



VOL 6 NO 25 Pacific Lutheran University April 10, 1969

President Mortvedt Resting Comfortably After Heart Attack

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President Mrtvedt is resting comfortably and his condition is satisfactory, according to reports from the cardiac care center at Tacoma General Hospital Wednesday morning.

Dr. Mortvedt suffered a heart attack in his home late Monday night and was hospitalized at 1:30 Tuesday morning. He was placed immediately in the hospital's new intensive care unit for heart patients.

The effect of the coronary upon the president will not be known for a few days. His mind is clear, his speech has not been effected and there seems to be no evidence of paralysis.

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Lasansky's "El Cardenal" - 1964

Famous Printmaker To Receive Honorary Doctor Of Fine Arts

See story pages 4-5

ROUNDTABLE

CALVIN KNAPP (music) was a busy man in Wenatchee this week. . . Monday thru Wednesday he listened to over 120 student pianists as adjudicator for the Wenatchee chapter of the Washington State Music-Teachers Association. . . MRS. JOHN LARSGAARD (wife of U. chaplain) underwent extensive surgery in Tacoma General Tuesday, April 1. . . she went home last Sunday and is making a good recovery. . . MRS. MARK ANDERSEN (nursing) is at the University of North Carolina (Chapel Hill) this week as one of 70 nursing educators from around the nation invited to the National Family Planning Conference for Nurse Educators. . . DR. LYNN STEIN (ed.) underwent minor surgery March 31. . . he is coming along well and is on the job this week. . . WELCOME to ALICE ROBERSON, new secretary to ROBERT MENZEL in the CHOICE office. . . CHOICE, by the way, is now located in Memorial Gymnasium and the extension is 328. . . DR. RONALD JORGENSON (ed.) gave a paper at the national convention of personnel and guidance people in Las Vegas last week. . . also attending from PLU were Dr. DANIEL LEASURE (v.p.-student affairs) and DR. PHILIP BEAL (dean of men). . . JAMES VAN BEEK (fin. aids) and RONALD COLTOM (admissions) were in Gearhart, Ore. April 3-5 for meetings of the Pacific Northwest Independent Colleges Conference of Admissions Officers. . . congratulations to COLTOM who was elected secretary of the organization. . . DR. DONALD FARMER and DR. LOWELL CULVER (pol. sci.) attended the Western Political Science Convention in Honolulu, Hawaii, April 3-5. . . representatives from 13 western states attended the convention. . . DR. JOSEPH LOWE (pol. sci.) is visiting Boston University and Washington D. C. to obtain materials for building up the PLU Far Eastern Studies collection. . . Dr. and Mrs. Peter Harstad and family spent the Easter vacation visiting the Harstads and HERZOGS (math). . . Dr. Harstad, grandson of PLU founder Bjug Harstad, is Associate Professor of History at Idaho State University. . .

FOR SALE OR RENT: 4 Bedroom house on large lot. Contact John Herzog ext. 361.

Retiring Faculty Members To Be Honored By PLU

Five retiring faculty members will be honored at a special dinner in Chris Knutzen Fellowship Hall Thursday, May 1, at 6:30 p.m.

They are Dr. Gunnar Malmin, Dr. O. M. Jordahl, Dr. Erich Knorr, Dr. Vernon Utzinger and Frederick Newnham.

Dr. Malmin, professor of Greek and Latin, came to PLU (PLC) in 1937. He served as director of the Choir of the West for 26 years and head of the music department before assuming his present position.

Dr. Jordahl, professor of physics, arrived at PLC in 1940. He was head of that department for many years.

Dr. Knorr, professor of sociology, was formerly head of the sociology department and dean of the school of arts and sciences. He began his work at PLC in 1949.

Both Utzinger and Newnham came to PLC in 1950. Utzinger is presently professor of speech and formerly was director of the school of fine arts.

Newnham, a nationally-known baritone soloist, is presently associate professor of music at PLU.

Everyone in the university community is welcome to the event, as well as alumni and friends. Tickets must be purchased in advance at the Information desk. They will be on sale April 14-23.

The dinner is sponsored by the PLU social committee.

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Would Like to Rent: Home for the summer and school year 69-70. If you have such a home available or know of such a situation, please contact Steve Kvinsland, Ext. 341 Foss Hall.

