

# The Roanoke College Teacher-Scholar

Review of Scholarly Activities  
1993-1994

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*Mentors and Role Models for Student Scholars ...*  
**Roanoke College's Faculty  
Insure Success for the College-wide  
Summer Research Program**

by Ralph Burgio, Director of College Publications

"The sciences have long known that summers are an excellent time to involve undergraduate students in research," says Dr. Benjamin Huddle, professor and chairman of chemistry at Roanoke College. "And recently, the interest in — and support for — research in the humanities, social sciences, and business have increased," he claims. "Students in non-scientific disciplines also want to share in the experience of conducting a scholarly study and intellectual dialogue over an extended period of time. The phenomenon is nationwide."

At Roanoke, a grass roots demand by faculty and students from all 13 academic divisions led to implementation of the Summer Scholars Program in 1994.

Department chairs from chemistry, biology, psychology, and fine arts developed the proposal, based on Roanoke's successful Bondurant Scholars program which provides students with stipends for summer research with the chemistry staff. (*Named for a former Roanoke chemistry chair, the Bondurant Fund is endowed by Roanoke alumnus and adjunct research professor in chemistry, Dr. Charles H. Fisher. The college supports these scholars by providing free campus housing and sometimes free board, as well.*)

The dean and president strongly supported the college-wide proposal; the five vice presidents were instructed to "make it happen" ... and they did!

Business Affairs allotted money from different accounts to support the program. Student Affairs arranged for college-owned housing. The registrar authorized credit for independent study. The faculty development committee solicited and evaluated applications. The library offered free interlibrary loan and technical assistance with electronic searches. And the coordinator was afforded a great deal of latitude by the dean in implementing the program.

Thirteen of 32 applicants were chosen to participate. The merits of the proposed projects were given priority, but also considered were balances of student gender and academic discipline. Art, biology, business administration, chemistry, computer science, English, history, physics, political science, and psychology were

ultimately represented.

"The opportunity was provided by the campus community," reports Dr. Huddle who coordinated the inaugural Summer Scholars program. "But it was the supervising faculty — and the students themselves — who made the program successful."

Profiled in the following pages of the *Teacher-Scholar* are four of Roanoke's faculty who worked to make the Summer Scholars program a success. All 13 stories are worthy; only matters of practicality limit the selection to these four.

## **Adrienne Bloss**

*Assistant Professor of Computer Science  
and Mathematics*

The scholarly activities of Adrienne Bloss are a fundamental part of who she is, as a computer scientist and as an educator.

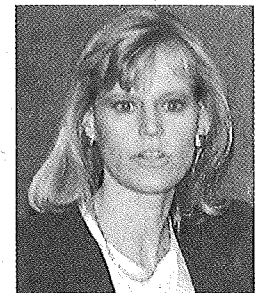
In addition to her teaching assignments in 1993-94, Dr. Bloss authored three scholarly publications; made professional presentations in

California and Alabama; critiqued computer science textbooks for a national publisher; reviewed grant proposals for the National Science Foundation; explored "Real-World Functional Programming" as a Roanoke College Faculty Scholar; and served as mentor for an undergraduate Summer Scholar researching computer "intelligence" through neural networks.

Add to these activities, helping to implement a National Science Foundation (NSF) grant which provides access to the Internet and greatly enhances research and instructional programs at the college. Dr. Bloss was co-author (with Dr. James Dalton, director of information services) of the successful NSF proposal for a \$22,000 grant to link Roanoke College faculty, students, and staff to computer networks from across the nation and throughout the world.

She also gave birth to daughter Rachel in September, 1994.

"I think it's always important for faculty to be professionally active," says Dr. Bloss. Even when research cannot be directly incorporated into the classroom, students benefit from the enthusiasm and knowledge of the teacher, she says. "The more I know about my chosen field, the more I can stimulate and



guide my students.”

“Scholarly activity is *always* good for the discipline itself,” she adds, “and the recognition that comes from a professionally active faculty certainly benefits the college.”

About her role as a mentor for her student scholar, Dr. Bloss reports her role was mostly to provide encouragement and guidance. “I was not very knowledgeable about neural nets when we began the project,” she admits, “so my role was primarily to give technical support.”

“This was not research in my field, but it *was* a very worthwhile endeavor,” she states. “I learned along with my student; gained an appreciation of his abilities as a scholar; and acquired an understanding of just how valuable the Summer Scholar Program can be.”

## John Brust

Associate Professor of Art

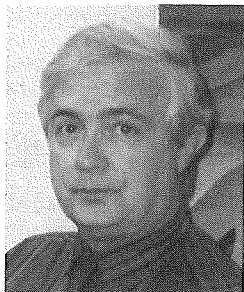
John Brust revels in being part of the college community. His commitment to education as a way of life and his enthusiasm for scholarly activities are evident even to the casual observer.

“I cannot imagine a richer, deeper brocade of cloth than what is my gentle lot to be in the world of the arts and education ... to share that world ... and equally enjoy my students and my colleagues in all their disciplines, reflecting their knowledge and excitement, as well,” admits professor Brust.

“Anyone worth his/her educational salt will be engaged in a love for lifelong learning,” continues Mr. Brust. “Research is just another word for that process and commitment. It’s an actual part of one’s inner being; it’s an appetite to simply know and always wanting to know. I love it — this passion to understand better this day than the day before,” he explains.

Professor Brust’s teaching expertise at Roanoke College includes two-dimensional design, all levels of drawing and painting, figure anatomy, and art history. He is an accomplished artist himself, commissioned to create an original print for the City of Roanoke’s 100th anniversary; one of his pastels graces the permanent art collection of the Lewis-Gale Medical Foundation.

