

the AFIP LETTER



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First Robert E. Stowell Lecture Highlights ARP Board Meeting

Paul E. Lacy, M.D., professor of pathology at Washington University School of Medicine, St. Louis, MO, delivered the first Robert E. Stowell Lecture at the ARP Board Meeting, held on October 30, 1991, at the Cosmos Club in Washington, D.C. Dr. Lacy spoke on "Islet Transplantation in Diabetes Mellitus."

Robert E. Stowell, M.D., served as scientific director at the AFIP from 1959 to 1967. Dr. Stowell was chairman of the International Academy of Pathology from 1974 to 1983, and has also served as a founding member and past president of the American Registry of Pathology.

The board meeting, chaired by the president, Dr. William Dolan, began in the morning with three concurrent committee meetings on civilian consultation, education, and research. Following lunch, a general discussion and review of committee reports took place.

Vernon Armbrustmacher, Col,

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AFIP'S AIDS Pathology Program collaborates with international experts *Diverse Paths Taken in Studying the Disease*

The AFIP's AIDS Pathology Program is playing a critical role in worldwide efforts to learn more about the disease, according to program director Dr. Florabel Mullick, Associate Director, Center for Advanced Pathology. "Early HIV infection and its outcome is of primary concern to everyone, especially to the military," she notes. Researchers at the Institute are studying early HIV-1 infection in close collaboration with the Army, and have taken diverse paths in attempting to unravel the natural history of this retroviral infection. "Our efforts cover a variety of areas," she says, "from looking at the role played by other infectious agents, to investigating animal models exhibiting AIDS, to studying perinatal and pediatric HIV-1 infections."

The Department of Infectious and Parasitic Disease Pathology, chaired by COL Douglas Wear, MC, USA, and its

Division of AIDS Pathology, headed by COL Peter Angritt, MC, USA, have been actively investigating the role played by various infectious agents, including *Pneumocystis carinii*, *Cryptosporidium*, *Mycobacteria*, and *Mycoplasma* in HIV infection.

From the perspective of peri-natal and pediatric HIV-1 infection and AIDS, institute researchers center on the pathological examination of the placenta as the ultimate barrier to intrauterine HIV-1 infection. "Over 500 placentas from various sources, derived from both HIV-1-seropositive women and from negative controls, are in the archives of the Institute and are actively used in collaborative research projects," notes Dr. Mullick.

The AFIP also provides expert state-of-the-art diagnostic pathology consultation services, having studied over 3,000

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Dr. Adolfo Firpo (left), registrar of the AIDS Registry, discusses a case with Dr. Florabel Mullick and COL Peter Angritt.

DIRECTOR'S MESSAGE

A LOOK TOWARDS 1992



1991 has been a year of changes here at the AFIP, with a number of ongoing and proposed programs to report on. Some

months ago I reported to you that the number of consultations received by the Institute has leveled off to approximately 45,000 per year. As a result, we're seeing more interesting and challenging cases which form the basis for our research and education programs. Turnaround time has noticeably improved in many departments, but we still have room for improvement. Please let us know if our service meets your expectations.

We are in the process of establishing a new Placental Pathology Registry in an effort to recognize fetal and maternal diseases which currently are difficult to identify. Over 150,000 deliveries worldwide take place in the U.S. military each year, and through this new registry we hope to understand and prevent untoward fetal outcome.

The Department of Pediatric Pathology and the Department of Radiologic Pathology will collaborate in mid-1992 with the planned addition of a radiologist to study pediatric cases. Over 300 of the Radiologic Pathology cases accessioned each year are on individuals under 18 years of age, and the material gathered from them will greatly benefit the Pediatric Pathology Education Center.

The Armed Forces DNA Identification Laboratory (AFDIL) played a crucial role in identifying remains of servicemembers killed during Operation Desert Storm. Some of the most

WHO Salivary Gland Tumor Classification Published

The World Health Organization's Collaborating Center for the International Histological Classification of Tumors is located at the AFIP. It is responsible for organizing and coordinating the second edition of the WHO "Blue Books." The first edition was issued between 1967 and 1981; it aims at standardizing the definitions, nomenclature, and classification of tumors. There is close liaison with the AFIP's Atlas of Tumor Pathology so that the WHO recommendations are available to the Atlas authors.

About 20 working groups of pathologists in a number of countries are now reviewing and updating the first edition of the classification. The second editions of the following WHO histological classifications have been published: *Thyroid Tumors* (1988), *Intestinal Tumors* (1989), *Esophageal and Gastric Tumors* (1990), and *Tumors of the Gallbladder and Biliary Tract* (1991). The fifth, *Histological Typing of Salivary Gland Tumors*, has just appeared. Its author, Professor G. Seifert, Hamburg, Germany, led a group of 10 experts from seven countries to elaborate the classification.

