

*Charles P. Ruch and Eugene P. Trani*

*Metropolitan universities derive a significant element of uniqueness from the breadth and character of their interactions with their communities. Drawing on the experience of two metropolitan universities, Virginia Commonwealth University (VCU) and the University of Missouri-Kansas City (UMKC), the scope of these interactions is illustrated. The discussion highlights potential limitations to the university inherent in such activities and what changes the university will need to undertake to ensure success.*

# Scope and Limitations of Community Interactions

Metropolitan universities derive a significant element of uniqueness from the breadth and character of their interactions with their communities. While many universities reside in urban or metropolitan areas, not all universities consciously and as a matter of mission and strategy, seek to build mutually beneficial relationships with many of the diverse elements characteristic of their service area. It is the interactive nature of these activities that defines their scope and contributes to their inherent limitations.

Metropolitan universities are not simply in the city but of the city, and the importance of activities with their surrounding environment is central to the life of the institution. These universities have as their mission the land-grant tradition of institutional research and public service conducted within the growing metropolitan centers of the country. Furthermore, public service is expanded to include the broadest of interactions with the community—interactions that are naturally reinforcing to both institution and city.

As an institution of the city, the metropolitan university, by design and conscious action, seeks to draw upon the rich tapestry and fabric of the community in strengthening its programs of instruction, research, and public service. Conversely, the institution plans and delivers programs and activities that contribute to the improvement of the urban environment in which it resides. Through its many interactions with the community, the metropolitan university seeks to contribute to and ulti-

mately improve the quality of life in the metropolitan area while enhancing its primary mission of knowledge generation and dissemination.

Three characteristics identify the particular nature of the interactions between the metropolitan university and its environment.

First, the interaction is mutually reinforcing. In all of the aspects, both the institution and the environment are richer for the participation. Some institutions tend to see their role as only to enrich the environment, ever maintaining an invisible wall that keeps their cloisters tightly knit, yet opening the doors to the community to participate within those cloistered walls. Other institutions seek to move beyond the cloistered walls as they move their activities into the greater community. It is the task of the metropolitan university to build relationships and activities that are mutually beneficial to both partners. As ties between the university and the community strengthen, the results of these interactions encourage cooperation on new projects.

Second, the interaction is guided by institutional choice and strategy. A metropolitan university is rich in its resources and possibilities. Conversely, the environment is a pool of unlimited diversity and opportunity. In developing mutually reinforcing relations, choice on the part of the institution as well as the needs of the community must prevail.

A third characteristic undergirding the university-community interactions is one of value and import. The university values and prizes the interactions, rewarding participants and building such interactions into the ongoing life of the institution. On the other hand, the community is reinforced and rewarded through its participation with the university. It welcomes and encourages university participation.

### Making Mutual Interactions Happen

Interactions of mutual interdependence do not just occur. Potential activities require the assessment for mutuality, appropriateness, and quality. Examples drawn from experiences at two metropolitan universities—Virginia Commonwealth University (VCU) and the University of Missouri-Kansas City (UMKC)—illuminate these dimensions. The most successful interactions are characterized by mutually reinforcing qualities, carefully selected and valued by the university. While it can be argued that these interactions enrich both the metropolitan university and the community, and are consistent with the institution's mission and role and beneficial to the core mission of the university, they do not occur spontaneously. Careful institutional actions are also necessary. These include:

- **Strong Leadership.** In each of the examples cited in this article, strong institutional leadership was necessary to initiate, develop, and sustain the

interaction. Institutional leaders need to be visible and involved in community affairs.

- **Clear Goal Statements.** Interactive community relationships need to be articulated in clear goal statements. Both university and community members need lucid statements of the importance and value of productive university-community interactions.
- **Supportive Institutional Policies.** Institutional policies frequently inhibit strong university-community relationships. Academic requirements, promotion and tenure guidelines, salary and workload policies are but a few of the institutional policies that need to be reviewed to support community-university relations.

### Teaching and Research

Mutually beneficial relationships between the university and the community directed at the core mission functions of teaching and research are legion. To be most effective, such interactions need to be not only mutually advantageous, but also carefully selected, and integrated into the fabric of the institution. Examples of experiential education, alternative program design, adjunct faculty and cooperative research illustrate the point.

