

campus notes

The Selection Process

The selection process to find a successor to Dr. George L. Cross has begun. Dr. Cross announced May 30 (*Sooner News-Makers*, June) that he will retire as president of OU in June, 1968, after 25 years as head of Oklahoma's largest institution of higher education. Dr. Cross, president longer than any of his six predecessors and longer than any other state university president, urged that a committee of the Faculty Senate and the Regents begin an immediate search for the next president. The Faculty Senate did not hesitate; its members met June 6 and nominated a list of 27 faculty members from which nine were chosen by the Regents to serve on a nominating committee of twelve.

The basic nominating committee will discuss the kind of person it is looking for ("We will not be interested in anyone past 55," says Dr. Mark Johnson, president of the Regents), receive names from any source ("I won't divorce myself entirely from the question," says Dr. Cross. "I may have a name or two to drop in the hat when the time comes."), screen the names, and select a half dozen or so, recommending these to the Board of Regents for the final decision. Faculty members on the basic committee are Dr. Lloyd Williams, education; Dr. Colin Plint, physics; Dr. Gilbert Fite, history; Dr. Robert Collier, microbiology; Dr. Lowell Dunham, modern languages; Dr. Jim Reese, economics; Dr. Clayton Feaver, philosophy; Dr. Gerald Porter, education, and Dr. Tom Love, engineering. The other members are William Whitehurst, president of the Student Senate; Lou Sharpe Jr., president of the Alumni Association, and Dr. Robert Bird, medicine, representing the Medical School.

(The 17 other faculty members chosen—Dr. Bird's name also appeared on the original list of 27—will serve as an auxiliary committee and may be called upon for tasks like interviewing candidates. They are Dr. Victor Elconin, English; Dr. Oliver Benson, political science; Dr. Doyle Bishop, management; Dr. Charles Mankin, geology; Dr. Teague Self, zoology; Dr. Stephen Sutherland, geography; Dr. C. M. Sliepevich, engineering; Dr. John Morris, geography; Joseph Taylor,

art; Dr. Arthur McAnally, library science; Dr. Nat Eek, drama; Dr. Marion Phillips, marketing; Dr. C. E. Springer, mathematics; Dr. John Campbell, engineering; Dr. Robert Patnode, microbiology; Prof. Gerald Tuma, engineering, and Dr. David Kitts, geology and the history of science.)

Dr. Johnson said he would like the president-designate to participate in an appraisal of the role of education for the present day and the future. He said he hoped he would be selected in time to allow him a year to familiarize himself with the University and its problems and objectives. "We are not excluding outside candidates," says Dr. Johnson. Public speculation has mentioned several men in high positions in the University, including several deans and vice presidents, as likely successors. The committee held its first meeting in June but issued no official statement. In describing the kind of man that should be sought, Dr. Cross said he should be a person with "keen aware-

ness of the need for faculty and student representation in university affairs, a vigorous and articulate spokesman for the institution, and a man who can separate personalities from issues. The immediate problem is to draw a flexible blueprint for the next 25 years. We must find money to invest in various fields, but we must stop trying to do too much with so little. We can be great in some things but not in all disciplines."

David Ross Boyd Professors

Two faculty members were honored by the Board of Regents June 9 when they were named David Ross Boyd professors. Dr. Max L. Moorhead, professor of history, and Gerald Tuma, professor of electrical engineering, will join the elite group of OU teachers who have been so honored when their appointments become effective Sept. 1. The Boyd professorships, named for the University's first president, were established in 1945 to honor vigorous performance and

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Recognizing American industry's continuing responsibility to higher education, the Halliburton Education Foundation, Inc., is announcing a five year grants program designed to foster excellence in the teaching of the sciences. □ The University of Oklahoma is one of the educational centers selected for this purpose. □ In addition, the Foundation is continuing its established policy of matching contributions made by the employees of the Foundation's contributors to accredited colleges and universities in the U. S. Any employee giving up to a thousand dollars a year has his gift matched by the Foundation. □ The Halliburton Education Foundation is supported by the Halliburton Company and its subsidiaries and divisions. These include Brown & Root, Inc., Otis Engineering Corp., Life Insurance Company of the Southwest, Jet Research Center, Inc., Highlands Insurance Co., Southwestern Pipe, Inc., Joe D. Hughes, Inc., Mid-Valley, Inc., and the Welex, Welex Electronics, Elcor and FreightMaster divisions.