The second edition is more comprehensive and detailed than the previous one published in 1972. A total of 31 epithelial tumors and 7 tumorlike lesions are described using internationally accepted terms and diagnostic criteria. New entities include polymorphous low-grade carcinoma and basal cell adenocarcinoma. The immunohistochemical characteristics of the tumors are given wherever relevant, but the classification and definitions are essentially based on conventional light microscopy. The aim is to promote pathologic, therapeutic, and epidemiologic comparisons. ICD-O and SNOMed numbers accompany each entity to facilitate coding. Illustrations from the Tumor Nodes Metastasis Atlas are included to help in staging the carcinomas.

The book contains 124 color photomicrographs and can be ordered from the publisher, Springer-Verlag (Tel. 1-800-SPRINGER). A set of 124 color slides (35 mm) corresponding to the photomicrographs in the book is available from the American Registry of Pathology (tel. 202-576-2978).

advanced techniques currently available for human identification were first utilized in a mass disaster situation by the AFIP for military fatalities from Operation Desert Storm.

The use of antibody profiling and DNA profiling provided valuable assistance to our professional staff in difficult cases of comingling and fragmentation by enabling accurate and timely identification to facilitate the return of loved ones to their families. We are now in the process of establishing a DNA Repository for all services to assist in future identification efforts.

Lastly, on 5-6 December, the first Human Developmental Anatomy Center

Conference brought together 25 scholars, researchers, administrators, and museum professionals to discuss initiatives for this new area. Plans are underway for an international symposium to be held in Washington, D.C., in mid-1992.

Have a happy, healthy, and safe holiday season.

Vernon W. Armbrustmacher
Col, USAF, MC
The Director

USAF, MC, Director of the AFIP, spoke of new directions in pathology being undertaken at the Institute, including investigation related to cancer, infectious diseases, and environmental pathology. "The future lifeblood of the AFIP is advanced research, especially relating to the study of tissue," he said.

The Research Committee reported on new guidelines for research proposals and emphasized the need to support research activities among younger staff members. Dr. Florabel Mullick, Associate Director, AFIP, reviewed the Environmental Pathology Program, including efforts in the genetics program, fluoride program, and toxic lesion archives.

Members of the Education Committee discussed new efforts in continuing education, including extending seminars in subspecialty areas to universities. J. Thomas Stocker, COL, MC, USA, Deputy Director, AFIP, reviewed new education initiatives, including changes

in course locations and brochures. The committee also reported on the effectiveness of videodiscs as a teaching tool for use in didactic sessions, self-teaching, and continuing medical education.

The Diagnostic Civilian Consultation Committee provided the board with a review of new diagnostic tests in hematopathology, immunohistochemistry, trace elements, and toxicology. Dr. Hugo Rizzoli, ARP secretary, discussed the billing procedures, including the level of reimbursement and the need for possible direct patient billing.

Dr. Donald West King, ARP executive director, reviewed the financial statements and all the committee reports. He gave a report on plans for the future, including expansion of the environmental pathology program, increasing the number of fellowships, improving the diagnostic consultation service, and gathering national support for a new AFIP building. The full meeting came to a close following a

discussion of ongoing initiatives to move the National Museum of Health and Medicine of the AFIP to a new exhibit space in downtown Washington, D.C., along with long-range proposals for a new AFIP building in Bethesda, MD.



Robert E. Stowell, M.D., greets Paul E. Lacy, M.D. prior to the first Stowell Lecture.

Repository and Research Services

Proper packaging of formalin-fixed tissue specimens

Recently, the Institute has received several packages of formalin-fixed tissue specimens which have leaked during shipment. Most of these are minor and cause little problem. However, on occasion there has been a significant leak which resulted in disruption of the shipping process.

In order to prevent incidents of this kind from happening, all formalin-fixed tissue should be appropriately packaged at the source. According to the latest postal service guidelines:

- Specimens should be securely sealed in a primary container with sufficient shock-resistant material to withstand

shock and pressure changes.

- Surround the primary container with absorbent material to take up the contents in case of leakage.
- Place the primary container in a secondary shipping container, which should also contain enough absorbent material to prevent any leakage from escaping outside the container.
- Specimens exceeding 50 ml per parcel must be packaged in a fiberboard box or shipping container of equivalent strength.
- Single primary containers must not contain more than 1,000 ml (1 qt) of material, with the maximum amount of clinical specimens enclosed in a single outer shipping container set at 4,000 ml (we also recommend sealing the primary container in a plastic bag).

- Handling instructions written on the box are usually ignored unless an official handling designation has been coordinated and appropriate postage placed on the box.

Facilities having questions concerning the proper packaging of pathologic materials are encouraged to call the AFIP Materials Repository at (202) 576-2804 for guidance prior to shipment.