Cooperative education, first designed to support engineering programs, is an ideal program for a metropolitan university. Both VCU and UMKC have programs of growing size and importance. At VCU, students extend their classroom into the world of work by serving as members of a corporate team for one or more semesters. Consequently, the curriculum is expanded and enriched. An additional benefit of cooperative education is that it offers students an opportunity to earn money to defray college expenses. Participating corporations contribute to the education of talented students, and at the same time identify prospective workers.

Expanding the curriculum into the community is not limited to a formal co-op program. Internships, practica, and other opportunities are found for every discipline and academic major. At VCU, for example, students in history, political science and English find internship experiences with state and local government to be particularly helpful. Students in the sciences take advantage of fieldwork opportunities in local corporations as well as state and local government. Students from the arts find work in museums and galleries. Projects and field trips within individual courses help to expand the curriculum into the community.

The boundaries between the classroom and the community can be made permeable, and the extent to which the flow of ideas and people is accelerated is to the mutual benefit of both. However, the full impact on the curriculum will not be met by including only community activities. Inductive pedagogy, case methodology, and cooperative learning strategies will need to be introduced into the classroom. Only by restructuring the instructional

process so classroom content is tied with community experience will the full potential of these boundary-spanning strategies be achieved.

An additional hallmark of metropolitan universities has been the willingness to deliver instruction in the community and the work place. VCU offers an executive MBA program at a corporate location, a program for health administrators through closed-circuit television in regional hospitals, and courses for teacher certification in area schools. Courses taught in shopping malls and corporate executive centers are additional examples of the metropolitan university moving its instruction from the campus into the community.

An example of intra-institutional cooperation that benefits the community is the UMKC-UMC (University of Missouri-Columbia) engineering program. Engineering programs tend to be housed at the land-grant institution in a rural location, while city populations and corporations are frequently in need of affordable, convenient engineering programs. UMKC solved this problem by bringing UMC engineering faculty to the UMKC campus. The faculty work in Kansas City but earn tenure and promotion through the engineering departments at UMC, 120 miles east of Kansas City. UMKC provides the physical facilities as well as the basic general education and science curriculum; UMC engineering faculty the professional engineering course work. The needs of the land-grant university, metropolitan university, and the community are all served through this model arrangement. This concept might prove to be particularly effective in getting programs offered in urban settings without duplicating such degrees. It also builds good will between land grant and urban campuses.

Staffing is another area where metropolitan universities enjoy unusual opportunities. Adjunct and part-time faculties can be drawn from the local area work force, thus contributing directly to the maintenance of the community economy. At VCU, practicing professionals bring up-to-date life experiences each semester from the community into the classroom. Judicious use of adjunct faculty in selected courses leaves the overall curriculum with the dimensions of the real and the possible, a necessary counterpoint to the theoretical and the imagined.

Knowledge generation is central to the mission of the university. The opportunities for faculty and students to identify real world problems, to draw community and professional members into the research teams, and to develop solutions to critical issues of academic and community interest are important opportunities for metropolitan universities. Research activities, mutually developed and pursued, provide yet another opportunity for the curriculum of the metropolitan university to be enhanced through community interactions.

If the academic life of the institution is so enriched through its interactions with the community, why are such arrangements so difficult to sustain?

The answer lies in several of the characteristics of mutually interactive relationships. Unless carefully designed, the community perceives internships and practica experiences only as academic exercises. If students do not develop usable skills on campus, on-the-job difficulties develop. If adjunct faculty cannot enter the academy and learn to integrate their real-life experiences with theory, their instruction becomes dysfunctional. In each case choices must be made. Faculty and administrators need to ensure that off-campus programs are of the same quality and dimension as campus programs. Faculty and students alike need to be rewarded for their activities. Institutional policies need to be examined to support the off-campus instruction. Credit needs to be awarded for co-op and practica experiences, and reasonable salaries need to be paid to adjunct faculty. In short, each element of the university needs to be examined to ensure that it is consistent with the desired goal of productive community interaction. This examination must start with a clear and consistent mandate from institutional leadership.

### Cultural Life of the City

Universities have always been central to the cultural life of the city. However, it is the metropolitan university where these activities have been developed in an interactive way to the mutual benefit of both. In Kansas City, for example, the UMKC houses the Missouri Repertory Theater, Incorporated. This repertory company, now twenty years old, has its own board, annually guarantees the funding of the Missouri Repertory Theater, and has even raised an endowment for it. The theater employs an artistic director, the university employs the chairperson of the theater department, and, jointly, these individuals coordinate the academic and professional programs.

