Dear Editor:

After reading your article on “Footnote to Selma,” I definitely decided that none of my three boys should ever study in a school which undoubtedly tolerates hypocrites as Dr. Weisberger appears to me to be; and who apparently likes notoriety to such an extent that he would perhaps sacrifice integrity to secure. If he were a dedicated man, he would do something about the civil rights problems you have in Rochester.

My training was entirely in the East and North, and I know how much better off the negro is in our section of the country. It is just such meddlesome “maties” as the famous Ph.D. Dr. Weisberger who are doing the university and the country an injustice.

During my day we had famous men like Dr. John J. Morton, Dr. Whipple, Dr. McCain (sic), and numerous others to put Rochester University on the medical map. They did not do it by notoriety or hypocrisy. They did it by achievements, hard work, and investigations based on actual true facts.

Hope this will be published.

ARCHIBALD C. HEWES, M.D.
Interned 1931

Prof. Weisberger Replies

Dear Editor:

It is very hard to make a reasoned answer to a letter so full of cliches as is Dr. Hewes’, but I will try to do it briefly. I am active in several organizations which “do something about the civil rights problem . . . in Rochester.” I did not seek publicity for my trip to the South, much less “notoriety.” My academic reputation needs no such props. It was made before I went to Selma. These statements hold equally true for most of the professional people I met there. We knew about the problems in our own back yards, but we were in Selma because there was a special need there in March of 1965.

I don’t know how to argue seriously with someone who repeats the old claim that the Negro is “better off” in the South. The millions of Negroes who have left the region in this century do not think so. (Mississippi alone had a decline of 70,000 in Negro population between 1950 and 1960.) Nor do those Negroes who remain in the South and

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New Medical School Project—

A Clinic for Migrant Workers

Through the summer and fall, doctors, dentists, nurses, and medical students from the University's School of Medicine and Dentistry spent two evenings a week working under the glare of bare light bulbs in a small clinic with stark white walls at the edge of an apple grove. These volunteers—along with a local pediatrician, public health nurses, a sociology student, and others—operated a free clinic for migrant workers at the Sodoma camp some 17 miles west of Rochester.

Under the general direction of the School's Department of Preventive Medicine and Community Health, the project offered medical care to a group of people who, because of minimal incomes and lack of permanent homes, had received very little regular medical attention. In addition, the clinic provided new opportunities for teaching, for surveying the special health needs of migrant workers, for conducting a health education program among migrants, and for analyzing the social and psychological setting of disease in this group. Dr. John Radebaugh, project director, and Dr. James Zimmer laid the groundwork and organized medical teams.

The clinic proved highly popular with both migrants and volunteers. Out of a camp population of only about 100, some 10 to 12 patients sought—and needed—attention on a typical clinic night. More faculty and students volunteered for the project than could be used.

Said Dr. Radebaugh of the experience: "The need of these families for medical care is great—but their greater need is something quite different from what we can do here. They need education not only in matters of health but in basics that will help them break out of this cycle of poverty and ignorance."

—DAVID R. BRANCH
Dr. Robert Berg makes use of clinic's educational potential in discussion with students Mary Costanza, Donald Ferris.

Nurse Ann Maier, '64GN, medical student Frances Driver, and Dr. Robert J. Haggerty (rear) treat a patient. Doctors and nurses were chosen from a volunteer pool.
Dr. Haggerty and others took advantage of the opportunity for basic health education at the clinic.

A second-year medical student, John McIntyre, watches as Dr. Haggerty examines an elderly clinic patient.

"More volunteers than we could...

This was the second season for the clinic, which began as a pilot project at another camp in 1964.

Medical students Mary Costanza, left, and Frances Driver set up a laboratory and performed routine tests.
Dr. Erling Johansen, '55GM, chairman of the Department of Dentistry and Dental Research, performs examination.

A Colgate-Rochester Divinity School student interviews worker for a UR sociological study.

"assign"...a story of enthusiasm

The project team hopes to continue, and possibly to expand, the clinic for migrants in 1966.

Mrs. Lisa Trayser, assistant director of nursing service at Strong Memorial Hospital, organized nursing staff.
To provide a much needed airing of an ever-perplexing subject, the REVIEW turned to Charles R. Dalton, '20, director of admissions from 1944 to 1963, and his successor, George L. Dischinger, Jr., '49. Dalton’s article, adapted from a talk given before alumni admissions chairmen, reveals some sharp contrasts in admissions “then and now”... while Dischinger’s “view from the firing line” suggests that people, rather than test scores, are still the primary focus of admissions at Rochester.

In 1929, when Ray Ball (then vice president and treasurer of the University) asked me to join the staff, his main thesis was that the University wished to strengthen its student body in calibre, size, and geographical distribution to match the greater opportunities that would become available when the River Campus opened the next year.

After many interviews I found myself behind an old desk swallowed up in an old office in an old house on Prince Street back of the old Faculty Club where I didn’t even know how to requisition a lead pencil. (This presents no problem today. All you do now to get a pencil is make a requisition in triplicate with a purchase order number in seven digits to specify the project you want to use the pencil for, get it signed by a vice president, send it on to the Purchasing Office, and wait a week.)

Let me give you a little picture of the University and of admissions at that time:

In 1930 our undergraduate enrollment totalled about 1,100—650 men and 450 women. The catalog stated: “A part of the entering class (not to exceed one-half) will be selected as early in May as practicable and ordinarily the selection will be substantially completed by the middle of July. A very few places will be reserved for applicants of distinguished merit who have convincing reasons for making application later than June 30.” What a nice leisurely way to admit a freshman class!

Some 192 men and 112 women (out of about 400) were admitted that year, and practically all who were offered admission came. Tuition had just been increased to the exorbitant figure of $300 per year. The catalog did not list the cost of rooms (perhaps because of timidity or embarrassment), but stated that that information could be obtained from the Registrar. In any event, rooms cost $125 a year in Burton or Crosby; meals, another $200; and a student could live comfortably on $800 to $900 a year!

You have heard much about the complexity of admissions in 1965—with some 3,100 undergraduate applica-
tions, thousands of interviews, school visitations, College Board aptitude tests, achievement tests, College Scholarship Service financial aid computations, advanced placement programs, National Defense Student Loans, N.Y.S.-H.E.A.C. Loans, graduate admissions, part-time student employment, and a host of other complicating factors that require a full-time admissions staff of eight, plus even more secretaries, all of whom are under pressure twelve months a year to meet their deadlines.

Back in 1930 Freshman Dean Arthur Gale handled all of the admissions with one hand and the aid of a secretary who devoted only part-time to this function. Incidentally, the Dean used to go to his summer home on the St. Lawrence right after Commencement, and I can remember his annual telephone call at the end of June stating that he planned to come to Rochester July 5 and wondered whether he, Dick Long (a member of the Math Department and freshman adviser), and I could get together to pick the rest of the freshman class. This we did in a day or so and the Dean went back to the St. Lawrence for the rest of the summer. Nor did we worry about how many students were going to withdraw: We admitted them and they came.

And what about financial aid? The River Campus scholarship budget for 1965-66 is $830,000 and the loan fund budget is $400,000, including federal loans administered through the University. But in 1930 very few scholarships were awarded on admission; most were not granted until a student completed one term.

Because of today’s competitive admission situation, some alumni labor under the delusion that Rochester has only recently admitted a highly qualified group of freshmen. Often I hear an alumnum say, “It’s a good thing I got in when I did. I’d never make it now.” Well, in 1930 we had no College Aptitude Test, but we did put freshmen through a similar American Council on Educational Psychological Test. And in 1929-30 Rochester ranked fourth among the 137 colleges that gave the exam. (Today, of course, our freshmen rate among the very top groups in the country in terms of their test scores and high school rank.)

What about geographical distribution? Today less than 10 per cent of our undergraduates come from the Rochester area. We were not so fortunate in 1930: Seventy per cent came from Rochester and suburbs. My first report carried this encouraging paragraph: “Rochester will undoubtedly have representation in at least two cities in the Southern Tier, where it has been practically unknown . . . interest has also been aroused in Buffalo, Watertown, Auburn, Erie, and several other communities . . .”

In that 1930 report, I concluded:

“It is unquestionably true that school principals clearly recognize Rochester’s high standards and are becoming more conscious that only a high type of student will be accepted or can succeed at Rochester.

“Rochester’s traditions and educational background are not as clearly known as is its recent development.

“Rochester alumni are not as active as those of many other institutions in making Rochester known to prospective students.

“In spite of frequent published statements and general comment with reference to the deluge of applications for admission received by colleges and universities, there is evidence of the keenest type of competition to interest students of high calibre.

“Although Rochester is liberal in financial aid for students who have spent a year here, it is more conservative than many institutions in awarding scholarships to
prospective students on the basis of their high school records.” (And that was a masterpiece of understatement!)

Some of these comments are, I think, as true today as in 1930. I believe, for instance, that we still over-emphasize Rochester’s future and do not capitalize enough on its rich heritage. And I have the temerity to suggest that if we turn out as high a percentage of distinguished alumni in the future as we have in the past, we shall be doing well indeed. Much of Rochester’s strength and development have resulted from sound policies and high educational ideals that have survived and have built our University’s reputation through more than a hundred years.

Moreover, it is equally true today that despite the number of applications, there is still the keenest competition to interest students of highest calibre. And certainly it is still essential to assure that our scholarship budget keeps pace with student needs.

But it is not true today that our alumni are less active than others in making their university known to prospective students. One of the heartening experiences of my thirty-odd years in admissions is the growing interest of alumni in admissions, their understanding of the problems that face the admissions office, and our friendly relationships with alumni through the years despite an occasional failure to admit students in whom alumni are interested. I doubt that any university has enjoyed greater alumni support and understanding in this field than Rochester. And what a boon that is to an admission office!

From 1930 to 1965 we have experienced wide fluctuations in the admission pattern. In the early Thirties we, along with all other colleges, worried about filling our classes because of the Depression and the effects of a low birth rate. We fought hard and successfully to live through this period without the drop in admission standards to which many institutions resorted. Then, during World War II, we had a flood of Navy V-12 students who transferred from colleges all over the East. (I remember one West Virginia group whose members tried to pass a compulsory V-12 course in physics without any previous mathematics beyond elementary algebra. You can guess the academic mortality of that group!)

After the war we were flooded by veterans, and since we gave them preference in admission, about 70 per cent of our freshmen came directly from the armed forces under the G.I. Bill. That presented a few problems, too: In 1945, with only one staff member (Harm Potter, ’38, who had just returned from the Navy), we struggled with more than 15,000 requests for information and interviewed over 2,500 prospective applicants. Incidentally, if you think the mother of a rejected applicant can be difficult, try to reason with the wife of a rejected veteran applicant!

Over the years we have seen alternate periods of feast and famine: periods when the faculty in the humanities expected to be submerged by the engineers, and periods, like the present, when engineering applicants were submerged by those in the liberal arts. The pendulum swings, cycles take over, and gradually balance is restored. And so it goes. Admissions always seems to be involved in one crisis or another. It is full of headaches, always demanding, sometimes frustrating, but almost never monotonous. To my mind those alumni who volunteer to work on admission have chosen a project that can make an enduring contribution to the University and to its students.

A day in July 1964, the mails brought the first application for admission in September of the following year. The wheels were turning.

We did not record the name of the applicant first to file papers. But whoever "he" was, his papers did not long remain lonely in the files.