Profile

Captain Heather N. Tyreman, Chief, Resources Management



Captain Heather N. Tyreman is the new chief of Resources Management at the AFIP. Her responsibilities include

overseeing the AFIP's annual operating budget of over \$24 million and coordinating manpower resources within the Institute. She is also a key staff member in the planning and programming of future year resources.

A native of Anaheim, California, CPT Tyreman received her B.A. in botany from Pomona College and M.Sc. in systems management from the University of Southern California. She recently graduated from Syracuse University, where she received her M.B.A. in resource management and was nominated for membership into

Beta Gamma Sigma, the national business honor society. CPT Tyreman is also a member of the Healthcare Financial Management Association and the American Society for Healthcare Materiel Management.

CPT Tyreman began her military career in 1980 as the division medical supply officer for the 3rd Infantry Division, Aschaffenburg, Federal Republic of Germany. She also served as property management officer for the U.S. Army Medical Materiel Center, Europe, in Pirmasens. Upon her return to the United States, CPT Tyreman served in various medical logistics assignments before selection to long-term graduate education in the Army Comptrollership Program at Syracuse University.

CPT Tyreman holds the Expert Field Medical Badge. Her awards include the Army Meritorious Service Medal for duty performance at the U.S. Army Medical Department Activity, Fort Benning, Georgia. CPT Tyreman's interests include musical performance (piano and oboe), SCUBA diving, bicycling, cross-country skiing, and Indian cuisine.

COL J. Thomas Stocker Elected Fellow of CAP



J. Thomas Stocker, COL, MC, USA, Deputy Director, AFIP, has been elected a fellow of the College of American Pathologists (CAP), and will be

serving on CAP's Autopsy Committee. The committee is composed of CAP fellows representing pathology and other medical societies. "The AFIP and DoD are extremely interested in promoting the use of the autopsy as valuable teaching and research material, and as a quality assurance mechanism," Stocker says. "The AFIP, in particular, has been concerned about the steady decline in the number of autopsies performed in the U.S. The autopsy rate in military medical centers has been maintained at a steady 30-40% while nonmilitary hospitals have seen a decline to as low as 5%."

AIDS Pathology Program, continued from page 1

AIDS cases to date. "We receive microscopic slides, paraffin tissue blocks, and fixed wet tissues derived from HIV-infected individuals and AIDS patients," Dr. Mullick adds, "and any of our 23 departments with expertise or interest in relevant pathology subspecialties can be called upon to reach a consensus opinion for a final diagnosis."

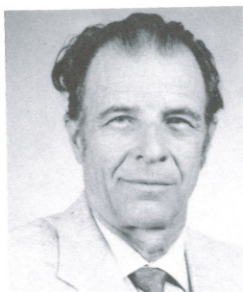
The AIDS Pathology Program actively participates in the AFIP's commitment to medical education. Dr. Adolfo Firpo, registrar of the AIDS Registry, is developing courses in various aspects of AIDS pathology in collaboration with pathologists, basic

scientists, and clinicians involved in AIDS research and patient care. "We are also developing visiting fellowship programs for pathologists through the assistance of external sponsoring agencies and organizations," notes Dr. Mullick.

One significant AFIP-sponsored program has been 'Project SIDA,' an international collaborative study on the HIV and AIDS epidemic in Africa. "Since 1986, we've collaborated with the Centers for Disease Control and the National Institutes of Health to study AIDS in Zaire," Dr. Mullick observes. "We have two fully equipped autopsy facilities, and a histopathology laboratory overseen by one U.S. pathologist,

Dr. Ann Nelson, along with a staff of nine Zairian employees." At the moment work has stopped because of political unrest, but Dr. Mullick hopes to get started again soon. "Every case worked on by institute personnel in Zaire has been accessioned at the AFIP for further study," she says, "and we hope this valuable and important work is renewed again in the near future."

AFIP STAFF "IN THE NEWS"



■ **Henry J. Norris, M.D.**, Chairman, Department of Gynecologic and Breast Pathology, received a Ciba-Geigy grant to attend the XIII

World Congress of the International Federation of Obstetricians and Gynecologists (FIGO) in Singapore, 15-20 September 1991. Dr. Norris appeared as part of a symposium sponsored by the International Society of Gynecological Pathologists. He later spoke in Hong Kong at a postcongress course sponsored by the Hong Kong College of Obstetricians and Gynecologists, and at the Queen Mary Hospital's Department of Pathology, Hong Kong.

■ In October 1991, **Tatiana T. Antonovych, M.D.**, Chief, Division of Nephropathology, Department of Genitourinary Pathology, lectured at the Lviv Medical Institute, Ukraine, and at the Research Institute of Urology and Nephrology in Kiev, Ukraine. She then participated as a member of the Advisory Board of Pathologists for cyclosporin toxicity and in the workshop for the prevention of cyclosporin-nephropathy in autoimmune disease, held in Bad Zurzach, Switzerland.

