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NIH CITES EMPLOYEES FOR IDEAS, SERVICE

Cash incentive awards, totalling over \$2,000, were presented to 14 NIH employees in ceremonies held in Institute offices during Christmas week. Three other persons, located in field stations, were also named to receive awards.

Awards for suggestions went to Philip Joram, DRS, \$75; Doris Pagano, CC, \$75; Richard Stroud, NHI, \$100; Henry Burriss, NIDR, \$25; and Wade Jefferson, NHI, \$50.

Those receiving awards for special acts or services were Jay B. Wells, NINDB, \$270; and Harry W. Diehl, NIAMD, \$275.

Honored for superior performance were Elwood Clagget, NIAID, \$100; William Humphrey, Jr., NIAID, \$108; Margaret Fowlkes, CC, \$125; James Simmons, NCI, \$123; Lucie Hauck, NIAMD, \$75; Frances Price, NIAMD, \$150; and Paul Koger, NIAMD, \$150. Three secretaries at the NHI Study Center, Framingham, Mass., Lorna P. Lyell, Dorothea M. McElholm, and Patricia McNamara, divided a \$375 superior performance award.

DR. SJOERDSMA RECEIVES AAAS's SMITH AWARD

Dr. Albert Sjoerdsma, head of the Experimental Therapeutics Section, NHI, last week received the 14th annual Theobald Smith Award in Medical Sciences from AAAS.

The award, consisting of \$1,000 and a bronze medal, was presented to Dr. Sjoerdsma for "demonstrated research in the field of medical sciences, taking into consideration independence of thought and originality."

Dr. Sjoerdsma's work with mast cell tumors, with pheochromocytoma, and with malignant

(See Dr. Sjoerdsma, Page 2)

HEY, YOU! HAPPY NEW YEAR



CODE OF ETHICS ESTABLISHED BY CONGRESS

Congress recently established the following "Code of Ethics for Government Service," listing principles of conduct for all elected and appointed persons in Government:

Any person in Government should

- Put loyalty to the highest moral principles and to country above loyalty to persons, party, or Government department.

- Uphold the Constitution, laws, and legal regulations of the United States and of all governments therein and never be a party to their evasion.

- Give a full day's labor for a full day's pay; giving to the performance of his duties his earnest effort and best thought.

- Seek to find and employ more efficient and economical ways of getting tasks accomplished.

- Never discriminate unfairly by the dispensing of special favors or privileges to anyone, whether for remuneration or not; and never

accept, for himself or his family, favors or benefits under circumstances which might be construed by reasonable persons as influencing the performance of his governmental duties.

- Make no private promises of any kind binding upon the duties of office, since a Government employee has no private word which can be binding upon public duty.

- Engage in no business with the Government, either directly or indirectly, which is inconsistent with the conscientious performance of his governmental duties.

- Never use any information coming to him confidentially in the performance of governmental duties as a means for making private profit.

- Expose corruption wherever discovered.

- Uphold these principles, ever conscious that public office is public trust.

Electronic Device Aids Cancer Detection

No. 221 in a Series

Scientists at the Hagerstown Laboratory of NCI's Field Investigations and Demonstrations Branch have reported progress in their studies of an electronic device that will speed the examination of specimens obtained in the cytology test for uterine cancer.

Uterine cancer, which kills 16,000 women each year, is almost 100 percent curable if caught early. It may be symptomless for two or three years after onset, and the cytology test is one means of detecting cancer in this early stage.

First reported over 15 years ago by Dr. George N. Papanicolaou, the cytology test involves collecting from body openings cells shed by internal organs. Placed on slides and stained, the cells may be studied by trained technicians and determined to be either negative (nonmalignant) or suspicious. Patients whose slides are suspicious are further examined by biopsy to diagnose actual cases of cancer.