In both Richmond and Kansas City there are joint appointments between the university and the city's symphony. In Kansas City, the first and second chairs of the symphony are faculty members of the Conservatory of Music at UMKC. In Richmond, the director of the Richmond Symphony holds an appointment at VCU. With community support, VCU sponsors the Terrace Concert Series in Richmond. This program provides an opportunity for musicians performing in the Terrace Concert at the Kennedy Center in Washington to appear in Richmond.

In both cities, the university operates an art gallery. Both galleries have clear niches within the overall art community. A joint appointment for the UMKC museum curator with a city museum is a useful strategy. In Richmond, the VCU sculpture department frequently displays its work at festivals and is joined by the painting and printmaking department in providing artistic work for display throughout the city. The VCU fashion show, pro-

duced by the fashion department, provides an opportunity to demonstrate their accomplishments within the fashion industry in the city.

Another shining example of an exchange beneficial to both university and community is VCU's free university. Staffed primarily with emeriti faculty, this program annually provides fifteen hundred senior citizens an opportunity to participate in lectures, discussion groups, and short courses on a variety of topics.

Extended university-artistic relations are not without problems and limitations. Differences in style and emphasis within the artistic and cultural community can lead to unnecessary misunderstandings. Dual institutional involvement exacerbates the potential for competition. Community expectations may clash with academic and artistic expression. Consequent pressures for perceived or actual censorship may emerge and will need to be repelled. Only with clear policy direction and implementation is it possible to move these relationships from competition to cooperation. Careful discussion and constant communication is necessary to ensure the continuing interactive nature of these relationships. A necessary prerequisite for success is the direct involvement of senior university leadership when establishing and maintaining these activities.

### Health Care

Health care is an area where university and community interaction is essential to the benefit of both. VCU, through its Medical College of Virginia campus, and UMKC, through its Health Sciences Center, provide not only training of health care professionals, but direct and indirect health care service to the community at large. Central to both is the teaching hospital, the Medical College of Virginia Hospital in Richmond, and Truman Medical Center in Kansas City. Both are tertiary care centers and serve large indigent populations. The academic health center serves as the locus for the training of health care professionals, the conduct of basic and clinical research and delivery of direct patient care.

At UMKC, integrating and coordinating leadership responsibilities between the School of Medicine and the city/county hospital administration assures key strategic policy development and the delivery of first-rate medical care. For example, the executive director of the Truman Medical Center, the city/county hospital, also serves as dean of UMKC's medical school. The further involvement of health care and researchers ensures that the health care is on the cutting edge of medical practice.

Beyond direct service activities, the major academic health care centers are reaching out to disseminate knowledge to the larger medical and lay communities, often in rural settings. For example, at VCU the Massey Cancer Center conducts a rural cancer project linking the researchers and

practitioners at the health science center with cancer patients and their physicians in outlying rural counties. While initial patient diagnosis and treatment, coupled with in-service training of practitioners, is done in the city at the cancer center, the goal is to make sure the patient returns to the local community where first-rate care from a local health care team is provided. This care is augmented and supported by the cancer center through telecommunications and on-site health consultations. Similarly, the Virginia Center for Aging and the Gerontology Education Program deliver outpatient education programs to the larger health care community, who in turn can turn to the unit for additional help and support.

The greatest challenge to the university health center and its relations to the community is the increasing competitive health care environment. Balancing additional costs, patient acuity, training requirements, and care to indigent populations places the academic health science center at a competitive disadvantage with the community private hospitals. Conversely, through collaborative relationships and activities the competitive nature of the health care environment may be lessened. Only through such an approach can the health care across the metropolitan area be improved.

### **Community/Economic Development**

As the call to strengthen competitiveness in the American economy has gone out, universities have responded with a variety of strategies to strengthen community and economic development. In many ways metropolitan universities have been at the forefront of developing these strategies. Two of the more frequent strategies have been the creation of a small business center, and the participation with area businesses and corporations in development of incubator centers, technology transfer projects, and/or research parks. At both VCU and UMKC, small business centers provide an opportunity for the prospective entrepreneur to receive technical assistance and support from business faculty and students. The VCU center provides help in developing a business plan, organizing a small business, taxes and legal advice, marketing strategies, and other business concerns. Faculty have an opportunity for hands-on experience confronting many of the issues faced as a new business is created. To the extent that students are included in the consulting activities, the curriculum and educational opportunities are strengthened. When developed in cooperation with the chamber of commerce and other civic organizations, as in Richmond, the Small Business Center provides strong support for the development of small businesses in the metropolitan area.

