ON THE COVER

Students from the College of Osteopathic Medicine participate in providing free physical examinations for senior citizens at the Senior Center in downtown Lansing. Student Ellen Johnson is behind the ophthalmoscope; Thomas A. Naegele and Dr. George Gross look over a patient record together; and Brenda Sikorski checks for hypertension.

INSIDE THIS ISSUE......

3 MSU-COM students offer free physicals to senior citizens

4 Immunity problems caused by zinc deficiency easily treated

5 Cancer pain presents unique management problems

6 California surgeon to discuss alternatives to blood transfusion at MSU February 25 Nobel Laureate on campus March 24-25 Federal training and education grants listed in new publication

7 People

8 People
Jack Maatsch honored for development of certification exam for emergency medicine French osteopathic physicians visit MSU-COM

COMMUNIQUE

"Communique," a newsletter publication of the Michigan State University College of Osteopathic Medicine, is issued 15 times a year through the Health and Medicine Information Section of the Department of Information Services, A314 E. Fee Hall, East Lansing, Michigan 48824; telephone 517/353-0820. Members of the Editorial Advisory Committee include David Marler, Ph.D.; Francis A. Bernier, Ph.D.; Gordon C. Spink, D.O., Ph.D.; Nancy Houston, B.A. (editor) and Patricia Grauer, M.A. (managing editor). Circulation manager is Mary Palmer. Production on this issue was done by Beth Stephens and Connie Burch; photography by Dick Wesley. Date of publication of the next issue will be Monday, March 10, 1980. Copy deadline for that issue is noon, Thursday, February 28.

Michigan State University is an affirmative action/equal opportunity institution.
MSU-COM STUDENTS OFFER FREE PHYSICALS TO SENIOR CITIZENS

Potential malignancies, cataracts, hernias and possible ulcers are some of the medical problems that students from the Michigan State University College of Osteopathic Medicine have discovered in special clinics being held for senior citizens.

The examinations are conducted free of charge in a program cosponsored by the Tri-County Office on Aging. They include an extensive history on medical, social, familial and lifestyle characteristics, and a physical examination of the head, neck, chest, abdomen and extremities. Checks of the neurological and musculoskeletal systems are also conducted.

Six third-term osteopathic medical students and two physicians are working Tuesday and Thursday afternoons at the Senior Center, 500 W. Washtenaw, Lansing, in the ten-week program.

"The clinic benefits our students as much as it does the patients," said George Gross, D.O., professor of community health science. "They are going to see more and more persons over 65 in their practices as the age of the general population increases.

"These persons have long medical histories, and offer students a chance to determine what is significant and what is not," Dr. Gross said. "They also gain experience in communicating on sensitive values with persons who may be as old as their grandparents."

Though no treatment or prescriptions can be offered at the clinics, patients are referred if students find something outside normal parameters, Gross said.

The clinic is part of a course offered by the College on comprehensive patient evaluation. Course coordinator is John A. McNeil, D.O., associate professor of family medicine. James J. Davis, D.O., professor of family medicine, also assists at the clinic.
IMMUNITY PROBLEMS CAUSED
BY ZINC DEFICIENCY EASILY TREATED

Zinc deficiency can ruin the body's natural immunity to disease, but new research at Michigan State University indicates immunity can be restored simply by returning to a proper diet.

"We knew lack of zinc made the body vulnerable to disease," explained Pamela J. Fraker, immunologist in the Department of Biochemistry. "What we needed to find out was: 'Is a child locked into permanent bad health?'

"We've been pleased to find that the body's immune system quickly repairs itself, without resorting to drugs or abnormally high amounts of zinc — just a return to adequate zinc in the diet."

The immune system in humans and animals produces specialized cells which ingest and inactivate invading disease organisms. The blood and other body fluids also dissolve foreign bacteria.

When zinc is absent from the diet, that immune system quickly deteriorates.

"This has only been known for a few years," Dr. Fraker said. "Even now, we're still reaching an awareness of how much damage can be caused by even marginal zinc deficiency."