■ **Zachary D. Goodman, M.D.**, Chief, Division of Hepatic Pathology, Department of Hepatic and Gastrointestinal Pathology, served as codirector for the 1991 Postgraduate Course of the 42nd Annual Meeting of the American Association for the Study of Liver Disease. Over 1,650 hepatologists, gastroenterologists, and pathologists attended the course, entitled "Liver Biopsy Interpretation for the 1990's - Clinicopathologic Correlations in Liver Disease." Also on the faculty were Dr. Kamal G. Ishak, Chairman, Department of Hepatic and Gastrointes-

tinal Pathology, and Dr. Hyman J. Zimmerman, Distinguished Scientist. The course was held in Chicago the second and third of November 1991.

■ **James J. Buck, CDR, MC, USNR**, **Melissa L. Rosado de Christenson, Maj, USAF, MC**, and **Mark J. Kransdorf, LTC, MC, USAR**, participated in the Second Conference of Radiology and Imaging, held 3-5 October at the Hospital Central Militar, the principal military hospital of Mexico, in Mexico City. These AFIP radiologists gave several lectures demonstrating the radiologic-pathologic correlation of gastrointestinal, chest, and bone disease.

■ **James Smirniotopolous, M.D.**, Department of Radiologic Pathology, has been named to the Professional Advisory Board of the Sturge-Weber Foundation. Sturge-Weber syndrome is one of the phakomatoses with very important radiologic findings.

■ **Fatollah K. Mostofi, M.D.**, Chairman, Department of Genitourinary Pathology, was interviewed in the November 1991 issue of *Societe Internationale D'Urologie News*. He spoke about the collaboration between pathology and urology, highlighting the newly established publication, *Journal of Urological Pathology*.

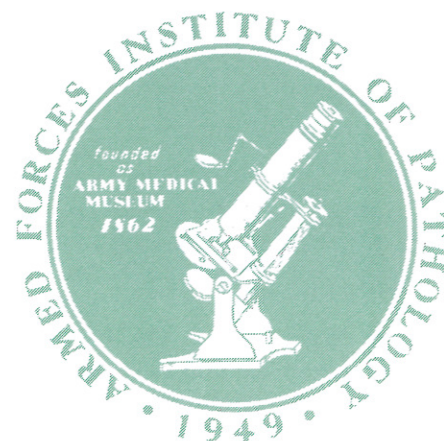
■ In September 1991, the crash of a DuPont Conoco jet in Malaysia took the lives of all 12 U.S. citizens on board, and resulted in a team of AFIP personnel being sent to conduct identification procedures. Headed by **Col William Gormley, USAF, MC**, deputy medical examiner, and **Dr. William Rodriguez**, forensic anthropologist, the team responded at the request of the State Department. Team members included forensic pathologists, odontologists, and anthropologists.

■ **The First Annual AFIP Course in Radiologic-Pathologic Correlation** was held 7-11 October 1991 in Orlando, Florida. The course, which was the first radiologic pathology course held outside the Washington area, was supported by a generous grant from Mallinckrodt, Inc. During a dinner held the final night of the course, the AFIP plaque was presented to Dr. Elias G. Theros, the second chairman and registrar of Radiologic Pathology, in recognition for his outstanding contributions in the area of radiologic-pathologic correlation.



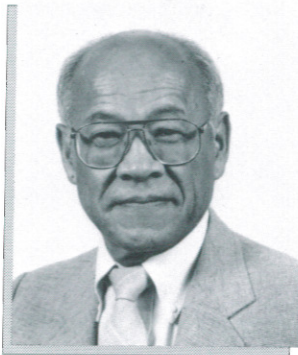
■ **John M. Pletcher, COL, VC, USA**, Chairman, Department of Veterinary Pathology, was recently elected to serve a four-year term as one

of four councilors of the Executive Council of the American College of Veterinary Pathologists (ACVP). The ACVP was established in 1948 to solve specialized problems in the teaching, research, and practice of veterinary pathology. Among its objectives are to further scientific progress in veterinary pathology and to establish standards of training, experience, and examinations for qualification as specialists in veterinary pathology. The college has over a thousand diplomates from all over the world and is growing rapidly.



George Migaki, D.V.M., Retires from Registry of Comparative Pathology

Dr. George Migaki, chief pathologist for the Registry of Comparative Pathology since 1968, retired from the AFIP in December 1991. Dr. Migaki also served as a scientist associate for the Universities Associated



for Research and Education in Pathology (UAREP) since 1968.

Born in Troy, Montana, Dr. Migaki graduated from high school in Spokane, Washington, in 1943. Following an honorable discharge from the U.S. Army in 1946, he attended Gonzaga University, Spokane, WA, and Washington State University, Pullman, WA, earning a doctor of veterinary medicine degree in 1952.