Over the past five years the cytology test has proved its value as a diagnostic aid in the NCI-University of Tennessee Medical School program of mass screening for uterine cancer in women of Memphis and Shelby County, Tenn. Of 108,000 women tested in the first screening, 800 cases were discovered, half of them in the early stage and 90 percent of these cases unsuspected. The other 400 cases were in the advanced stage, with about 30 percent unsuspected. Results of a later screening in the same county revealed a marked drop in cases of both unsuspected and advanced cancer.

The electronic cytoanalyzer at the Hagerstown Laboratory is the only one now in use, and is still in the developmental stage. In the present study, the machine has checked over 1,000 slides. It gave accurate results for all the positive or suspicious slides, and for 40 percent of the negative slides.

Specimens are obtained and prepared by standard methods, except that cells are arranged on the slide in a monolayer, or layer one cell thick. The machine's scanning microscope makes a detailed observation of every point on the slide. As each cell is scanned, the size of its

nucleus is superimposed on an electronic grid, the squares of which have been pre-set to a size of 11 microns. The computing element in the machine determines whether the cell nucleus is smaller or larger than 11 microns, and an automatic counter device records the number of nuclei larger than the pre-determined size, and the number smaller. Investigators read the machine counters, and on the basis of computations of the ratio of nuclei size, classify the slide as negative or suspicious. The electronic process is instantaneous.

The grid-square size of 11 microns is an arbitrary figure, arrived at after experimentation. Investigators are not sure that this is the precise point between malignant and nonmalignant nuclei, but results have been promising.

Dr. John C. Pruitt, senior investigator on the study, concludes that the cytoanalyzer is a workable device, capable of accurately selecting a significant percentage of slides that need not be examined further by cytotechnicians or pathologists.

The investigators are improving the effectiveness of the machine and the method of preparing slides. They feel that the cytoanalyzer promises to be a most effective weapon in uterine cancer diagnosis, with a potential of saving the lives of thousands of women each year.

DR. SJOERDSMA Contd.

carcinoid, has made him an authority on "secreting" tumors.

His further studies in pheochromocytoma have demonstrated in man much of the biochemistry of adrenaline metabolism which had previously been known solely from studies in animals.

After his work with certain enzyme-inhibiting compounds, which produce a marked lowering of blood pressure in hypertensive patients, the findings of Dr. Sjoerdsma and his colleagues have led to the opening of a new approach to the treatment of hypertension.

Before coming to NIH in 1953, Dr. Sjoerdsma was resident physician at the USPHS Hospital, Baltimore.

Dr. Sjoerdsma is a member of the AAAS, Sigma Xi, the American Federation for Clinical Research, and the American Heart Association.

Publication Preview

The following manuscripts were received by the SRB Editorial Section between September 8 and September 17.

DBS

Crawford, J. G., and Fishel, C. W. Growth of *Bordetella pertussis* in tissue cultures.

Schmidt, P. J.; Nancarrow, J. F.; Morrison, E.; and Chase, C. A hemolytic reaction due to the transfusion of A blood.

CC

Skolaut, M. W. New ideas and testing in purchasing.

NCI

Earle, W. R. Long term cultivation of animal tissue cells in large cultures.

Reisfeld, R. A.; Bergenstal, D. M.; and Hertz, R. Distribution of gonadotropic hormone activity in the serum proteins of normal pregnant women and patients with trophoblastic tumors.

NHI

Waalkes, T. P. The determination of serotonin (5-hydroxytryptamine) in human blood.

Korn, E. D. Observations on the use of cellulose ion exchangers for the chromatographic separation of nucleotides.

Haverback, B. J., and Davidson, J. D. Serotonin and the gastrointestinal tract.

NIAID

Woodworth, R. C., and Schade, A. L. Conalbumin: A rapid, high-yield preparation from egg-white.

Luttermoser, G. W. Studies on chemotherapy of experimental schistosomiasis. V. Enhancement of the schistosomicidal activity of tartar emetic and stibophen by glycerine.

Greenberg, J.; Taylor, D. J.; Bond, H. W.; and Sherman, J. F. Toxicity of amine-extracted soybean meal.