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PLU Earns Honors At Pi Kappa Delta Tourney

Pacific Lutheran University earned its seventh straight superior sweepstakes rating at the 26th Pi Kappa Delta forensics tournament in Tempe, Ariz., March 31-April 4.

Extending a string of sweepstakes awards that began 14 years ago in the bi-annual event, PLU was among the top 18 PKD chapters among more than 100 in competition.

Harry Wicks, a senior, rated a superior rating in oratory, one of the top five per cent in the competition. Wicks and Barbara Thompson, a junior, rated excellent in championship division debate. Jim Collins, freshman, and Pattie Cowell, sophomore, also ranked excellent in debate.

Cathy Collins, junior, rated excellent in interpretive speaking in spite of the forfeit of one round of competition due to illness. Other excellent ratings were achieved by Lynn Moody, junior, and Miss Thompson in extemporaneous speaking.

More than 1000 forensics students from throughout the nation were entered in the tournament at Arizona State University.

Theodore O.H. Karl, PLU team coach and head of the university's department of speech, presided at the PKD convention to close out a two-year term as president of the national forensics honorary.

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RANDY ABERNETHY TO OFFER SENIOR ORGAN RECITAL

A complimentary senior organ recital will be given by Randy Abernethy Sunday afternoon, April 13, at 4 p.m. in Eastvold Auditorium.

Abernethy will perform works by Hindemith, Bach and Cesar Franck

A reception in the faculty lounge will follow the concert.

VIOLINIST, PIANIST FEATURED DURING FRIDAY NOON MUSIC

This week Friday Noon Music will feature two outstanding music majors: Dalwyn Olberg, violinist and pupil of Mrs. Ann Tremaine, and Jill Farver, pianist and pupil of Mr. Calvin Knapp.

Dalwyn will perform two Sonatas for violin and piano by Mozart and Cesar Franck and a set of two compositions by John Field and Von Wever, "Waltz" and "Country Dance".

Jill will perform the Bach Tocaata in E Minor and Rondo in A Minor by Mozart.

This program will be a very exciting one and a most relaxing and pleasant way to start the week-end. As usual the program will be held in Xavier Auditorium at 12:30 p.m.

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Faculty Wives Plan Annual Spring Luncheon

Faculty Wives of PLU will hold their annual spring luncheon at the Lakewood Terrace Restaurant Saturday, April 26, at 12:30 p.m.

Reservations are now being taken for the event to be held in the Colonial Room. The program will include a portion of the musical "Camelot" performed by university students.

A choice of menu includes Trio Salad (Seafood-Turkey-Fruit), dessert and beverage OR mixed greens with Italian dressing, beef sirloin tips stroganoff, rice pilaff, rolls, dessert and beverage.

Total price of the luncheon is \$2.60 including tax and gratuity. Deadline for reservations is April 23.

Reservations may be made with the following committee members: Anita Christian, LE 1-1539; Judy Kvinsland, LE 1-6900 ext. 341; Lane Leasure, JU 4-3251; Charm Van Beek, LE 1-2216 or Florence Vedell, GR 5-3164.

Tickets may be purchased at the door.

PLU Honors Printmaker Lasansky

Mauricio Lasansky, usually considered the nation's foremost printmaker, will visit PLU Thursday, April 17, to receive an honorary Doctor of Fine Arts degree and to present six of his prints to the university.

As founder and chairman of the department of graphic arts at the University of Iowa, Lasansky heads what has been described by Time magazine as the "most influential graphic arts workshop in the world."

One of Lasansky's former students, Dr. Glen Alps, will speak at the special 9:50 a.m. convocation honoring Lasansky to which the public is welcome. Alps is chairman of the University of Washington printmaking department and is recognized as the dean of Northwest printmakers.