Dr. Migaki took up a general veterinary practice in Montana and Washington state from 1952 to 1954, before serving with the Meat Inspection Service, U.S. Dept. of Agriculture, as a veterinary meat inspector and veterinary pathologist through 1968.

As chief pathologist for the Registry of Comparative Pathology, Dr. Migaki established and edited the *Comparative Pathology Bulletin*, first published in November 1969, and now in its 23rd

year. He has also contributed to the development of 12 symposia on various aspects of comparative pathology, developed 13 scientific exhibits on timely topics of comparative pathology, edited over 25 books and chapters, and has authored over 65 peer-reviewed articles in journals.

Dr. Migaki received Washington State University's Alumni Achievement Award in 1988.



Arnica Downing named Senior Laboratory Supervisor



Arnica E. Downing has been named senior laboratory supervisor within the Department of Scientific Laborato-

ries. In her new role, Mrs. Downing will oversee the work of seven histopathology laboratory branches staffed by

over 40 technical personnel.

A graduate of the Medical Technology Program at Columbia Hospital for Women, Mrs. Downing began her career there as a histology technician. In 1966, she began her federal career as a histology technician in oral pathology at the U.S. Institute of Dental Research. In 1969, she joined the Department of Radiologic Pathology at the AFIP. Since 1971, she has served as a member of the Histopathology Department.

A registered and certified histotechnologist with the American Society of Clinical Pathologists and the National Society of Histotechnologists, she has extensive experience in ophthalmic, infectious and parasitic disease, veterinary, and C&E laboratories.

In 1980, Mrs. Downing became supervisor of the AFIP's neuropathology laboratory, maintaining an excellent record of service for that department. She lectures annually at the AFIP Histotechnology Workshop/Seminar and is a course instructor to the AFIP's Tri-Service Histopathology School.

Mrs. Downing's technical expertise and managerial experience will insure that the laboratories remain at the technological forefront and are fully capable of providing superior histopathology support for the Institute's missions.

Museum Receives Congressional Appropriation of \$700,000 *AFIP Goal Of New Museum Site Takes Significant Step Forward*

In a vote which reflected strong bipartisan support in both houses, Congress provided AFIP's National Museum of Health and Medicine with an FY '91 appropriation of \$700,000 to prepare for

transition to a new site in downtown Washington, D.C. This vote was consistent with the AFIP's established goal of moving the museum's exhibit and public education programs to a more visible site on The Mall. A comprehensive site selection survey carried out in 1989 and 1990 determined that the best site for the new facility is adjacent to the Humphrey Building, the headquarters of the Department of Health and Human Services, on Independence Avenue.

Dr. Louis Sullivan, Secretary of the Department of Health and Human Services, has established a task force to study the issues raised by the Museum's possible relocation to the plaza of the Humphrey Building. This location would put the Museum in close proximity to the Air and Space Museum and to

the future home of the Museum of the American Indian. A formal feasibility study of the Independence Avenue site, funded by the Congressional appropriation, is being conducted by the General

The planning grant will also be used to implement a National Planning Commission. This will enable the Museum to reach out to professional associations and community leaders

across the United States in an effort to determine interest, ideas, participation, and feasibility for support of a revitalized exhibit and public education facility for the National Museum of Health and Medicine. The commission will conduct regional meetings during 1992 to seek the views and participation of the American people.

Asked for his assessment of the situation, Dr. Marc Micozzi, Associate Director,

National Museum of Health and Medicine of the AFIP, said:

"This strong show of congressional support, coupled with the help of the Public Health Service, represents a very significant step forward in the effort to revitalize the Museum and recapture its enormous potential. With continuing support from the AFIP, we expect to accomplish this important goal."



MG Thomas Tempel, DC, USA, Chief Army Dental Corps, (left), received a special tour of the National Museum of Health and Medicine of the AFIP by Director Dr. Marc S. Micozzi, during an October 1991 visit to the Institute.

Services Administration.

In September, the contract to administer these planning funds was awarded to the American Registry of Pathology. In addition to the site feasibility study, the funds will be used to provide a master exhibit plan, a master facility program, the real estate/site selection plan, and the final and coordinating reports generated by this effort.

Abstracts

Cytometry and Morphometry of Malignant Fibrous Histiocytoma of the Extremities: Prediction of Metastasis and Mortality

Robert L. Becker, Jr., LtCol, USAF MC, David Venzon, PhD, Ernest E. Lack, MD, Ulrika V. Mikel, MGA, Sharon W. Weiss, MD, and Timothy J. O'Leary, MD, PhD