Let's call him Andrew A. At this point, Andrew had filed his section of the application; he would, in various ways, add to the folder containing the raw materials of the admissions process: his high school record and a description of Andrew-the-person as seen by his school... College Board test scores, including one set or more of aptitude and achievement test scores... probably, but not necessarily, an interview report... possibly, but not probably, a letter or two in his behalf from someone whose support he enjoys or expects he enjoys... very possibly a copy of the Parents' Confidential Statement (earnings, savings, assets, expenses, problems) and a Financial Need Analysis Report, both of which arrive via the College Scholarship Service if Andrew applied for financial aid... and, finally, correspondence from Andrew to us and from us to Andrew on any topic directly or indirectly related to his application.

No applicant for admission can reduce the contents of his folder to fewer than three items: his own section, the school report, and the College Board test scores (SATS and ATS). More often than not, the contents are considerably weightier.


From Andrew A., applicant, to Zelda Z., applicant, the folders for September 1965 became complete—form by form, card by card, report by report, letter by letter, until 3,099 were full, final, and ready.

What forces were at work when one person in Wyoming, one in Tennessee, one in New York, one in Alaska sat down to type or write out applications that eventually totaled 3,099? And why not 500—or 5,000? (Actually the number of applications varies from year to year, but not wildly; 1961—2,579, 1962—2,424, 1963—2,648, 1964—2,761.)

Why, within the total, do sub-groups of applicants remain so constant in number? (Engineering candidates, for example, have numbered 330, 294, 300, 297 over the past four years.)

And why are our candidates, whether from Honolulu or Hoboken, more likely to be in the first fifth of their high school classes than in the third fifth? (This year 2,310 applicants came from the first fifth of their classes and 789 from the lower four-fifths.)

Riddles. Speculation. Guesswork. E.S.P. Guidance. Chance... Certainly. But the apparent fact—that our candidates for admission do the initial selecting and sorting and thus establish the framework within which admissions and financial aid decisions are made—is an important fact. Absolutes are nice, but we in Admissions are more likely to work with relatives (pun intended). Oversimplified, the essential facts are that 3,099 young men and women from 1,211 schools in 43 states and several foreign countries were serious enough about the University of Rochester to file papers and to pay $10 in order to be considered for admission, and, in 1,632 cases, for financial aid, too.
The awesome responsibility of selecting those to be offered admission and those to be offered financial aid rests—appropriately enough—in the Office of Admissions and Student Aid. Here the selection process begins not with a review of applications but with a review of the University. What are its academic standards, its goals—intellectual, academic, social, and spiritual? What are the limits of its library, its classrooms and other physical facilities? And, finally, how does this collection of concerns, standards, goals, and facilities affect the applicants individually and collectively?

Lest this sound a little stuffy—as if the Admission Office were a latter-day embodiment of the combined attributes of Solomon and Hercules—wise and strong enough to support the University in its entirety—let us immediately disavow any such intention.

The interpretation of the University for which we should be accountable has limitations. In brief, we must be as informed as and as expert as we can in two areas: academic—in which we should have a sound idea of the level of academic preparation and potential needed for success; and ecologic—which requires an understanding of how many and what kinds of students are needed and/or wanted in the University environment.

To be more specific, we must know what combination of high school record, College Board test scores, and personal traits, characteristics and qualifications is likely to produce exceptional performance, satisfactory performance, poor performance. To date, the most reliable predictors of academic performance in college are the good old standbys: the high school record (undoubtedly because the task at hand—making satisfactory grades—differs from high school to college in degree rather than in kind), and the College Board test scores.

College Boards, by the bye, are often subject to unfounded criticism and condemnation and held in unnecessary trauma-producing awe; consequently, a word or two in their behalf may be in order. The Boards were designed to provide a measure of a student's aptitude for academic work; this measure was meant to be a common yardstick independent of variations in school grading systems, unaffected by differences in curricula, and sufficiently broad in scope to cover minor cultural and geographic and social differences without placing those tested at a disadvantage.

In our view, the tests are sound. High scores are likely to indicate greater aptitude and consequently better performance in academic work than low scores. This is validity; the tests measure what they purport to measure: academic aptitude. The tests also are reliable; that is, students retaking the test (actually, a similar version of it) are likely to make scores which will be in the same order top to bottom, high to low, as they were the first time.

Nevertheless, there are very real limitations in the accuracy of the tests, the amount of emphasis which should be placed on scores, and their usefulness in the admissions process. The College Entrance Examination Board and the Educational Testing Service (which makes, administers, and scores the tests) are scrupulously careful about explaining the rights and wrongs of their tests. Those who misuse tests scores or misunderstand the purpose of the tests are culpable—not the tests or their sponsors.

To return to the mainstream of events, in February, when the file drawers are bulging with completed applications, we begin a three-stage program which culminates in final decisions.

Stage one is the reading of applications. The contents of each folder are read carefully by a staff member who makes a global assessment of the candidate's strength and assigns a letter grade of "A," "B," "C" or "X." "A" candidates sparkle in every respect; in the reader's judgment, their academic and extracurricular accomplishments, their recommendations and their personal qualifications are superior. "B" candidates are very good. "C" candidates are completely satisfactory. "X" candidates are unqualified or have deficiencies which would make Rochester an unsuitable choice or, conversely, would make them unsuitable choices for Rochester.

All these judgments are subjective, of course. A staff member is balancing what the candidate has said for and about himself, what is known about him through his school record and test scores, the comments from his school, and information gleaned from a variety of sources; from these emerges a composite picture which is then judged for strength and appeal.

Next, each folder is reviewed by another staff member who makes his independent judgment. Then the twicerated applications are reviewed by a group, discussed, and sorted into three piles. The first consists of candidates who definitely should be offered admission; the second, those who should not be offered admission. The last group is the critical one: those who could be offered admission.

Candidates in the third and largest group are fine young men and women, well prepared for college work, able; they have been active in school and community programs; they are recommended by their schools. But it is within this group that admission becomes most competitive, for their number exceeds the limits of offers of admission which can be made if the entering class is to be of the proper size.

Obviously, choices must be made—choices that take
into account the best current thinking about the desired "mix" of the entering class. Every effort is expended to provide diversity and strength. And diversity, in this context, is geographic and socio-economic, vocational and avocational: We select students from schools and areas which would otherwise be lightly represented, if at all. We look for students from social or economic backgrounds which are modest or harsh. We are attracted to those who plan to enter the professional fields of engineering, teaching, business, nursing. We are impressed by those who have shown special talent in athletics, drama, music, art, or any moral and legal endeavor requiring talent, vigor, and discipline.

As someone once put it: The search is for the person who is different in some positive way. The rationale, of course, is a class and a college composed of able students from a variety of backgrounds and with a variety of goals, interests, and special talents will provide stimulation which will lead to the growth—intellectual, social, cultural, spiritual—basic to education at its exciting best.

Of course, the candidates are searching, too—and not all of those whom we are willing to accept finally decide—when the chips are down—to choose Rochester. And there's a suspense story in itself. We have to wait almost a month—from early April to May—for the returns to come in from those to whom we offered admission (about 1,840 of the original group of 3,099 applicants). This is known in the trade as "precipice admissions," which contrasts with "rolling admissions," in which acceptances are accumulated over an extended period until a class of the desired size is acquired.

How did we make out this year? We aimed for a class of 850; we wound up with some 854 stalwarts (503 Andrew A's, 351 Zelda Z's). These 854 freshmen are an able group; we believe they are an interesting, active, talented group.

Of course, as Chuck Dalton points out in his article, Rochester students have always been an able group. Changes in admissions have come gradually, and the admissions picture today recognizes the growth in numbers of candidates with strong qualifications. With the excess of such candidates for the available places in the entering class has come an opportunity to be selective; the increase also carries with it the pressures, problems, and pitfalls of competitive admissions. We are forced to examine carefully our philosophy of selection, to interpret accurately the University as it is today, to predict what it may be tomorrow, and to carry on our program in a manner that truly reflects our position.

Clearly—and thank goodness—the Admission Office alone does not establish policy, nor should it. Formally, we enjoy the assistance of an advisory committee representing administration, faculty, and student points of view. Informally, we receive comments, suggestions, criticisms from many sources, including alumni. We welcome, repeat welcome, criticism.

Assistance is received from many sources, especially from alumni. For example, Rochester alumni interview candidates, call on high school counselors, and sponsor social functions for candidates and entering students. Most important—the entire process is highly personalized and individualized. We use statistics and formulas only as a means of establishing a firm basis for judgment and not as substitutes for judgment. The papers and scores are important only as they help us interpret the promise and potential of the young men and women who produced the numbers, grades, and scores.

As we looked over the bright and eager young members of the Class of 1969 this fall, we were as glad as they to have transformed them from candidates to classmates. But while they act like freshmen, we act like an admissions office; we are working with what will be the Class of 1970.

Once again, we have a much greater number of qualified youngsters than we can accommodate. Once again we shall have to weigh a variety of intangibles over and above the nuts-and-bolts of test scores and grades to come up with the kind of class whose members will profit from—and contribute to—the University.

It is a task we approach eagerly because of the opportunity to work with such fine young people. It is also a task we approach with humility... may all of our decisions be good ones.
ALADDIN OF BROADWAY

Broadway's 54th Street Theater will be renamed the George Abbott Theater. Announcement of the latest in the long string of honors accorded GEORGE ABBOTT, '11, was made at a dinner at which the distinguished producer-director-actor-writer received the first merit award of the Society of Stage Directors and Choreographers. Future winners of the award (which will be called "The Mr. Abbott") will receive a bronze head of the first recipient.

Mr. Abbott's 106th production, "Anya," opened in New York this fall—nearly 40 years after he first won fame as co-author of "Broadway.

A recent New York Times profile titled "Aladdin of Broadway" described Mr. Abbott as "the most productive all-round man in Broadway history," who has "turned out more big hits than anyone else in the business."

CLASS NOTES

Newly elected to the New York State Court of Appeals, former Senator KENNETH B. KEATING, '19, recently received the following editorial tribute from The New York Times:

"... the voters of New York State have given him the opportunity to cap his long career with a new kind of public service. ... We are confident that he will maintain the traditional standards of the state's highest tribunal."

WILLIAM F. NEUMAN was cited for his research on the biological behavior of calcium at a recent meeting of the International Association for Dental Research.

RAYMOND E. FRANCIS has retired as principal of Marshall High School.

ROBERT TAYLOR has become vice president and general manager of Walker Mfg. Co.'s organization in Northern Ireland.

Marriages

REV. EVERETT PERRY to Margaret M. Tammen, July 9.

Marriages

GERRITI VAN INGEN WESTON to Phoebe Helmer Wadsworth, Aug. 7.

RENA STEBBINS CRAIG, '21G, emeritus dean of women at Union Theological Seminary, has received the State University College at Oswego's Outstanding Alumnus Award.

NATHANIEL C. KENDRICK, dean of Bowdoin College, received the 1965 Bowdoin Alumni Award for faculty and staff.

Dr. John S. Carman, professor of surgery and consulting surgeon at Christian Medical College and Hospital, Vellore, South India, has received an honorary doctor of humane letters degree from Alderson-Broaddus College, W. Va.

CONSTANCE PRATT DAILEY has retired from the American Cancer Society.

NATHANIEL C. KENDRICK, dean of Bowdoin College, received the 1965 Bowdoin Alumni Award for faculty and staff.

HENRY SALMON has retired after 28 years as district manager of the Social Security Office in Jackson Heights.

RAYMOND DEWITT PIKE has been elected senior vice president at RG&E Corp.

IDA L. PADELFORD has retired from the Sondley Reference Library, Asheville, N. C.

ELTON J. BURGETT has been appointed president of Quimby and Co.

JOHN J. WILSON, JR., is senior officer in charge of investment and administrative operations at Boston's Prudential Center.

MILDRED A. CRAMER has been promoted to an assistant vice president at Security Trust Co., Rochester.