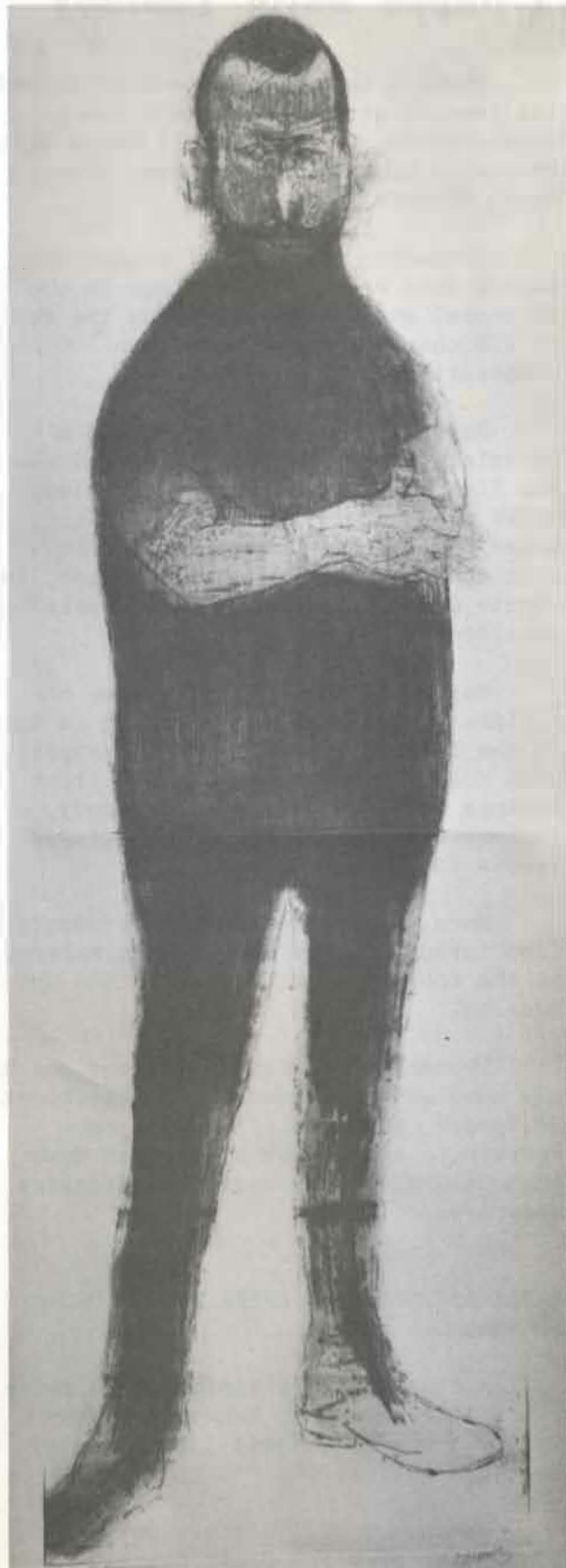
Following the program Lasansky will formally present his prints to the university in a ceremony at the Robert Mortvedt library. The prints will become a part of the permanent university collection.

The Argentina-born printmaker will also be honored at a noon luncheon in Chris Knutzen Hall and a private Tacoma Art Museum reception Thursday evening.

The Lasansky prints donated to PLU are intended to represent his development as an artist over the past three decades. The selection includes one



Firebird - 1953



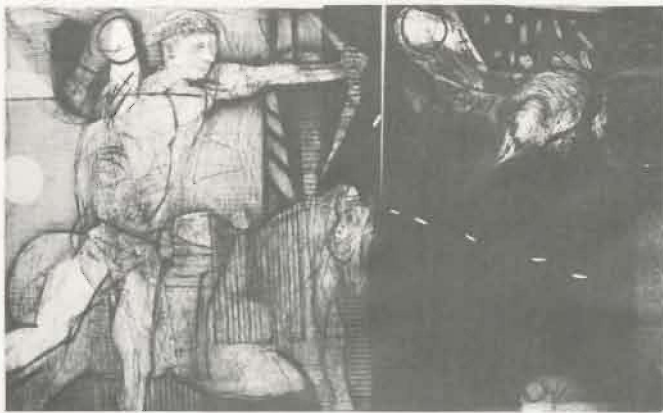
Self-Portrait - 1959

print from the '40's, three from the '50's and two from the '60's. They include a 66-inch self portrait, created in 1959.

Lasansky is known throughout the United States for his controversial series of 30 "Nazi Drawings," exhibited from coast to coast in 1967. They were displayed at the Tacoma Art Museum in September and October of that year in conjunction with a showing at PLU.

His workshop in Iowa City is often considered the printmaking capital of the U.S. Hundreds of professional artists and students have been influenced by his work, which has been described as Goyarsque in its sense of nightmare.

Born in Buenos Aires in 1914, Lasansky came to this country in 1943 on a Guggenheim fellowship. In 1945 he was appointed a visiting lecturer to create a graphic arts department at Iowa U. Three years later he was full professor and in 1952 became an American citizen.



