the AFIP LETTER

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The Director's Message

Reflections

This letter brings to a close almost eleven years as a member of the Directorate, with the last four years as Director. It has been a challenging assignment, with numerous changes which have seen the AFIP build on its reputation as an international resource in pathology knowledge.

As a result of several reorganizations and the elimination of numerous management layers, the Institute has been streamlined to allow a quicker response to changes in medicine, especially in the area of pathology. I would like to share some of these changes with you.

In the area of consultations, we sought to improve our turnaround time by upgrading and installing numerous modifications to our data processing facilities. This allows us to be more responsive to both the contributor and the AFIP staff, and additional changes are programmed for the next several years. Improvements in our Histopathology laboratories, the introduction of new immunopathology techniques, and the centralization of word processing activities have all markedly contributed to a shortened turnaround time of less than three days in a majority of "rush" consultation cases. The charging for civilian consultations was a budget-driven initiative that has had some positive results, including a slight decrease in the quantity of cases but an improvement in the quality of diagnostic challenges for the staff. The new Repository not only safeguards the pathology materials better, but accessibility is markedly increased, and, therefore, more responsive to the consultation, research, and education missions.

Newly appointed Director, Col Vernon W. Armbrustmacher, USAF, MC, receives "The Buck Stops Here" statuette from CAPT Robert F. Karnei, Jr., MC, USN, the outgoing Director. *Profile, page 2.*

The research program has become more diverse through increased utilization of "high tech" pathology (molecular biology, image analysis, morphometry, etc.) and collaboration with extramural investigators. Our efforts have been bolstered through additional funding from other government and private sector granting organizations. As a result, we have seen a significant increase in the number of research projects, presentations at national and international meetings, and publications.

The educational mission has also undergone numerous positive changes, with an increase in both the number of courses offered and attendees. New initiatives include additional courses, with some to be presented in other areas of the country in collaboration with local medical centers.

The Congress and the private sector are now supporting the National Museum of Health and Medicine of the AFIP in its attempt to find a more public-accessible exhibit location, a program we fully back.

The establishment of the Armed Forces Medical Examiner System is a positively response to the needs of DoD and other Federal agencies on a world wide basis. This was evident during the recent Desert Shield/Desert Storm activities, by the positive identification and reassociation of remains, and determining the cause of death.

The future of the AFIP is bright, with the establishment of new learning centers (Pediatric Pathology, Human Developmental Anatomy, etc.) and various initiatives which include the

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Vernon W. Armbrustmacher, Col, USAF, MC, Named 30th Director of AFIP

Vernon W. Armbrustmacher, Colonel, USAF, MC, has been appointed as the new Director of the Armed Forces Institute of Pathology (AFIP), effective 27 June 1991. Col Armbrustmacher will oversee one of the world's leading institutes for the study of pathology, with a staff of over 700 personnel and a budget of over $22 million.

Born on October 18, 1938 in St. Johns, Michigan, he attended St. Josephs Seminary and Aquinas College in Grand Rapids, Michigan prior to receiving his medical degree in 1964 from the University of Michigan. Following graduation, he completed a rotating internship at Rockford Memorial Hospital, Rockford, Illinois in 1965 and a residency program in anatomic and clinical pathology at Blodgett Memorial Hospital in Grand Rapids, Michigan in 1969. Colonel Armbrustmacher was certified in anatomic and clinical pathology by the American Board of Pathology in 1970.

Coming on active duty in the Air Force in 1969, he first served as a staff pathologist at the USAF Hospital in Wiesbaden, West Germany until 1972 when he moved to the Armed Forces Institute of Pathology as a neuropathology fellow. Following completion of training and board certification in neuropathology, Col Armbrustmacher was assigned to the AFIP as the Chief of the Neuromuscular Division of the Neuropathology Department in 1975. Following this, he was appointed Chairman of the Department of Neuropathology in 1980 and Deputy Director (Air Force) of the AFIP in 1984, a position he held until the present. Colonel Armbrustmacher has served on a number of Boards and Committees, including the Examination Committee (Neuropathology) for the American Board of Pathology; the Editorial Boards of the American Journal of Clinical Pathology and the Journal of Modern Pathology; the Council of Anatomic Pathology of the American Society of Clinical Pathologists; the Advisory Board of Clinical Reviews in Neurobiology, CRC Critical Reviews, CRC Press; and the Governing Board of the Atlas of Tumor Pathology, Series III. He also served as Registrar of the Registry of Neuropathology, AFIP; Scientific Director of the Yakovlev Collection of the AFIP; Professorial Lecturer of the Department of Neurosurgery, George Washington University School of Medicine; Editor, American Society of Clinical Pathology Check Sample Series on Anatomic Pathology; Air Force Representative to the Advisory Council of the American Society of Clinical Pathologists; and Air Force Delegate to the College of American Pathologists.