Similarly, the development of incubator projects and research parks are viable strategies for cooperative relationships between the metropolitan university and the business community. In Richmond, the Richmond Tech-

nology and Enterprise Center (RTEC), and in Kansas City, UMKC all working to develop an area research park. RTEC is a business incubator facility and provides small business with temporary support space and technical advice for the transfer of biotechnical discoveries from the medical center into a commercial enterprise. Once developed, the new company moves into the community. The research park strategy at UMKC has already resulted in a five-year contract between the university and United Telecommunications. United Telecommunications funds faculty members for research on basic and applied research consistent with United Telecommunication interests. The long-term goal is a center, close to UMKC, where several businesses can be housed, drawing on the expertise of other UMKC faculty.

At both settings the future of incubators and research parks reflects the complexity and uncertainty of this strategy. New companies are difficult to sustain. Venture capital is not always readily available. Technology transfer, critical to both the metropolitan university and its community, is a complex, resource-intensive undertaking.

Economic development and technological transfer are areas where the business community and the university interface most directly. However, their short-term interests are not always compatible. The business community is looking for a return on investment, and a marketing and competitive edge that drives the private sector. University research faculty are more inclined toward matters of intellectual inquiry and development. Nor are faculty efforts in patent and copyright activities always rewarded within the academic promotion and tenure system. Consequently, the economic and commercial application of their activities may not be of high importance. Furthermore, state and institutional policies relating to patent and copyright ownership, conflict of interest between university and private sector activities, and priority of interests suggest that planning and delivery need to be carefully monitored.

### **K-12 Educational Improvement**

The involvement of the metropolitan university in the improvement of Kindergarten through twelfth-grade education is an area of mutual benefit. There are a number of examples of how metropolitan universities can play a major role in this improvement.

In Kansas City, an exchange program between senior administrators in the School of Education and the Kansas City school district led to the development of a “community service fellowship” program where faculty (while on university payroll) went into the community to tackle city educational problems. The university developed a Mathematics and Physics Institute where students from Kansas City area schools come to campus to

receive programs of advanced mathematics and physics instruction not available in area schools. This institute is funded by four school districts using gifted and talented funds from the state.

In Richmond, the Capital Writing Project has allowed faculty from English and English education to work with almost all of the K-12 teachers in the area to improve writing skills and teaching of writing. Similarly, the mathematics department working with math educators developed the Richmond area Teachers' Professional Network, allowing mathematics teachers at all levels to work together to improve K-Collegiate mathematics instruction. The centerpiece of this activity has been a teacher-in-residence program where teachers from area schools spend the academic year on campus teaching in the mathematics department. A similar program occurs in the School of Education with teacher exchanges. Project BEST is an example of a university/school partnership, which encourages middle school students to continue further studies in mathematics and encourages retention of VCU students. VCU students serve as counselors and mentors for the middle school students, and in turn VCU faculty administrators serve as mentors for the VCU students.

The Richmond Community High School is an example of mutual interaction at its best. Now over ten years old, this Richmond City school is run by a community advisory board which includes VCU faculty. Talented, economically disadvantaged students are enrolled in an enriched academic curriculum supported by resident teachers, visiting faculty (frequently emeriti faculty), and university faculty. Students may enroll in VCU courses (for high school or advanced placement credit), and use VCU libraries, laboratories and computers.

The continued improvement of urban education depends on the mobilization of all community resources, including those of the metropolitan university. Building bridges through joint meetings with area superintendents and university leadership, presidents and provosts, serve as a way to coordinate the activities. Recognizing faculty contributions to area schools through the normal tenure and promotion process is critical to building these interactions. But central to the success of such enterprises is the creation of an atmosphere of mutual respect and collegiality. This can only be achieved through successful long-term exchanges of personnel and successful joint projects.

### **Support to Local and State government**

The metropolitan university has a strong stake in improving the civic life of the city and state. The university can provide a set of resources which, if properly marshalled, can improve the quality of state and local government. Examples include exchange of governmental officials and university faculty.