Sagittarius - 1955



Sol Y Luna - 1945



Gregorian Chanter - 1968

Some of his early prints reflect the same emotional quality found in the German expressionists. Later he flirted with cubism and surrealism, somewhat influenced by Picasso. "But my great teacher," he says, "was the Depression. There were lots of ugly things then."

A Lasansky scene, according to art critics, can be fervish with clashing lines and spinning faces, or one lonely figure may look up to stare starkly into space. Either way there is always an air of mourning. The world that Lasansky pictures is really two: the one that is perpetually dying and the other that must watch and grieve.

Beginning almost singlehandedly, he has helped raise printmaking from the status of a minor art to that of a major one.

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GENDA TO HEAD
CENTER FOR ECONOMIC STUDIES

A Center for Economic Studies sanctioned by the Joint Council on Economic Education in New York City has been established at Pacific Lutheran University under the direction of Prof. Ronald W. Genda.

An outgrowth of the American Economy Program which began under Genda's direction at PLU a year ago, the center will concentrate on courses for teachers in economic education, civic activities relating to the program, material supply and research.

According to Genda, the center's major objective is to raise the level of economic understanding in the Pacific Northwest. "In order for the youth of this area to become useful citizens of tomorrow, we believe it is necessary for them to become familiar with the principles of economics and the operation of our economic system," he said.

Application and understanding of the principles of economics are also important, he emphasized.

Center activities will be geared to both youth and adults. Young people will be reached in cooperation with the local school districts while meeting adult needs will be undertaken through civic groups, churches and other agencies.

LIBRARY STAFF REQUEST

Evenings and Sundays are prime hours for our students' use of the Library. In addition more and more high school students are coming to the Library during these same hours. This latter group we shall seek to deter from coming at these times; and not at all unless they have purchased an associate membership.

For this and other reasons we request (1) that children of the faculty refrain from coming to the Library, evenings or Sundays, (2) that when they do come it be strictly for work and not for social outlet, and (3) that children twelve or under shall be accompanied by a parent.

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PLU Establishes Joint Communications Committee

A Joint Committee on All-University Communications has been established at PLU as the result of a suggestion by the Board of Regents Committee on Social Activities.

Purpose of the committee is to enhance communication between students, faculty, administration, alumni and the Board of Regents.

No chairman has been selected. Rather, a concept of team workmanship has been proposed.

Included on the committee are two members of the Board of Regents: Mrs. Jerrold Moilien and Rev. Theodore Brueckner; two members of the administration: Dr. Richard Moe and Dr. Daniel Leasure; two members of the faculty: Dr. Jane Williamson and Dr. Peter Ristuben; and four students: Steve Morrison, David Vold, David Lee and Barney Petersen.

BIRTHDAYS

Lillian Mohr	April 7
G. Malmin and Muriel Garner	April 9
Paul Hartman and Grace Blomquist	April 10
Emma Curry and Stanley Vikesland	April 11
Richard Alseth	April 12
Lucille Giroux	April 14
Ken Dunmire	April 16
Alice Chambers	April 18
Gundar King and Ann Lee	April 19
Haroldine Reeves	April 20

PLU Netters, Golfers Win Matches

PLU WINS NWC TIPOFF GOLF TOURNEY

PLU won the Northwest conference tip-off golf tournament with a 308-stroke aggregate total for four players.

Willamette had 314, Lewis and Clark 318, Linfield 320 and Pacific 324.

PLU's Jay Robinson was medalist with a par 72 at McNary Golf Club. Also for PLU: Rick Alflen 78, Rick Nelson 78, and Bob Iverson 80.

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PLU NETTERS SPLIT PAIR

Knight netters split a pair of contests during the first week's action.

Coach Rich Alseth's squad squeaked past Willamette 4-3 on March 25, picking up two of five singles matches and both doubles efforts.

Jim Sheets and Kelly Gerke were singles winners. Sheets teamed with Dave Soderland and Dave Beam and Mike Benson combined for the doubles victories.

In a non-conference meet with the University of Idaho, Dave Beam was the only PLU winner in nine matches.

Negstad Earns NSF Fellowship

Recently the National Science Foundation released the names of students who have been awarded Graduate Fellowships in the sciences, mathematics, and engineering for the 1969-70 year. It also published a list of the individuals who have been accorded Honorable Mention, i. e., judged deserving of NSF Graduate Fellowship support if additional funds were available. Included in the latter category is senior Paul Negstad, for whom congratulations are certainly in order. It is of interest to note that Paul's cumulative gpa at the present time is 3.95.