“In my own work, I have a kinship with Hopper,



Wyeth, Dali, and Chagall,” relates Mr. Brust. “American genre, technical precision, and fantasy are all parts of visual language that I try to incorporate into my own work, in my own way. I feel that art must have a basis in realism, but that realism is kept veiled for fun,” explains professor Brust. He cites, as author John Stott put so well, “Art is an appeal from the imagination of the artist to the imagination of the viewer.”

Mr. Brust recently served as mentor for a young Roanoke College artist who created a series of works based on the writings of the *I Ching*. “As his mentor, I focused on the *creative* quality of his work,” he explains. “His technical skills were already well in place, a credit to his work ethic and his preparation at Roanoke. It’s a lot of scholarly fun to work with a fine student who wants to know; who works hard to understand and develop the originality of his/her own work.”

Professor Brust particularly savored the weekly discussion sessions held by the Summer Scholars and their mentors. “It was revealing for everyone to see, that though the disciplines are different, the pursuit of knowledge, growth, and excellence are the same. There was an underlying kinship, a common ground of respect for all the fields engaged in positive human endeavor.”

“What a marvelous way to live one’s life — to be in the process of becoming, and to be with fellow beings so inclined. Students, academic disciplines, and their institutions all benefit from a community of both seekers and scholars.”

## Jane Ingram

Professor of Mathematics and Computer Science

Jane Ingram is the quintessential educator. Her scholarly activities are not at all traditional research; they are directly related to what she does in the classroom and one-on-one with her students.

“Because I teach a variety of courses in a discipline that is changing rapidly, I must devote a lot of my time to reading and learning,” explains Dr. Ingram. “Keeping current is especially crucial in a small department where the whole spectrum must be covered by a few people.”

Her current discipline is far from where she began 17 years ago in functional analysis of mathematics.



"When Roanoke College needed someone to learn computer science, I grabbed the opportunity. I started with formal learning (she complemented her 1978 Ph.D. in mathematics with a 1985 M.S. in computer science), but I haven't stopped yet, and still I feel that I know so little!" *Little by her standards!* ... Less than two years after continuing her formal education, Dr. Ingram was named "Professor of the Year" by the Roanoke College Chapter of Blue Key, a national honor fraternity.

Professor Ingram is called upon to teach many different courses — 11 different, in fact, in the past two years. Three were new preparations which required extensive reading in areas she had never formally studied; one was a major revision which doesn't mesh with any existing textbook. Dr. Ingram will use a semester-long sabbatical next spring to expand and improve instructional materials and activities for the latter course.

She is also frequently called upon to direct independent studies which cover a broad spectrum of topics. Typical of independent learning projects, Dr. Ingram was again required to learn anew as a mentor for an undergraduate student working as a Summer Scholar in 1994. She is always willing to do whatever is necessary to engage students in the learning process, and she feels these independent studies immerse students in ways ordinary classroom experiences rarely do. "If done correctly," she states, "the students really 'get their hands dirty' while learning — it isn't all spoon-fed to them."

"Roanoke College benefits by having students involved in the intellectual side of life, and by having faculty actively involved with the students," says Dr. Ingram. "The college today does a good job of emphasizing 'caring' and other non-intellectual aspects of life," she states. "Yet I would like to see development of an atmosphere where intellectual endeavors don't take a back seat to other things. A critical mass of bright students engaging in research can bring scholarly activities to the forefront and make them respectable," she concludes.

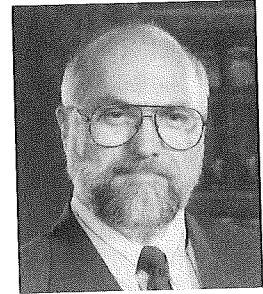
## Larry Lynch

*Professor of Business Administration*

Larry Lynch is a versatile and talented educator.

He is a professor of business administration; chair of the department of business administration, economics,

and computer information systems; a published expert in bankruptcy prediction; a consultant in forensic economics; a "student" of financial education; a respected college advisor; a licensed airplane pilot; an amateur musician; an experienced electrical



engineer; yet not the only esteemed educator in his family. He is married to Dr. Jan Lynch, Roanoke College professor of psychology and recipient of the college's 1993 Award for Exemplary Teaching.

Larry Lynch's involvement with an undergraduate Summer Scholar in 1994 was based on a mutual interest in the topic at hand: the forecasting of corporate bankruptcies. A talented student in his "Advanced Finance" class was intrigued by the same subject her professor explored in his doctoral dissertation. Furthermore, professor Lynch has published several papers and a book chapter on the topic in recent years.

Together, they developed a model for predicting financial distress for NYSE and AMEX firms by combining significant variables from published literature. Upon testing their model with statistical programming, Dr. Lynch and his Summer Scholar were able to predict bankruptcies with 70 percent accuracy. Presentations and publication of their research are forthcoming.

"Through my research, I am able to bring real-world examples into the classroom. And through *undergraduate* research, students learn how problems in the real world are solved," continues professor Lynch. "Roanoke's young scholars gain a true sense of accomplishment when they experience how problems are solved through hands-on research."

Students and their faculty mentors aren't the only ones who benefit from scholarly activities. According to Dr. Lynch, "The academic discipline, itself, improves through better-educated students. And the reputation of the college is greatly enhanced by the research published or presented before outside audiences."

"It's always a pleasure to work with students on projects," says Dr. Lynch. "I gain a better understanding of what is missing in our educational programs, and how we can do a better job preparing our students for life after Roanoke."