He has served as a Consultant in Neuropathology to Malcolm Grow USAF Medical Center, Andrews AFB, Maryland; Medical Examiners Office of the District of Columbia; Walter Reed Army Medical Center; National Naval Medical Center, Bethesda, Maryland; and District of Columbia General Hospital, Washington, D.C.

Colonel Armbrustmacher has an appointment as an Associate Professor of Pathology at the Uniformed Services University of the Health Sciences (USUHS) in Bethesda, Maryland, and was designated Consultant in Pathology to the Air Force Surgeon General in 1984.

He has presented invited lectures for several state pathology societies and has given numerous seminars and lectures for the American Society of Clinical Pathologists and the U.S. Canadian Division of the International Academy of Pathology on the subject of surgical and nonsurgical neuropathology and the pathology of neuromuscular diseases. Colonel Armbrustmacher was a Course Director for the AFIP Annual Course in Neuropathology from 1977 to 1983 and has participated in many other AFIP pathology courses.

His scientific presentations and publications have centered around the subjects of metabolic diseases of muscle, pathology of brain trauma, descriptions and classifications of brain tumors, and descriptive papers concerning the pathology of neuromuscular diseases using newly developed techniques in enzyme histochemistry.

Colonel Armbrustmacher married Carolyn Radawski in 1961 and they have three daughters, Dana Kaye, Cynthia Lynn, and Paula Michelle.

Change Of Command Ceremony Set for 27 June, 1991

Col Vernon W. Armbrustmacher, USAF, MC, will assume command from CAPT Robert F. Karnei, Jr., MC, USN, on Thursday, 27 June, 1991 at 1000 hours at the Armed Forces Institute of Pathology.

AFIP PROVIDES KEY SUPPORT DURING OPERATION DESERT STORM
Armed Forces Medical Examiners, Others, Staff Dover Mortuary

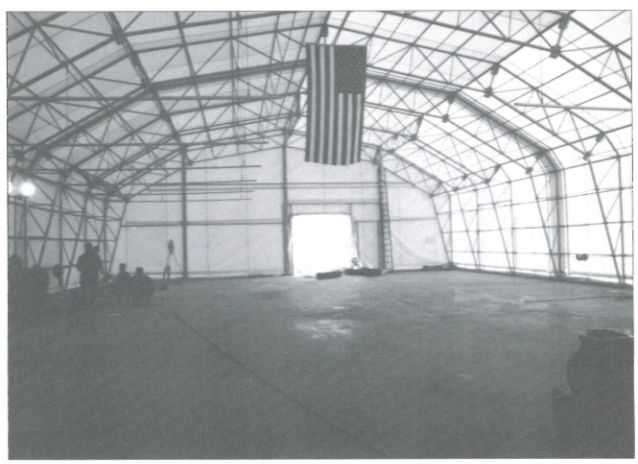
A team of pathologists, anthropologists, dentists and administrative support personnel from the AFIP – with over 50 additional pathologists on call at the Institute – staffed the Dover Air Force Base Port Mortuary during Operation Desert Storm, according to Dr. Richard C. Froede, the Armed Forces Medical Examiner. "We were there in full force to support operations in the Gulf," he notes.

The mission of the Dover Air Force Base Port Mortuary is to receive and process remains of active duty military members and their dependents who have died in Europe, the Middle East and Africa. This includes final preparation of the remains for burial, arranging transportation to the place of burial, and providing escort for the remains of active duty personnel. Under normal conditions the Port Mortuary processes approximately 60 remains per month.

Once Desert Storm began, however, the mortuary became a 24-hour operation. A massive construction effort almost doubled available work space, and large amounts of equipment were procured. X-ray and fluoroscopy units, gurneys and consumable supplies were set up in anticipation of heavy casualties from a ground war.

The primary job of AFIP personnel, most of whom are attached to the Office of the Armed Forces Medical Examiner (OAFME), was twofold: to positively identify those who died in the Gulf, and to determine the cause of death. "We covered all areas," Dr. Froede notes, "including combat casualties, natural deaths, suicides, accidents and homicides."

The Gulf War also provided the opportunity to use techniques being refined at the AFIP's new Armed Forces DNA Identification Laboratory (AFDIL). "We were able to positively identify fragmented remains of soldiers through the use of antibody profiling, which tests a special set of infection-fighting proteins found in each person's blood," he says. "This was really the first time that we accomplished a scientific reassociation of body parts."