Nutritionists recommend about 18 milligrams of zinc a day for adults, but this requirement varies drastically between individuals, Dr. Fraker feels.

Zinc deficiency often occurs in the Middle East, where much of the population relies heavily on a diet of cereals, without enough meat or milk, the MSU researcher said. "It can be found anywhere diets are inadequate," she added. "You rarely find someone malnourished only in zinc."

Dr. Fraker's work with zinc was started at the urging of Dr. Richard W. Luecke, also a professor of biochemistry, known for his study of the effects of trace elements in nutrition.

"For years physicians and clinicians have known that malnourished children are more vulnerable to disease," Dr. Fraker noted. "It doesn't even help to vaccinate these children."

Her work on recovery of the immune system uses mice, since it would be impossible to do a controlled experiment on dietary deficiency in humans. "But I'd be shocked if the findings with these lab animals didn't apply to humans," she said.

In a side-by-side comparison, one group of mice was given adequate amounts of zinc in their food, the other group a diet adequate in everything but zinc.

With young adult mice — the equivalent of 10- to 16-year-old humans — "we found a very rapid degeneration of most branches of the immune system in the zinc-deficient animals," Dr. Fraker said. "But we found that even an animal close to death could be quickly brought back by feeding it an adequate diet. Complete return to normal immunity levels occurred in as short as 12 days."

With neonates — the equivalent of newborn children — "the zinc-deficient animals also repaired. But they did it in only four days flat," Dr. Fraker said. "There was also a tantalizing period of about two days during the recovery where the previously deficient neonate's immune capacity was almost double normal. We're studying that phenomenon now."
CANCER PAIN PRESENTS
UNIQUE MANAGEMENT PROBLEMS

Managing the unique problems of pain caused by cancer while keeping the patient functional will be the focus of a seminar held at Michigan State University, March 9.

The conference, which will be held at MSU's Kellogg Center, is sponsored by the MSU College of Osteopathic Medicine, MSU Lifelong Education Programs, and the Comprehensive Cancer Center for Metropolitan Detroit.

"Though the pain of cancer is not necessarily more intense than that of other diseases, a tumor that presses on a vital organ or nerve plexus can be exruciating," said Claude Oster, D.O., program chairman and medical director of the Southfield Rehabilitation Center.

"In addition, because cancer is a very serious, often terminal, disease, the anxiety and fear experienced by cancer patients tend to magnify their pain problems," he said.

A third issue cited by Dr. Oster was that of the physician's perception of a dying patient as one for whom addiction or extreme sedation with drugs doesn't matter.

"The pain of cancer is often treated with drugs which leave the patient unnecessarily somnolent and confused," he said. "There are better applications of old techniques and new procedures for pain management which can eliminate the patients' pain but maintain their function."

Procedures of pain management which will be addressed at the seminar include radiotherapeutics, anesthesiology, neurosurgery, pharmacology and psychiatric aspects.

In addition, speakers will discuss the physiological mechanisms of cancer pain and its emotional aspects.

Conference faculty include Dr. Oster; Michael Berkovic, D.O., staff oncologist at Martin Place East and Troy Beaumont Hospitals; Dietrick Blumer, M.D., chairman of the Department of Psychiatry at Henry Ford Hospital; Earl Gonyaw, D.O., professor of neurosurgery at the MSU College of Osteopathic Medicine; George Gustavson, D.O., associate professor of radiology at MSU; Vildan Mullin, M.D., director of the Pain Clinic, University of Michigan; and Vainutis Vaitkevicius, M.D., professor and chairman of the Department of Oncology at Wayne State University.

Contributors to the seminar include McNeil Laboratories; Wright & Filippis, Inc.; Purdue-Frederick Company & Affiliates; Merck, Sharpe and Dohme; and Knoll Pharmaceutical Company.

Application has been made for six hours of Category I continuing medical education credit from the American Osteopathic Association and the Michigan Board of Osteopathic Medicine and Surgery. Approval has been granted for six hours of American Medical Association Category I Credit by the MSU College of Human Medicine.

