Federal grant could give hearing impaired a new voice

A federal grant to a WMU speech and hearing specialist could result in new techniques to teach hearing impaired persons to speak. "It's the basic research that intrigues me," he says. "We're really studying the perceptual system's ability to perceive abstract patterns. Patterns are generated when speech production mechanisms produce a sound wave. We want to know how the ear picks out a nice tidy little unit like the vowel 'e' or the consonant 't' from a complicated and highly variable sound wave."

Hillenbrand and his research collaborator, Robert A. Houde, an electrical engineer and president of Spectraphonics Inc. of Rochester, N.Y., will analyze spectrograms of the spoken word. The spectrograms are graphs depicting the frequency and intensity of the sound waves produced when each word is spoken. As pictures of words, the spectrograms are similar to photographs because they contain a lot of information that is not important to the message that is actually being conveyed, Hillenbrand says. Information about the age, sex and emotional state of the speaker as well as the speed at which the word is spoken is all part of the speech signal or sound wave. The researchers' main goal will be to filter out that kind of detail and determine only the parts of the sound wave telling the auditory system what sound is being produced. Hillenbrand and Houde will use Masked Peak Representation (MPR), a mathematical technique developed by Houde that simulates certain characteristics of auditory nerve fibers. The process removes from the spectrogram details the researchers decide are not critical to speech recognition. The results will then be tested by generating computer-synthesized speech from the remaining information on the spectrogram and conducting listener tests to see if recognizable speech is still produced. If intelligible speech results, Hillenbrand and Houde will know that they have preserved the correct information in the sound wave. "Working with MPR is the most exciting part of this project," Hillenbrand says and notes that collaborating with a computer speech recognition expert like Houde is a fairly unusual practice for someone involved in human speech perception research.

Haenicke to lead off 1992-93 series of breakfast programs

President Haenicke will present the first talk in a series of six breakfast speaking engagements being planned for alumni and friends this year by the WMU Alumni Association. He will address "Higher Education: Challenges of the '90s" during a program Tuesday, Sept. 29, at the Gilmore Alumni House on Short Road. All programs, which include a continental breakfast, will begin at 7:30 a.m. and end by 8:20 a.m. The cost for each is $5 for Alumni Association members and $7 for non-members. Reservations for the first program should be made by Wednesday, Sept. 23, by calling the McKee Alumni Center at 7-8777. Those who sign up for the entire series can pay $30 for members or $35 for non-members. In addition to receiving six programs, participants will earn an additional ticket for the Sept. 29 program.

The other programs scheduled for this year are:

• "The Ever Changing Face of Russia" with James M. Butterfield, political science, Tuesday, Oct. 20, at the Fetzer Center.
• "Helping Students Cope" with a panel led by Theresa A. Powell, vice president for student affairs, Tuesday, Nov. 17, at the Fetzer Center.
• "Community Outreach: The Paper and Printing Program" with Arvon D. Byke, chairperson of paper and printing science and engineering, Tuesday, Jan. 12, at Welborn Hall.
• "Language as a Business Tool" with Joel P. Bowman, interim chairperson of business information systems, and Bernadine P. Branchaw, business information systems, Tuesday, Feb. 9, at the Fetzer Center; and "Behind the Scenes of a 21st Century Library" with Bettina S. Meyer, University libraries, Tuesday, March 2, at Waldo Library.

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Senate to hear presentation on academic programs tonight

President Haenicke will make a presentation on academic programs at the first Faculty Senate meeting of the academic year Thursday, Sept. 10. The meeting will begin at 7 p.m. in the Fetzer Center.

Also on the agenda are an interim report from the Ad Hoc Committee to Revise General Education and recommendations from the Ad Hoc Committee on the Curriculum Review Process. In addition, the senate will consider a recommendation regarding minimum grade point average for PTG students as well as the Faculty Fees Bond Fund for 1992-93.

The meeting will be followed by a welcome back reception in the Fetzer Center lobby.

