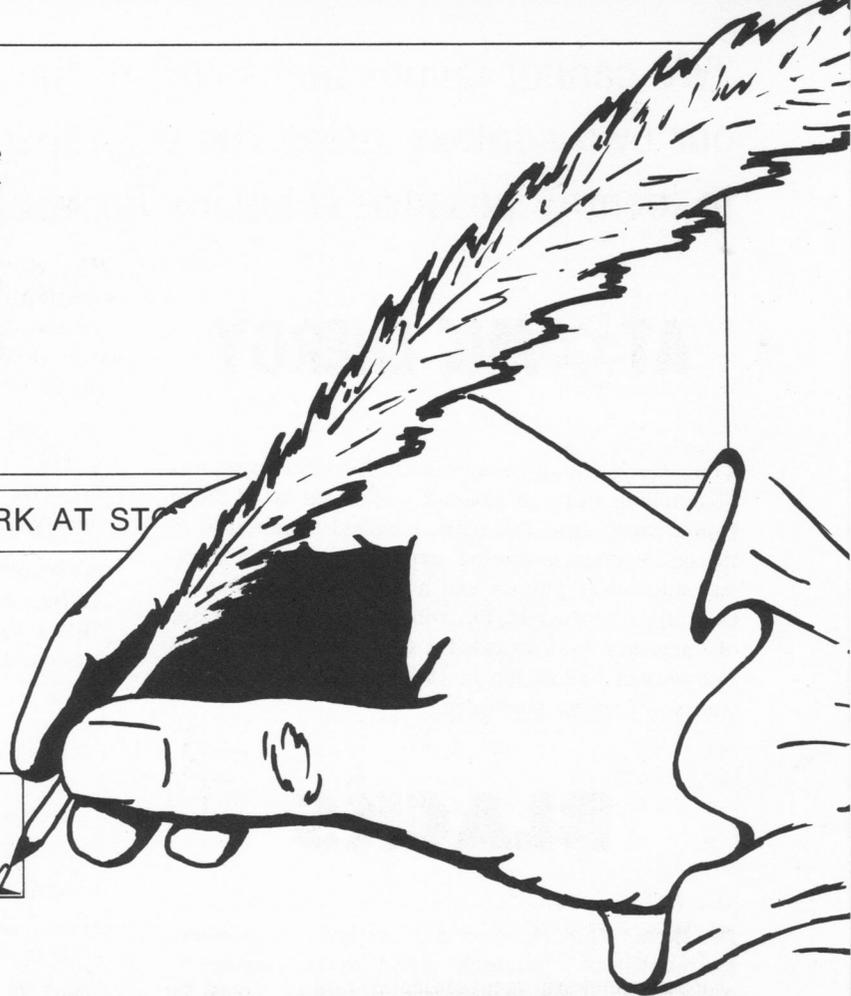


"The moon's a long way off — but its rocks are being analyzed right down the road by scientists at the State University of New York at Stony Brook. Small universe, isn't it? Or perhaps just another example that our University is one of important rank in the world of science."

Port Jefferson Record

A MONTHLY PUBLICATION OF THE STATE UNIVERSITY OF NEW YORK AT STONY BROOK

RELEVANCE



Original print from the Bettmann Archive

12th Century Warrior, 20th Century Peace Symbol

War and peace, medieval and contemporary, relevant and irrelevant—these terms are not as dichotomous as they may seem.

Students today seek "relevance," an end to war-related research, less emphasis on research and more on teaching by university professors. In the past, war-related research has spurred the de-

velopment of such relevant fields as aviation, electronics and space exploration. At Stony Brook there is no classified, i.e., secret, defense research being conducted and the University is not involved in the development of weapons. All funds for basic research on campus, including monies from the Department of Defense, are used to support programs aimed at working toward the improvement of our society. Defense Department research at the University is varied and ranges from the basic investigation of the properties of materials which may help in solving the problems of pollution, to work on stellar atmospheres, ocean circulation and the ecology of harbors. Some of these programs for the environment are considered among the highest in priority by our society. One grant from the Army Medical Research and Development Command is furthering the perfection of a scanner-computer system to read thousands of X-ray photos in a few seconds in search of cancer symptoms, tooth decay and other health problems. A proposal to halt all Department of Defense research, recently defeated by the Faculty Senate, would have cancelled these projects.