The commonwealth governmental exchange program at VCU allows VCU faculty to take key roles in state government. Currently, the director of training in the Virginia Office of Personnel Training, the Virginia Commissioner of Mental Health and Mental Retardation, and staff to members of the finance committee of the general assembly are VCU faculty. Similar arrangements have allowed senior scientists in Kansas City to work on water control problems, and education faculty to assume school administration responsibility. The Center on Public Affairs at VCU conducts research and training activities designed to inform on public policy matters. Recently the state's Transportation Commission turned to the center for its staff work, as did the Attorney General's office for help on the development of drug abuse and awareness programs. VCU's Survey Research Laboratory periodically conducts the Commonwealth Poll, an opportunity to tap public opinion on key state issues.

It is clear that the metropolitan university can be an important participant in strengthening state and local government. Limitations in developing these activities are equally obvious. The university clearly needs to remain neutral in matters of partisan politics. This is not always easy, but is the position the university must take. However, the university does have an obligation to provide the most accurate information that might inform public policy. This, too, is an area where those within the academy will differ. Much contract work requires interdisciplinary coordination and may frequently exacerbate matters of vested interest among faculty members. The university needs to be sensitive to these forces and respond accordingly. Finally, the movement of faculty into bureaucratic life or that of agency heads into the academy is not without its problems.

### **Employer/Landlord/Investor**

Metropolitan universities are major employers and owners or occupiers of significant property within the metropolitan area. Their impact on the overall community cannot be underestimated. The necessity of managing these corporate affairs with the understanding of the overall community is integral to the continued development and esteem of the university. Yet it may be in this area more than any that the "town-grown" relationships become strained.

Metropolitan universities are major employers. Their employment levels directly affect the overall economy. The indirect economic effects through student purchasing and other activities are significant. As public entities, their tax-deferred status is of some sensitivity to the community. The sound business practices of competitive bidding and prompt payment of institutional accounts are matters of considerable import in building community support.

However, it is in the area of land use and land use planning that metropolitan universities may have major difficulties. A major accomplishment, for example, is a joint parking deck on the VCU campus. The deck, constructed with university, state and city funds, provides parking not only for a portion of VCU's commuter students, but for public events because of its location next to the City Auditorium. In similar fashion, the university is discussing with the city the possibility of managing a run-down park adjacent to the campus. The university proposes that the city transfer the responsibility of the park's maintenance and security to the university, which in turn would enhance both its usefulness and attractiveness for the community. On the other hand, the university seeks to expand and is in the process of trying to negotiate a land-use plan and acquire new property.

Particularly sensitive is a metropolitan university's interest in acquiring low-income housing property or moving into areas of perceived residential communities. Similarly, a university may have a variety of historically sensitive properties on its campus which it seeks to maintain, although at additional expense. There is simply no avoiding the conflict in relationships as the university tries to plan for its future as a constructive neighbor. Like most land-use debates, core community values frequently stand at the center point: economic development versus environmental protection, cost versus aesthetics, public versus private, academic versus commercial.

### **Minority Communities—A Special Opportunity**

Metropolitan universities have a special opportunity to build mutually reinforcing relationships with their minority communities. More than other sectors of higher education, metropolitan universities have a responsibility to make a significant contribution to improving the educational opportunities for minority and low income citizens from surrounding communities. Most of the examples of university-community interactions reported above involve and benefit the minority communities in both Richmond and Kansas City. But the metropolitan universities must also undertake activities specifically targeted to providing increased educational access and employment to members of the minority communities. The metropolitan university plays a major role in making higher education accessible and available to the broadest cross section of the community. Programs designed to attract and assist minority youth with academic promise, such as VCU's academic support program, furnish a vehicle to extend higher education to an ever-widening population. Delivering courses at times and places convenient to the working, part-time student provide yet another mode of increasing educational access. Strong community college-metropolitan university transfer arrangements provide another strategy to extend educational opportunity to all members of the community.

As an employer, the metropolitan university is the first place significant numbers of the minority communities become employed. Throughout the institutional work force, occasions to hire and strengthen all employees, including minority members, should be pursued. A VCU program to provide free tuition for courses available to all employees permits work-study arrangements to the mutual benefit of the employee and the university. Completion of a college degree creates additional opportunities for the individual. Similar arrangements for graduate students strengthens both the degree program and the graduate.