Emmons, C. W. Environmental sources of infections in the mycoses.

Andrews, J. M. Malaria eradication in the United States.

Steinman, H. G., and Murtaugh, P. A. Isoelectric precipitation of adenovirus and of its complement-fixing antigen.

Wolcott, G. B. The chromosomes of *Dipyllobothrium ursi*.

Beye, H. K., and Wright, W. H. The national filaria control-program (NFCP) of India: Investigative challenges.

Brodsky, I., and Rowe, W. P. Chronic subclinical infection with mouse salivary gland virus.

Utz, J. P. Rheumatoid arthritis: Viral studies of synovial fluid and tissues using tissue culture techniques.

Weinbach, E. C., and Garbus, J. Oxidative phosphorylation in mitochondria from aged rats.

NIAMD

Segal, S., and Foley, J. B. The metabolic fate of C^{14} labeled pentoses in man.

Stetten, DeW., Jr. Hormone regulation.

Levenberg, B., and Hayaishi, O. A bacterial pterin deaminase.

Eddy, N. B.; Lee, L. E., Jr.; and Harris, C. A. The rate of development of physical dependence and tolerance to analgesic drugs in patients with chronic pain. I. Comparison of morphine, oxymorphone and anileridine.

Pollard, C. J., and Bieri, J. G. Nature of the inactivation by isoctane extraction of enzymes of the respiratory chain.

Eisenberg, F., Jr.; Dayton, P. G.; and Burns, J. J. Studies on the glucuronic acid pathway of glucose metabolism.

Lutwak, L. The estimation of radioactive calcium-45 by liquid scintillation counting.

Pollard, C. J., and Bieri, J. G. DPNH-cytochrome C reductase activity in vitamin E-deficient chick heart.

Eddy, N. B., and Lee, L. E. The analgesic equivalence to morphine and relative side action liability of oxymorphone (14-hydroxydihydromorphinone, Numorphan (R)).

Webster, S. H.; Rice, M. E.; Highman, B.; and Stohlmann, E. F. The toxicology of potassium and sodium iodates: II. Subacute toxicity of potassium iodate in mice and guinea pigs.

Lillie, R. D. Diazonium salts.

Scow, R. O. Effect of growth hormone and thyroxine on growth and chemical composition of muscle, bone, and other tissues in thyroidectomized-hypophysectomized rats.

Scow, R. O.; Chernick, S. S.; and Guarco, B. A. Ketogenic action of pituitary and adrenal hormones in pancreatectomized rats.

McGuire, J. S., Jr., and Tomkins, G. M. The effects of thyroxin administration on the enzymic reduction of Δ^4 -ketosteroids.

Gershfeld, N. L., and Shanes, A. M. The influence of high hydrostatic pressure on cocaine and veratrine action in a vertebrate nerve.

Saad, F.; Kominz, D. R.; and Laki, K. A study of the tropomyosins of three cold-blooded vertebrates of different classes.

Robbins, J.; Wolff, J.; and Rall, J. E. Iodoproteins in thyroid tissue and blood of rats with a transplantable thyroid tumor.

Highman, B.; Maling, H. M.; and Thompson, E. C. Serum transaminase and alkaline phosphatase levels after large doses of norepinephrine and epinephrine in dogs.

NIDR

Burstone, M. S. New histochemical techniques for the demonstration of cytochrome oxidase.

NIMH

Chapman, K. W. Management and treatment of drug addiction.

Sokoloff, L. Studies on the peripheral action of thyroxine and its relation to cerebral metabolism.

Kaufman, S. Studies on the mechanism of the enzymatic conversion of phenylalanine to tyrosine; implications for phenylketonuria.

Kaufman, S. Studies on the mechanism of the enzymatic conversion of phenylalanine to tyrosine.

Axelrod, J. The metabolism of sympathomimetic amines *in vivo* and *in vitro*.

Kies, M. W., and Murphy, J. B. Studies on the encephalotogenic factor in guinea pig central nervous system.