Dr. F. Milton Hathaway has been elected president of the Michigan Board of Examiners in Optometry.

JOSEPH C. WILSON has received an honorary doctor of laws degree from St. John Fisher College.

FRED H. GOWEN has been elected a director of Ceco Corp.

ROBERT B. HOFFMAN has become a senior vice president of Gulf Oil Co.

JAY BLAND has been elected president of the American Welding Society.

John J. Maxwell's paintings were exhibited recently at the Everhart Museum.

IRENE WRAY SWANTON, '36G, president of the Avon Board of Education, has been appointed to the board of cooperative services of Livingston County.

MILDRED POTTER, '43G, has retired as principal of Rochester's School 33.

BARBARA MILLER is professor of physical education at Hiram Scott College.
Fresh from the Johns Hopkins press in Baltimore is *Winegar Tourgee*, UR '62 (1862, that is) — fighter against discrimination in any form. Threats by Ku Klux Klansmen against his current research as University Historian.

REVIEW

The best seller lists. They recount the tragedies and failure of the Reconstruction. "My race owes much to the courage, and helpful work of Judge Tourgee," declared Booker T. Washington, "which we shall not forget."

While an undergraduate Tourgee frequently wrote to his fiancee about his experiences at the University and assessed the professors, including Dr. Chester Dewey. The eminence of Dewey in the Rochester saga is suggested by the building on the River Campus bearing his name; fellow scientists honored him by labelling certain California plants "Deweya."

A member of the University's remarkable original faculty, he taught chemistry and natural sciences, which embraced botany, geology, physiology, and astronomy. (Dewey occupied a settle, not a chair.)

Before his intellectual powers started to decline (he retired in 1861 at the age of seventy-six, but continued to teach a little until he was eighty), students highly prized his instruction. His portrait, which adorns a corridor of Rush Rhees Library, reveals a man of fine head and benevolent countenance.

Professor Dewey contributed generously to professional publications and to the press, writing a series of articles, for instance, on "The Invaluable Benefit of Glasses to the Aged." Best known in scientific circles as a botanist and collector of botanical specimens, he belonged to leading national scientific societies and counted the foremost American naturalists among his friends. Hundreds of varieties of sedge grasses were systematically catalogued by him, and, as a self-appointed meteorologist, he kept accurate daily weather observations in Rochester for thirty years.

Though Dewey was acquainted with novel hypotheses in science, such as the Darwinian theorem, he rejected them as irreconcilable with his theological convictions. When a student commented, "Well, Doctor, if geology does not lie, the world was not created in six days," the elderly professor, seemingly pained, removed his spectacles and solemnly replied, "... There is nothing in science which really opposes revelation."

Ideas have changed in a hundred years. In the course of another century present-day views will doubtless undergo radical alteration, but Dewey's distinction as the first University scientist transcends the vicissitudes of time.

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The Review welcomes a new columnist and a familiar and beloved campus figure: Arthur J. May, professor emeritus of history, who will share some of the gleanings from his current research as University Historian.

■ 1939

ROBERT A. VAN AUKEN is superintendent of North Olmsted, Ohio, schools.

ROSE ENGELMAN is one of the authors of *Defense of the Western Hemisphere*, published by the Defense Department.

ELVA BAER KREMENTZ is on the English Department faculty at U.C.L.A.

CARL J. KUJAWSKI is president-elect of the business and industrial division of the Pennsylvania Psychological Association.

Marriages

JOHN W. CROFTS to Elizabeth Reed, March 21.

■ 1940

JOHN H. KISTLER has been elected assistant secretary of the Life Insurance Company of North America.

HELEN JUPNIK has become manager of the think tanks development department at the American Optical Co., Keene, N. H.

■ 1941

ROGER E. DREXEL has been appointed planning division manager of Du Pont's industrial and biochemicals departments.

WILLIAM D. HALLORAN has been named a vice president of Duriron Co., Inc.

■ 1943

HERBERT F. YORK is a trustee of the Institute for Defense Analysis.

Dr. FRANK R. SCHILL has been elected vice president of the medical board at St. Joseph's Hospital, Paterson, N. J.

LEONARD W. NIEDRACH, a physical chemist at the General Electric research center in Schenectady, is one of two GE scientists credited with developing the fuel cell used in the successful Gemini 5 spacecraft flight. The eight-day Gemini 5 flight marked the first operational use of fuel cells in space.

■ 1944

JOHN S. CROWLEY has been named chairman of the New York Chamber of Commerce's committee on public relations and is on the executive committee.

■ 1945

MERLE K. MILLER, '47G, has become associate professor of psychology at Springfield College.

■ 1946

FAY SAND REED is co-author of a book entitled "Contract with God."

■ 1947

JOSEPH C. NELSON has become secretary and general counsel of Kellwood Co.
HERBERT BRAUER is president and general manager of Scrantom's Book & Stationery Co., Inc., Rochester.

1948

DR. ELLIOT N. WINEBURG has been appointed chairman of the Mental Health Committee, Queens Medical Society.

PAUL W. BRAYER has been elected vice-president of the national Citizens for Educational Freedom (CEF).

ROBERT S. MAXWELL is curriculum director of the North High School, Oildale, Calif.

JOHN D. FASSETT has become director of the New Haven Savings Bank.

STANTON B. SMITH has been promoted to production manager of the activated carbon department of Norfolk and Western Railroad.

DR. RICHARD BLANDAU has been appointed to the National Advisory Child Health and Human Development Council, National Institutes of Health.

1949

GORDON A. ALLEN has been appointed director of research and development of The Great Lakes Paper Co.

WALTER CAMPBELL has become manager of the systems and procedures department at Burroughs Corp., Rochester.

ROBERT MILES is teaching social studies in the Newark Central School District.

PHILLIS VAN DE WALLE MAILMAN heads the Goodrich-Hough Community Information Center, an anti-poverty program in Cleveland.

1950

CHARLES F. LUCKETT has been named copy supervisor of Rumrill Co., Inc.

ROBERT LEE SCHWIND has been appointed regional counselor for the Sixth National Bank Region, Atlanta.

GLEN C. DURKIN is director of Kodak's business-technical personnel department.

GEORGE A. COOPER is teaching at the Pfaudler Division of Pfaudler Permutit Inc., Rochester.

ROBERT C. FRANK has become assistant employment manager at RGA& Corp.

JOHN FABY, '54G, is supervising principal in the Port Chester School System.

MERRILLYN A. CAMPBELL is studying at the University of California at Berkeley under an NSF fellowship.

1952

NORMAN P. NEUREITER, on a two-year leave of absence from NSF, has become deputy scientific attaché at the American Embassy in Bonn, Germany.

CHESLEY KAHMANN PARSONS' Theme and Variations for Orchestra was recently presented in New York.

FORD H. MATTHEWS has become technical superintendent at the Goodyear plant in Le Havre, France.

1953

NOBRETT GREENE has been promoted to professor of engineering at Rensselaer Polytechnic Institute.

DONALD MCINTYRE has been appointed manager, general accounting and payroll control, at Burch Corp., Rochester.

DR. BERNARD WEISS has been named associate professor of radiation biology and biophysics and brain research at the UR Medical School.

Marriages

RICHARD A. BERNSTEIN to Edith S. Brush, Aug. 29.

Births

To Anthony and Joan Kelsch Zangara, a daughter, Elizabeth, Oct. 6.

1954

DANIEL S. MICKEL has been promoted to assistant director of computer operations at Mutual of New York.

DAVID W. JOHNSON was elected secretary of Commercial Credit Company's Textile Banking Co., Peekskill.

1955

DANIEL W. HEMMING has been appointed general agent for the Connecticut Mutual Life Insurance Co. in Rochester.

ROGER G. COOLEY has been named headmaster of the Englewood (N. J.) School for Boys.

Marriages

ROBERT N. RUDA to Carol E. Hoffman, July 4.

1956

BARBARA CUSHMAN has become a district director of the Camp Fire Girls.

STEVEN BARK has been appointed house counsel for Dell Publishing Company.

CAPT. DONALD SCHAET has been transferred to the U. S. Marine Corps Officer Selection Office in New York City.

ROBERT KANE has been appointed manager of administration and engineering services of Grafex Inc., Rochester.

Births

To Oliver and Livonia Westcott Smith, a son, Oliver Jacob IV, June 21.

1957

ROBERTA G. EISMAN has been assigned to the nursing staff at the U. S. Air Force hospital at Sheppard AFB, Texas.

Births

To Adrian, '58, and Marian Burke Collins, a daughter, Elizabeth Anne, July, 1964.

To Joanne and Donald N. Hadley, a daughter, Susan June, June 8.

1958

DOROTHY MILLER has become associate professor of physics at Haverford College.

ADRIAN COLLINS has joined the tax staff of Price Waterhouse in New York City.

JERE CARTER has been named manager of the Wake Forest (N. C.) College Office of the Wachovia Bank and Trust Co.

JOHN DROTTING is assistant professor of industrial relations at the State University of New York at Buffalo. He studied last summer in Washington, D. C., under a National Labor Relations Board grant.

FREDERICK W. BRUNDAGE has become a staff programmer in mathematical analysis and programming at IBM's Space Guidance Center in Los Angeles.

Births

To Josephine and Barry Warshaw, a son, Michael Morris, July 17.


To Arthur and Barbara Kahan Pavelle, a son, Roger Michael, July 4.

To Gordon and A. Christine Hershey Perry, a son, William, Sept. 17, 1964.

To John and Charleen Dorwald Drottning, a daughter, Anne, March 30.

To Elizabeth and C. Lloyd Lipscomb, a son, William Henry, Aug. 20.

To William and Carol Stiles Anderson, '59N, a son, John Stiles, Aug. 18.

To Frank and Janet Cederquist Jarrett, '58N, a daughter, Cynthia, March 12.

1959

G. GORDON CONNALLY, assistant professor of geology at the State University College, New Paltz, received a faculty research fellowship and an NSF research grant at the University of Nevada.

MERRILLYN A. CAMPBELL is studying for a master's degree at Boston University. Last year she taught in Germany.

Oscar Eichhorn has become dean of men at the University of Denver.

LT. STEPHEN H. MOREHOUSE is serving on the U.S.S. Shadwell, Little Creek, Va.

JOSEPH R. CORATTI is a guidance counselor in the Port Chester School System.

Marriages


MARLENE HOWES to Leonard Monaghan, July 17.


ANDRUS NAJOKAS to Joanne Cleaveland, July 24.

Births

To Fred and Cynthia Palabay Robinson, a son, Christopher, Jan. 20, 1965.

To A. Leon and Arlene Linter Fuhrman, a son, Glenn Robert, March 18.

To DF. and Mrs. Michael Margaret-
1960

Stephen P. Shoup is a development engineer at Inland Steel's research laboratory in Hammond, Ind.


James A. Geaudry has joined the faculty of the United College at the Chinese University of Hong Kong.

Henry L. Schick has been appointed supervisor of secondary guidance for the Watertown School System.

Kenneth Williams is a staff scientist at the Worcester Foundation for Experimental Biology.

Joan Briggs Connal is "Miss Joan" on Syracuse's Romper Room TV program.

Paul R. Demmertmuth is a research assistant professor of sociology at the University of Illinois.

Marriages

Robert Wren to Eva Sandquist, July 4.
Frank Steele to Karon Kelly, May 22.
Robert Milrad to Judy Cheadle, May 16.
Sarah H. Ahearn to William D. James, July 3.

Births


To Gerald and Avis Greene Byles, a daughter, Ruth Deborah, March 16.

To Roger and Ann Brown Nelson, '62, a son, Scott David, Sept. 23.