KNIGHTS DEALT DIAMOND DUMPINGS

Inconsistent pitching, weak hitting and only average defense doomed the Pacific Lutheran University Knights to four losses in their first four conference and season baseball games.

Joe Broeker's nine was stopped by Willamette 10-7, Lewis and Clark 11-2, and Linfield 4-0 and 3-1.

Among the regulars, only Jim Flatness (.400) and Bill Ranta (.300) were consistent for the Lutes. Al Fruetal and Bill Tye provided the power with three RBI's apiece.

On the mound, sophomore southpaw John McLaughlin went the distance in the first Linfield game, giving up only one earned run but succumbing to a shaky defense and weak support.

Another sophomore, John Polzin, pitched six strong frames of relief, giving up only one earned run.

PLU MEN SKIERS PLACE THIRD IN OREGON MEET; WOMEN FOURTH

PLU men skiers placed third and the women's team placed fourth Sunday in the University of Oregon Invitational Ski Meet at Batchelor Butte.

The Knightmen scored 248.1 behind Oregon's 278.7 and Sierra College's 271.3. Oregon State women picked up 292.3 points to win with PLU finishing with 152.2.

Jan Lennox finished ninth in women's slalom and 12th in women's downhill. For the men, John Larsen and Kobey Kemple finished 15th and 16th in downhill, while Ron Moblo and Kemple were 16th and 17th in slalom.

Knight skiers close out the season this weekend when they host the Daffodil Cup races with the University of Puget Sound at Crystal Mountain.

KPLU-FM Gets Massey Lectures

PAMPHLET DESCRIBING HEW
PROGRAMS AVAILABLE

University Radio KPLU-FM, through its affiliation with the Canadian Broadcasting Corporation, has recently acquired the 1969 Massey Lectures "The Politics of the Family" featuring Dr. Ronald D. Laing.

Dr. Laing, a noted British psychiatrist, has for many years engaged in intensive studies of various kinds of families. His overview of the power plays within the family and the family within society exposes a radical isolation of spoken and unspoken rules which govern individual socialization and help or hinder growth. Dr. Laing attempts to show how families, consciously or unconsciously, create complex patterns of relationships that make the ties that bind or the binds that tie.

Further details on the five half-hour programs will be forthcoming as air time for the series is cleared.

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A recent publication put out by the Office of Education - U. S. Dept. of Health, Education and Welfare - describes all of the programs, institutes, fellowships and part-time academic year programs supported under the Education Professions Development Act. A brief description of each of the several hundred varied programs is provided together with information regarding the criteria required for admission into the program. Anyone who has considered developing a proposal for some kind of special institute, workshop, or other special effort for teachers is encouraged to review this pamphlet in order to gain some insights into what is currently being funded by the U. S. Office of Education.

The pamphlet is in the Office of the Academic Deans.

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WITH THIS RING

...a program of appropriate wedding music and featuring bridal gowns and attendant gowns from NORDSTROM BEST.



This year's program will consist of three service settings. The first will be a morning setting emphasizing contemporary organ music and vocal solos. The second will be an afternoon garden setting featuring a string ensemble, a brass ensemble, and a harp solo. For the last setting, a formal evening candlelight ceremony is planned.

In addition to the music presented, the program will include an article on what is appropriate for your wedding, how to choose your pre-wedding and wedding music, and a list of more appropriate music.

Following the program will be a reception with displays of flowers, a cake, music, and the many different styles of wedding invitations that are available.

Presented by Epsilon Sigma
Chapter of Mu Phi Epsilon.

Admission--\$.50

**April 16th
8:15 P.M.**

**Eastvold Chapel
Pacific Lutheran University**

SPECIAL BULLETIN # 6

NEW NSF PROGRAM FOR UNDERGRADUATES

The National Science Foundation has released the following announcement which we forward to you as an advance "alert" to permit you to begin thinking about this new program:

The National Science Foundation has established a Pre-Service Teacher Education Program (UPSTEP), to improve the programs of undergraduates who plan to become elementary or high school science teachers.