Top: Dr. William Rodriguez, forensic anthropologist, conducts a dissection of skeletal remains to provide personal identification.

Bottom: Construction of hangars at Dover Air Force Base provided additional work space for Desert Storm casualty processing.

At the height of the ground war, the AFIP assigned over 18 staff members to Dover. A special processing system was organized in order to handle large numbers of expected casualties. All remains, which arrived in closed aluminum transfer cases, were first screened for unexpended ordnance by a E-scan fluoroscope. They were then removed from the case, photographed, and assessed for injuries. Personal effects were also inventoried at this time.

Fingerprinting and a dental examination followed, along with a medical x-ray examination to document past injuries. "This is how we confirmed identities," Dr. Froede says, "but if remains were too fragmented to use these techniques, then we turned to DNA testing." The medical examiners were still able to identify over 70% of the remains directly by fingerprints, a number which has remained constant over the last several mass disasters.

The postmortem examination, which determines the cause of death, was the final step of OAFME involvement. Full autopsies were completed if the examining pathologist could not determine a cause of death at this time. Remains were then turned over to funeral directors for burial preparations.

"Operation Desert Storm really allowed the AFIP to take a significant role in supporting our troops," Dr. Froede says, "and we are certainly prepared to handle any challenges of this magnitude in the future."

Profile

Captain Glenn N. Wagner, MC, USN Named Deputy Director

Captain Glenn N. Wagner, MC, USN, has been appointed as the Navy Deputy Director of the Armed Forces Institute of Pathology. In his new role, Dr. Wagner will direct the Institute's Quality Assurance Program and serve as Deputy Director for Repository and Research Services.

CAPT Wagner most recently served as Deputy Chief Medical Examiner, Office of the Armed Forces Medical Examiner (OAFME) at AFIP. A native of Philadelphia, PA, Dr. Wagner is a graduate of Temple University and the Philadelphia College of Osteopathic Medicine. He completed a rotating internship and pathology training at the Naval Regional Medical Center-San Diego, and a fellowship in Forensic Pathology at AFIP. He is a rated naval parachutist and designated Naval Flight Surgeon.

CAPT Wagner is licensed to practice medicine in the states of California, Virginia, Maryland and the District of Columbia. He is board certified in anatomic, clinical and forensic pathology. He is a Fellow of the College of American Pathologists, American Academy of Forensic Sciences and a member of a number of medical societies. In 1987, Captain Wagner was appointed Clinical Assistant Professor of Pathology at the Uniformed Services University of the Health Sciences, where he continues to lecture and support laboratory sessions. He is also the forensic consultant to the National Cancer Institute (NIH) and Bethesda Naval Hospital.

Prior assignments include Philadelphia Naval Hospital, Naval Regional Medical Center-San Diego, Armed Forces Institute of Pathology, and the Naval Aeromedical Institute. As a member of the Armed Forces Medical Examiner's Office, he has been frequently temporarily assigned to numerous commands overseas and in the continental United States (CONUS) during medicolegal death investigations coming under DoD jurisdiction.

CAPT Wagner is a court-recognized authority in Forensic Pathology, often utilizing his background in law enforcement, fire-fighting, and emergency medical services.

CAPT Wagner holds over twelve awards and decorations, including the Legion of Merit, Joint Services Commendation, Joint Services Achievement Medal, and National Defense Medal. He is married to Joan Cecilia Cappello of Providence, Rhode Island, and has a step-son, Kenneth Scott, a student at Philadelphia College of Osteopathic Medicine.

Dr. Kamal G. Ishak Named 1990 Recipient of F.K. Mostofi Award

Dr. Kamal G. Ishak, Chairman of the Department of Hepatic and Gastrointestinal Pathology, received the 1990 F.K. Mostofi Distinguished Service Award on March 19 at the U.S. and Canadian Academy of Pathology's annual meeting in Chicago. The Mostofi award is presented annually to recognize outstanding service to the International Academy of Pathology and its United States-Canadian Division.

Dr. Ishak's special interests in liver diseases include drug-induced injury, infectious diseases, tumors and the inherited metabolic diseases. He holds appointments as a Clinical Professor of Pathology at USUHS, Medical Care Consultant at the Clinical Center at NIH, and Professorial Lecturer at Mt. Sinai Medical School in New York City.