1961

Stuart O. Miller is assistant district attorney of Seneca County.

Dr. Gary Miller was graduated from Albany Medical College and is interning at D. C. General Hospital, Washington.

Gerald Lach's has received an NSF grant to study electromagnetic signals.

Dr. Eugene Carroccia is interning at Kansas City General Hospital.

Dr. David R. Cook, '65M, is interning at Rochester's Genesee Hospital.

Marriages

Madeline I. Stamat to Raymond Fedak, July 10.
Phillip W. Albro to Christine Elizabeth Schmitt, Aug. 1.
William A. Gibson to Mary Conner, June 12.

Births

To Linda and David Jevnes, a son, Michael David, July 5.

1962

John D. Morris has become instructor in history at Kent State University.

Jane Rearick Shoup is a research associate in the zoology department at the University of Chicago.

Donald F. Musella is assistant professor of education at the State University at Albany.

William L. Vick has been appointed director of corporate planning for Stromberg-Carlson Corp., Rochester.

Dr. Warren B. How is interning at Philadelphia General Hospital.

Robert Weber has been promoted to field marketing communications supervisor at Burroughs Corp., Rochester.

Dr. Susan S. Aronson is interning at Albert Einstein Medical Center.

Louis Montulli is stationed at Kirtland AFB, New Mexico.

Dr. Patricia Numann is interning at the State University Upstate Medical Center.

Harvey M. Rapp is working toward certification in school psychology from Hofstra University.

William H. Knapp, USN, is teaching NROTC at Iowa State University.

Marriages

Robert Kolb to Rita Kuder, Oct. 2.
Beverly H. Taff to Alan J. Watson, April 17.
James J. O'Connor to Judy K. Kamman in August.
Michael F. Berger to Barbara E. Cohn, Sept. 11.
Donald E. Alhart to Linda A. Cook, Aug. 21.
Harvey M. Rapp to Susan Ellen Kliger, April 11.
Laurence Burd to Ina Feldman, July 11.
Peter Waasdorp to Dorothy Barden, '65, July 31.

Births

To Stefan, '60, and Jane Rearick Shoup, a daughter, Rebecca Jane, Sept. 4.
To Louis and Mary Davies Montulli, '63, a daughter, Lisa Catherine, March 31.
To Robert and Sandra Madison Saturn, a daughter, Wendy Jeanne, July 10.

1963

David C. Mauer has been named principal of the junior/senior high school of Honeoye Falls (N.Y.) School District.

John Malack was graduated with honors from the training course for accounting and finance officers at Sheppard AFB, Texas.

Reed Hamilton has received his silver wings from the U. S. Air Force and is stationed at Eglin AFB, Fla.

Dorothy de Zafra has become New England regional executive for the World University Service.

Donald G. Adams is assistant professor of English at Bowdoin College.

Jerome Goldstein was awarded a U. S. Public Health Service Summer Fellowship in Orthopedic Surgery.

Marriages

Carol Anne Wills to Sandor A. Agocs, June 5.
John Malack to Nancy Rowe, July 17.
Norma Redstone to Ronald Poretz, July 10.
John E. Walsh to Anne M. Harszy in August.
Frank B. Vergamini to Sarah Hadley, July 3.
Anne Elaine Stillman to William C. Brown III, July 17.

Norman Lester to Marla Leslie Klebanoff, Aug. 28.
Jeffrey A. Kaffee to Florence R. Marcus, Aug. 15.

Births

To Stewart and Nancy Sutch Furlong, a daughter, Christie, Nov. 21, 1964.

Robert Forster, '64, made his first major stage appearance last fall in William Hanley's Mrs. Daily Has a Lover. Although the play received mixed reviews, Forster, who appeared opposite Arlene Francis and Ralph Meeker, won critical praise for his performance. An alumnus of TV's Patty Duke show, he is being hailed as one of Broadway's most promising newcomers.

1964

Martha J. Zelle is technical librarian at Union Carbide, Cleveland.

Richard G. Kreitner is group insurance underwriter with Connecticut General Life Insurance Company, Hartford.

Timothy A. Ashman has become assistant manager of Marine Midland Trust Company's Pittsford-Brighton office.

Phyllis A. Boden has become instructor in French at Alfred University.

Daniel MacGregor is teaching English at Marcellus Central School, Syracuse, and is working for a master's degree from the State University College at Oswego.

Jерold B. Lissos is a reliability engineer at Burroughs Corp., Todd Division.

Stephen Cantor has joined U. S. Rubber Co.'s Research Center in Wayne, N. J.

Dorothy Wynne is coordinator of medical services for the Project Head Start programs in Durham, N. C., schools.

Charles Krantz has become assistant professor of history at Temple University.

Linda Sanders Warner is teaching third grade in Liverpool.

Roger N. Napiers has joined the research and engineering staff of Mobil Chemical Company's Metuchen laboratories.

Robert Martin is a sales service representative for Otis Elevator Co., Albany.


Marriages

Cornelia Gordon to Henry Hempe in June.
JUDITH SWOYER to BRADFORD JOHNSON, June 19.
RICHARD BERG to BARBARA GOLDBERG, '65, June 27.
JUDITH SUTTON to DANIEL DRAKE, Aug. 7.
MARTIN R. BRING to Judith Rappel, July 3.
RUTH GROSSMAN to THOMAS BUTLER, Aug. 30.
BEN LEVIN to Marilyn Lemke, June 13.
LINDA SANDERS to DONALD WARNER, June 27.
MARK A. GOLDSTEIN to Sally Michlin in July.
JOEL HOLSTEIN to Barbara Goss, July 15.
ANNE MCCAFFE to WILLIAM SCHAEFER, '65G, June 12.
MARGARET SEUFFERT to ROBERT MARTIN, June 5.
PHYLLIS ALEXANDER to DOUGLAS SANGER, March 16.
FAYE BROWN to Ralph Steuer, April 3.
DAVID M. MORSE to SARAH E. STOTENBURG, Aug. 21.
FREDERICK S. SCHAEFER to Joyce B. Jordan, '64N, Aug. 21.
ELIZABETH S. HERBRAND to William S. Geiger in August.
ROGER P. NAPIER to Connie M. DEYMANN, Oct. 2.
LEONARD MEAD, Jr., to Regina Nuttle, Oct. 3.
MICHAEL A. LACOMBE to Linda J. McCarriston, Aug. 21.
J. BRUCE GIEGER to M. Charlene Fay, Aug. 21.

1966

THOMAS W. MORRIS is a second lieutenant in the U.S. Air Force.
ROBERT T. SAYRE has received a Fulbright scholarship for study at the University of Cologne, Germany.
PAULA ARCONI CATTAT is teaching mathematics in Interlaken (N.Y.).
HUGH B. ANDREWS is an instructor in English at the University of Cincinnati.
HART A. GOLDSMITH has become an economic adviser to the Department of the Army.
DON FRIENFELD has begun graduate study at the College of Physicians and Surgeons at Columbia University.

Marriages
PETER RIKER BEAVER to Valerie King, June 12.
HART GOLDSMITH to Elizabeth KURTZ, June 7.
LINDA WILLIAMS to Peter Obourn, June 25.
DONALD PUTZIG to Gisela Briese, June 26.
LINDA BAN to David Greensclad in August.
RUTH E. DECKER to ROBERT F. STEEN, '64, Aug. 7.
PHILIP J. YURECKA to Judith BARWELL in July.
CHARLA VON HEINE-GELDERN to STUART K. TEWKSURY in May.
MARCIA WICK to PHILIP D. FISHBACK, '63, in June.
LUCY OGDEN to CLINTON ALKINS, Jr., Aug. 21.
SUZANNE E. ALHART to Carl R. HAGEN, Aug. 21.

Among the UR husband-and-wife teams serving overseas are ROBERT and SUSAN KENNEDY CALHOUN, both Class of '64, who are on Peace Corps duty in Turkey.

Other couples currently on overseas assignments are RICHARD STEAR, '63, '65GED, and SHARON MOREHOUSE STEAR, '64, who have started a two-year hitch in Northern Nigeria under the Teachers for West Africa Program; and DR. MICHAEL HAMILTON, '55E, '64M, and his wife, Brigitte, who are on Peace Corps service at Afghanistan's Nagrahr Medical School.

Eastman School of Music

1927
LUCE E. COOKE has retired after 32 years of teaching piano in Cooperstown.

1929
HUNTER O. JOHNSON received the North Carolina Gold Medal for distinguished achievement in the fine arts.

1932
J. STANLEY KING, '37GE, has retired from teaching music in Buffalo and is a violinist with the Indianapolis Symphony.
FRANCES DUNLAP ALTERMAN, on a sabbatical leave as assistant professor of music at the University of Susquehanna, is studying operatic production.

1933
SIMON KARASICK, a member of the Mannes College of Music faculty, recently conducted the College's Brass Ensemble in a TV program, "The Brass Choir," which will be shown abroad and over 84 stations nationally.

1934
Marriages
ABRAHAM KURHSEIDT HOFFMAN to STUART K. KROHN, Aug. 9.

1935
GODDARD LIEBERSON, president of Columbia Records, has received an honorary degree from the Cleveland Institute of Music.
PETER S. HANSEN, GE, chairman of the music department of Newcom College, Tulane University, lectured at the Springfield Arts Festival last season.

WALTER MOURANT'S ('36GE) Aria for Orchestra, Harper's Ferry, W. Va., has been released.

1936
MARGARET HONDELINK, '40GE, has retired after 30 years as vocal music teacher at Dansville (N. Y.) Central School.
CATHERINE CROZIER GLEASON, '41GE, has received an honorary doctor of music degree from Smith College.

1937
DONALD MACDONALD's ('36) article, "Your Flutes Don't Have to Play Out of Tune," appeared in Instrumentalist.
PAUL W. PETERSON is head of the voice department at Salem College and author of a recent book, "Criterias for the Evaluation of Vocal Performance."
R. BERTON COFFIN, head of the voice division of the University of Colorado College of Music and founder-director of the University Festival Chorus, was co-director for the Rocky Mountain premiere of Benjamin Britten's War Requiem. WILDA TINSLEY MOENNIG was recently honored by Stephens College with an Alumna Award.

Marriages

1939
KENNETH WRIGHT's ('41GE) Wing of Expectation was premiered last summer at the University of Kentucky centennial.
THOMAS CANNING, GE, had five of his compositions featured at the Twentieth Century Music Week in Oklahoma City.

LAURA HOWARD WHIPPLE, '42GE, has become drama and music director of the Ann's Academy, Boca Raton, Fla.

OSCAR A. COOPER, '41GE, is director of the Grove City (Pa.) College Choir.

MAC MORGAN, associate professor of voice and director of Boston University's scholarship fund last season.

ROGER PHELPS, associate professor of voice and director of Boston University's School of Music's music department at Kent State University, is lecturing at the University of Mississippi.

DOROTHY HAPPEL, violinist, was guest artist at a recital sponsored by the University of Hawaii's music department.

EVAN A. WHALLON, JR., '49GE, conductor of the Columbus (Ohio) Symphony Orchestra, was musical coach for the 1965 Merola Opera Program.

ROBERT LEWIS'S ('51&'64GE) Design for Orchestra was presented by the Boston Symphony and his Music for Fourteen Instruments was performed at Carnegie Hall.

WARREN P. THWIP recently gave a piano recital at the Shenendoah Conservatory of Music in Saigon, Viet Nam under a Fulbright grant.

ROBERT WEIDNER, '60GE, has become head of the organ department at Eastern Illinois University.

IGOR HUDADOFF is president of Nassau Music Educators Association.

THOMAS PIERSON has become conductor of the Mount Chamber Orchestra at Mount St. Mary's College, Calif.