Faculty exchange artwork

Faculty members in the Department of Art are swapping works this month with their counterparts from Central Michigan University. WMU is playing host to an exhibit of pieces by CMU art faculty members through Sept. 23. The exhibit is in Gallery II and the showcases of Sangren Hall. Gallery hours are 10 a.m. to 5 p.m. weekdays. At the same time, CMU is showing works by WMU art faculty members in its University Art Gallery. That exhibit runs through Sept. 22 in Mount Pleasant.
Students stress science literacy in Venture Grant project

Students in the Lee Honors College will put on a series of science literacy days for both middle school students and community members in Cassopolis this winter as part of a project funded by the Michigan Campus Compact.

Marian M. Smith, geology, has been awarded a $4,230 Venture Grant from MCC to help develop a plan and implement a "Science Literacy and Community Outreach" project. The students will coordinate six "Science Days," including two at Sam Adams Middle School. Each event will be followed by an evening family science activity at a local community center.

During the fall and winter semesters this year, Smith will teach a course in the Lee Honors College called "Science Literacy and Community Outreach." Students taking the course will develop plans for the science days and travel to Cassopolis to implement those plans beginning in January and ending in April. Each of the six science days will have a single science theme. Activities will include a math teach-in and presentations involving earth science, physics, chemistry, pharmacy and natural science.

"Science literacy must be achieved in steps," Smith says. "Our initial efforts will be spent making families comfortable reading the labels of over-the-counter medicines and the dietary ingredients in their food. Concepts of simple measurement and the basics of various sciences must be understood before we can hope for a population that can truly understand the implications of depletion of the ozone or global warming.

The project was jointly developed by Smith and Sandra J. Pompey, principal of Sam Adams Middle School. It follows an earlier two-year project during which Lee Honors College students traveled to Cassopolis to act as mentors for middle school students. That successful relationship between the University and the community will be continued in the new project.

"The semester-long programs provide a much needed emphasis on math and science in our community," Pompey says. "We hope to eleicit help from local churches, 4-H clubs, the Sportman Big Ten Club and other civic organizations to provide such help."
Intellectual skills program adopts new name to better reflect mission and scope of activities

The name of the Intellectual Skills/University Curriculum Programs has been changed to the Center for Academic Support Programs. "The old name, with its slash and 15 syllables, had become unwieldy and no longer communicated clearly our mission or the scope of our activities," said Lyman C. McCausley, director of the center. "The new name provides a clear organizational structure. It centers on several programs, and a correct name, 'academic support programs,' that identifies the nature of the unit's responsibilities.

The Center for Academic Support Programs has five subdivisions. Each will retain its special identity within the center's framework.

- The Intellectual Skills Development Program. This program tests all incoming undergraduate students in reading, writing and mathematics, develops criteria for placement into remedial courses; evaluates test results; communicates results and related information to Michigan high schools, and oversees the bureaucrat-level writing requirement.

- The University Curriculum. This program provides advising services for all new freshmen and transfer students who come to the University without declaring a major, currently serves more than 30 percent of the incoming freshmen and a total of 2,000 students; and includes the Alpha Program, a special admission program for freshmen with mid to high ACT scores but low high school grades.

- University 101: Freshman Seminar. This is a one-credit-hour course designed to introduce new students to the academic and social life of the University. Taught by upperclassmen, students from throughout the University, the course will enroll 850 students in 42 regular sections this fall; other sections are offered for selected groups of students.

- The Academic Skills Center, including the Writing Lab. This unit offers student academic support in the forms of supplemental instruction in high-risk courses; tutoring; and workshops in study skills, mathematics, and critical reading.

- The Writing Lab offers a workshop on academic documentation. A new computer lab will supplement the center's person-to-person service.

- The Special Services Program. This is a federally-funded program that offers academic and personal support to first-generation, low-income and/or disabled students.