Research and some of its ramifications for the modern campus provide focal points for this issue of the Review. On this page is a report on the increasing aid being allocated for research on social problems. On the back page is an account of some of the confusing, often fallacious, aspects of the old "publish or perish" conundrum. Inside is a listing of some of the more topical endeavors in which Stony Brook students and faculty are involved. On page 3, one of Stony Brook's more activist-oriented professors discusses the popularity of medieval studies and the "fundamental need for irrelevance," highlighting, like the knight above, the problem of defining anything as ephemeral as "relevance."

Social Research Attracts Increased Funding

Although the cost of research is rising annually and federal and private agencies are sharply curtailing research spending, the coordinator of research at Stony Brook, Dr. Donald Ackerman, couldn't be more pleased with the continuing expansion of research allocations for the campus. Contradicting both economic trends and general fears, sponsored research at Stony Brook is increasing rapidly, hitting \$5 million for the 1969-70 fiscal year—in contrast with \$4 million in 1968-69 and \$300,000 in 1962-63. This year the University expects to receive about \$6.5 million in sponsored research funding.

A variety of causes are contributing to this growth, but part of the increase can be traced to a large number of projects designed to study social problems. Support continues for purely science-oriented programs, but new attention is being given to the social sciences and the arts.

Dr. Ackerman notes that environmental studies are also receiving new emphasis at Stony Brook. The Marine Sciences Research Center, for example, is operating projects which study the interaction between natural and manmade forces within the marine environment. Opening up an even newer field, theoretical ecologists are using computers to chart the effects of possible future assaults to the ecological balance, such as might result from the construction of a nuclear power plant or of a bridge over Long Island Sound.

In another vital area, the University's Upward Bound project has been

bolstered by a high school equivalency program, with the two receiving over \$342,000 from the federal Office of Economic Opportunity. The Economic Research Bureau deals with questions raised by the expanding township and county surrounding Stony Brook.

Dr. Ackerman emphasizes that a university cannot become involved in research for the same reason most corporations do—to make discoveries which will make money—but that a school must use its resources to advance knowledge and to benefit students. Many graduate students are supported by faculty research grants and undergraduate assistants receive similar aid. Approximately one million dollars of current sponsored research money is used for student support and stipends for about 400 graduate and undergraduate students. Research funds help buy supplies and equipment, much of it used directly in undergraduate education. Research money also helps attract excellent faculty members to the University.

When Stony Brook was first created, generous funding helped attract scientific experts to the school and the sciences became its strongest departments. The new availability of grants in the humanities and social sciences now benefits Stony Brook similarly.

Dr. Ackerman, who incidentally listed one Richard M. Nixon as a reference when he first came to Stony Brook in 1967, foresees a bright future in research at Stony Brook as the University moves "into the social arena" while continuing its excellence in the sciences. "Research programs," he says, "which aid an institution must also aid a troubled society." □

"We cannot ignore the issues of the day but should approach them through our own context, using the very special resources of the University to identify possible solutions for society's pressing problems."

— President John S. Toll

ATOMIC ENERGY

The Atomic Energy Commission last year sponsored \$1.6 million worth of research conducted by 14 Stony Brook professors. The work included exploration of thermal neutron scattering, experimental and theoretical subnuclear physics and nuclear reaction studies. One of the professors, Dr. John Alexander, professor of chemistry, was awarded a Guggenheim Memorial Foundation Fellowship in 1969 for his experimental studies in nuclear chemistry.

BLACKS

Dr. Dieter Zschock, associate professor of economics, published a research report in the spring on a study of "Problems Facing Nonwhite Youth in Suffolk County." Sponsored by the University's Economic Research Bureau, the study found that residential and educational segregation, inadequate public transportation and insufficient employment and recreational opportunities are problems that particularly affect nonwhite youth and readily cause volatile expressions of their frustration.

The Technical Assistance Office continues to offer area businessmen an evening management course titled, "Minority Employment: A Practical Approach for Long Island." For managers concerned with recruiting, hiring, training and upgrading labor, the course details methods used successfully by several corporations active in this field.

A new interdisciplinary program in black studies is designed to provide students with an introduction to the cultural traditions, social institutions and contemporary problems of black peoples of Africa and of African ancestry. Special attention is given to the social and political forces that have shaped the dynamics of black-white relations in the Americas, particularly in the United States.

Black Students United works for the betterment of blacks on and off campus and also for the recognition of black culture. Black students, as well as others, help man the Long Island Farm Workers Service Center in Riverhead, a project which offers a free breakfast program, tutoring and other services.