The new program will build on the Foundation's experience with a small number of trial projects, currently under way, oriented toward pre-service teacher education. It will emphasize a balance between knowledge of subject matter and pedagogy, greater skill and experience in developing and testing course materials, and early direct involvement in teaching.

The program will be administered by the Foundation's Division of Undergraduate Education in Science. Dr. Donald C. McGuire, a member of the Foundation's staff since 1962 and program director for the Undergraduate Research Participation Program since 1966, has been appointed program director for the new program. Dr. McGuire received his Ph.D. in Genetics at the University of California at Davis and is a member of Phi Beta Kappa.

A brochure containing suggestions for submission of proposals is being prepared and is expected to be available in late spring. Institutions eligible to submit proposals under the program are four-year colleges and universities that have, or are actively planning, elementary or secondary school teacher programs in the sciences.

Source: Higher Education and National Affairs

NSF Program To Aid Student Who Plan To Teach Science

The National Science Foundation announced March 18 establishment of the Pre-Service Teacher Education Program designed to improve college and university programs for undergraduates who plan to become elementary or high-school science teachers. NSF said the new program will build on the foundation's experience with a small number of trial projects oriented toward pre-service teacher education. It will emphasize a balance between knowledge of subject matter and pedagogy, greater skill and experience in developing and testing course materials, and early direct involvement in teaching.

The program will be administered by the foundation's Division of Undergraduate Education in Science. Program director will be Donald C. McGuire, a member of the NSF staff since 1962 and currently program director for the Undergraduate Research Participation Program.

A brochure explaining the program in detail is to be available in late spring. Institutions eligible to submit proposals are four-year colleges and universities that have, or are actively planning, elementary or secondary school teacher programs in the sciences.

Schedule of NSF Programs for Education in the Sciences—Calendar Year 1969

This consolidated table presents important time-schedule information concerning NSF programs for education in the sciences. It is intended as a convenient reference for: (1) individuals applying for fellowships and (2) institutions submitting proposals for the conduct of all other listed programs and projects. Award announcement dates are approximate and on occasion may be somewhat later than the dates indicated.

INFORMATION FOR FELLOWSHIP APPLICANTS AND INSTITUTIONS

PROGRAMS	Program Announcement Dates ¹	Application Closing Dates	Award Announcement Dates	Pertinent Publications ²
FELLOWSHIPS				
Graduate	October 1969	December 5, 1969	March 15, 1970	F 69-G-4
Postdoctoral (Regular)	October 1969	December 8, 1969	March 15, 1970	E 69-G-3
Senior Postdoctoral—Suspended				
Science Faculty	August 1969	October 6, 1969	December 8, 1969	E 69-G-1
Senior Foreign Scientist	Open	March 31, 1970	Periodically	E 69-G-5
North Atlantic Treaty Organization (NATO) ³				
Postdoctoral	July 1969	October 3, 1969	November 24, 1969	E 69-G-2
Senior	Open	March 31, 1970	Periodically	F 69-G-7

NOTE: Because the dates above are subject to change, prospective applicants should consult specific program announcements for exact final dates.

INFORMATION FOR INSTITUTIONS SUBMITTING PROPOSALS

(NOT for Individuals Applying for Participation)