In addition to McCausley, professional staff members of the center include: Marilyn W. Voss, assistant director for University curriculum; Betty D. Dennis, Alpha Program coordinator; Cindy Overly, acting director of the Academic Skills Center; Shihan A. Fares, Writing Lab coordinator; Sherri Paxton, Special Services Program director; and Kathryn M. Welser, learning disabilities coordinator. Service staff members include: Buff Armstrong, Karel Hodges and Candace Duke. Gray's Student Center. Graduates of the center (1992-93) are Paul S. Jacobson, Glenn D. Pohl and Tessa Swiftney.

- Replacement

WMU is an EEO/AA employer

Media

Janet Dynak, education and professional development, discusses why children are less likely to lose interest in reading on "Focus," a five-minute interview produced by news services. "Focus" is scheduled to air Saturday, Sept. 12, at 6:10 a.m. on WKPR-AM (1420).

(FM) Replacement

Service

These employees are recognized for five, 10, 15, 20, 25 and 30 years of service to the University in September:

35 years - Ernst A. Breisach, history; Eugene C. Kircher, geography; and Paul Robbert, art.

30 years - Donald C. Berndt, chemistry; William W. Combs, English; Joseph S. Elian, philosophy; William Garland, anthropology; Darrell G. Jones, Harwell College of Business; Robert G. Kotecki, education and professional development; William M. Murphy, English; and Paul Vollstedt, physical plant building custodial and support services.

25 years - Frank R. Jamison, radio; and Phyllis M. Wolf, computer science.

20 years - Jack H. Roach, physical plant building maintenance.

15 years - Gail Heffin-Puffer, intercollegiate athletics; Richard M. Othan- dier, Counseling Center; Beverly J. Reis, Davis dining service; and Patricia F. Van- der Meer, Waldo Library.

10 years - Jean E. Bowsky-Verschoof, catering; and Lillian Y. Love, admissions and orientation.

Five years - Lester Baird, physical plant building maintenance; John E. Campos, music; Tracy A. Connelly, McKee Alumni Center; Sandra L. Custer, Student Life Health Center; Marcia J. Davison, education and professional development; Laurence D. Douglas, Fetzer Center for Undergraduate Education; Elaine Gaudioso, Coordinator of Federal Contract Administration; Janet M. Lenczycik, interior design; Donna J. Marks, Bernhard Center for the Arts; Janet L. McGurk, human resources; Nancy P. Pyne, Henry/Kocke/Bigelow dining service; Terry G. Spencer, internal audit; and Irene S. Vasquez, religion.

Services

For SALE — Best buy in Sunburst Hills. Two-story colonial home, 2,450 square feet, 2-1/2 baths, two fireplaces, central air, city sewer, 12-yearold, Portage schools. Low 150's. Call 327-6179.

For RENT — Four color season cottage on Lake Leelanau, 10 miles from Traverse City. Two bedrooms, one bath, 176 feet sandy frontage, non-smoking, boat, beautiful setting. $55/weekend. Call 629-5890.

Human resources

Performance measures workshop set for fall supervisors of non-bargaining employees are invited to attend a seminar on "Establishing Performance Measures" from 8:30 to 11:30 a.m., Wednesday Sept. 16, in 204 Bernhard Center.

Assistant Dean E. House, human resources, will suggest ways to set challenging, yet attainable, performance standards that can measure an employee's successes and areas for improvement. This seminar is planned to help both new and experienced supervisors prepare for their responsibility of annually evaluating the performance of their employees.

To reserve your place, please call Doris J. Moore, human resources, at 7-3620.

204 Bernhard Center.

John E. Nangle, emeritus in psychology, was recognized for 30 years of service to WMU in 1991. In Kalamazoo, he was 62.

Nangle joined the psychology faculty in 1964 and taught primarily in the area of industrial psychology. He took on administrative duties, including assistant director of the Office of Institutional Research in 1967. He began associate di-
State Rep. Morris Hood (Detroit) and U.S. Rep. Joe Walsh (D-Lansing) are among 15 persons from communities throughout West Michigan who have been named to the advisory board of the Institute for the Study of Race and Ethnic Relations in the WMU College of Arts and Sciences.