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PROF. MAX L. MOORHEAD

leadership in teaching, counseling, and guidance of students. They are granted for five-year periods, and no more than two



PROF. GERALD TUMA

are given in a year. Dr. Moorhead and Prof. Tuma have been honored previously for their outstanding teaching. Both received \$500

awards for "extraordinary excellence in student counseling and teaching of freshmen and sophomores" from the University of Oklahoma Foundation in the 1950s, and last year Moorhead was one of three winners of the Regents' Award for Superior Teaching.

Dr. Moorhead has been on the faculty since 1945. He received bachelor and master of arts degrees in history from OU in 1937 and 1938 and a PhD in history from the University of California in 1942. He is an expert on Latin-American history, and his list of publications is extensive. Beginning in September he will be on a year's sabbatical leave to do research in Spain. He and his wife will live in Sevilla where he will have access to the Archives of the Indies, which are comparable to the National Archives in the Library of Congress.

Tuma joined the faculty in 1941 as an instructor in electrical engineering. He received the bachelor of science degree in 1939 and the master of electrical engineering degree in 1941 from OU and did post-graduate work at the State University of Iowa. Tuma has taught nearly every course offered by the School of Electrical Engineering. He

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REPRESENTATIVE CARL ALBERT DELIVERS THE FIRST CORTEZ A. M. EWING LECTURE

"Dr. Cortez Ewing was a great teacher. He had rare talents. The best students in the University flocked to his classes. His ability to attract those with the greatest capacity to learn was rivaled only by his power to inspire them." The speaker was Carl Albert, the diminutive giant of the U.S. House of Representatives, who after carving out a magnificent record as a student at the University continues to leave an impressive

Political institutions, systems, and theories were important to Dr. Ewing, not because they represented the mechanical techniques by which society governs itself but because understanding them required, first of all, an examination of the fundamental questions of men's relationships to each other. Dr. Ewing was not doctrinaire, unless one defines that word to include the quest for truth as the greatest goal of man—even though there is little likelihood of finding it full grown and absolute. A native of Indiana, Dr. Ewing received his graduate degrees in history from the University of Wisconsin and taught for a time at Penn State before coming to Oklahoma. He was the author of several books about politics, including *Judges of the Supreme Court, 1789-1937*; *Congressional Elections, 1896-1944*, and *Presidential Elections*. On the campus Dr. Ewing was not inconspicuous. He looked the part of the college professor—white-haired during his latter years, distinguished, constantly smoking, adorned with one of his many hats, as often as not a favorite blue beret. Dr. Ewing believed that a teacher's greatest achievement was to induce students to think for themselves. He was most pleased when, acting as a catalyst, he ignited the intellectual curiosity of his students. He was saddened when students parroted back, at examination time, what he said during the term. He was delighted with the brilliant student, but always carefully plowed the intellectual fields of the others in the hope that some of the seeds he planted would sprout. To him the word "why" was one of the most important in the English language. He was never controversial. He forced students to re-examine continuously their conclusions, their judgments, and their attitudes concerning the processes of society.

Upon Dr. Ewing's death, Marcus Cohn, a partner in the Washington, D.C. law firm

of Cohn & Marks and whom Mr. Albert calls "probably Dr. Ewing's best student," began to contact former students, colleagues, and friends to create a foundation to perpetuate Dr. Ewing's name. In addition to lectures and seminars, the Foundation will award grants to individuals. Special attention will be given to their ability to inspire students in the "Ewing tradition" and to discuss topics not contained in the Univer-



MAJORITY LEADER ALBERT

sity's regular curriculum. In addition to faculty members, it is hoped that the grants will go to a cross-section of the intellectual community.

The initial lecture by Mr. Albert was presented April 29 in the Ballroom of the Union. Among those present were Dr. Ewing's widow, who still lives in Norman, and Mr. Cohn. Mr. Albert's topic was "The Legislative Process in Action" in which he described the techniques, the mechanics, the problems, and the misconceptions of the legislative process. The majority leader used specific bills enacted by Congress in which he had a part to illustrate political processes.