Deibler, G. E.; Holmes, M. S.; Campbell, P. L.; and Cans, J. The use of triton X-100 as a hemolytic agent in the spectrophotometric measurement of blood O₂ saturation.

NINDB

Dodt, E.; Copenhaver, R. M.; and Gunkel, R. D. Photo-pischer dominator und farbkomponenten im menschlichen elektroretinogramm.

Tower, D. B. The neurochemistry of asparagine and glutamine.

Kurland, L. T. Descriptive epidemiology of selected neurological and myopathic disorders with particular reference to a survey in Rochester, Minn.

Tower, D. B. The neurochemistry of convulsive states.

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NJH Spotlight



Mary Lou McVicker

After 11 years at NIH, Mary Lou McVicker is leaving. Secretary to NIMH Director Dr. Robert H. Felix for nine years, she has witnessed a significant expansion of the Institute's program, reflected in its growth from a mere 85 persons in 1948 to more than 600 now.

Mary Lou is on her way this month to Pittsburgh as a claims representative for the Social Security Administration. "I recently took the Federal Service Entrance Examination, passed it, and decided to make the change," she explains.

"Her main interest is her work at NIMH," said a co-worker. "You just can't find a more loyal and industrious person."

"Mary Lou is a great girl," said another. "She's very popular with all of us, and we'll hate to see her leave."

A lifetime of service to others is the selfless background of Mary Lou McVicker. After a girlhood in Somerset County, Pa., she graduated from business college and began her 17 years of Government service with the National Housing Agency. She was a part-time volunteer with Travelers' Aid during World War II, helping soldiers and their families in New York. She also contributed her time as a volunteer at St. Clare's Hospital.

But Mary Lou considers her work at NIMH as the most satisfying and important she has yet done. "And I feel so sad about leaving NIH," she said. "Do you know, they even gave me a surprise going-away party just before Christmas?"

Now making ready to vacate her apartment in McLean Gardens,

NEWS BRIEFS

Dr. Thelma Dunn, NCI, has been named by the American Medical Women's Association as one of 11 "Women of the Year" for 1958.

David T. Stanley has recently assumed the post of director of the Office of Management Policy of the Office of the Secretary, DHEW. Mr. Stanley was formerly management appraisal officer in the Office of the Surgeon General, PHS.

Nursing Services of the American Red Cross will celebrate its 50th Anniversary this spring.

HAMSTER NOTES

Hamster officers for 1959 were elected by the group at a meeting last month. The new officers are Paul Blank, CC, president; George Van Staden, DBO, vice president; Alvin Solomon, CC, treasurer; and Harriet Brightman, NIAID, secretary. They will take office this month.

Policy and production plans for the coming year will be discussed at this month's meeting. Employees interested in any phase of dramatics are invited to attend.

Priscilla Maury is now readying possible play entries for this year's Hamster presentation in the D. C. Recreation Department play tournament in the spring.

Paul Blank is planning a pilot course in acting, and invites those interested to call him for further information.

Mary Lou has found time to be active in the Capital Chapter of the National Secretaries' Association. As a member of the Theater Guild, she is an avid playgoer.

In addition to all this, Mary Lou devotes some of her spare time to volunteer work for the National Housing Conference, in Washington, and some to bookkeeping for the Army Times Publishing Co.

Though enthusiastic about her move to Pittsburgh, Mary Lou has her regrets about leaving NIH. "I'll miss my job here in Dr. Felix's office," she said. "He's tops as a boss. And I'll miss all the people here. I'll always remember NIH, because I know I've been spoiled in this job."

BAILEY NAMED CHIEF OF DGMS INFORMATION

Daniel Bailey, recently appointed information officer for DGMS, began his duties last month in Building 16.

Mr. Bailey came to NIH from the office of the Secretary of the Army, where he prepared the Secretary's semiannual reports to the President. Previously, he was information officer for the Department of State, stationed in New Delhi and Hyderabad, India.