Flow cytometry and nuclear morphometry were compared with traditional pathologic grading techniques for predicting the course of malignant fibrous histiocytoma of the extremities. Clinical, pathologic, and flow/morphometric variables from 53 cases were tested by Cox regression for prediction of distant recurrence and mortality. Tumor grading based on extent of tumor necrosis was a significant predictor for both disease-free survival ($p = .014$) and overall survival ($p = .003$). The fraction of nuclei in the S + G₂M segment of DNA histograms was significant for disease-free survival ($p = .007$), and remained significant ($p = .033$) in a joint Cox model with necrosis-based grade ($p = .004$ for the bivariate model). Relative risk for recurrence varied nearly 10x between the 10th and 90th percentiles of grade and $(S + G_2M)^{1/2}$. Overall survival was predicted by a nuclear shape feature termed "R" ($p = .000008$), the casewise difference (residual) between expected and observed nuclear perimeter as a function of average Feret diameter. In a bivariate Cox model, relative risk of mortality varied 35x between the 10th and 90th percentiles of grade and R. Cytometric and morphometric data contain information about recurrence-free and overall survival beyond that available from more usual clinical and pathologic features. It seems likely that nuclear morphometry, in particular, will prove to be a useful aid for estimating the prognosis of patients with malignant fibrous histiocytoma of the extremities.

Am J Surg Pathol 15(10):957-964,1991.

Toxicological Findings in Federal Aviation Administration General Aviation Accidents

James J. Kuhlman, Jr., MS; Barry Levine, PhD; Michael L. Smith, PhD; and Jerry R. Hordinsky, MD

Blood, urine, and tissue specimens were received from 377 Federal Aviation Administration (FAA) aviation fatalities during fiscal year 1989. Carbon monoxide at less than 10% saturation was found in 94% of the cases, and cyanide at less than 0.5 mg/L was found in 96% of the cases. Ethanol at greater than 10 mg/dL was found in 14.8% of the cases, but only 4.5% were determined to be due to ethanol ingestion from toxicological findings. Excluding nicotine and ethanol, 12.6% of the cases were positive for one or more drugs. Acetaminophen and salicylate were the most frequently found drugs. Cannabinoids were found in 1.3%

of the cases and benzoylecgonine in 1.6%. There was minimal use of therapeutic drugs that cause central nervous system depression or stimulation. These results show no consistent pattern of drug involvement in civilian aviation fatalities.

J Forensic Sci. 1991;36(4):1121-1128.

New Techniques and Tumor Nomenclature

Leslie H. Sobin, MD, Department of Hepatic and Gastrointestinal Pathology

New techniques in pathology can effect tumor nomenclature by leading to new concepts which may then give rise to new terms. Pathologists generate morphological data. They are obliged to provide consistent data for those who depend on standardized terms, e.g., clinical trials, tumor registries and practising physicians and surgeons. They face the dilemma of when to replace a standard term with a new term.

The following are recent examples of situations in which new techniques have had an impact on tumor nomenclature but which have raised questions about the applicability of new terms in routine diagnostic reports:

- tumors of the lung, particularly when studied by electron microscopy: should the ultrastructural heterogeneity of lung tumor types be expressed or ignored in routine diagnosis?
- the APUD and neuroendocrine carcinoma concepts: is there a need to rename carcinoids and small cell carcinomas?
- endocrine elements in carcinomas: are the following terms useful for diagnosis: amphicrine carcinoma, argentaffin cell carcinoma, biphenotypic carcinoma?
- The recognition that conceptual terms and descriptive terms have separate functions may help pathologists deal with terminological change.

APMIS Suppl. 23:9-12, 1991.

Detection of Epstein-Barr Virus Sequences in Hodgkin's Disease by the Polymerase Chain Reaction

Cynthia F. Wright, Ann H. Reid, Mark M. Tsai, Kathleen M. Ventre, Pamela J. Murari, Glauco Frizzera and Timothy J. O'Leary

The authors examined paraffin-embedded lymph node biopsies from 65 cases of Hodgkin's disease for the presence of Epstein-Barr virus (EBV) DNA, using the highly sensitive polymerase chain reaction technique. Overall 40% of the cases were positive for EBV DNA; there were no statistically significant differences in the frequency of EBV positivity among the different subtypes of Hodgkin's disease. These results are in agreement with those of previous studies that employed less sensitive detection techniques and suggest that EBV either is present in pathologic tissues only in some phases of the evolution of Hodgkin's disease or is a pathogenetic factor involved in only a portion of cases.

Am J Pathol 1991, 139:393-398.

COURSE OFFERINGS

Armed Forces Institute of Pathology / American Registry of Pathology
January 1992 - June 1992

Orthopedic Pathology

Feb 2-7
Bethesda, MD: Holiday Inn of Bethesda
Approx. CME Credit: 46
Tuition: \$500 (DoD, VA, PHS Fee: \$100)

Infectious & Parasitic Diseases in the Tropics and in the U.S.