Several programs and committees strive to safeguard the equal employment rights of minority groups on campus. Wesley A. Brown supervises the State University Construction Fund's Affirmative Action Program, which promotes the employment and advancement of minority group members on Stony Brook construction projects. Vera Rony is university coordinator of equal opportunity programs. The 22-member student-faculty-staff Committee on Equal Employment Opportunity, chaired by Prof. W. Burghardt Turner, has issued a report urging improved minority representation among faculty members, graduate assistants, non-teaching employees and construction workers.

The High School Equivalency Program (HEP) is preparing 35 children of migrant workers for their general education diploma. The students live on campus while participating in the program sponsored by the federal Office of Economic Opportunity.

The Achievement through Individual Merit Program (AIM) is a major source of counselling, tutorial and financial assistance for many of Stony Brook's black undergraduate students.

A recently published 37-page report by Dr. Michael Zweig, assistant professor of economics, is titled, "Black Capitalism and the Ownership of Property in Harlem."

CITIES

Funded by a \$500,000 grant from the National Science Foundation, a new interdisciplinary masters program in urban science and engineering was begun this fall. Drawing together experts from fields such as engineering, economics, political science and sociology, the program focuses research efforts on the diverse technological problems of urban areas.

Dr. Daniel Dicker, professor and executive officer of the College of Engineering, on the basis of his own independent research, was able to issue the first definitive statement on the cause of the 1967 collapse of the Point Pleasant Bridge over the Ohio River, a disaster which resulted in the deaths of 46 people.

Dr. John A. Gardiner, associate professor of political science, was granted an award from the University's Research Foundation to conduct a study of "Corruption in Urban Affairs."

ECOLOGY

Stony Brook researchers have concerned themselves with many ecological matters in addition to those listed here under pollution, cities and noise. In fact, a newly-formed department offers a graduate program granting a Ph.D. degree in ecology and evolution. Research interests of the department's staff include population dynamics, taxonomic theory and methodology, physiology, genetics, statistics, systems analysis and conservation. Also, interdepartmental programs offering graduate degrees in marine environmental studies and marine biology have recently begun.

Scientists in the Marine Sciences Research Center at Stony Brook are involved in a series of tests designed to study and protect the ecology of Long Island Sound. Periodic checks are made of the Sound from the Center's research vessel, Micmac. One Center study involved using a harmless dye to trace tidal currents near David's Island, the site of a proposed nuclear power plant in the western portion of the Sound. In a study sponsored by the Long Island Lighting Company, scientists are investigating the

physical and biological effects of thermal effluents in an effort to determine how many generating plants discharging hot water the Sound can sustain.

Dr. Thomas F. Goreau, late director of the University's Discovery Bay Laboratory in Jamaica, had been studying the case of the "crown of thorns" starfish when he died in April. For the U.S. Office of Naval Research, he led an investigation into the devastation of miles of South Pacific coral reefs caused by an unprecedented population explosion of the species of destructive starfish.

Environmental Action (ENACT) is organizing faculty-student-community groups to preserve woodland, restrict air pollution and improve waste disposal systems on Long Island.

HEART SURGERY

While engaged in an approved independent research project, Glenn Bock and Todd Swick, two Stony Brook undergraduates majoring in biology, helped test a sophisticated titanium valve to be used in open heart surgery. Working as part of a research team at Montefiore Hospital in the Bronx, they were supervised by Dr. Edmund D. Pellegrino, Stony Brook's vice president for health sciences, and Dr. Raymond F. Jones, acting provost for the Division of Biological Sciences, during their research.

MARIJUANA

Dr. Erich Goode, assistant professor of sociology, has recently published articles in learned journals on "The Marijuana Market," "Multiple Drug Use Among Marijuana Smokers" and "Marijuana and the Politics of Reality." Last year he edited a book called *Marijuana*, in 1970 he wrote *The Marijuana Smokers*.

The University's rules committee, a student-faculty-administration group, last spring conducted a preliminary survey of drug use on campus. The group attempted to ascertain the extent, rationale and effects of drug use.

Associate Professors of Psychology Dr. Stuart Valins and Dr. Gerald C. Davison have conducted studies of the effects of drugs on behavior.

The School of Allied Health Professions this fall offered 25 college instructors who supervise student teachers a 14-session drug education course in cooperation with the Suffolk County Medical Society.