EDGAR SUMMERLIN, in collaboration with poet William R. Miller, has composed a service of worship in jazz entitled Liturgy of the Holy Spirit. The work was premiered at the annual meeting of the New York Methodist Conference. Summerlin was featured in an article, "Jazz Goes to Church," in Jazz magazine.

WALTER F. MOCX conducted the Alabama Pops Orchestra series at Howard College.

WILLIS A. STEVENS, '61GE, who presented his second Town Hall piano recital last spring, recently performed at Columbia Basin College, Washington.

EDWARD JANTSCHI, '54GE, conducted the orchestra of the Juilliard School of Music, had his first performance at the New York Philharmonic's June 24.

ROBERT LEWIS'S ('51&'64GE) Design for Orchestra was presented by the Boston Symphony and his Music for Fourteen Instruments was performed at Carnegie Hall.

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WARREN P. THWIP recently gave a piano recital at the Shenendoah Conservatory of Music in Saigon, Viet Nam under a Fulbright grant.
ELWOOD L. SMITH, '57GE, directed the National Opera Company in Cimarosa's The Secret Marriage.

THOMAS C. YALANSKI was musical director for the Meriden (Conn.) production of Bye Bye Birdie.

Arthur Wight, Jr., taught vocal repertoire and choral conducting last summer at the Tanglewood Festival.

Marriages
RONALD T. BISHOP to Marie Wilburn, June 22.

1957
RALPH B. LEWIS has become assistant to the dean of the School of Graduate Studies and a faculty member of the School of Music at the University of Michigan.

SYLVIA SHAPFER BLANKENSHIP, '59GE, has become visiting instructor in music at Central Michigan University.

1958
HELEN L. BOVJERG, '59GE, won a bronze medal in the International Contest of Song in Toulouse, France.

ROBERT J. MURRAY has been appointed instructor at the Eastman School of Music.

DAVID MULBURY has been selected by the Arts Presentation Society of St. Louis as one of two young artists who will present a public organ recital under the auspices of the Society in St. Louis.

PETER H. TANNER, '59GE, was guest composer for the 1965 Symposium of Contemporary Music at Texas Technological College.

ARMAND K. RUSSELL'S Antiphony I and II was premiered during the Festival of Music and Art of This Century at the Honolulu Academy of Arts. His Theme and Fantasia for Orchestra was recently performed by the Dallas Symphony.

Marriages
FRANK M. SIDORFSKY to Donna Sue Woodson, Oct. 2.

1959
PATRICIA SELOVER HANSON, who received a scholarship for piano study at Chautauqua Institute last summer, won the Chautauqua award.

JAN BLANKENSHIP, '61GE, a member of the piano faculty at Central Michigan University, was soloist with the Giorgio Crompt Festival String Orchestra.

JAMES W. RILEY has become assistant professor of musicology at the College-Conservatory of Music of the University of Cincinnati.

GERALD V. CAREY, '61GE, is working on his doctor of musical arts degree and has been named a fellow at the University of Illinois.

Marriages
BRUCE BODINE to Carol Corso, Aug. 14.

1960
GEORGE A. CAVANAUGH is assistant professor of music at the University of Maine.

ROBERT L. TOWN is assistant professor of organ at Wichita State University.

BOYCE REID is studying music at the St. Cecilia's Academy in Rome under a Fulbright scholarship.

CHARLES FUSSELL, '64GE, composer-in-residence for the Newton, Mass., public schools, conducted the Baltimore Symphony Orchestra in his Symphony in One Movement last year.

GAYLORD FRENCH has become assistant music director at Northwood Institute and Midland Music Foundation.

1961
ROBERT EHLE heads the electronic music department at North Texas State U.

H. BRUCE LEDERHOUSE, '63GE, collaborating with Herbert Graesel, composed a folk-style Mass entitled RefoRce.

MCCARROLL AYERS has been appointed instructor in voice at Millsaps College.

PETER W. HADCOCK has joined the Boston Symphony Orchestra as clarinetist.

Marriages
ROBERT EHLE to Linda Candle, July 17.

Births
To H. Bruce, '63GE, and Mary Collins Lederhouse, '63, a daughter, Mary Ellen, Nov. 13, 1964.

To Peter and Mary Greer Hadcock, '63GE, a daughter, Sylvia Mary, Aug. 23.

1962
WILLIAM FLECK appeared in Puccini's La Boheme at Chautauqua.

L. RICHARD JENNINGS EGERS was staff musician during the Ruth Knight Summer Theater Workshop.

BRUCE M. SMITH, '65GE, has become elementary instrumental music teacher for the Rye Neck (N. Y.) Schools.

GEORGE KLUMP is on the organ faculty at Southern Methodist University.

Marriages

CARTER NICE III to Elizabeth Washack, June 26.

Births
To David and Susan Rosenblum Levin, a son, Arron Gil, June 22, 1964.

1963
EDWARD R. BARR is teaching music in Williamstown, Mass.

L. CAMERON JOHNSON recently directed the Coast Guard Academy Protestant Choir in a concert sponsored by the East Greenwich (R. I.) Ministers Association.

HARMON D. CUMMINGS has been appointed director of bands and assistant music professor at Marietta College.

MARY ALICE HONGEN, '65GE, is head of the harp department at Texas Technological College.

RICHARD THORELL is business manager of Ars Antiqua.

BYRON HANSON has become an instructor at Interlochen Arts Academy, Mich.

Marriages
GRACE S. WONG to Joseph Ho in March.

1964
Marilyn Schiwe has become an instructor at Florida State University.

DONALD T. JONES taught oboe at the Summer Conservatory of Music at Delta College, Mich.

JOSEPH COHEN's oratorio, David and Goliath, was premiered last summer.

Marriages
JEFFREY DRIFMEYER to Nancy Taylor, June 26.

MICHAEL A. SMITH to Wendy Caesar, July 17.

1965
ROBERT S. ELLINWOOD directed the "Night of Opera" at Lynchburg College.

EMILY TREPZ is teaching music at Eastview and Highlands Elementary Schools.

A. LAURENCE LYON'S Music for a Festive Occasion was premiered by the Utah Symphony Orchestra.

KAREN ANDRIS is studying in Paris under a Fulbright grant.

Marriages
KATE E. DOUGLAS to RONALD E. CROY, Aug. 21.

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Medicine and Dentistry

1927
Dr. ORBIN GREENBERG has been appointed assistant dean of Tufts University School of Dental Medicine.

1933
Dr. LLOYD C. MILLER, GM, is director of revision for the U. S. Pharmacopoeial Convention, a drug standard publication.

1937
Dr. GEORGE F. BANTLEON, '32, has become director of health service for the State University College at Geneseo.

1940
ERNST A. PINSON has been named commander of the Air Force's Office of Aerospace Research.

1941
Dr. J. HENRY WILLS, GM, has received the Department of the Army Decoration for Exceptional Civilian Service, the highest award given a civilian employee.

1943
Dr. WILLIAM BLACKMORE has become chief of staff at Elizabethtown (N. Y.) Community Hospital.

Dr. ALFRED M. DECKER, '40, is a trustee of the Trudeau Foundation.

Dr. HERMAN D. ZEIFER has become director of the Cleveland Orchestra's Soviet tour.

1948
Dr. THOMAS W. MOIR has been named director of the State University College at Geneseo.

1952
Dr. MORTIMER LITTLER has become assistant professor of bacteriology and immunology at Harvard University.
Col. Carl L. Hansen, GM, has retired from active duty in the U. S. Air Force. He has joined the National Cancer Institute, NIH, as a consultant to the deputy director for grants and training.

1961

Marriages

Dr. Carol Shander to Dr. Theodore Nadelson, July 16.

1962

Marriages

Dr. Peter M. Winter has been appointed a research fellow in anesthesia at Harvard Medical School.

1963

Marriages

Dr. Myron Varon, '65GM, has become radiological medical director at the U. S. Naval Radiological Defense Laboratory in San Francisco.

1964

Marriages

Dr. George T. Mantzas has been commissioned a lieutenant in the U. S. Navy. Dr. Byron E. Kolts is a resident in medicine at Mary Hitchcock Memorial Hospital, Hanover, N. H.

1965

Marriages

Dr. Robert M. Briggs is a resident at Stanford University Hospital.

Births

To Chris and Robert Briggs, a daughter, Kari Horgen, July 12.

1966

Births

To Walter and Linda Callanan Franck, a son, Christopher, May 2.

1967

Births


1968

Births


1969

Births


1970

Births


1971

Births


1972

Births


1973

Births


1974

Births

Among his many activities, University Trustee Sol M. Linowitz is board chairman of Xerox Corporation, executive committee chairman of the government's International Executive Service Corps, and vice president of the board of trustees of the John F. Kennedy Center for the Performing Arts. The article that follows is based on his recent address given at the annual conference of the American College Public Relations Association.

James Thurber was once asked: “How’s your wife?” He replied: “Compared to what?” By the same token, we can answer the question as to whether a man is or is not educated only by inquiring: “Compared to what—and compared to when?” For the fact is that science, which has been moving forward a step at a time for thousands of years, has suddenly broken into a pell-mell race, and yesterday’s educated man very quickly finds himself uneducated in terms of our times and our world.

Until not long ago, we were a frontier society. Even as the steel mills smoked in the east, Indian battles were being fought in the west. Or to put it in more current terms, when Charles de Gaulle was born, America had not yet admitted to the Union the states of New Mexico, Arizona, Oklahoma, Utah, Wyoming, and Idaho—not to mention Alaska and Hawaii.

For a century and a half, our challenge was simply to master the geography of a continent. But today our frontiers are no longer limited by wild rivers and imposing mountains; our struggles are no longer defined from without. We have learned to conquer the elemental forces of our continent; and in doing so we have not only established a nation of unparalleled strength, but we have discovered within ourselves a new vision of human potential.

To realize that potential, I think, requires that we understand fully the changing nature of our own lives. And though I make no claim to being an historian, it seems to me that the pattern of our future can be detected evolving from that of the past.

Until less than five generations ago, for example, the power of nations and of empires was directly related to the amount of agricultural land they controlled and made fruitful. For from good land grew the food to feed armies and the fibers to clothe them. Even the discovery of the New World—motivated by the mythology of exotic riches and golden cities—found its real worth in great fertile lands and the start of a new agronomy.

With the Crimean War, the world changed abruptly and irrevocably. A great agricultural nation was defeated by the industry of England; and the real basis of power and wealth became industrial strength. Our own Civil War affirmed the lesson: Agriculture was the Confederacy’s pillar of power—but it could not master the industrial might arrayed against it.

Today we are undergoing an even more profound change. We grow enough food not only to feed ourselves, but to provide sustenance for millions of people around the world. Our industrial capacity is a legend and has become the standard by which other nations measure their own accomplishment.

Yet despite the fact that we possess the two greatest pillars of historical power ever seen on this earth, our position is threatened and our power challenged. Today
We are educating our computers faster than we are educating our young people.

we know that a new pillar of strength is evolving—and that its source is the ability to digest, disseminate, understand, and apply the vast body of new knowledge that each day increases and adds to the vision of human potential. It is, in other words, the ability to communicate an understanding and control of the knowledge exploding all around us. In short, the new pillar is education.

Not long ago the computer arrived as a feared and unwelcomed member of our society. It brought visions of a dismal and frightening machine-dominated tomorrow. Experts, extrapolators, and statisticians promptly began adding statistics to heavily seasoned economic analysis, pouring in generous jiggers of dark speculation, stirring well—and then standing back. By following this recipe it was easy enough to end up with a picture in which, as James Reston puts it, “machines are replacing everything except maybe pretty girls.” Today we are no longer trying to wish away the computer because we have recognized that it is a means of expanding human ability and exploring unknown regions. We now know that without the computer there would be no space programs at Cape Kennedy or anywhere else—and that men would not be able to walk the sky.