The Mostofi Award honors Dr. Ishak for his long and continuing service to the Academy's educational programs. During the past 23 years Dr. Ishak has presented 32 "short courses" at the annual USCAP meetings. He has also participated in the Academy's two most recent "long courses" on the liver. Dr. Ishak has authored or coauthored over 200 scientific publications.

Dr. Kamal G. Ishak, (center) conducts a slide conference with department staff and visitors.

New Course

AFIP Offers "Problems in Anatomic Pathology"

New course prepares pathology residents for independent practice

The AFIP established a "new era" in pathologic education for residents by holding the First Annual Course in Problems in Anatomic Pathology from April 1-12, 1991, in the Institute's Callendar Laboratory. The course is designed to prepare senior pathology residents for independent practice by reviewing a series of difficult and problematic entitites, according to Dr. James G. Smirniotopoulos of the Department of Radiologic Pathology, who conceived and planned it.

"We offered more than 80 hours of didactic teaching and supervised microscopic review," he notes, "and more than 60 staff pathologists from the AFIP participated in presenting this new academic program. We received extremely positive feedback from participants, all of whom felt that this course should be an essential component of all pathology residency training."

Twenty-three senior residents in pathology from all military branches attended the course, along with two VA residents, four AFIP staff pathologists and The Director of the AFIP. This pathology course is modeled after a similar course in Radiology which is given six times per year, and which is attended by more than 75% of all American radiology residents. The committee that organized the curriculum included MAJ Richard M. Conran, Maj Joni L. McClain, CDR Chris Gardiner, Zachary D. Goodman, LCDR Bruce M. Wenig and LCDR Aileen M. Marty, all of the AFIP.

The course will be given again from March 3 to April 3, 1992,

Histotechnology Notes

Modified Bielschowsky Method for Neurofibrils

In a time when there appears to be fewer laboratory personnel to accomplish an ever-increasing task load, new ways to reduce the time it takes to accomplish procedures without detracting from the overall quality of the final product are constantly being tried. Our laboratory technicians have successfully managed to develop a modified Bielschowsky method for neurofibrils that involves a reduction of the times in the silver solutions, yet manages to yield excellent results.

This is now a Standard Operating Procedure for the Neuropathology Laboratory to provide slides used in diagnosing Alzheimer's Disease and other neuro-degenerative processes. The changes were quite simple and involved reducing the times from 15 to 9 minutes in the 20% silver nitrate solution, and from 15 to 9 minutes in the ammoniacal silver solution. These types of modifications, when made with careful consideration and study, can greatly benefit a laboratory dealing in high volumes of materials with limited staff.

Results:

Neurofibrils and
senile plaques ..... black
Background ..... yellow to brown

Profile

Les Howell, Jr. Named First Civilian Employee of the Quarter

Les Howell, Jr., Chief, Receiving and Accessions Division, Repository and Research Services, has been honored as the AFIP's first Civilian Employee of the Quarter. Mr. Howell, who oversees a staff of 18, is responsible for the accessioning of all incoming pathology cases in the Institute.

A native of Moriarty, New Mexico, Mr. Howell enlisted in the U.S. Navy and served as a Hospital Corpsman from 1968 to 1976. In 1977, he joined the Directorate of Medical Activities Administration (DMAA) at Walter Reed Army Medical Center. Progressively responsible assignments included lead medical records technician and Records Manager for DMAA, and supervisor of Inpatient Records for the Patient Administration Directorate. He was selected to his current position in October, 1983.

Since 1984, Mr. Howell has coordinated the AFIP's sponsorship of handicapped students from Rock Terrace High School. In that time, over 50 students have gained vocational experience at the Institute, preparing them for the challenges of living in the workday world.

AFIP Happenings . . .

■ **Juan Rosai, M.D.**, Professor of Pathology and Director of Anatomic Pathology at Yale University Medical School, addressed the AFIP staff on April 18, 1991. His topic, "The Mythical Branchial Pouches and their Pathology: A Unifying Pathogenetic Proposal," was sponsored by the Department of Otolaryngic Pathology. Dr. Rosai, who served as the 1987 Ash Lecturer, is a new member of the Scientific Advisory Board.

■ **Dr. Fatollah K. Mostofi,** Chairman, Department of Genitourinary Pathology, had Volume 1, No. 1 of the *Journal of Urogenital Pathology* dedicated to him on the occasion of his 80th birthday. Included was a 7 page biography and interview, along with personal tributes from his colleagues and friends located around the world.