COHN AND MRS. EWING

and enduring mark as a national political leader. Mr. Albert spoke these words about his long-time friend and former teacher, Dr. Cortez A. M. Ewing, one of the University's greatest professors. Dr. Ewing died in 1962. He had served as a member of the OU faculty since 1928 except for a year at Texas. The occasion for the majority leader's remarks was the first Cortez A. M. Ewing Lecture fittingly delivered by Mr. Albert, one of Dr. Ewing's most famous students and a trustee of the Cortez A. M. Ewing Foundation, established by the professor's friends and former students to sponsor lectures and seminars for the study of political ideas.

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has served as chairman of the school and directed construction of the Osage digital computer. Through his contacts in industry he has been able to make valuable contributions in the planning of the electrical engineering program. Besides teaching, Prof. Tuma has been active in the research programs of the school and the OU Research Institute. He has published numerous technical reports and articles on antenna systems and digital computers. During the past five years he has directed the work of 12 master's degree candidates and two doctoral candidates.

David Ross Boyd professors are selected by the Regents on the basis of recommendations of the deans of all degree-granting colleges and the dean of the University College. Nominations are sent to the University Budget Council, which also makes nominations. Each nomination is held by the council for at least 30 days. Then each nominee who does not receive more than one negative council vote is recommended to the president of the University. If he approves the nominations, he presents them to the Regents.

Faculty Losses

This year death has claimed four University faculty members. In January Dr. Robert Vlach, professor of Russian and editor of *Books Abroad*, died suddenly at 49 (*Sooner News-Makers*, Feb.). The latter part of February another untimely loss occurred when Dr. Donnell M. Owings was struck by a car and killed as he walked along a Norman street (*Sooner Magazine*, March). In June a long-time, respected member of the modern languages department, Professor Antonio M. de la Torre, died suddenly after suffering a heart attack (*Sooner News-Makers*, June). Said Dr. Lowell Dunham, chairman of the department: "I have known Prof. de la Torre for the past 38 years. He was my teacher, my colleague, and one of my dearest friends. Teaching was his life. Few if any of the men I have known or studied with were his equal. He was an inspiring teacher for the simple reason that he was inspired by his subject matter. So careful and so thorough was he that he never entered even a Spanish 1 classroom unless he had carefully and thoroughly prepared every line of the material. When the great Spanish philosopher Julián Mariás, a recent visitor to our campus, received the news of Prof. de la Torre's death, he remarked, *Un verdadero caballero de los que quedan pocos*. (A real gentleman, one of the few left.)"

"Those of us who were fortunate enough to have had him as a teacher and as a friend understand and deeply appreciate Dr. Mariás' tribute. What Prof. de la Torre did, and did so well, for so long, and for so many of us, will be an enduring memorial to his presence." Dr. Cross described Prof. de la Torre as "a professor respected both for his scholarship and his ability to inspire and lead his students."

On June 10 another faculty member, Tannell A. Shadid, 49, professor of business law, died suddenly of an apparent heart attack. Said Dr. Cross, "Prof. Shadid was an excellent teacher of business law whose academic training was supplemented by a great deal of practical experience in the field of law enforcement. Members of the administration and faculty were shocked and saddened by his untimely death." A native of Mangum and Oklahoma City, he received his BA and law degrees from OU in 1942 and 1946 and a master of laws from the University of Michigan in 1963. In World War II Prof. Shadid served with the Marines and as an investigator with the OPA in the latter part of the war. He practiced law in Bethany and served as the city's police judge, was county attorney of Noble County for six years and was attorney for the Department of Public Safety before joining the faculty in 1955. He is co-author of two books, *Business Law: Cases and Materials* (1958) and *Bailments and Carriers* (1960). Survivors include his wife, the former Madelyn Haddad of Mangum, and a daughter, Carol Ann.

Memorial funds in memory of the professors have been created by colleagues, friends, and former students. Those who wish to honor Dr. Vlach should send their donations to *Books Abroad* at the University in his name. Contributions in memory of Dr. Owings should be mailed to the Donnell M. Owings Scholarship Fund, OU, Norman. A memorial loan fund in honor of Prof. de la Torre has been established to augment the Student Loan Aid Association. Donations to it can be made through Dr. Horace B. Brown, a vice president of the University. The Tannell A. Shadid Memorial Scholarship Fund has been established with the OU Foundation and will be administered by the College of Law to help deserving law students with financial need. Contributions can be sent to the College of Law.