February 3-7
Key Biscayne, FL: Sheraton Royal Biscayne
Approx CME Credit: 41
Tuition: \$495 (DoD, VA, PHS Fee: \$300)

Genitourinary Pathology

February 8-12
Bethesda, MD: Holiday Inn of Bethesda
Approx CME Credit: 59
Tuition: \$350 (DoD, VA, PHS Fee: \$150)

Controversies and Recent Advances in Surgical Pathology

February 9-14
Orlando, FL: Disney Contemporary Hotel
Approx CME Credit: 30
Tuition: \$650 (DoD, VA, PHS Fee: \$300)

Neuroradiology Review

February 29- March 1
Bethesda, MD: Hyatt Regency Bethesda
Approx. CME Credit: 11
Tuition: \$300 (DoD, VA, PHS Fee: \$75)

Neuropathology Review

March 2-6
Bethesda, MD: Hyatt Regency Bethesda
Approx. CME Credit: 33
Tuition: \$500 (DoD, VA, PHS Fee: \$225)

Paleopathology

March 11 - 13
Washington, DC: Armed Forces Institute of Pathology
Approx. CME Credit: 20
Tuition: \$200 (DoD, VA, PHS Fee: \$150)

Forensic Dentistry

March 16-20
Bethesda, MD: Holiday Inn of Bethesda
Approx. CME Credit: 36
Tuition: \$495 (DoD, VA, PHS Fee: \$95)

Problems in Anatomic Pathology

March 22-April 3
Washington, DC: Armed Forces Institute of Pathology
Tuition: \$1000 (DoD, VA, PHS Fee: \$250)

Surgical Pathology of the Gastrointestinal Tract

March 30 - April 1
Bethesda, MD: Holiday Inn of Bethesda
Approx. CME Credit: 25
Tuition: \$325 (DoD, VA, PHS Fee: \$150)

Uroradiology

April 4-5
Washington, DC: Hyatt Regency Capital Hill
Approx CME Credit: 14
Tuition: \$275 (DoD, VA, PHS Fee: \$100)

Prenatal & Pediatric Pathology

April 6-10
Bethesda, MD: Holiday Inn of Bethesda
Approx. CME Credit: 22
Tuition: \$450 (DoD, VA, PHS Fee: \$100)

Comparative Pathology

April 20-22
Bethesda, MD: Holiday Inn of Bethesda
Approx. CME Credit: 23
Tuition: \$250 (DoD, VA, PHS Fee: \$100)

Forensic Toxicology

April 29 - May 1
Bethesda, MD: Holiday Inn of Bethesda
Approx. CME Credit: 16
Tuition: \$400 (DoD, VA, PHS Fee: \$200)

Gastrointestinal Radiology Review

May 2-3
Bethesda, MD: Hyatt Regency Bethesda
Approx. CME Credit: 14
Tuition: \$275 (DoD, VA, PHS Fee: \$75)

Hematopathology

May 5-8
Bethesda, MD: Holiday Inn of Bethesda
Approx. CME Credit: 33
Tuition: \$500 (DoD, VA, PHS Fee: \$300)

Melanocytic Lesions of the Skin

May 6-8
Bethesda, MD: Hyatt-Regency Bethesda
Approx. CME Credit: 20
Tuition: \$350 (DoD, VA, PHS Fee: \$200)

Diagnostic Immunopathology & Molecular Pathology

May 11-13
Bethesda, MD: Holiday Inn of Bethesda
Approx. CME Credit: 25
Tuition: \$400 (DoD, VA, PHS Fee: \$250)

DNA Databases & Repositories

May 15-16
Bethesda, MD: Marriott
Approx. CME Credit: 12
Tuition: \$200 (DoD, VA, PHS Fee: \$125)

Veterinary Descriptive Pathology

June 8-11
Washington, DC: Armed Forces Institute of Pathology
Approx. CME Credit: 30
Tuition: \$350 (DoD, VA, PHS Fee: \$75)

Exfoliative & Fine Needle Aspiration Cytology

June 8-12
Bethesda, MD: Holiday Inn of Bethesda
Approx. CME Credit: 35
Tuition: \$550 (DoD, VA, PHS Fee: \$200)

Forensic Anthropology

June 22-26
Bethesda, MD: Uniformed Services University
of the Health Sciences
Approx. CME Credit: 33
Tuition: \$500 (DoD, VA, PHS Fee: \$200)

For further information, contact: Education Division, Armed Forces Institute of Pathology, Washington, DC 20306-6000; 301-427-5231; FAX:301-427-5001

Instructions for Filling Out Application Form for AFIP Courses

1. **Course Fee:** Checks for all courses are to be made payable to the American Registry of Pathology (ARP). To safeguard your course space, we strongly encourage advance fee payment when application form is submitted, but not later than the Application Priority Deadline (does not apply to non U.S. citizens).
2. **Application Priority Deadline:** Fifty percent of the course spaces are reserved for federal applicants and 50% for non-federal applicants until the Application Priority Deadline Date. After that date applications will be considered on a first-received, first-accepted basis.
3. **Federal Personnel Please Note:** To insure a space will be held for you, submit an application for each course you desire to attend directly to the Education Division, AFIP. Do this regardless of any funding action.
4. **Accreditation:** The Armed Forces Institute of Pathology is accredited by the Accreditation Council for Continuing Medical Education to sponsor continuing medical education for physicians.
5. **Registration Procedures for International Applicants:**