■ **Rubina Patel, Ph.D., Wayne M. Meyers, M.D., Ph.D., and M. Ellen D'Nicuola, B.S.**, of the Department of Infectious an Parasitic Diseases Pathology, received a grant of $180,616 from the U.S. Army Medical Research and Development Command for their project, "Rapid Detection of Mycobacteria in Patients with HIV Infection." The aim of the project is to develop rapid, specific, and sensitive assays for identification of mycobacteria using species-specific and/or strain-specific DNA or RNA probes.

■ **Timothy J. O'Leary, M.D., Ph.D., Thomas G. Fanning, Ph.D., and Cynthia F. Wright, Ph.D.**, Department of Cellular Pathology, received a grant of over $129,000 from the U.S. Army Medical Research and Development Command for their project, "Polymerase Chain Reaction Assays for the Diagnosis of Pneumocystis Carinii Infection."

■ **Dr. Henry J. Norris**, Chair, Department of Gynecologic and Breast Pathology, has been named Editor of the *International Journal of Gynecologic Pathology*.

Director's Message, *continued from page 1*

Environmental and Toxicologic Pathology Program, and the proposed DNA fingerprinting of all active duty military. The proposed digital imaging of 2.3 million records on file at the Institute will allow for greater accessibility for our staff, along with consolidation and space saving. Our collaborative initiatives with the American Registry of Pathology have expanded beyond the educational and research programs to now include charging for civilian consultations and the marketing of the Fascicles of Tumor Pathology.

As you can imagine, none of this could be possible without the coordinated efforts of our dedicated staff. I wish to thank everyone for the support shown during these challenging years, and request your continued support of the AFIP in the future.

ROBERT F. KARNEI, JR.
CAPT, MC, USN
The Director

Repository and Research Services

Questions About the Status of Your Case?

Contributors should contact the department directly

The Receiving and Accessions Division and the Records Repository receive many calls from contributors regarding the status of cases. Our personnel can only inform the contributor of the day the case was accessioned, to what pathology department it was assigned, and whether a final consultation report has been rendered or not. For more specific information, the contributor should call the appropriate pathology department directly. A complete listing of all Center for Advanced Pathology phone numbers was published in the August 1990 issue of the AFIP Letter. If you need a copy, please contact the AFIP Public Affairs Office at (202) 576-0233/2904 or AV 291-0233. They will be happy to send you the issue or a copy of the phone listing.

The Records Repository is in the process of awarding a contract for purchase and installation of optical disk imaging equipment. We hope that beginning in January 1992, we can begin scanning our new pathologic case folders for storage on optical laser disks. We currently have approximately 800,000 cases in paper form and 1.5 million cases on microfiche and microfilm. Converting to optical disk storage should significantly decrease our space requirements while enhancing our retrieval time. Currently, our paper records are stored in three robotic horizontal carousels and hundreds of filing cabinets. More information concerning this significant project will be in future issues of the Letter.

Allison Webb Willcox, Manager Of The Museum's Anatomical Collections

She may live in the present, but Allison Webb Willcox enjoys deciphering clues from our collective past. Webb Willcox is the new Manager of the

Anatomical Collections in AFIP's National Museum of Health and Medicine. A Ph.D. candidate at the University of Pennsylvania, she has a double concentration in physical anthropology and Egyptian archaeology. The new Collections Manager is equally at home explaining to a sixth grader what bones reveal about a person's life and conducting a tour of the collections for visiting dignitaries.

For Webb Willcox a typical working day may include responding to research requests, preparing finding aids which make the collections more accessible to all users, helping to prepare a departmental budget request and providing day-to-day care and maintenance of the collections. She takes great pleasure in the intellectual challenges provided by the museum's "world class" skeletal collections. Ms. Webb Willcox is currently involved in helping to plan and organize the Museum's annual Forensic Anthropology course. When the course is presented this June, she will be one of the presenters.

These collections have been used to enrich human lives in ways that may surprise a casual observer. One project cited by Webb Willcox involved an effort to collect data on the pelvic and shoulder girdle measurements from bones in the collections as part of a program to develop a device to protect children who are too old for car seats, but too young for seat belts. A second research effort concerned an attempt to improve hearing implants for deaf children. In this case, the goal was to reduce the number of operations necessary to maintain the device for long periods.

Among the factors that brought Webb Willcox to the National Museum of Health and Medicine of the AFIP is a fascination with museums as centers of education for the general public. Given her experience as a museum lecturer and docent, she hopes to become actively involved in the museum's programs for the public. On her own time, Webb Willcox continues to explore her interests in hieroglyphs and ancient Egyptian medicine.