For further information about the pain seminar, contact Joan Martin Alam, MSU Kellogg Center for Continuing Education, 517/353-7822.
CALIFORNIA SURGEON TO DISCUSS ALTERNATIVES TO BLOOD TRANSFUSION AT MSU FEBRUARY 25

A pioneer in so-called "bloodless surgery," Ronny Lapin, M.D., will visit MSU on Monday, February 25 to present two special programs on blood transfusion alternatives. Dr. Lapin and his colleagues at Doctors Hospital in Santa Ana, California, have been in the news in recent weeks for their work in developing surgical operations planned to be as bloodless as possible.

Issues will include presurgical preventive measures, maximizing new blood production, autotransfusions, problems of minors, anesthesia concerns, and blood substitutes — topics of special concern to persons with rare blood types and to practitioners with Jehovah’s Witness patients (who refuse blood on religious grounds).

Dr. Lapin will address professional audiences from noon to 1:30 p.m. and again from 7 to 9 p.m. in the auditorium of the Life Sciences Building. The programs are identical. There will be a question and answer session at each.

Sponsors of the program are the MSU Medical Humanities Program and the Department of Surgery of the College of Human Medicine.

***

NOBEL LAUREATE ON CAMPUS MARCH 24-25

Nobel Prize laureate Sir Peter Medawar and his wife Lady Jean Medawar will discuss the limits of science, the role of women in science, and technical advances in tumor immunology during a visit to the Michigan State University campus March 24-25.

"The Role of Women in Science" will be presented by both from 3 to 5 p.m., Monday, March 24. "The Limits of Science" will be discussed by Sir Peter at 8 p.m. on Tuesday, March 25. The technical session on tumor immunology has yet to be scheduled.

***

FEDERAL TRAINING AND EDUCATION GRANTS LISTED IN NEW PUBLICATION

A new publication listing federal training and education grant opportunities is being issued through the MSU-COM Office of Research and Graduate Study.

Perry E. Parkhurst, Ph.D., has been appointed by the dean as editor of the publication, which is distributed periodically on-campus to clinical and medical education personnel.

"Information on basic research grants is not listed," Dr. Parkhurst said. "Rather these grants are directed to projects such as establishing training programs, enhancing the teaching skills of clinical faculty, or studying issues in health education and academia."

Information provided in the guide includes application deadlines, contact persons, descriptions of requirements, and funding levels.

Persons wishing to receive the federal grants advisory should contact Dr. Parkhurst at 336 E. Fee Hall, MSU; 517/353-7285.
Charles H. Sander, M.D., professor of pathology, was the featured evening speaker for the Professional Advisory Council of the Michigan Cerebral Palsy Association. His topic was "The Placental Tissue Registry — Frequent Placental Alterations Which May Be Related to Cerebral Palsy." The meeting was held January 30 at the Botsford Inn, Farmington.


Walter C. Mill, D.O., chairman of the Department of Osteopathic Medicine, and Joseph Waleczak, D.O., associate professor of obstetrics and gynecology, attended the 47th annual convention of the American College of Osteopathic Obstetricians and Gynecologists held last month in Miami. Dr. Mill also attended the sixth in-depth review on breast cancer, held by the American College of Osteopathic Surgeons in Nashville.

Joseph A. Papsidero, Ph.D., professor of community health science, participated in a two-day conference on community care of the elderly in San Diego January 30–31. He presented papers on research on effects of care, translation of research into definitions of service, and implications for the organization of services and interdisciplinary service roles. The conference was sponsored by the Department of Family Medicine of the University of California at San Diego, and by the San Ysidro Community Health Center.

Petra Rose Callejas, D.O., 1978 alumna, has opened a practice in family medicine and obstetrics at 17 W. Tenth St., Temple Building, Holland, Michigan. She recently completed an internship at Bay City Osteopathic Hospital.