Theatre-in-the-Quarter-Round

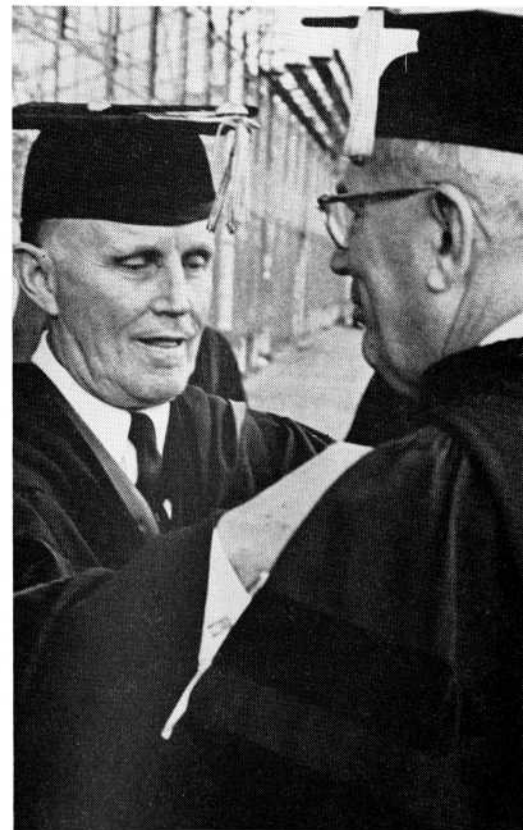
The OU Summer Circle Theatre introduced audiences to the thrust stage of the Rupel J. Jones Theatre in the new Drama Building. The four plays on the summer bill have been played in front of the curtain on the two raised forestage elevators which extend into the audience. The quarter-round effect cuts the capacity by about 100 from the 668-seat theater. Says Dr. Nat Eek, director of the School of Drama, "The elevators are for use in pre-modern productions and when more intimate theater, such as the summer productions, is desired. By avoiding the separation of the audience and players by the proscenium arch, there is a closer actor-audience relationship." The 1966 summer bill began with *A Shot in the Dark* by Marcel Anchart, June 23-25. Following were *Lady Windemere's Fan* by Oscar Wilde, June 30-July 2; *Spoon River Anthology* adapted from Edgar Lee Masters, July 7-9, and *Three-Penny Opera* by Kurt Weill and Bertolt Brecht, July 20-23. All of the productions also made a circuit of state lodges at Lake Murray and Lake Texoma and Arrowhead, Fountainhead, and Western Hills lodges.

Sabbaticals

Every seventh year the OU professor is eligible for a sabbatical leave of absence entitling him to spend a year away from the University at half pay or one semester at full pay (*Sooner Magazine*, "Ambassador of Learning" Nov. 1962 and "The World Is Their Classroom" Oct. 1963) so that he might travel, study, conduct research, teach at other institutions, and engage in educational programs in this country and abroad. It's a change of scenery that benefits the professor, who has an opportunity to grow, and the home school, which profits from the professor's growth.

In the coming year OU will have eleven professors on sabbaticals. They are Arthur N. Bragg, professor of zoology, to complete a long-term project on the Salientia of Oklahoma—for publication (one semester); Sherril Christian, professor of chemistry, to study hydrogen-bonding and charge-transfer complexes at the University of Oslo, Norway; John Paul Duncan, professor of political science, to complete a book on political theory (one semester); John G. Eriksen, associate professor of political science, research and writing at the Institute for the Study of the USSR in Munich and travel in Eastern Europe and the Soviet Union; W. Eugene Hollon, professor of history, research on the livestock industry in

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The men who have led Oklahoma's two state universities through their greatest years of growth and development announced their retirements this year. Dr. George Cross steps down in June, 1968, after 25 years at OU, and Dr. Oliver Willham (right) retires after 15 years as president of Oklahoma State.

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Spain before the conquest and work on a book, *Western America*;

William Horosz, associate professor of philosophy, research in social sciences and in philosophy of religion for a book on the place of the individual in science and religion (one semester); Cecil E. Lee, assistant professor of art, to study Reformation thought and theology in Switzerland; Max L. Moorhead, professor of history, research in Sevilla, Spain and Mexico City; Roger E. Nebergall, professor of speech, study and research on development of theory of persuasion (one semester); Lawrence Poston Jr., professor of modern languages, travel in Europe, research in Spain on Spanish linguistics; Simon H. Wender, Research professor of chemistry, to study biochemistry at the University of Wisconsin (one semester).