MENTAL HEALTH

Dr. John Neale, assistant professor of psychology, is conducting studies of schizophrenia. Last year he reported some of his findings in two psychology journals.

Dr. Edward J. Erwin, assistant professor of philosophy, was named the recipient of a State University Research Award for a study of the concept of mental illness.

Dr. Eugene Weinstein, professor of sociology, wrote recently on "Interpersonal Tactics Among Retardates."

About 75 children under 16 years of age with psychological problems related to their emotional, social and intellectual development are being treated at Stony Brook's Child Clinic.

Student volunteers, under the guidance of Dr. Fredric Levine, assistant professor of psychology, provide recreation therapy and psychological counseling to mental patients and others at Kings Park and Central Islip state hospitals.

NOISE

Dr. Jerome E. Singer, professor of psychology and associate dean of the Graduate School, has conducted a series of studies on the effects of aversive noise. Laboratory experiments were made to study changes in performance efficiency and tolerance for frustration of people exposed to repeatedly-presented noises.

POLLUTION

The Marine Sciences Research Center is involved in several projects concerned with the pollution of waters in the New York metropolitan area. The U.S. Public Health Service has funded a special study to determine the long and short-term physical and chemical effects of fine-grained solid wastes being dumped in Long Island Sound and adjacent waters. A year-long preliminary report of New York Harbor and ocean dumping grounds, recently submitted to the U.S. Army Corps of Engineers, revealed that the disposal at sea of mud and sediment from shoreside dredging operations is harmful to sea life.

Dr. Charles F. Wurster, Jr., assistant professor of biological sciences, is one of the nation's leading crusaders against the use of DDT. One of the founders of the Environmental Defense Fund, he has been active in legal battles to ban the insecticide.

"Industrial Pollution and Waste Control" is the subject of a fall class offered Long Island businessmen by the University's Technical Assistance Office.

SEX

Dr. John H. Gagnon, associate professor of sociology, is co-editor of the books, *Sexual Deviance* and *The Sexual Scene*, and a former senior research sociologist of Indiana University's Institute for Sex

Research. He co-authored the chapter, "Homosexuality: The Formulation of a Sociological Perspective," in the recent book, *The Same Sex: An Appraisal of Homosexuality*.

Dr. O. Andrew Collver, associate professor of sociology, has conducted studies of fertility and Dr. Thomas J. D'Zurilla, assistant professor of psychology, published a recent report on "Reducing Heterosexual Anxiety."

SPACE

The National Aeronautics and Space Administration invested \$1.2 million in Stony Brook research last year. Dr. Oliver A. Schaeffer, chairman of the earth and space sciences department, led detailed investigations of lunar samples returned to earth by the original Apollo 11 crew. More recently, fragments from Surveyor III have been examined.

The largest telescope on Long Island, equal in size to the largest in the state, is expected to be installed at Stony Brook by late spring. The telescope and accessory equipment will be used to explore the early history of the solar system, the evolution of young stars and the nature of planetary atmospheres.

A new, compact, multi-lens system which enhances optical resolution has been developed at Stony Brook by Dr. George W. Stroke, professor of engineering. The "Stroke lens" is expected to be useful in the taking of high resolution photographs from space.

TOBACCO

Dr. Gerald C. Davison, associate professor of psychology, has received a research grant from the American Cancer Society for his study, "Attribution of Drug Effects in Reduction of Smoking Behavior."

A smoking project, sponsored by the National Institute of Mental Health, is helping over 100 Long Islanders reduce their smoking habits. The smokers are attending seven weekly one-hour evening sessions to learn the latest motivational techniques to help them reduce cigarette consumption. The program was devised by doctoral candidate Richard Winett.

WOMEN'S LIB

Dr. Joseph Katz, newly-appointed professor of human development and director of research for human development and educational policy, is an authority on the emerging role of American women. Chairman of the National Research Development Conference on Women, he describes, in a forthcoming book, a two-year research project which he directed on the recent educational development of American women.

Middle Ages

Do little girls still dream of knights in shining armor and boys thrill to the adventures of Prince Valiant? I thought not but. . . Last spring more than 200,000 people crowded the galleries of the Metropolitan Museum of Art to view a special exhibit of medieval art and artifacts called "The Year 1200." Their presence seems to indicate a continuing fascination for those Dark Ages when life was so totally different.