Stuart Sprague, B.S., first-year osteopathic medical student; James Carrick, B.S., nuclear reactor supervisor, Division of Engineering Research; Bruce Wilkinson, Ph.D., professor of chemical engineering; and Gilbert Mayor, M.D., associate professor of medicine, are authors of "Determination of Nanogram Quantities of Gold in Biological Tissues by Nondestructive Neutron Activation Analysis," published in the Journal of Radioanalytical Chemistry, Vol. 52: 419–24. Sprague was also coauthor with Mayor; Michael Hourani, M.D., and Tom Sanchez, B.S., senior research assistant, Department of Medicine, of "Parathyroid Hormone Mediated Aluminum Deposition and Egress in the Rat" in January 1980 issue of Kidney International, Vol. 17: 40–44.

Robert D. Stevens, Ph.D., professor of health economics, will present a paper on "Cost Effectiveness of Managing Hypertension in a Family Practice Health Center" at the National Conference on High Blood Pressure Control in Houston, Texas, March 25.

Elizabeth Ann Stoll, D.O., 1975 alumna, completed a residency in internal medicine at Mercy Hospital, affiliated with the State University of New York at Buffalo Medical School. She has joined Nathan H. Sokoloff, D.O., in the practice of internal medicine at St. Petersburg Osteopathic Hospital, St. Petersburg, Florida. She also passed the 1979 certifying examination in internal medicine and is a diplomate of the American Board of Internal Medicine.

Milvet J. Strickler, director of anatomical resources, has been named governor-elect of the Michigan Civitan District, the chief administrative officer for all the Civitan clubs in the state. He recently attended a week-long training session for governor-elect, held January 27 – February 2 in Birmingham, Alabama.
Paul E. LaCasse, D.O., 1978 alumnus; Steven E. Blum, D.O., 1978 alumnus; and David Reis, D.O., 1975 alumnus, have all recently joined the staff of Botsford General Hospital. Dr. LaCasse interned at Pontiac Osteopathic Hospital and has been assigned to the Botsford emergency room. Dr. Blum, who did his internship at Botsford, is in family practice. Dr. Reis, who also is working in the emergency room, completed his internship at Detroit Osteopathic and Bi-County Hospitals.

John R. Harris Jr., M.D., professor of radiology, coordinated the publication of the *Emergency Radiology Syllabus*, the professional self-evaluation and continuing education program of the American College of Radiologists. Dr. Harris is chairman of the Emergency Radiology section of the ACR.

* * * *

**JACK MAATSC HONORED FOR DEVELOPMENT OF CERTIFICATION EXAMINATION FOR EMERGENCY MEDICINE**

Jack Maatsch, Ph.D., professor in the Office of Medical Education Research and Development, was recently honored by the American College of Emergency Physicians for his "exemplary contributions to the development of the certification examination in emergency medicine."

He was presented with an inscribed plaque upon his return from sabbatical leave at the University of Utrecht Medical School in the Netherlands.

Dr. Maatsch acted as director of technical development for this new type of criterion-referenced emergency medicine certification examination. He was also principal investigator for an HEW grant that researched the reliability and validity of the exam. His work was seen as instrumental in facilitating the recognition of emergency medicine as a specialty by the American Board of Medical Specialties.

The two-part criterion-referenced examination is designed to predict clinical competence in real medical practice. It is not a norm-referenced achievement test, but rather is score-referenced to examiner ratings of the quality of care given to certain patients in simulated patient encounters. Thus, if all the given standards of performance are met, the candidate is passed. If any one of the standards is not met, the candidate will fail the exam. This test strategy contrasts with the norm-referenced test strategy which automatically fails a certain percentage of persons falling below the norm of all who take the test.

* * * *

**FRENCH OSTEOPATHIC PHYSICIANS VISIT MSU-COM**

Three visiting French osteopathic physicians, guests of John E. Upledger, D.O., associate professor of biomechanics, attended the regular weekly meeting of the Cranial Study Group during their recent visit to MSU/COM. More than 35 persons were present at the demonstration of diagnostic techniques with functional and indirect treatment methods, given by Jean-Pierre Barral, D.O.; Jean-Paul Matthieu, D.O., and Pierre Mercier, D.O.