Roderick F. Herring, SSgt, USAF, Named Armed Forces Institute of Pathology's Service Member of the Year

Roderick F. Herring, a U.S. Air Force Aerospace Physiology Technician currently assigned to the Division of Altitude and Hyperbaric Physiology, Department of Scientific Laboratories, has been named as the AFIP's Service Member of the Year.

In his role as Non-Commissioned Officer-In-Charge of the Division's Research Laboratory, SSgt Herring is responsible for the day-to-day operations of the laboratory. He has participated in most of the Division's research protocols since his arrival in 1984, and is currently working on a protocol involving fibroblast function in altered oxygen environments.

SSgt Herring has attended the Technical Instructor Course at Keesler AFB, MS; NCO Leadership School at Charleston AFB, SC; Hyperbaric Team Training Course at Brooks AFB, TX; and is currently studying for his A.A.S. in Physiology Training Technology through the Community College of the Air Force.

His prior assignment was at the Physiological Training Directorate, USAF Medical Center Wright-Patterson, Wright-Patterson AFB, Ohio. SSgt Herring's military awards include the Air Force Commendation Medal, Army Commendation Medal, and the Joint Service Achievement Medal (10lC).

SSgt. Herring is married to Kimberly Kay (Cooper) of Dayton, Ohio. They have five children, Ryan, Jessica, Dustin, Andrew and Christian.

Announcing an Exciting New Seminar

Controversies
and
Recent Advances in
Surgical Pathology
February 9-14, 1992
Contemporary Hotel,
Orlando, Florida
Watch for further details!

Reprints

Image analysis of nucleoli and nucleolar organizer regions in prostatic hyperplasia, intraepithelial neoplasia, and prostatic carcinoma

Isabell A. Sesterhenn, Robert L. Becker, Frank A. Avallone, Fathollah K. Mostofi, Tse H. Lin, and Charles J. Davis, Jr.

Twenty-five prostates exhibiting areas of hyperplasia (HYP), invasive carcinoma (PCa), and intraepithelial neoplasia (PIN) were evaluated for expression of argyrophilic nucleolar organizer regions (AgNORs) by visual and computer-assisted methods. Casewise measurements of projected AgNOR areas showed substantial difference between HYP and PIN ($p < .001$) and between HYP and PCA ($p < .000001$) and slight but significant difference between PIN and PCA ($p < .001$). The determination of AgNORs is an objective method to differentiate PIN from hyperplasia. The impression, gained on H&E stained sections and immunopathology, that PIN is related to carcinoma is further supported by the AgNOR values which suggest either proliferative activity or ploidy values similar to those of carcinoma.

Journal of Urogenital Pathology. 1991;1:61-74.

Alcoholic liver disease: pathologic, pathogenetic and clinical aspects

Kamal G. Ishak, Hyman J. Zimmerman, and Mukunda B. Ray

Alcoholic liver disease includes steatosis, alcoholic hepatitis, and cirrhosis. Other liver diseases of genetic origin, but with a curious association with alcohol intake, are hemochromatosis and *porphyria cutanea tarda*. The attribution of chronic hepatitis to alcohol intake remains speculative, and the association may reflect hepatitis C infection. Hepatic injury attributed to alcohol includes the changes reported in the fetal alcohol syndrome.

Steatosis, the characteristic consequence of excess alcohol intake, is usually macrovesicular and rarely microvesicular. Acute intrahepatic cholestasis, which in rare instances accompanies steatosis, must be distinguished from other causes of intrahepatic cholestasis (e.g., drug-induced) and from mechanical obstruction of the intrahepatic bile ducts (e.g., pancreatitis, choledocholithiasis) before being accepted. Alcoholic hepatitis (steatonecrosis) is characterized by a constellation of lesions: steatosis, Mallory bodies (with or without a neutrophilic inflammatory response), megamitochondria, occlusive lesions of terminal hepatic venules, and a lattice-like pattern of pericellular fibrosis. All these lesions mainly affect zone 3 of the hepatic acinus. Other changes, observed at the ultrastructural level, are of importance in progression of the disease. They include widespread cytoplasmic shedding, and capillarization and defenestration of sinusoids. Progressive fibrosis complicating alcoholic hepatitis eventually leads to cirrhosis that is typically micronodular but can evolve to a mixed or macronodular pattern. Hepatocellular carcinoma occurs in 5 to 15% of patients with alcoholic liver disease.

The clinical syndrome of alcoholic liver disease is the result of three factors — parenchymal insufficiency, portal hypertension and the clinical consequences of extrahepatic damage produced by alcohol. At the several phases of the life history of alcoholic liver disease, the individual factors play a different role. The clinical manifestations of alcoholic steatosis are mainly extrahepatic in origin. Those of alcoholic hepatitis reflect mainly parenchymal insufficiency and those of cirrhosis are mainly those of portal hypertension.