PROGRAMS	Program Announcement Dates ¹	Proposal Closing Dates	Grant Award Dates	Pertinent Publications ²
GRADUATE TRAINEESHIPS	August 1969	October 17, 1969	February 15, 1970	E 69-G-6
ADVANCED SCIENCE EDUCATION PROGRAMS				
Advanced Science Seminars	February 1969	June 15, 1969	November 15, 1969	E 68-G-10a
Special Projects in Graduate Education	Open	Open	Open	E 66-G-10a
Public Understanding of Science	Open	Open	Open	E 66-G-10p
COLLEGE TEACHER PROGRAMS				
Academic Year Institutes for College Teachers, 1970-71	March 1969	June 1, 1969	October 20, 1969	E 69-U-6
Short Courses and Summer Institutes for College Teachers, 1970	March 1969	June 1, 1969	October 20, 1969	E 69-U-6
Research Participation for College Teachers, 1970	March 1969	June 1, 1969	October 20, 1969	E 69-U-6
In-Service Seminars for College Teachers, 1970-71	March 1969	June 1, 1969	October 20, 1969	E 69-U-6
UNDERGRADUATE EDUCATION PROGRAMS				
Undergraduate Research Participation	May 1969	September 8, 1969	December 19, 1969	E 69-U-2
Instructional Scientific Equipment	October 1969	January 30, 1970	May 15, 1970	E 68-U-3
Science Curriculum Improvement Program	Open	Open	Open	E 68-U-7
Special Projects (Undergraduate)	Open	Open	Open	E 68-U-8
COLLEGE SCIENCE IMPROVEMENT PROGRAMS				
Individual Institutional Projects	Open	Open	Open	E 68-U-10
Interinstitutional Projects in 4-Year Colleges	Open	† February 15, 1969 † October 15, 1969	† June 1, 1969 † January 15, 1970	E 68-U-10
Cooperative Projects for 2-Year Colleges	Open	† February 17, 1969 † October 15, 1969	† May 1, 1969 † January 15, 1970	F 68-U-10
PRE-COLLEGE EDUCATION PROGRAMS				
Summer Institutes for Secondary School Teachers, 1970	March 1969	† May 1, 1969 ⁴ † July 1, 1969 ⁴	November 20, 1969	F 69-P-2
Summer Conferences for Secondary School Teachers, 1970	March 1969	October 1, 1969	November 25, 1969	E 69-P-2
Academic Year Institutes for Secondary School Teachers, 1970-71	March 1969	July 1, 1969	October 15, 1969	F 68-P-3
In-Service Institutes for Secondary School Teachers, 1970-71	September 1969	† December 1, 1969 ⁴ † December 15, 1969 ⁴	March 25, 1970	E 68-P-6
Research Participation for High School Teachers—Suspended				
Cooperative College-School Science	April 1969	August 11, 1969	December 9, 1969	F 69-P-22
Special Projects in Pre-College Science Education	Open	Open	Open	
Course Content Improvement (Pre-College)	Open	Open	Open	E 66-P-25
Student Science Training Program (Pre-College)	April 1969	August 25, 1969	December 9, 1969	E 68-P-21
Supplementary Science Projects for Students	Open	Open	Open	

¹ Date application materials are available; also opening date for receipt of applications or proposals.

² In most instances the publications will not be available before the Program Announcement Dates appearing on this schedule.

³ Programs administered by NSF for U.S. citizens at the request of the Department of State.

⁴ Closing dates: May 1 for proposals requesting multi-term support; July 1 for all others.

⁵ Closing dates: December 1 for renewal of multi-term support; December 15 for all other proposals.

NOTE: Additional copies of this schedule may be obtained by addressing requests to Operations Unit, Office of Associate Director (Education), National Science Foundation, Washington, D.C. 20550.

MORE AND MORE SCHOOLS TRY 4-1-4 PROGRAMS

Source: Chemical & Engineering News, March 24, 1969

January has become a very special month in more and more colleges and universities across the country. In fact, educators and students are beginning to look at January as the most exciting part of the academic year. By a very simple change in the traditional two-semester school year as many as 80 institutions enable a student to study intensively a subject of his choice for the entire month of January without competing demands for his time from any other course work.

This period is preceded and followed by a four-month semester of formal course work, and thus, the overall program is often called a 4-1-4 program, denoting the sequence of months in the academic schedule.

Details of the January term vary from college to college, as does the name of the term itself-for example, it's the winter term, the interim, the intersession, the Jan Plan. Most of the schools require students to participate in at least one January term, and many require participation all four years. Grading is normally on a pass-fail basis, partially to encourage students to venture outside their major fields. Most schools give no credit applicable toward graduation.

To chemistry undergraduates the January term offers a chance to become oriented to research early in their college education, or in the case of some upperclassmen, to continue research projects carried over from the fall semester, says Dr. Richard W. Neithamer. He is chemistry department coordinator at Florida Presbyterian College, St. Petersburg, which claims to have been the first school to offer a 4-1-4 program when the college opened in 1960.

Dr. James F. Skinner, assistant professor of chemistry at Williams College, Williamstown, Mass., which has had the 4-1-4 program for two years, feels that the January term can be a particularly successful way to introduce beginning students to science and research. Many potential science students lose interest in the field during regular introductory courses, he says, because they are given little opportunity for independent thought.

For example, Dr. Skinner notes, laboratory experiments test the student's ability to follow instructions but frequently do not stimulate the inquisitive student to ask questions. In the January term, however, the beginning student soon learns that when there is no laboratory manual he must work out procedural details with his supervisor. "In one month," he says, "the student can learn more about the day-to-day problems encountered in a scientific research program than in a full year of carefully planned and documented experiments."