Civilians:

Mail letter of application to:

Chief, Program Resources Branch
E/VCP, Rm 266
United States Information Agency
301 4th Street, S. W.
Washington, D.C. 20547
FAX: (202) 619-4655

Letter of application should include:

1. Title of Course
2. Inclusive dates of course
3. Your present position
4. Your home and office mailing address
5. Your date and place of birth
6. Your country of citizenship
7. Your financial arrangements for stay at this course (U.S. Government cannot be responsible for any expenses incurred while you are in the U.S.)

With letter of application, attach a copy of course application form, a check drawn on a U.S. bank or International Money Order, payable to the American Registry of Pathology, in U.S. dollars in the amount required.

Military:

Request the desired training through your military training channels to the Security Assistance Office of the U.S. Mission in your country.

International Applicants Employed by an Agency of the U.S. Government

Attach to letter of application (see above) a letter certifying employment from your servicing personnel office and mail to:

International Training Program Manager,
U.S. Army Health Professional Support Agency
Attn: SGPS-EDI; International Training Officer
5109 Leesburg Pike
Falls Church, VA 22041-3258
FAX: (703) 756-7535

Residents and fellows deduct 25% of Course Fee

Friends of AFIP deduct 10% of Course Fee

APPLICATION FORM - AFIP COURSES

Course Title & Dates _____

Name (Last, First, MI) _____

Mailing Address _____

City, State, Zip _____

Phone _____ Specialty _____ Board Status: Certified Eligible

Citizenship _____ Resident/Fellow Friend of AFIP Membership # _____

Military/Federal Civilian Employees (Only): Rank/Civilian Grade _____

Service Agency: _____

Corps: MC, DC, NC, VC, Biomedical/Allied Science

Payment Enclosed: (Payable in U.S. dollars only) Tuition \$ _____ DoD, VA, and PHS Fee \$ _____

Method of Payment: Check/Money Order MasterCard Visa

Card Number _____ Expiration Date _____

Name as it appears on card _____

Signature _____

Make All Payments to: AMERICAN REGISTRY OF PATHOLOGY

Mail To: Armed Forces Institute of Pathology
Education Division
Washington, D.C. 20306-6000

Telephone: (301) 427-5231
AUTOVON: 291-5231 FAX: 301-427-5001

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Washington, D.C. 20306-6000
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Recent Publications by AFIP Staff

1. Becker RL Jr, Venzon D, Lack EE, Mikel UV, Weiss SW, O'Leary TJ. Cytometry and morphometry of malignant fibrous histiocytoma of the extremities: prediction of metastasis and mortality. *Am J Surg Pathol.* 1991; 10:957-964.
2. Kuhlman JJ Jr, Levine B, Smith ML, Hordinsky JR. Toxicological findings in Federal Aviation Administration general aviation accidents. *J Forensic Sci.* 1991; 36:1121-1128.
3. Mikel UV, Becker RL Jr. A comparative study of quantitative stains for DNA in image cytometry. *Anal Quant Cytol Histol.* 1991;13:253-260.
4. Montgomery EA, Meis JM. Nodular fasciitis: its morphologic spectrum and immunohistochemical profile. *Am J Surg Pathol.* 1991; 15:942-948.
5. Seeff LB, Ishak KG, Gerber MA. Unresolved clinical issues and histopathologic and immunopathologic aspects of chronic active hepatitis B and C. In: Hollinger FB, Lemon SM, Margolis H, eds. *Viral Hepatitis and Liver Disease*, Baltimore, Md: Williams & Wilkins; 1991:805-813.
6. Seifert, G in collaboration with Sobin LH and pathologists in 7 countries. *Histological Typing of Salivary Gland Tumors*. 2nd ed. Berlin-New York, NY: Springer-Verlag; 1991.
7. Sobin LH. New techniques and tumor nomenclature. *APMIS Suppl.* [Acta Pathol Scand]. 1991;23:9-12.
8. Wright CF, Reid AH, Tsai MM, Ventre KM, Murari PJ, Frizzera G, O'Leary TJ. Detection of Epstein-Barr virus sequences in Hodgkin's disease by the polymerase chain reaction. *Am J Pathol.* 1991;139:393-398.
9. Shanmugaratnam K, in collaboration with Sobin LH and pathologists in 8 countries. *Histological Typing of Tumours of the Upper Respiratory Tract and Ear*. 2nd ed. Berlin-New York, NY:Springer Verlag;1991