In meeting these special responsibilities, the metropolitan university will need to be especially responsive and innovative. It will have to conduct programs of developmental education and academic support. Structured mentoring programs, employee training, and flexibility in recruitment and hiring are necessary institutional responses if the metropolitan university is to maximize its opportunities to its minority communities.

### **A Final Admonition**

Significant elements defining the character of a metropolitan university are the breadth and character of their interactions with their communities. The nature of these relationships is defined by their mutuality, appropriateness, and quality. As illustrated earlier, the scope of such activities runs across the gamut of institutional and community life. If developed with imagination, cooperation and energy, the university, as well as the community, will be richer.

Such activities do not occur spontaneously nor easily. Several limitations inherent in current institutional life mitigate against the enhancement of community interactions.

First, there is the matter of faculty role, responsibility, and reward. The traditional professorial role of teaching and research needs to be expanded to include active public service in the local community. The traditional view of scholarship must be broadened to value action research and problem-solving methodologies. A view of teaching that focuses on active learning in an extended classroom needs to be encouraged. Perhaps most necessary is the revision of the traditional reward system to include these as valued activities in the tenure, promotion and salary considerations.

Second, metropolitan universities must become more consumer-oriented. Degree programs need to be planned and scheduled at times, places, and locations convenient to community members. Service units need to schedule hours to accommodate working students. Support services need to be provided to assist community members in making the transformation into university life.

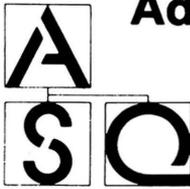
Third, and most important, throughout all its activities, involvement with

the community needs to be extolled as an institutional value and characteristic. The power of such symbols as presidential leadership, frequent discussion of successful community projects in local media, and visible community-university advisory councils cannot be underestimated.

Metropolitan universities and their communities have much to offer and gain from each other. They are not always natural partners. Their successful interactions necessitate the university to take a broader view of its mission, role, and activities.

### *Suggested Readings*

- Elman, Sandra, and Smock, Sue. *Professional Service and Faculty Rewards: Toward an Integrated Structure*. Washington, D.C.: National Association of State Universities and Land-Grant Colleges, 1985.
- Lynton, Ernest, and Elman, Sandra. *New Priorities for the University: Meeting Society's Need for Applied Knowledge and Competent Citizens*. San Francisco: Jossey-Bass, 1987.
- Seymour, Daniel, ed. *Maximizing Opportunities Through External Relationships*. San Francisco: Jossey-Bass, *New Directions for Higher Education*, No. 68., 1989.



# Administrative Science Quarterly

*Dedicated to advancing the understanding of  
administration through empirical investigation  
and theoretical analysis.*

**The March 1990 issue of ASQ (Special Issue on Technology, Organizations, and Innovation) includes:**

"Architectural Innovation: The Reconfiguration of Existing Product Technologies and the Failure of Established Firms"

**Rebecca M. Henderson and Kim B. Clark**

"The Alignment of Technology and Structure through Roles and Networks"

**Stephen R. Barley**

"The R&D Boundaries of the Firm: An Empirical Analysis"

**Gary D. Pisano**

**The June 1990 issue of ASQ includes:**

"Autonomy, Interdependence, and Social Control:  
NASA and the Space Shuttle *Challenger*"

**Diane Vaughan**

"Measuring Organizational Cultures: A Qualitative  
and Quantitative Study across Twenty Cases"

**Geert Hofstede et al.**

"Do You Get What You Deserve? Factors Affecting the  
Relationship between Productivity and Pay"

**Alison M. Konrad and Jeffrey Pfeffer**

**Special issue on Organizational Culture (Sept. 1983) still available (\$10.00 per copy)**

**ADMINISTRATIVE SCIENCE QUARTERLY**

Johnson Graduate School of Management, Cornell University, Malott Hall,  
Ithaca, NY 14853-4201 (607) 255-5581

Published quarterly: March, June, September, and December

Back issues, 1981-present, available for \$10.00 each

Begin a subscription with  forthcoming issue  the \_\_\_\_\_ issue

Individual  \$35.00 Student (with proof of I.D.)  \$25.00 Institution  \$62.00

**U.S. dollars only**

Additional postage outside the U.S. \$5.00  Airmail, \$25.00

Visa  Mastercard No. \_\_\_\_\_ Expiration date \_\_\_\_\_

Payment enclosed  Bill me Signature \_\_\_\_\_

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_