Alcoholic liver injury appears to be generated by the effects of ethanol metabolism and the toxic effects of acetaldehyde, perhaps the immune responses to alcohol- or acetaldehyde-altered proteins, and questionably enhanced by viral hepatitis.

Alcoholic hepatitis may be mimicked histologically, and to a varying degree clinically, by a number of conditions (obesity, diabetes, several drug-induced injuries, jejunoileal bypass, and related "short circuiting" of the bowel). Perhaps the most important facet of the hepatotoxicity of alcohol is its enhancement of the effects of a number of other hepatotoxic agents, among which acetaminophen is the prime example.

Alcohol Clin Exp Res. 1991;15:45-46.

MR and CT appearance of Nodular Fasciitis

Chris A. Meyer, Mark J. Kransdorf, James s. Jelinek, and Richard P. Moser, Jr.

Nodular fasciitis is a common soft-tissue tumor that remains almost unreported in the radiology literature. We retrospectively reviewed all available imaging studies on three patients with nodular fasciitis studied by MR at our institution. The lesions were round to oval in configuration, ranging in size from 1 to 4.5 cm. Two were intramuscular and one was subcutaneous in location. Both intramuscular lesions were poorly defined on CT, with a tissue attenuation less than that of skeletal muscle. The single subcutaneous lesion was well defined by surrounding fat. Conversely, all lesions were well defined on MR, although the appearance was otherwise nonspecific and varied according to the histology of the lesion. Both intramuscular lesions were mucoid or cellular and were hyperintense to skeletal muscle on T1-weighted and hyperintense to fat on T2-weighted spin-echo (SE) MR images. The subcutaneous lesion was fibrous and markedly hypointense to skeletal muscle on all SE pulse sequences. Findings on three-phase bone scan, arteriography, and ultrasound are discussed. Because there are no unique radiologic findings in nodular fasciitis, this entity must be included in the preoperative differential diagnosis of small soft-tissue masses occurring in the extremities of young adults.

J Compt Assist Tomogr. 1991;15:276-279.

Postgraduate Short Courses in Continuing Education
Academic Year 1991-92

Course Title	Scheduled Dates	Application Deadline	Tuition	Military, DoD, VA & PHS Fee
Pathology of Radiation & Cancer Therapy	24 Jun 91	2 May 91	$390	$125
Exfoliative & Fine Needle Aspiration Cytology	10-14 Jun 91	10 May 91	$450	$30
#Seminar & Workshop in Histopathology Techniques	17-20 Jun 91	17 May 91	$200	$80
#Forensic Anthropology	24-28 Jun 91	24 May 91	$450	$75
Pathology of Laboratory Animals	12-16 Aug 91	12 Jul 91	$250	$90
Anatomy, Histology, and Electron Microscopy of the Eye, Orbit and Ocular Adnexa	24-25 Aug 91	26 Jul 91	$200	$55
Ophthalmic Pathology for Ophthalmologists	26-30 Aug 91	29 Jul 91	$500	$150
Hepatic Pathology	4-6 Sep 91	7 Aug 91	$400	$95
Abdominal Imaging Review	7-8 Sep 91	9 Aug 91	$275	$75
Flow Cytometry: Diagnostic Adjunct in Hemopathology	21-22 Sep 91	23 Aug 91	$350	$200
Ischemic Heart Disease: Clinical & Pathological Prospectives of Reperfusion & Revascualization	27-29 Sep 91	30 Aug 91	$400	$150

Reflects change in course dates

Course Descriptions

Pathology of Radiation & Cancer Therapy
Course will address the morphologic effects of radiation on human tissues and related subjects and will be of special interest to pathologists examining irradiated tissue from radiation therapy patients, residents desiring board review of radiation pathology, and persons assisting in medical management of acute radiation injury incidents.

Enrollment limited to 250. Approximately 20 CME credit hours.

Exfoliative & Fine Needle Aspiration Cytology
Course presents diagnostic exfoliative and fine needle aspiration cytology through lectures and microscopic workshop sessions. Topics covered include benign and malignant criteria for all body sites; female genital tract; respiratory, urinary, and gastrointestinal tracts; body cavity effusions; cerebrospinal fluids; breast; thyroid; salivary glands; lymph nodes; prostate; liver and pancreas. Infectious agents accompanying inflammatory cell changes, and cervical intraepithelial lesions will be discussed.