Courtly love and free sex, the Crusades and "Hell No! We Won't Go," monasticism and God is Dead. The catalog of contrasts between then and now stretches on. But an age driven by a constant quest for relevance still peeks back with paradoxical fascination.

A surprising number of students are taking courses and even majoring in medieval history, art, music and literature. Faculty to staff these programs is also on the increase.

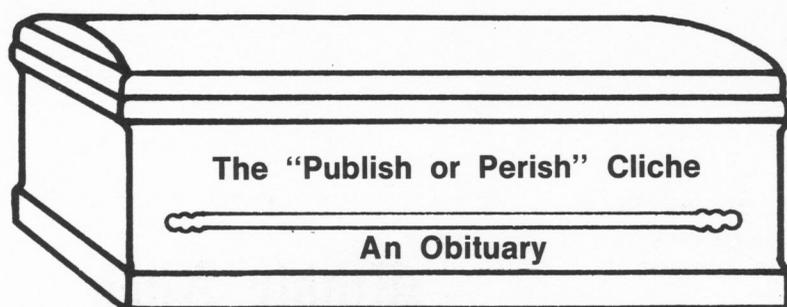
Although there is no formal program in medieval studies at Stony Brook, the University has attracted several scholars in a variety of disciplines who have specialized in this period.

The interests of practicing medievalists at Stony Brook run the gamut (which, by the way, is a word we get from medieval music) from a definitive edition of the Middle English Townley plays by Professor of English Martin Stevens to Associate Professor of Art Jacques Guilmain's history of early medieval metalwork.

Perhaps the paradox of modern interest in the Middle Ages is best illustrated by Associate Professor of History Joel Rosenthal who last year called a series of four colloquia at Stony Brook to set up interdisciplinary conversations with his fellow medievalists. Between colloquia the 37-year-old specialist in feudal economics helped organize a rally supporting Black Panthers on trial in New Haven and became a leader in the effort to ban Department of Defense research on campus.

There are a variety of reasons why students are interested in this period of history, according to Dr. Rosenthal. Many Roman Catholics are looking for a more complete understanding of the age when catholicism was the prime power in western society. "They suspect the parochial schools didn't tell them the whole story," Dr. Rosenthal says, "and now want to take a closer look at the Age of Faith." Jewish students are also interested in this period, he notes, because the Middle Ages established the focus of European anti-semitism. "These are partial explanations," he adds, "because a student takes a given course for a variety of reasons. Many students realize that the institutions which have shaped modern society, at least in the west, have their roots in the Middle Ages."

Possibly there is a more fundamental explanation. Dr. Rosenthal thinks that enthusiasm for the medieval—such as is manifested in the wide sales of the Tolkein trilogy and the proliferation of "Frodo Lives" buttons—may be due to the fundamental need for irrelevance. "After all," he says, "a person can't have everything in his life relevant." —Patrick Hunt □



The old student lament that professorial success depends too much on research and not enough on teaching inevitably provokes a good argument about the very nature of the academic process.

Student evaluation and other indicators of teaching effectiveness are beginning to have a significant impact on the venerable tenure system, though even the most vocal "publish or perish" critics insist that scholarly excellence must always be a precondition for tenure.

This is the general situation. However, before the research-teaching question can even be viewed intelligently, one must get beyond all the hyperbole that surrounds it.

For decades, the whole situation has been distorted by the slogan "publish or perish"—suggesting that teachers who don't publish scholarship or produce artistic works are scorned by the academic system. That system, the distortion implies, is callous to student educational needs and cares only about attracting grant money and big name scholars to enhance the prestige of academic departments.

There is also a prevalent distortion about the reformers—that they would scrap academic standards and grant tenure merely for flamboyance, charisma or popularity.

It would, indeed, be naive to say there is not some basis for the hyperbole. But both extremes are in error.

First of all, there have always been exceptions made for non-researchers who are great teachers or artists. Secondly, leading academic administrators at Stony Brook and elsewhere make strong cases for maintaining a research priority rooted in concern for knowledge and for teaching itself, not for departmental prestige.

Among those who would reduce emphasis on research, it seems impossible to find a single faculty member who would throw out scholarship standards along with publishing requirements.

Within these limits, there is some significant difference as to how research and teaching should be valued. Officially, the evaluative criteria bearing on faculty tenure and promotion decisions don't even mention research, except as an instance of the five major criteria. These five, according to the policies of the Board of Trustees, are: mastery of subject matter,

teaching effectiveness, scholarly ability, university-service effectiveness and continuing growth.