New Social Sciences Building

Approval of a \$995,000 federal grant has opened the way for construction of a new social sciences building. Total cost of the building complex, which will include a classroom structure and an office building connected by a common corridor, will be \$2,985,000. Construction will begin as soon as final architects' plans have been completed and approved and construction bids have been accepted by the Regents. The remainder of the construction funds beyond the federal grant will come from money provided by the passage of State Question 433 last December which provided for capital improvements at state institutions.

To be constructed south of Copeland Hall (journalism building) on the South Oval, the two buildings will have 87,411 square feet of assignable space. The classroom building will include a basement for laboratories and experimental rooms for the departments of psychology, anthropology, and geography. The office tower building, which will be just west of the classroom structure, will

provide offices and research space for the social sciences faculty members and staffs.

Bye Bye Batman, Hello Go-Go

Batman and Robin no longer appear at the Monterrey (*Sooner Magazine*, May) on Thursday nights. Latest attractions at the student spot are go-go girls who seem to be every bit as successful at drawing customers as the Dynamic Duo were. And only in a college town would one of the dancers be a candidate for a PhD in psychology.

Tea Case Too Weak

Charges of possession of marijuana against 11 former OU students (*Sooner News-Makers*, Feb.) were dismissed June 24 in a special sessions court in Norman when Judge Tom Lucas ruled that the police used an invalid search warrant. The judge said in addition the arrests were made before the warrant was served. "It is clear that all incriminating evidence was obtained under the invalid warrants," said Judge Lucas. "In my opinion, this constitutes unlawful arrest, and all evidence from the arrest was illegally obtained." Preston Trimble, the Cleveland County attorney, said his office would re-examine the case before deciding whether to file it again.

Briefly Noted

Dr. George M. Sutton, Research professor of zoology and a world-renowned ornithologist, painter, and writer, is spending the summer on Jenny Lind Island east of Victoria Island in the Canadian Archipelago capturing the birds of that region with water colors. He and a former student, Dr. David Parmelee, a professor at Kansas State Teachers College, and two of Dr. Parmelee's students will conduct research there during the summer. Dr. Sutton expects to return to Norman with 60 paintings of shore birds (turnstones, sandpipers, and plovers), perching birds (horned larks, redpolls, and longspurs), and snowy owls, gulls, jaegers,

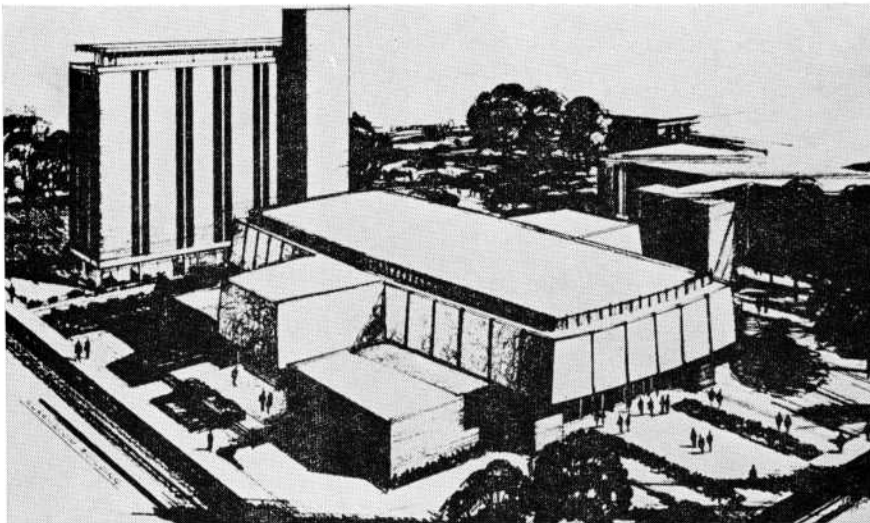
falcons, whistling swans, Canada geese, black brant, snow geese, and blue geese. . . . Three band concerts were held this summer by the pond north of the stadium for those who love to listen to band music played on summer nights. The first program featured two marches by Sousa, *His Honor March* by Henry Fillmore, an adaptation of Gershwin's *Rhapsody in Blue*, *Blue Tango* by Leroy Anderson, *Finlandia* by Sibelius, and other traditional favorites. Conducted by Dr. Gene Braught, professor of music, the concerts annually attract Norman citizens and students who bring chairs, blankets, pillows, and camp stools for the evening of music. . . . Philip Lee Walls, Bartlesville graduate student, is the 1966 recipient of the Virgil G. Wilhite Memorial Scholarship Award for Excellence in Economics, presented annually by the economics department to its outstanding student in memory of Professor Wilhite. . . . The first formal sign of interest in the Vietnam War by students or faculty was a debate held in May between representatives of Young Americans for Freedom, a conservative organization which is in basic agreement with U.S. policy, and Students for a Democratic Society, a liberal organization which has no official stand but whose members overwhelmingly and individually disagree with the conduct of American foreign policy in Vietnam. The debate filled Meacham Auditorium. . . . A grant of \$561,000 has been approved by the Office of Economic Opportunity to establish a regional training center for workers in agencies involved in the war on poverty. There are four other centers at Temple, and the universities of Wisconsin, North Carolina, and California. The center will be operated through the School of Community Services in the Extension Division.