But the advent of the computer has presented immense challenges. And one of the greatest has been the hard cold fact we have been least willing to recognize: We are educating our computers faster than we are educating our young people.

Secretary of Labor Willard Wirtz has said that a computer today has the equivalent of a high school education. And it can be educated to do many other things which will tap its full mechanized genius. But our system of educating our young people simply is not keeping step. For while we are in some ways making real strides in improving education in elementary and high schools, we still are not doing enough to prepare our youth to do what computers can never learn to do.

The great challenge in education is not that Soviet universities will graduate three times as many engineers and scientists as American universities during the next five years—not whether we can beat the Soviet educational program—but whether we can meet our own requirements. The issue is not how well we can compete with the Communists, but with ourselves and with time.

Robert Frost once concluded a poem with these lines:

"They cannot scare me with their empty spaces
Between stars — on stars where no human race is.
I have it in me so much nearer home
To scare myself with my own desert places."

It is within these—our "own desert places"—that the real front-line of freedom is today. It is not in the trenches of a Korea or a Vietnam as much as in the classrooms of New York or the jungle schools of Ghana or the remote instruction lean-tos of northeast Brazil that the real fight for freedom is being fought. The basic challenge of our time is how men can remain free; and while the solution may momentarily seem lodged in this or that particular battleground, the real test will be within our own institutions and within our own ability to create a breeding ground for freedom. In Thomas Jefferson’s words: “If a nation expects to be both ignorant and free, it expects what never was and never will be.”

Against this backdrop, let us look at a few significant and sobering facts:

First: Last year one out of three high school students with I.Q.’s of 120 or over did not go to college.

Second: The Pentagon spends more on education and
training for war than all the secondary schools in the United States put together.

Third: The United States commits a smaller percentage of its economic affluence to education than any other industrial nation.

Fourth: Assuming the status quo prevails in terms of opportunity for "all Americans regardless of race," when a Negro baby and a white baby are born side by side today, the white child will have twice the chance to finish high school, three times the chance to get into college, three times as much chance to own his own home.

In practical terms, what do we do about this? How do we assure that we will turn out the kind of citizens we must have in this democracy if we are to bring into being the kind of society and the kind of world we want?

The traditional answer in this country has long been to rely on compulsory education to the age of sixteen. I respectfully suggest that this response has become both inadequate and anachronistic. I submit that it is time-long past time—for serious re-examination of this goal and for asking: Is that really enough?

It is true that even today one-third of our youth does not finish high school. But by the same token, it is also true that two-thirds do conclude their high school studies. And they will then have achieved the education of a computer.

I suggest that this calls for consideration of new goals—including perhaps an additional two years in our compulsory education program.

This idea is by no means novel. Moreover, the vast systems of junior colleges in states such as California and New York are every day bringing it closer to reality. But as yet they have gone no further than making it available on a non-selective voluntary basis. I believe it is time for the next inevitable step forward.

I recognize, of course, that this country is already facing vast educational commitments. Just to stay even we must schedule the building of more college plants during the coming decade than we have built in the past 200 years. Here, as in Alice’s Wonderland, we have to run twice as fast just to stay where we are.

But without a new commitment, without the new prospects for more and better education, we will not merely stand still—we will slip backward. As Professor Alfred North Whitehead put it a little over a generation ago: “Today we maintain ourselves. Tomorrow science will have moved forward yet one more step, and there will be no appeal from the judgment which will then be pronounced on the uneducated.”

Even if our present system of compulsory education became universal, it would not solve tomorrow's problems—and by tomorrow, I mean 24 hours from now. Tradition can no longer provide us with the answers for the world of the future. We must be willing to ask ourselves frankly: “Is the high school graduate of today sufficiently mature to move out into the uncertain and changing world we have created? Will he be ready for the race between freedom and an ignorance the like of which we have never known—the ignorance of the half-learned, the half-schooled, the half-intelligent?” And we must answer the questions honestly and resolve to do what must be done.

But this deals with only a part of our educational problem. We know that with time our cumulative talents will enable us to explore the perimeters of our solar system, expand the boundaries of our civilization, and perhaps even recreate the chemistry of life itself. But what significance will these things have to an Appalachian boy who can hardly speak English and who has no place in the world of systems and cybernetics—or to an Asian child who is at this moment living some 600 years behind us? In our present continents of wealth and oceans of knowledge, what of the “desert places” of the less talented and the less privileged? How do we evolve a more symmetrical world—how do we share with the less talented people

It is not in the trenches of a Korea or a Vietnam as much as in the classrooms of New York or the jungle schools of Ghana or the remote instruction lean-tos of northeast Brazil that the real fight for freedom is being fought.
An academic case in point: Since 1962 the medical schools of the University of Rochester and the University of Lagos in Nigeria have conducted a faculty exchange program. Left, Dr. Harry L. Segal of Rochester confers with two students at Lagos.

...the task of education is not just to communicate what is new at the frontiers of knowledge, but to draw all people in all nations as close to those frontiers as the tools of education can take them.

and the less privileged nations the knowledge we have gained? To me it seems clear that the task of education is not just to communicate what is new at the frontiers of knowledge, but to draw all people in all nations as close to those frontiers as the tools of education can take them.

This brings me to my second point—the possibility of developing new educational devices to help meet the needs of education more effectively. Today the written materials which have always been used for teaching are still the familiar tools. But the geometrical expansion of knowledge has made it necessary that these tools be augmented by newer ones. The industrial worker who has been taught the complex skill of operating his machine may—no matter how talented he currently is at his trade—find his talents obsolete five years from now. How can he be made ready for retraining in a second and perhaps third successive skill?

The same problem is faced even at high professional levels. The average half-life of an engineer, it has been estimated, is now just ten years. Putting it another way, half of the information he will need to know ten years from now is not available to him at this moment. So rapid has the pace of discovery become that even the normal advancement of children from primary school through college becomes hazardous. Much of the specific material they are taught in their early years is outdated by the time their education is complete. Thus, for all of us, specific knowledge must in some way be generalized and become transferable to other disciplines; and education itself must become not so much a defined process with beginning and end, but a continuing part of our lives.

Clearly, in this age, our national objective must be unmistakable—to educate all of our people to the maximum of their ability. And if we can learn how to do these things—to make education a way of life in our country, to educate well both the quick and the slow, to conquer the foreign lands of poverty and ignorance within our own land, to make knowledge move quickly from city to city and from state to state—why cannot we then spread it from country to country, from continent to continent?

The history of the world's newer nations and of its underprivileged people is in a way very similar to the theory of an expanding universe in which different elements travel at different speeds. We tend to think today of political freedom for these developing nations as synonymous with progress—and after freedom, agriculture and industry. But at the outer perimeters of our universe, knowledge is accelerating at a faster and faster rate; thus, a victory for political freedom may prove to be a Pyrrhic victory because those who achieve it may still find themselves living even more centuries behind than they are now—and losing ground each day. If we can solve our own educational problems in this country, however, it may also mean that the hard-won freedom of the developing nations can be given deeper meaning through a system of education that bridges the centuries and brings them into the mainstream of knowledge.

At this critical time of human history, we have the unparalleled opportunity to extend the reach of human beings in all nations and to begin to realize the vision of the true human potential. It is a time foreseen by Ralph Waldo Emerson when he wrote:

"If there is any period one would desire to be born in—is it not the age of revolution, when the old and the new stand side by side and admit of being compared; when the energies of all men are searched by fear and hope; when the historic glories of the old can be compensated by the rich possibilities of the new era?"

"This time like all times is a very good one—if we but know what to do with it."
The Rise and Fall of Lysenko

ERNST W. CASPARI

and

ROBERT E. MARSHAK

To Professors Caspari and Marshak, the career of T. D. Lysenko is a revealing chapter in the annals of Soviet science. Their article is adapted from a somewhat lengthier essay in SCIENCE Magazine and appears with the permission of that publication.

Ernst W. Caspari is professor and chairman of the Department of Biology and president of the Genetics Society of America. On leave this year, he is a fellow at the Center for Advanced Studies in the Behavioral Sciences. Robert E. Marshak is Distinguished University Professor of Physics and chairman of the National Academy of Sciences Advisory Committee for the Soviet Union and Eastern Europe.

Within the last several months T. D. Lysenko, the Russian geneticist, has again been in the news, probably for the last time. He has been removed as director of the Institute of Genetics of the Academy of Sciences of the U.S.S.R.; his institute is being completely re-organized along Western lines; and commissions will be set up to eradicate Lysenkoist doctrine from Soviet schools and colleges. What is the significance of his downfall and what does it reveal about the state of Soviet society and its present leadership?

It is certainly no accident that Lysenko’s exit closely followed Brezhnev and Kosygin’s accession to power, for his fortunes have always been closely tied to support from the top Soviet leadership. Under Stalin, he became both director of the Institute of Genetics and president of the all-powerful Lenin Agricultural Academy. In this dual capacity he was in a position to crush his scientific opponents, and this he proceeded to do with great alacrity and thoroughness.

Historically there are many instances of such attempts to impose an external dogma on science—for example, Galileo’s experience with the Inquisition in Rome in 1616, and the Scopes trial in Tennessee in 1925. But there are few cases in which the chief perpetrator himself has been a scientist seeking to impose his views on an entire scientific discipline in the name of a higher authority (in this case the Communist Party). Furthermore, the
Lysenko affair has been marked by unusually brutal treatment of the opposition and by a conspicuous failure to attain the very objectives that were invoked to justify such treatment.

Just as the Fundamentalists' literal interpretation of the Bible led to the Tennessee law against the teaching of evolution and to the Scopes trial, a literal interpretation of Marx and Engels set the stage for the rise of Lysenko. Marx and Engels published their major works before Mendelian genetics became generally known and at a time when Lamarck's idea of the inheritance of acquired characteristics was still a respectable scientific theory. Indeed, even Darwin had assumed that the Lamarckian mechanism was of importance in evolution. The thesis that the environment can produce physiological and mental changes in man that can be passed on to later generations was embraced by Marx and Engels (great admirers of Darwin), who saw in it a happy device for hastening the achievement of a benevolent Communist society.

By 1925 the Lamarckian hypothesis was being abandoned in the West because the evidence in its favor had proved to be either invalid or faked; moreover, Darwinism had been reinterpreted to exclude the Lamarckian factor in evolution.

Not so in the Soviet Union. Since Marx and Engels were the prophets of the Revolution, their fervent Darwinism (with its associated Lamarckian doctrine) provided the "scientific" rationale for dedicated Communists striving to mold Soviet man into a paragon of virtue, hard work, and social consciousness.

Other factors contributed as well. In 1923 the great Pavlov, whose work on conditioned reflexes in animals had highlighted the importance of environmental influences in behavior, announced that a conditioned reflex in mice was inherited and even advanced in succeeding generations. Although he withdrew this claim when the evidence collapsed, this did not discourage the Lamarckian Marxists.

A Russian scientist who more directly prepared the groundwork for Lysenko was the horticulturist I. V. Michurin (the Russian counterpart of Burbank), whose extensive and in many ways successful empirical work in plant breeding was bolstered by theoretical views which were anti-Mendelian and, in a sense, pro-Lamarckian. Michurin believed (as Darwin did) that "heredity" is diffused throughout the organism and can be modified by many types of environmental influences. This view was in the Lamarckian tradition and was taken over by Lysenko.