Academic Vice President Bentley Glass, who reviews all tenure cases after their passage through departments and the Personnel Policy Committee, says a good academic administration further balances the judgment process by making sure the candidate's peers don't give disproportionate weight to either scholarship or teaching.

Dr. Glass emphasizes however, that, as one of the four university centers in the State University system, Stony Brook has a major responsibility for developing advanced graduate programs aimed not merely at transmitting, but also advancing, knowledge.

"If university centers don't advance knowledge," Dr. Glass says, "then where will knowledge be advanced at all?" And if it is not advanced, he says, modern civilization's scientific and technological base cannot be sustained.

Stony Brook's top academic administrator says a university needs different talents for different kinds of teaching. The broad survey course introducing undergraduates to a field, for instance, may be best served, Dr. Glass says, by "someone who rouses enthusiasm and can carry on dialogue with a large number of individuals at once; while in advanced, independent study work, whether undergraduate or graduate, teaching success might be better measured by how an individual teacher conveys a sense of his devotion to learning."

"There's no saying a teacher is a good teacher except in a specific context," he says, and, whatever the context, several studies have concluded that good teaching and good scholarship usually go together.

"As a rule," Dr. Glass says, "a per-

son who is good in research knows how to express himself clearly and with sufficient zest about his subject so that he will be an effective teacher . . . The teacher who only meets his classes is *ipso facto* not a 'superlative teacher.'"

Dr. Max Dresden, Chairman of the Executive Committee of the Faculty Senate, agrees. He says it is "impossible to be an outstanding teacher without some explicit commitment to one's field." That commitment, he maintains, must go beyond passive study or scholarship. It must include submission of the teacher's ideas, through lectures or publications, to the review of his peers.

Dr. Dresden, professor of physics and Executive Officer of the Institute for Theoretical Physics, says the teacher who opposes such review by his peers is like the student who is unwilling to take exams or who insists he is competent despite poor performance on exams.

"Both cases," he says, "show self-delusion. . . that is the most important thing about research: it puts one's ideas to a test that is outside his own head."

Dr. Alan Entine, assistant academic vice president and adjunct associate professor of economics, rejects the idea that all excellent teachers must submit to the peer-evaluation process through lecturing or publishing. He believes greater weight should be given to student evaluation of teaching competence.

Even more strongly than Dr. Dresden, he thinks that courting researchers enhances the graduate faculties and, thus, graduate education. But the undergraduates can suffer, he adds. "They've been short-changed . . . State systems, including ours, have been matching the resource allocations of private universities with respect to graduate programs, but not undergraduate."

He does not favor dual faculties, a research faculty and a teaching faculty. He does think that the academic departments—whose judgments weigh heavy in tenure cases—should consciously consider their duty to help both graduates and undergraduates; and, in fulfilling the latter duty, should

give more credit for outstanding teaching, even where there is no research achievement.

To the argument that research assures freshness of teaching approach, Dr. Entine says:

"I've known graduate-school lecturers who did great research yet gave the same lectures year after year. . . There's also the researcher who will wrap his whole course around his own narrow research area. . . I think you can be an excellent teacher without doing any formal research or publication. Just by privately refreshing your own learning in the field, you can synthesize, organize, re-do and logically present your materials as well as any researcher."

As for student evaluations, he says they tend to be objective and useful when they are specific and comprehensive. He says the evidence indicates that such critiques are not mere popularity polls and that a severe grader may still receive high praise from his students.

Though teaching performance is gradually being given more weight in tenure reviews by departments and the Committee on Personnel Policy, Dr. Entine says, the shift should be accelerated.

"What it all comes down to in the end," says Dr. Herbert Weisinger, Dean of the Graduate School, "is that you do not think of your colleagues as teachers alone or scholars alone but as persons, distinct persons each with his own character, his own style, and his own stance toward life and how these impact on your own character, style and stance. You deal with individuals in their totality, so that seen from this point of view, the whole publish or perish business becomes tiresome and beside the point. There are excellent researchers who are rotten teachers; there are rotten researchers who are excellent teachers; but there are also those who are excellent teachers and excellent scholars and who are persons of character, style and stance, and these constitute the norm by which the individual is measured, and you hope that somehow the tenure process will enable you to have more of such people on your faculty rather than less." — Sam Segal □

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