The featured speakers were Riccardo Giacconi, Director of the Space Telescope Institute at JHU; James Walker, Professor of Physics at JHU; Frank Press, President of the National Academy of Sciences; Donald Henderson, Dean of the Johns Hopkins School of Hygiene and Public Health; Donald Coffey, Professor of Urology at the Johns Hopkins School of Medicine; Michael Shara of JHU's Space Telescope Institute, and Alphonso Caramazze, Director of the Hopkins Cognitive Science Center.

Additionally, the School of Continuing Studies initiated an assessment of the marketplace in professional development by offering several noncredit courses in management, communications, computer technology, and investing and financial planning. In February 1989, the school received the preliminary endorsement of the new Maryland Higher Education Commission to offer master's degree programs in administrative science, applied behavioral science, interdisciplinary science studies, school counseling and guidance, and special education in Montgomery County. Final approval was granted in March 1989.

TEACHING FACILITIES

The interior and exterior designs for the Montgomery County Center evolved from a series of discussions involving the Montgomery County Center advisory committees, senior staff representatives of APL, deans and University officials, representatives of the Montgomery County government, and the Maryland National Capital Parks and Planning Commission. Designed by architects from the Hillier Group of Princeton, New Jersey, and built by the Whiting-Turner Construction Company of Washington, D.C., the modern building of granite and highly reflective glass (Fig. 1) is a 44,000-gross-square-foot instructional facility. Figure 2 shows some of the center's new accommodations.

The availability of construction and program support funds will ultimately determine the feasibility, nature, and timing of future campus expansion. The approved, current, overall building master plan will accommodate 375,000 gross square feet of building construction.

LIBRARY SERVICES PARTNERSHIP

The Montgomery County Center Library was established in September 1988 as an affiliate of the JHU Libraries, a group that includes the Milton S. Eisenhower, R. E. Gibson, Abraham M. Lilienfeld, Peabody Conservatory, and Welch Medical libraries. Holders of the center's library card may enter any of the other JHU libraries. The new library is open to faculty, students, and staff of the University and its medical institutions and to patron members of the community with specific research needs.

Liaison was established early between the Montgomery County Center librarian, who reports to the center's director, and appropriate associate deans and program directors, to facilitate communication, identify book, journal, and reserve material needs, and make recommendations for storing little-used materials. JANUS, the library's on-line catalog, was installed to offer access to serials, books, audiovisual materials, and microforms cataloged by the Eisenhower Library and located at either the Eisenhower, the Montgomery County Center, or the School of Continuing Studies' downtown and Columbia centers. Materials held by the Welch Medical and Lilienfeld libraries can be located through any computer terminal by modem. A start-up collection of bound volumes and unbound issues of selected journals is shelved in the library's display area. It will take four or five years to develop these collections to the planned 5000-volume limit. Additionally, the Research Libraries Information Network service, an on-line bibliographic network of nearly 100 research and specialty libraries



Figure 1—The facade of The Johns Hopkins University Montgomery County Center.



Figure 2—The Montgomery County Center. Top row, left to right: reception area, 300-seat auditorium, 5000-volume instructional library with on-line catalog. Bottom row, left to right: representative classroom, computer laboratory, multipurpose meeting room and lounge area.

throughout the nation (e.g., Library of Congress, National Library of Medicine, National Agricultural Library) is also available for student, faculty, and staff use, as are supplementary resources.

CORPORATE PARTNERSHIP

Linkages with the county's corporate community are being established through an education brokerage created by the Montgomery County High Technology Council for its 167 corporate members and JHU, American University, Capital College, George Washington University, Hood College, Howard University, Montgomery College, the Montgomery County Public School System, the University of Maryland, and a newly formed Montgomery County Center Advisory Board, which is chaired by JHU's provost. Advisory board members include deans from the School of Continuing Studies, the School of Engineering, the School of Hygiene and Public Health, myself, and corporate and government chief executives representing Automated Sciences Group, Bechtel Power Eastern Company, Computer Data Systems, COMSAT Systems Division, Fairchild Communications and Electronics Company, Fairchild Space Company, the Foundation for the Advancement of Education in Science of the National Institutes of Health, GTE Government Systems, Life Technologies, the Office of the Montgomery County Executive, the Montgomery County Health Department, the Montgomery County High Technology Council, the Montgomery County School System, Otsuka Pharmaceutical, the Shady Grove Adventist Hospital, and Westinghouse Bio-Analytic Systems Company.

Additionally, the center's facilities are made available to corporations and the general community during the

day as a regional, nonresidential conference site. The 300-seat auditorium with its state-of-the-art audiovisual electronics and the center's classrooms, lounges, exhibit space, catering areas, and parking facilities are being actively marketed. All meeting and conference arrangements are coordinated by an assistant director who also manages the center's day-to-day operations and business affairs and oversees supportive audiovisual, housekeeping, plant management, security, and copy center services.

CONCLUSION

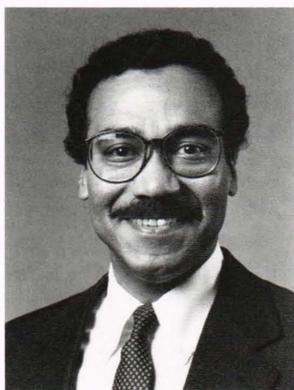
During the Montgomery County Center's first year of operation, three completely independent academic divisions of JHU joined together and firmly established their plans to offer nine graduate degree programs and noncredit courses in response to the burgeoning needs of the advanced technology community in the county. Thus far, the essential ingredients for success have been the splendid cooperation among deans, faculty, and staff, and the implementation of an open, collegial, and supportive planning process.

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THE AUTHOR



EDGAR E. ROULHAC, Assistant Provost and Director of The Johns Hopkins University Montgomery County Center, was born in Chicago in 1946. Between 1969 and 1974, he received his B.S., M.S., and Ph.D. degrees in biological sciences, community health education, and higher education administration, respectively, from Southern Illinois University at Carbondale. In 1975, he was awarded a Master of Public Health degree from the Johns Hopkins School of Hygiene and Public Health. Before assuming his position at the Montgomery County Center, he was Associate Dean for

Student Affairs and Continuing Education at the Johns Hopkins School of Hygiene and Public Health. Before coming to Johns Hopkins, Dr. Roulhac was a founding faculty member of the Southern Illinois University School of Medicine, and also coordinated health-planning affairs for the school throughout rural southern Illinois. His research interests embrace two diverse areas: the prevention of childhood lead poisoning and the analysis of policy development for innovation in higher education.