Another significant factor was the great need to improve Russian agriculture. In the Western world Mendelian genetics was being used to develop new strains of plants and to increase farm productivity. But the time scale was slow, because advances depended on patient breeding of the proper genetic material and laborious crossing experiments. Impatient, the Soviet government was ready to back a scientist who promised rapid improvement in agriculture. Thus the stage was set for Lysenko.

At that time many active and original geneticists were working in Russia. Some were investigating problems of evolution and gene action in fruit flies; one outstanding group was studying the evolutionary origin of cultivated plants and its application to plant breeding. As a follower of Michurin and a devout Communist, Lysenko began a violent campaign against the Russian school of classical genetics. He derided "Mendelian-Weismannian-Morganian" genetics as passive, "idealistic," and "metaphysical," in contrast to the active, "materialistic," and "empirical" character of his own theory of heredity. He had no sympathy with Mendel's original concept of the gene as a calculating unit designed to describe genetic experiments, nor with the later elaboration of the concept in which genes are viewed as autonomous units governing the inheritance of well-defined characters which cannot be modified by environment. He ignored the fact that, by the mid-1930's, some rather concrete ideas about the molecular nature of the gene had been developed, and claimed that Mendelian genetics was anti-Darwinian, even though modern evolutionists had by that time reconciled Darwin's theory of evolution with Mendelian genetics. Rejecting outright the abundant experimental basis for the Mendelian mechanism of inheritance, he argued that the Mendelian rules are statistical in character; thus, they conflict with Marxist dialectics and cannot be regarded as "natural laws." (Incidentally, this type of argument had been used by Soviet scientists against Western work in quantum physics, relativity theory, theory of the chemical bond, and cybernetics.)

In place of Mendelian theory, Lysenko substituted his so-called "physiological" theory which (following Michurin) assumed that heredity is diffused through the organism, collected in the germ cells, and mixed in the course of fertilization. In this process, Lysenko argued, the weaker germ cell becomes assimilated by the stronger, as in the assimilation of food in nutrition.

In addition, he proposed a theory of the "development of plants by stages," according to which the successive stages in a plant's development can be speeded up or slowed down by environmental conditions such as temperature. If one stage is so altered, he held, later stages also will be changed, thus producing an organism with different physiological qualities - presumably better adapted to the environmental influence in question.

The article on which this report was based appeared in SCIENCE Magazine, July 16, 1965, Vol. 149, No. 3681, Pages 275-278. Copyright 1965 by the American Association for the Advancement of Science.
Finally, he claimed, these environmentally induced changes are transmitted to the progeny and thus result in better-adapted plant lines.

Based on these ideas, extensive experiments were carried out: Seeds were treated with strong environmental agents such as high and low temperatures; the progeny of the treated plants were bred; and spectacular claims for improved plant species were made. But it appears that the experiments did not measure up to expectations and that the slow "Western" method based on quantitative classical genetics has proved superior.

Another line of Lysenkoist experimentation was the production of "vegetative hybrids." If, as was claimed, heredity is diffused through the organism, hybrids could be produced by the union of two organisms (as in grafting one plant on another) just as effectively as through sexual combination. Grafting has long been used in agricultural practice; however, the Lysenkoists claimed that the graft hybrids propagate a combination of characters from the two species through future generations just as sexual hybrids do. In such grafts it is possible, of course, that branches arise with tissues derived from both plants. However, such "chimeras," which have also been observed in the West, have not been found to perpetuate hybrid characters in any experiments carried on outside Russia.

The dubious character of the Lysenkoists' research and their grandiose claims led to a violent controversy between Lysenko and his followers on the one hand, and the Western-oriented geneticists, under Vavilov, on the other. Finally, in 1948, at a meeting of the Lenin Agricultural Academy, Lysenko was declared the victor, and classical genetics was denounced as contrary to Darwinism, Michurinism, and dialectical materialism. Having thus won official support, Lysenko established control over Russian genetics and allied branches of biology. He proceeded to suppress research in classical genetics and to eliminate his opponents—by firing all of them and having his bitterest enemies exiled to Siberia. (Vavilov died in a Siberian labor camp in 1943.) By the time of Stalin's death in 1954, Lysenko had filled every position with one of his followers and had practically destroyed classical genetics in the Soviet Union.

When Khrushchev came to power, the conditions of scientific work began to improve greatly. In the mathematical and physical sciences particularly, many ingredients of scientific freedom were restored: the researcher's freedom to choose the subject of his investigations and to draw conclusions without having to subject them to the arbitrary dictates of a superior power; his freedom to publish his results and to engage in the usual forms of scientific criticism; his freedom to receive the voluminous Western scientific literature; and, to a lesser extent, his freedom to have personal contact with all scientists working in his field. Although these new freedoms were more grudgingly granted to the biological scientists, partly because of Lysenko's continued influence, Soviet biology began to lose its monolithic character. When Lysenko was deposed as president of the Lenin Agricultural Academy, Russia's surviving classical geneticists were allowed to resume their research.

During the Khrushchev period a "cold war" situation prevailed: Lysenkoists and non-Lysenkoists co-existed, but there was little communication between them. In personal contacts with Western geneticists, the Lysenkoists still held the upper hand. Thus, in 1958, twenty-seven Soviet geneticists, both Lysenkoist and non-Lysenkoist,
indicated that they would attend the International Genetics Congress in Montreal. About two weeks before the Congress, several sent their regrets. Finally, eleven persons, all Lysenkoists, appeared. Similarly, at the 1963 Genetics Congress in The Hague, the Russian delegation was exclusively Lysenkoist.

It was symptomatic of the state of Soviet genetics that a Russian delegate to the 1963 Congress confided to Western geneticists that Lysenkoists still denied the existence of genes but were willing to accept the existence of DNA as hereditary materials. More than any other single event, this acknowledgement—that DNA is not an abstract "idealistic" concept but a real molecule playing an important role in heredity—heralded the beginning of the end of Lysenkoism. Such an admission by a Lysenkoist was, of course, a tribute to the remarkable developments in Western genetics during the past couple of decades. Indeed, while Lysenko was imposing his outdated theories on Soviet research, Western biology was entering a golden age, primarily because of the fusion of genetics and biochemistry into the field now called molecular biology.

The triumphs of molecular genetics have been so overwhelming that even Lysenkoists have started to work in the less controversial area of microbial genetics. More to the point, non-Lysenkoist biologists are trying to catch up on Western developments and to establish molecular biology as a field of its own. Unfortunately, the relatively few surviving classical geneticists and the weakness of Soviet biochemistry (weak for reasons of its own) have slowed this process. Thus, recent Soviet journals of biology include a strange mixture of Lysenkoist and Western-influenced papers.

As distinguished members of the Soviet scientific community have become increasingly aware of the accomplishments of Western science, the full measure of the Lysenko disaster has permeated their consciousness. As a result, strong scientific pressures have been building up to curb Lysenkoism and to encourage Western-type biology. About three years ago, while Khrushchev was still in power, the distinguished Soviet physicist Peter Kapitza spoke out against the intrusion of Marxist dialectics into science (with special reference to biology) and the harm which its uncritical acceptance had done to Soviet science. Kapitza's voice did not carry the full weight of the Soviet Academy of Sciences, but it indicated that responsible Soviet scientists were becoming increasingly concerned about the extent to which Lysenkoism had damaged Soviet biology, the plant-breeding program, and agriculture in general.

It remained for the president of the Soviet Academy of Sciences, M. D. Keldysh, to deliver the coup de grace several months ago when he announced Lysenko's removal as director of the Genetics Institute, and stated:

"The exclusive position held by Academician Lysenko must not continue. His theories must be submitted to free discussion and normal verification. If we create in biology the same normal scientific atmosphere that exists in other fields, we will exclude any possibility of repeating the bad situation we witnessed in the past." Keldysh's action and forthright statement suggest that Russia's new political leadership will not permit Communist fanaticism to injure the best scientific interests of the Soviet state.

(Editors note: Since the original publication of this article, the Soviet Academy of Sciences has introduced a new prize for achievements in genetics and plant breeding—named for the once-discredited Academician Vavilov.)

The rise and fall of Lysenkoism form a sad but instructive story. Lysenko's rise was due to an unfortunate combination of circumstances: the philosophical dogma of the Soviet state, with its convictions concerning human heredity; a strong national tradition in empirical plant breeding founded on the Lamarckian approach to genetics; the desire for rapid transformation of Soviet agriculture; and, finally, the presence of a powerful dictator—Stalin—able and willing to throw the full resources of his government behind a specific ideological position. To this potent brew was added an extraordinarily ambitious and ruthless scientific adventurer.

Lysenko's final downfall can be attributed to a continuous relaxation of these factors since Stalin's death. Increasingly, the political and economic tenets of Marxism have been separated from dialectical materialism as the supreme arbiter of all scientific concepts and procedures; Michurinism has been placed in proper perspective; the neglect of classical genetics has been recognized as in large part responsible for the lack of productivity of Soviet, as compared to Western, agriculture; and finally, Khrushchev and Kosygin have been more reluctant than Stalin to use governmental authority to decide scientific doctrine.

The tragedy is that so much precious time has been lost for the biological sciences in Russia. However, once the Soviet Union makes a major decision to develop a scientific area (as it did several years ago in mathematical economics and econometrics), lavish provision is made for laboratories and equipment, Western ideas are widely introduced into the educational system, and no effort is spared to attract talented persons into the new field. Lysenko's removal implies unequivocally that such a decision has been made regarding molecular biology and the biological sciences generally. We can only applaud this decision and state our earnest hope that Soviet biologists will soon take their rightful place on one of the great frontiers of modern science. And without much prescience we can predict that at the next International Genetics Congress in 1968, the non-Lysenkoists will be well represented in the Russian delegation!
Library Expansion

The long-sought expansion of Rush Rhees Library has moved a step closer to reality with the receipt of a $1,275,065 grant from the U.S. Office of Education.

The expansion program—including construction of a major addition and remodelling of the existing building—accounts for the largest single commitment for the River Campus in the $38 Million Campaign.

The project, which will more than double the library's space, will cost about $5.8 million; of this amount, $4.5 million is being sought from private sources through the campaign and the remainder from government agencies.

Loewy Named Air Force Adviser

Professor Robert G. Loewy of the College of Engineering and Applied Science has been named chief scientist of the United States Air Force for one year. Loewy, who will be on leave from the University, will be technical and scientific adviser to the Chief of Staff of the Air Force on plans, programs, and requirements. Before he joined the Rochester faculty in 1962, he was chief technical engineer at the Vertol Division, Boeing Co.

In 1958 he received the Lawrence Sperry Award of the American Institute of Astronautics and Aeronautics, in part for his work in developing a "tilt wing" airplane. The Award described him as "the young man in aerospace engineering who made the greatest contribution to the advancement of aeronautics during the year."

Merger, Anyone?

Top-ranking executives representing forty corporations throughout the United States and Canada tackled one of the most intricate problems of business management in an intensive two-day campus seminar on mergers and acquisitions held last fall.

Sponsored by the College of Business Administration, the seminar was conducted by authorities from the fields of business, education, and government. The blue-ribbon roster of "students" included six corporation presidents, sixteen vice presidents, seven secretaries and treasurers, two board chairmen, and nine directors of planning and acquisition.

Big Names On Campus

Reflecting student interest in bringing "name" speakers to the campus, the undergraduate Outside Speakers Committee came up with a livelier-than-usual array of lecturers for its current series on "The Challenges to Contemporary Society."

Speakers have included Franklin D. Roosevelt, Jr., chairman of President Johnson's Equal Employment Opportunity Commission; Senator Wayne Morse; Dr. Benjamin Spock, whose subject was foreign affairs, rather than child care; and James Farmer, national director of CORE. Additional speakers "of national prominence" are in prospect for next semester's series.