Kudos for the OU Press

Books published by the University of Oklahoma Press have won five of the top literary prizes offered in the spring. Vincent Starrett's *Born in a Book Shop: Chapters from the Chicago Renaissance* won the Midland Author's Prize (\$500) and the Friends of Literature Prize (\$500), both awarded in Chicago. The Carr P. Collins Prize of \$1,000 went to Henry D. and Frances T. McCallum for their book, *The Wire That Fenced the West*. The \$1,000 prize offered by the Sons of the Texas Revolution was awarded to Wayne Gard for his *Rawhide Texas*, and W. H. Hutchinson was the recipient of the Silver Medal presented by the Commonwealth Club of California for *Oil, Land, Politics: The California Career of Thomas Robert Bard*.

Dr. Hollon's Desert

Dr. W. Eugene Hollon, professor of history, is the author of *The Great American Desert*, published this spring by the Oxford Press. Dr. Hollon's book is the story of the vast area between Sierra Nevada and the midland plains—its evolution from early myths to the dawn of knowledge, through its past into the present. *The New Yorker* called it a "first-rate book—vivid, fair-minded, and comprehensive." Dr. Hollon tells of the adaption by the Indians to the region, and



PROPOSED SOCIAL SCIENCES BUILDING ON SOUTH OVAL

follows its natural, social, and political history through settlement. At the end he takes the reader on a motor tour of the desert states. Dr. Hollon is a professional historian of the West and has traveled thousands of miles throughout the "desert" with a tent or camp trailer. The book may be bought through the University Book Exchange.

SCIENCE AND RESEARCH

The War on Crab Grass

The crab grass battle at OU is being fought in test tubes. Robert L. Parenti, graduate student in botany, is too much the scientist to go around carrying a "Stamp Out Crab Grass" sign, but his dispassionate investigation of the secret behind the persistence of crab grass makes him nevertheless a comrade-in-arms of thousands of lawn owners who consider the pesky weed their mortal enemy. In the research for his dissertation on *Digitaria sanguinalis* (crab grass), he plans to show that the plant inhibits the growth of higher plants by producing a chemical that gets into the soil and stunts the development of its competitors. Parenti was inspired to do the crab grass study by his major professor, Dr. Elroy L. Rice, professor of botany. They have been working together on a related project—a study of inhibitors of nitrogen-fixing and nitrifying bacteria—for three years (*Sooner Magazine*, March 1965). Bacterial inhibition results in the reduction of nitrogen compounds necessary for the survival of higher plants. This fact, Dr. Rice and Parenti believe, explains why it may take as long as a hundred years or more for an abandoned field to revegetate into a true prairie. Parenti's doctoral research is concerned more with direct inhibition of higher plants by crab grass, one of the first weeds to appear in an abandoned field. "Dr. Rice really deserves most of the credit for the success of this study," Parenti says. "The techniques I learned working with him in the bacterial inhibition project have been invaluable in my own re-



PARENTI



The Quaker Student Group on campus is sponsoring a silent vigil of concern about the Vietnam War each week at the benches between the Union and the law barn. Students and faculty are asked to sit or stand silently "Out of a concern for the loss of life in Vietnam: a silent vigil each Wednesday noon to express our sorrow and protest." The vigil lasts an hour.

search. And he has been extremely willing to lend advice whenever I run into problems." Parenti's praise of Dr. Rice is not likely to be challenged by other students. The short bespectacled botanist is one of the few men to receive both the Regents' Award for Superior Teaching and the OU Foundation award for excellence in the teaching and counseling of undergraduates. He received the Regents' Award this year (*Sooner Magazine*, May).