Hood was instrumental in 1989 in providing state support to establish the institute and Wolfe donated his 1990 congressional pay raise to the WMU College of Arts and Sciences.

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For the Study of Race and Ethnic Relations in the WMU College of Arts and Sciences.

"I'm excited by the potential of this board to keep the institute closely attuned to the needs of the community, our region and beyond," said Earl M. Washington, director of the institute and assistant dean of the College of Arts and Sciences. "I trust this to be an active, participative group."

"We are trying to get both sides together on this," said Wolf. "One of the purposes of this project is that it combines the resources of both areas in a collaboration that has been sorely lacking in this field."

The pair will concentrate on vowels as they attempt to understand how the ear recognizes sounds. But Hillenbrand says that if they are successful in unlocking the secret of how sounds are heard, other sounds will be easy to analyze as well. It is hoped that they will be able to determine the parts of a sound wave that are most critical, speech differences such as those caused by regional dialects, could be more readily understood and taken into account in developing more flexible and reliable speech recognition devices.

**Calendar**

**Thursday, September 10**

(tru 30) Exhibition, photographs of "Sky Art, Inflatable Art and Environmental Sculpture," by Leon Kizmazian Resources, 3420 Seiber Administration Building, weekdays, 8 a.m.-noon and 1-5 p.m.

(tru 11) Exhibition, work by master of fine arts degree candidates, Student Art Gallery, East Hall, 8 a.m.-6 p.m.

(tru 23) Exhibition, work by Central Michigan University art faculty, Gallery II and Department of Art showcases, Sangren Hall, weekdays, 10 a.m.-3 p.m.

Exhibition, "Jagoda/Plage, the Polish time capsule," by sculptor and conceptualist Dwayne Stotz, Sangren Hall sculpture pad.

Reception for nontraditional and graduate students, North Ballroom, Bernhard Center, 4-6 p.m.

**Friday, September 11**

Meeting, Executive Board, Council of Representatives and committee chairpersons of the Administrative Professional Association, Red Room A, Bernhard Center, 11 a.m.

Doctoral oral examination, "Experimental and Theoretical Analyses of Instructional Tasks: ," by Susan Shen, Department of Educational Research, Sangren Hall, 2-4 p.m.

Meeting, Faculty Senate, Sangren Hall, 2-4 p.m.

**Saturday, September 12**

(13) Women's tennis, Bronco Invitational, Sorensen Courts, all day.

Graduate recital, James Bicigo, trombone, Dalton Center Recital Hall, 3 p.m.


**Sunday, September 13**

(su 12) University Theatre production, "Bent," York Arena Theatre, 8 p.m.

**Monday, September 14**

(tru 25) Art exhibition, serigraphy and woodcut prints by artists James A. Walker, Student Art Gallery, East Hall, weekdays, noon-5 p.m.

**Tuesday, September 15**

(tru 26) Exhibition, " enclosed: Booth, 349 Wood Hall, 9 a.m.-5 p.m.

WMU College Fair, 209-210 Bernhard Center, 9 a.m.-3 p.m.

Vendors to show products, 209-210 Bernhard Center.

**Wednesday, September 16**

(tru 27) Shadow, a shadow puppet maker and alumnus James A. Walker, Student Art Gallery, East Hall, weekdays, noon-5 p.m.

**Thursday, September 17**

Graduate College writing-workshop for the preparation of doctoral dissertations, specialist projects and master's theses, Red Room A, Bernhard Center, 10-11 a.m.

*Admission charged*

**Chemist wins grant to study new treatment for diabetes**

A WMU chemist has received a $506,900 grant from the U.S. government to conduct a research project that may lead to new treatment options for people with diabetes.