Honors

President W. Allen Wallis has been elected to a five-year term on the executive committee of the Association of Colleges and Universities of the State of New York.

Dr. John D. States, a clinical instructor in orthopedic surgery at the Medical School, is the new president of the American Association for Automotive Medicine.

Wallace O. Fenn, Distinguished University Professor of Physiology and director of the University's Space Science Center, received an honorary doctorate from Belgium's Free University of Brussels.

The international music sorority Mu Phi Epsilon awarded its annual prize for academic achievement to its chap-
this year, the undergraduate Arts Com­
Worcester Music Festival Award to
Young Artists. In addition to $1,500
senior, recently won the first annual
ter at the Eastman School of Music .. ..
Symphony.
appearance as soloist with the Detroit
in cash, the first prize included a guest

Campus Film Fare
L
ike their counterparts on camp­
puses throughout the nation, UR undergraduates have been
evidencing considerable enthusiasm for
the cinema as an art form. In general,
films shown on campus have run the
gamut from Flash Gordon (purveyed
via Campus Flicks) to Federico Fellini
(sponsored by Cinema '62); however,
this year, the undergraduate Arts Com­
mittee awarded a grant to James Lem­
kin, River Campus sophomore, to pro­
duce his own films. Lemkin's initial
productions—three short works titled
_X, The Death of a Volkswagen, and
_Transience—were presented in Strong
Auditorium last fall.

Research Briefs
W
ith some $4,501,000 in con­
tracts from the Atomic Energy
Commission, the University
ranked sixth in dollar volume among
colleges and universities in atomic en­
ergy contracts last year.
Medical School research involving
the measurement of “brain waves” in
babies before birth has been awarded
a three-year grant totalling $136,753
from the John A. Hartford Founda­
tion, Inc. It is hoped that such data can
be used in finding clues to the origin of
certain congenital brain defects.

Professor Rene Millon's archeologi­
cal investigations of the prehistoric
Mexican city of Teotihuacan have re­
vealed that the ancient city was prob­
bly larger than Imperial Rome, so con­
gested that it underwent a drastic urban
renewal program, and so busy that a
network of broad avenues was needed
to handle its traffic. Professor Millon,
who has been commuting between
Mexico and the University's Depart­
ment of Anthropology for the past
several years, is conducting a block-by­
block archeological survey of Teoti­
uhacan under grants from the National
Science Foundation.

New Support for Study of Disease
U
iversity research into psychologi­
cal factors affecting physical
health will receive $1,063,128 from the U.S. Public Health Serv­
cice over the next seven years.
The federal grant will support con­
tinued studies by a Medical School team
whose investigations into the role of
psychological and social factors in
disease began nearly 20 years ago.
Principal investigators are Dr.
George L. Engel, professor of psy­
chiatry and medicine; Dr. William A.
Greene, associate professor of medicine
and psychiatry; and Dr. Arthur H.
Schmale, Jr., associate professor of
psychiatry and medicine.

Last Call for Hawaiian Tour
APRIL 30—MAY 15
The Alumni Federation's 1966 tour includes all­
jet fare, twin-bedded room, 11 days of sightsee­
ing on islands of Oahu, Maui, Hawaii, Kauai, 3
days in San Francisco, most meals, entertain­
ment. Round trip Rochester, $795; lower rates
from Chicago and West Coast. Optional extra
week's stay in California. For details, please use
coupon.

Research Briefs
W
ith some $4,501,000 in con­
tracts from the Atomic Energy
Commission, the University
ranked sixth in dollar volume among
colleges and universities in atomic en­
ergy contracts last year.
Medical School research involving
the measurement of “brain waves” in
babies before birth has been awarded
a three-year grant totalling $136,753
from the John A. Hartford Founda­
tion, Inc. It is hoped that such data can
be used in finding clues to the origin of
certain congenital brain defects.

Professor Rene Millon's archeologi­
cal investigations of the prehistoric
Mexican city of Teotihuacan have re­
vealed that the ancient city was prob­
obly larger than Imperial Rome, so con­
gested that it underwent a drastic urban
renewal program, and so busy that a
network of broad avenues was needed
to handle its traffic. Professor Millon,
who has been commuting between
Mexico and the University's Depart­
ment of Anthropology for the past
several years, is conducting a block-by­
block archeological survey of Teoti­
uhacan under grants from the National
Science Foundation.

New Support for Study of Disease
U
iversity research into psychologi­
cal factors affecting physical
health will receive $1,063,128 from the U.S. Public Health Serv­
cice over the next seven years.
The federal grant will support con­
tinued studies by a Medical School team
whose investigations into the role of
psychological and social factors in
disease began nearly 20 years ago.
Principal investigators are Dr.
George L. Engel, professor of psy­
chiatry and medicine; Dr. William A.
Greene, associate professor of medicine
and psychiatry; and Dr. Arthur H.
Schmale, Jr., associate professor of
psychiatry and medicine.

newsitemofthemonth
U
ndisputed winner of the Uni­
versity's non-existent award for
the most unusual news release
of the year was Don Grossfield of the
Office of Public Relations, who pro­
duced the following:
"A dramadancemime version of
james joyces finnegans wake that won
the vernon rice award as the best off­
broadway play of the 1963 season will
be presented in a performance open to
the public at the university of roche­
ten on november 14 at 8 pm in strong audi­
torium on the river campus by the origi­
inal fivemember new york cast led by
dancedramatist jean erdman who wrote
the play entitled the coach with the six
insides to add a further dimension to
joyces exploration of the dreams in the
mind of a dublin tavernkeeper by tak­
ing advantage of intricately staged
scenes accompanied by a trio of musi­
cians whose unusual score helps create
a peculiar atmosphere that allows the
five actors to assume a wide variety of
characters and attitudes that abound in
the mind of the dreamer without ad­
hering to the usual barriers of space­
timeandlanguage.
"The coach in the title refers to a
coffin."
A rough translation may be obtained
from the author.

Retirees
T
two long-time members of the
University community—Profes­
sor William S. Larson of the
Eastman School of Music, and Mrs.
Mildred Smeed Van de Walle, '22, alumni recorder—retired last fall.
Professor Larson, who has been
named Professor of Music Education,
Emeritus, was chairman of the East­
man School's Department of Music
Education for 36 years.
protest, in spite of gruesome risks. I suggest that Dr. Hewes would profit by "investigations based on actual true facts," To the editor:
Continued from page 3

Tuition, Student Aid To be Increased

T o provide "the quality of education our students expect and deserve," the University will raise tuition this fall, President W. Allen Wallis has announced.

In the River Campus colleges of Arts and Science, Business Administration, Education, and Engineering and Applied Science, undergraduate and graduate tuition will go from $1,800 to $2,000 a year. At the Eastman School of Music, it will increase from $1,500 to $1,750. At the School of Medicine and Dentistry, tuition for graduate students (studying for M.S. and Ph.D. degrees) will go from $1,800 to $2,000 a year; tuition for undergraduate students in the Department of Nursing, from $1,100 to $1,250 a year. There will be no increase in tuition for candidates for the M.D. degree. At University School, tuition will be increased by $5 per credit hour.

In a letter to students and their families, President Wallis emphasized that the University will appropriate additional financial aid for students so that the tuition increase "does not prevent any student from continuing his education at Rochester."

Less Stress On Grades

S tarting this semester, undergraduate students in the College of Arts and Science may elect to receive a grade of Satisfactory or Fail in one course each semester.

The new system, recently authorized by the faculty of the College, is designed to reduce the pressure for grades and to enable students to become "more venturesome" in their choice of courses, according to Dean Kenneth E. Clark.

It is being initiated as the result of studies made by two faculty groups of the College—the Committee on Academic Policy and the Committee on Improving Instruction—and the undergraduate River Campus Committee on Educational Policy.

Associate Professor Robert G. Sutton, chairman of the Committee on Academic Policy, termed the new grading system "an effort on the part of the faculty to lessen the stress on grades as a means to an end." He said it is designed "to encourage students to elect courses in which they are interested but which they believe might be difficult for them."

Under the four-course system on the River Campus, undergraduates customarily take four courses each semester; of these, only one can be graded under the new system and the rest will be graded according to the traditional marking system—A, B, C, etc.

Professor Vincent Nowlis, chairman of the Committee on Improving Instruction, said the reduced emphasis on grades "hopefully will motivate the student to explore areas which he might avoid if he were essentially interested in maintaining his grade point average. It allows him to become involved in independent research or honors courses which he might otherwise shun. It permits him to have the experience of learning the essential core of a course without the corrupting feature of 'grubbing' for a grade."

Nowlis noted that it has been found that students work as hard in courses under systems like the new Rochester plan as they do under traditional grading systems. However, he cautioned faculty members: "Let the poor teacher beware in a system of this sort because there is evidence that students who choose this option cut classes frequently if the course provides too little educational challenge."

RE:VIEWpoints Continued from page 3

postscript on Perkins

To the editor:
In connection with the recent Presidential Citation awarded Professor Dexter Perkins, as reported in the June/July 1965 issue of the Review, the following item may be of passing interest:

"On every Sunday morning at ten o'clock in Gannett House, Dr. Dexter Perkins, Professor of History at the University of Rochester, and formerly Captain, United States Army, Intelligence Service, on duty for the Peace Conference, lectures on social, economic, political and international problems of the present. Dr. Perkins has won a reputation as an authority who is at once a sane and a fearless commentator on current events. His Sunday morning lectures are crowded, hearers coming from all parts of the city and from many different churches. Our church is fortunate in having such an able member to take charge of its adult class; and liberals who are not already availing themselves of the opportunity should become regular attendants upon these lectures."

This item appeared in the Directory of the Rochester Unitarian Church for 1920. . . .

Sincerely yours,

WILLIAM H. PEASE, '55G
Department of History
University of Alberta
Dr. George L. Engel is a professor of psychiatry and medicine at the University Medical School and a teacher and scientist of considerable distinction. He is also an inveterate doodler—in his office, at conferences and staff meetings, at luncheons and lectures.

As yet the latter activity does not seem likely to overshadow Dr. Engel's scholarly achievements (a note on one of his major professional interests appears on Page 24). Nevertheless, his drawings have attracted a growing circle of admirers at the Medical School and elsewhere; in fact, they recently became the subject of a one-man show at the Medical School Library.

Originally these visual byproducts of Dr. Engel's daily activities wound up in his wastebasket; however, when he discovered that students and colleagues were retrieving them and compiling personal collections, he began to amass his own file.

Of the sampling shown herein, those on the opposite page represent early Engel; the others are more recent works and were among the drawings displayed in the Medical Library show which, not incidentally, was entitled "Strictly Unconscious." Dr. Engel offers no explanation for the evolution from the tiny, scurrying figures of his earlier period to the statelier creations which typify his later work.

Readers are invited to provide their own captions.
Some of Dr. Engel's creations seem to draw their inspiration rather directly from his professional interests. The larger drawing on this page, for example, emerged during a meeting on child psychiatry; the smaller one, from a session which dealt with concepts of disease.
To Mark a Decade

IN HONOR OF the tenth anniversary of the All-University Symphony Orchestra, Director Ward Woodbury, '45&'54GE, programmed a fall concert that brought back to the campus Metropolitan Opera star William Dooley, '54, as soloist in the Rochester premiere of "This Sacred Ground" by David Diamond, '37E. Diamond, Woodbury, and Dooley (above, left to right) were among the guests at a reception for the Orchestra.

Ancora un poco più mosso (♩=72)

Four-score and seven years ago our

Child's Chorus:

Four-score and seven years ago our

S.:

Four-score and seven years ago our

A.:

Four-score and seven years ago our

T.