He is a former staff member of the Atlanta Constitution and the Washington Post, and earlier published the North Dekalb Record, Brookhaven, Ga. Mr. Bailey was public relations director of Oglethorpe University, Atlanta, Ga., and attended Marist College in Atlanta.

TWO EMPLOYEES RETIRE AFTER LONG SERVICE

Dr. Wolfgang F. Von Oettingen, of the Laboratory of Pharmacology and Toxicology, NIAMD, retired at the end of December after 20 years of Government service. Dr. Von Oettingen will continue his association with NIH by serving as a consultant in toxicology.

Formerly professor of pharmacology and toxicology at Western Reserve University, Cleveland, Dr. Von Oettingen also served as the first director of the Dupont Corporation's Haskell Laboratory of Industrial Toxicology, Wilmington.

Before coming to the United States from his native Germany, Dr. Von Oettingen did research in toxicology at the University of Heidelberg, and was professor of chemistry at the University of Goettingen. He received his M.D. at the University of Heidelberg in 1916, and his Ph.D. from the University of Goettingen in 1913.

Dr. Von Oettingen is a member of Sigma Xi and AAAS, and has published three books and more than 75 papers in the field of toxicology.

Francis C. Hyman, industrial equipment operator, Plant Engineering Branch, DRS, retired last month after 18 years of service.

Mr. Hyman came to NIH in 1948 from Portsmouth, Va., where he had been a machinist in the Navy Yard. Earlier, he operated his own contracting business in Wilson, N. C.

THROUGH ETHIOPIA WITH CAMERA AND NEEDLE



Natives watch the nutritional survey team set up equipment.

Carrying one 16-mm. motion picture camera, two Rolliflexes, 30 rolls of film, and a clean shirt, Jack Robinson, information specialist in NIAMD, set off two months ago for Ethiopia.

One month later he returned, carrying three cameras, 31 rolls of exposed film, one dirty shirt, and a profound respect for all the dedicated public health officers from Europe and America who serve in Ethiopia.

Joining the nutritional survey team sent there under the direction of the Interdepartmental Committee on Nutrition for National Defense, Jack spent three weeks making a photographic record of the survey methods used, and gathering story material about the work for Ethiopian and American use. The team of 10 American doctors and technicians, and 25 Ethiopian health officers, guards, and drivers is assessing the nutritional status of the people and will make recommendations on methods of utilizing to best advantage the agricultural resources on hand.

Ethiopia has no medical school and only one native M.D. But in the city of Gondar, a new Public Health school has just graduated its first class. Concerned mainly with preventive medicine, the school is operated by WHO, UNICEF, Point IV, and the Ethiopian Government, and the staff members represent about 10 nationalities.

Traveling by jeep and truck convoy, the survey team journeyed through jungle, desert, mountains, and high plateau. They found roads to be poor or nonexistent. One vil-



Team health officer takes blood sample from native woman.

lage was accessible only by canoe. Often staying the night at one of the small touring hotels that are a legacy of the Italian occupation, the team branched out to nearby villages by day. Parking the vehicles in a semicircle at the edge of an assemblage of small circular huts, the team director and interpreter chose from among 60 native dialects to talk with the village chief and obtain his permission for the survey. They observed the social amenities by drinking honey beer or sharing a native delicacy with the chief and his entourage. Then equipment was unloaded and the medical assembly line set up.

All the villagers came to see the show, and depending on the chief's interest or comprehension of the program, a number volunteered for testing. As Jack's three cameras recorded the procedures, team members noted the age, weight, and height of the volunteers, and each was given a quick physical examination. One out of ten received a more detailed examination. Samples of blood, urine, and feces were packed in ice and flown back to Addis Ababa, where three biochemist team members made analyses.

The American team members subsisted mainly on spaghetti. All drinking water had to be purified with iodine pills, and special precautions were taken against contamination of solid foods. In addition, Jack spent a fair amount of time protecting his film from excessive heat.

"It was an experience," concludes Jack, returning with a sigh of relief to Washington's prosaic comforts.