Parenti has received high recognition himself this spring. He presented a paper on his research at the annual meeting of the Southwestern Association of Naturalists. His presentation was judged the outstanding student paper in botany at the meeting. Some day a practical scientist will come along to use Parenti's findings and develop a way to free the lawns of the world from crab grass.

Sky-high Grant

Ten faculty members and 12 graduate students have begun work under a new \$200,000 grant from the National Aeronautics and Space Administration. The grant will provide financial support for continued development of the University's space sciences Graduate Education and Research Program. Don Harper, associate director of the Research Institute, which administers the program, says in addition to enabling the University to develop a stronger space research program, the grant should attract new space related industry to the state. "This grant is further proof that Oklahoma has great potential in becoming a center for research in the national space effort," says Mr. Harper. Professors being supported under the first year of the grant are: Engineering—Dr. C. Phillip Colver and Dr. R. V. Kasser; Geology—Dr. Charles J. Mankin and Dr. George T. Stone; Chemistry—Dr. Jordan J. Bloomfield and Dr. Francis J. Schmitz;

Botany and Microbiology—Dr. Robert E. Collier and Dr. J. Bennett Clark; and Physics—Dr. James R. Burwell and Dr. John M. Canfield.

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DR. PAYNE



DR. JERNER



DR. COLVER



DR. BABB

Names and Faces in Science and Research

The four professors above are recent recipients of grants from the National Science Foundation for research in four separate projects. DR. JAMES A. PAYNE, assistant professor of aerospace and mechanical engineering, has a \$9,600 NSF grant to work on the development of a "zero-zero" instrument landing system (ILS) for commercial aircraft. The Navy has developed an ILS for carrier-based planes, but it is too rough for commercial use. Present minimum FAA restrictions require a pilot to be able to see at least 1,600 feet horizontally after emerging from blind overcast at not lower than 150 feet. DR. CRAIG JERNER, assistant professor of metallurgical engineering, has a \$13,900 grant to study thermionic emission, the process by which electrons may be emitted from the surface of a metal by addition of sufficient heat. By collecting the dispersed electrons this emission may be converted to electrical energy. In previous research Dr. Jerner has measured excessive electron loss in certain metals. This enhanced emission cannot be explained by present electron emission theory. The professor wants

to discover why this happens. Direct conversion of the heat to electricity is of major importance in present military and space research. DR. PHILIP COLVER, assistant professor of chemical engineering and materials science, has a \$45,700 grant to study diffusion in liquids under varying pressures and temperatures, present knowledge of which is far from adequate. Accurate knowledge of diffusion in the liquid stage has application in several fields. Dr. Colver is particularly interested in applying it to secondary oil recovery, using carbonated water flooding. DR. STANLEY E. BABB, associate professor of physics, is charting the behavior of three gases—argon, nitrogen, and carbon monoxide—under the measured combination of pressure, volume, and temperature (PVT) with a \$33,000 NSF grant. Many theories in this area have been advanced but Dr. Babb's experiments are the first to actually measure their accuracy over a wide PVT range. His data will indicate the most accurate of the theories which may then be applied to PVT behavior in other gases.

Renowned Scientist Joins Faculty

Dr. Hubert Frings, '37ms, an internationally known entomologist, will join the faculty next fall. Dr. Frings will teach courses in his own research specialties and will direct the organization and teaching of the introductory course in zoology, which will have an estimated enrollment of 1,500 students during the 1966-67 academic year. He and his wife, a scientist in her own right, have been doing research for nearly 20 years on the effect of sound on birds and insects, work which is important in the area of pest control. Interested in bio-acoustics, an interdisciplinary field which unites physics and biology, Dr. Frings founded an active acoustics division within the physics department at Penn State. There he met a physicist who helped him with technical problems of monitoring insect sounds, some of which are at too high a frequency for human ears. In turn, as an expert on biology, he advised Penn State physicists of potential hazards connected with working with ultrasonic sounds. Dr. Frings visited the campus in April and gave a public lecture in which he described some of the research he and his wife have done. In an interview he commented that one of his major teaching interests is introductory zoology, which gives

him an opportunity to face "a group of students who say to me, essentially, 'You can't interest me. I'm taking this course only be-

cause my adviser said I had to.' I get a big kick out of accepting this kind of challenge."

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