Enrollment limited to 70. Approximately 35 CME credit hours.

Seminar & Workshop in Histopathology Techniques
Four-day program consists of lecture sessions covering a variety of topics in histotechnology, and workshops providing discussions of the selected methodologies, hands-on experience in performing these procedures, and a comprehensive discussion of the results. Upon completion the participants should be able to perform a wide variety of fixation, processing, embedding, sectioning, and staining techniques on standard and non-standard tissue specimens.

Enrollment limited to 30. Approximately 21 CME credit hours.

Forensic Anthropology
Overview course of basic principles of forensic anthropology consists of series of lectures covering various topics in the field, followed by lab sessions emphasizing hands-on analysis of skeletal remains. Prior knowledge of physical anthropology is not assumed.

Enrollment limited to 35. Approximately 33 CME credit hours.

Pathology of Laboratory Animals
Five-day course designed to help professionals recognize and interpret lesions in laboratory animals and to interpret spontaneous diseases which may affect experimental results or alter the supply of suitable laboratory animals. In addition to pathology, the course will emphasize other features of disease such as etiology, pathogenesis, diagnosis and control. A wide range of diseases from iatrogenic through infectious will be discussed in a variety of lab animals.

Approximately 38 credit hours.

Anatomy, Histology and Electron Microscopy of the Eye, Orbit and Ocular Adnexa
Two-day course for physicians or veterinarians who are ophthalmologists, pathologists or ophthalmic researchers is designed as a review of the anatomy, histology, embryology, and ultrastructure of the normal eye and ocular adnexa.

Enrollment limited to 200. Approximately 13 CME credit hours.

Ophthalmic Pathology for Ophthalmologists
Five-day course designed for ophthalmology residents and clinical ophthalmologists consists of a basic and comprehensive survey of pathologic conditions affecting the eye and ocular adnexa. Participants will gain insight into clinico-pathologic correlations and electron microscopy of normal and pathologic conditions of the eye. Applicants should be board qualified or certified or well advanced in pathologic anatomy or ophthalmology.

Enrollment limited to 250. Approximately 38 CME credit hours.

Hepatic Pathology
Three-day course designed to provide an overview of hepatic pathology to both pathologists and clinicians interested in diseases of the liver. While emphasis is placed on interpretation of biopsy material and clinico-pathologic correlation, material obtained at surgery and autopsy will be used to provide a comprehensive review of each disease covered.

Enrollment limited to 150. Approximately 19 CME credit hours.

Abdominal Imaging Review
First annual two-day course will provide comprehensive review of the imaging of the solid peritoneal viscera. Course is designed for radiologists, gastrointerologists and other physicians interested in the radiologic diagnosis of hepatic, biliary, pancreatic, and splenic tract diseases. Radiology of both congenital and acquired diseases will be presented, with emphasis on pathologic basis for radiographic appearance of abnormalities. All radiographic modalities, including MRI, will be discussed in didactic sessions on radiologic-pathologic correlation, and interventional radiology will be reviewed in separate sessions.

Enrollment limited to 200. Approximately 13 CME credit hours.

Flow Cytometry: A Diagnostic Adjunct in Hematopathology
Course is designed to provide training in the application of flow cytometry to the diagnosis of leukemias and lymphomas through formal lecture and workshop sessions. The topics include: sample preparation, DNA analysis, immunophenotyping, and data analysis as they pertain to leukemias and lymphomas. Students are asked to bring problem cases with them for an open end panel discussion. Computers and analysis software will be provided.

Enrollment limited to 40. Approximately 12 CME credit hours.

Ischemic Heart Disease: Clinical and Pathologic Prospectives of Reperfusion and Revascualization.
Three-day course is a basic and comprehensive review of cardiovascular pathology for residents, fellows, and pathologists. Participants will learn methods of opening the heart for maximum information about pathologic conditions such that clinical correlations can be easily made using the newest investigative tools. Material will be presented in lectures, with clinico-pathologic correlations of interesting cases illustrated. Slide seminars focusing on arteritis and aortitis will be held in evenings.

Enrollment limited to 100. Approximately 21 CME credit hours.

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
United States Information Agency
301 4th Street, S. W.
Washington, D.C. 20547
Telephone: (202) 619-5228
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, Room 595
5109 Leesburg Pike
Falls Church, VA 22041-3258
Telephone:(703)756-8273
FAX: (703) 756-0243

Residents and fellows deduct 25% of Course Fee ● Friends of AFIP deduct 10% of Course Fee

APPLICATION FORM - AFIP COURSES

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