Susan R. Stapleton, chemistry and biologic sciences, was awarded a three-year grant by the National Institutes of Health's National Institute of Diabetes and Digestive and Kidney Diseases. She will use the grant to study the metabolic effects of mimetics artificial agents that mimic insulin's ability to increase the rate at which the body absorbs glucose.

Besides helping the body absorb glucose, insulin is a powerful hormone regulator that can activate or deactivate genes in a way that is still not understood, Stapleton says. She reports that her research shows that mimetics can do the same thing, it could lead them to use a substitute or supplement to insulin therapy for people with diabetes.

"A global hormone that is involved in many other body processes, such as protein synthesis," Stapleton says. "Before we can start clinical trials, we need to find out how they can fill the same parameters as insulin."

Since mimetics are cheaper, more plentiful and can be taken orally, they might help people who have some problems with diabetes be cost-effective.

Stapleton says those who develop diabetes after age 40 are an increasing problem in this nation, she says, because of the aging population. For those who have classic juvenile diabetes, a condition in which the body does not produce enough insulin mimetics could prove an effective supplement or alternative for insulin therapy.

Stapleton will examine the different properties of mimetics such as insulin, and how they affect the body's metabolism and cardiovascular processes. A lot of work is related to diabetes.

"When studying fatty acid metabolism," she says, "a major concern is the disease state. The diagnosis of diabetes and cardiovascular and other problems. A lot of my work is related to diabetes."

Stapleton received a new $7,900 grant from the Diabetes Research and Education Foundation of Bridgewater, N.J., to study the effects of diabetes on the body's metabolism. She will study changes in the levels of glucose, insulin and other metabolites in blood samples taken from a colony of monkeys that is known to develop diabetes at about the same rate as humans.

Orfolsky among six slated for Athlete of the Hall of Fame

Fred C. Orfolsky, health, physical education and recreation, is among six athletes who will be inducted into the WMU Athlete of the Hall of Fame on Friday, Sept. 18.

Orfolsky, the only head coach in the history of WMU's women's gymnastics team, will be honored at a 7 p.m. banquet in the Bernhard Center. The other inductees, all former Bronco athletes from the 1960s, '70s and '80s, and their sports are: Pat Askland, women's basketball and field hockey; John Cook, men's tennis; Gary Hart and Jerome Liebenberg, men's cross country and track; and Jim McKinley, football.

During his 25-year career, Orfolsky has coached two All-Americans and had 13 NCAA qualifiers, including a NCAA qualifier in each of the last two years. WMU belonged to the Great Lakes League, he guided his squad to 10 team titles in 14 years and had 33 champions who won 63 individual events.

Orfolsky was a 1976 recipient of WMU's Alumni Teaching Excellence Award, works as an international judge and has been an NCAA representative to the U.S. Gymnastics Federation Board of Directors.

As a competitor, Orfolsky was a member of the 1960 U.S. Olympic team, the 1962 NCAA champion and was runner-up for the all-around title in 1961, 1962 and 1963. He also won the 1960 NCAA all-around, rings and parallel bars crowns.

Tickets for the banquet, which will be preceded by a 6 p.m. reception, are $20 and may be reserved by calling 7-8652.

**Vendors to show products at Sept. 15 Computer Fair**

A variety of hardware and software vendors will present and discuss their products Tuesday, Sept. 15, at the WMU Computer Fair. Sponsored by Micro & More, the fair will run from 9 a.m. to 3 p.m. in 209-210 Bernhard Center.

Vendor booths include Apple, IBM, NeXT, Tenex, Zenith, the Douglas Stewart Co., Egghead Discount Software, Microsoft and WordPerfect. Persons can stop by the vendors' exhibits and register for promotional items that range from a computer to an automobile.

Apple, IBM, NeXT, Tenex and Zenith also will be distributing information about their particular offerings for the fourth annual WMU Truckload Sale. Orders for the sale will be taken this month, and items are scheduled to be auctioned for Oct. 9.

For more information, persons should call Micro & More at 7-5460.