Only the interests and imaginations of the students and faculty limit the variety of projects that may be pursued in January terms. Some colleges offer a catalog of subjects for the January term, especially in cases where faculty members have special interests or research grants in specific areas. Other colleges accept suggested topics from interested students. Students may elect group programs, individual projects, or interdisciplinary programs. And the student may even go off campus for study at another college or in a foreign country.

At Oberlin College, Oberlin, Ohio, which held its first January term this year, one of the projects offered by the chemistry department was a group study of pollution. Members of the interdisciplinary group of students and faculty in chemistry, biology, economics, and political science studied, for example, local industrial water and air

pollution, an atomic absorption photometric technique for determining metal contaminants in river water and bacterial growth in storm sewers as a result of sewage overflow.

A senior chemistry major at Oberlin, David Sherertz, who admits to an intense interest in computers, used the January term to continue a senior honors research problem he had already started in the fall semester. His project involved computer programs in normal coordinate analysis of infrared spectra of fluorinated cyclopropanes.

Asked his opinion of the January term, Mr. Sherertz tells C & EN: "It's great to work on an activity of one's interest with no academic pressure to produce results." Describing his first winter term as stimulating and very worthwhile, he applauds the increased accessibility of faculty and the help in shaping future interests.

Mr. Sherertz's enthusiasm for the January term is apparently shared by nearly all the students and faculty at Oberlin, according to chemistry department chairman Richard Schoonmaker. Much of the success of the term, he says, was due to the college's stressing an atmosphere which made for, he says, "an informal community of scholars exchanging ideas."

Much the same reaction to the January term comes from Tufts University, Medford, Mass., after its first experience with the program this year, and from Colgate University, Hamilton, N.Y., now in its fifth year of the 4-1-4 program. In fact, one Colgate spokesman says, the independent research program during January is one of the recurring reasons freshmen give for coming to Colgate.

The concept of January as a period of intensive study extends not only to students but to faculty as well. For instance, at Colby College in Waterville, Me.,--where the 4-1-4 program was adopted in 1960, shortly after Florida Presbyterian started its program--half of the instructional staff is responsible for counseling students and directing projects during January. The other staff members, relieved from college responsibilities, have a significant period of time for writing and research. The college, during January, thus becomes even more truly a community of scholars, Colby says.

Considering the rather spectacular success that the 4-1-4 program has met in many of the country's smaller colleges and universities, many educators are wondering if the January term would meet with similar success in larger institutions. Case Western Reserve University, Cleveland, Ohio, is betting it will. The CWRU faculty has unanimously passed a resolution to adopt the 4-1-4 plan, which only waits approval of the university's president. Assuming the president gives his nod, CWRU will be the largest university to implement the plan.

The basic reasons the CWRU faculty wants the 4-1-4 program also are the program's four strongest points, according to Dr. Donald Whitman, professor of chemistry and co-chairman of the joint curriculum committee that formulated the 4-1-4 proposal.

Besides permitting the student to devote a month to a single topic, the January term provides a chance for the student to take a greater responsibility in shaping his own education. The 4-1-4 program makes more effective use of the month of January. (In the traditional two-semester schedule, Dr. Whitman explains, there are a few class days in January after Christmas vacation, then exams, then a week or so of vacation before spring semester begins.) And the program is a drawing card for greater numbers of high-quality students.

Opponents of the 4-1-4 program, Dr. Whitman adds, complain that the slightly shortened regular semester lessens the amount of material that can be covered in a course, or else it forces the instructor to compress the same amount of material normally taught into less time. But only about six or seven class days are lost, and

not even that much if the course is taught only three or four times a week. Another concern of several educators is that, unless the January terms are required, the student will flee from the campus for a month.

Will the large state universities follow the direction of the smaller schools in adopting a 4-1-4 program? No, says Carl Peterson, Oberlin's chairman of the January term committee. This won't happen if for no other reason than for the sheer numbers of students involved. CWRU's Dr. Whitman disagrees, however. He believes that something like the 4-1-4 program will eventually be adopted by the large state universities, but the process of doing so will be very slow because of the size, politics, and "ponderous machinery for changing things there." But, he adds, the idea is so contagious and attractive in many ways, that students in the large schools will want something comparable.