



## AFIP Performance Questionnaire set for April

The international pathology community will be asked to respond to an important "performance questionnaire" in April, according to AFIP Director Vernon W. Armbrustmacher, Col, USAF, MC. "We want to find out how well the pathologist in the field thinks we are doing, from our consultation service to the types of educational programs we offer," he says. "This will really provide us with a 'report card' to determine how we can better serve our colleagues."

The questionnaire will be sent by the American Registry of Pathology (ARP) to readers of the AFIP Letter, notes Armbrustmacher. "We're asking pathologists to take just a few minutes and answer some very important questions about our services," he says.

Included will be questions on the quality of AFIP consultation services, an overview of education programs, and a special section on new developments at the Institute.

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## Department of Oral Pathology prospers through collaborative efforts



CAPT Paul Auclair, DC, USN (center) reviews a case with (from left) Col Robert Goode, USAF, DC; Gary Ellis, DDS, VA; and COL Harvey Kessler, DC, USA.

The Department of Oral Pathology's involvement in a variety of collaborative efforts at the AFIP, including the production of a new educational video-disc, reflects the Institute's ongoing efforts to provide high-quality service to the international pathology community. "Our primary mission is to provide consultative opinions to military and civilian pathologists on diagnostically challenging cases," notes department chairman CAPT Paul Auclair, DC, USN. The department's purview includes cases that effect the oral and oropharyngeal mucosa, the major and minor salivary glands, the maxilla and mandible, and associated supporting tissues. "The AFIP has an exhaustive collection of diseases that effect these sites, cataloged by diagnosis," Auclair says. "For instance, the department maintains a database of over 21,000 salivary gland lesions alone and has a wide variety of selected cases available for review or study."

This large number of unusual cases facilitates research and publication. Recently, members of the department were primarily responsible for publication of a 580-page textbook on salivary gland disease (Ellis, G.L., Auclair, P.L., Gnepp, D.R., eds.: *Surgical Pathology of the Salivary Glands*; Philadelphia, W.B. Saunders Company, 1991). "We've also recently completed a study of the grading of minor gland mucoepidermoid carcinomas," Auclair notes. Other topics of ongoing studies include the grading of mucoepidermoid carcinomas of the major glands, lymphomas of the salivary glands, atypical mixed tumors, cystadenocarcinomas, desmoplastic ameloblastomas, inflammatory pseudotumors, and myofibromas.

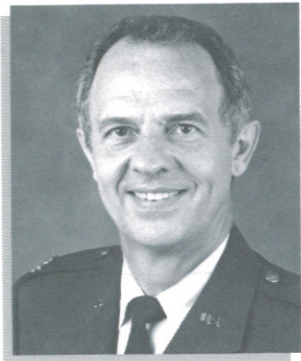
The department conducts an annual continuing education course in oral pathology and biennially conducts a course in pathology of the head and neck in collaboration with the Department of

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## DIRECTOR'S MESSAGE

### AFIP Looks To Future With Telepathology Pilot Study

Telepathology is one of the emerging techniques being considered by the AFIP to better assist pathologists in the field. We are currently designing a pilot study



with our smaller military hospitals to review its benefits and have received funding for equipment to begin this important project. The

results of the study will help us to define how pathologists will find it useful for their daily activities and to determine its role in a consulting and education environment.

A major effort over the next fiscal year will be to expand new laboratory resources that can be applied to our consultation service. An array of new techniques, including flow cytometry and new immuno-probe and genetic-probe studies, can be used for consultation and clinical investigation. We plan to selectively expand in those areas which prove to be of value.

Lastly, in just a few short weeks the American Registry of Pathology will forward a "performance questionnaire" about the AFIP to you. In order for us to continually improve our services to the international pathology community, we need to know how you think we're doing. The survey contains important questions on our consultation services, including the types and numbers of cases sent each year and the accuracy and timeliness of our response.

Regarding our education services, we'd like to learn more about why you attend our courses and use our fascicles

### WHO Upper Respiratory Tract Tumor Classification Published

The World Health Organization's Collaborating Center for the International Histological Classification of Tumors, located at the AFIP, 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.


The second editions of the following WHO histological classifications have been published: Thyroid Tumors (1988), Intestinal Tumors (1989), Esophageal and Gastric Tumors (1990), Tumors of the Gallbladder and Biliary Tract (1991), and Salivary Gland Tumors (1991). The sixth, Histological Typing of Tumors of the Upper Respiratory Tract and Ear, has just appeared. Its author, Professor K. Shanmugaratnam, Head of the WHO Classification Center in Singapore, led a group of 12 experts from 8 countries to elaborate the classification.

The book covers the following sites: sinonasal tract; nasopharynx; larynx, hypopharynx, and trachea; and external, middle, and inner ear. This edition is more comprehensive and detailed than the previous one published in 1978. A total of 97 tumor types and 50 tumor-like lesions are described using internationally accepted terms and diagnostic criteria. The immunohistochemical and electron-microscopic 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.

The book (ISBN 0-387-53880-1) contains 200 color photomicrographs and can be ordered from the publisher, Springer-Verlag (tel. 1-800-SPRINGER). A set of 200 color slides (35mm) corresponding to the photomicrographs in the book is available from the American Registry of Pathology (tel. 202 576-2978).

and study sets. We'd also like to know how we compare with educational services offered by organizations outside the AFIP.

As I mentioned at the beginning of this message, the AFIP is engaged in a number of new programs to benefit our colleagues in the field. We'd like to learn more about other kinds of services you'd like to have available, including cytology, histopathology correlations, and toxicology. Your responses will help shape our plans for the future.

  
Vernon W. Armbrustmacher  
Col, USAF, MC  
The Director

### Request for Pediatric HIV/AIDS Cases

The Division of AIDS Pathology is procuring cases of documented HIV infection and AIDS in children. All cases will also be examined by the Department of Pediatric Pathology and by all other subspecialty experts at the AFIP. Contributors will receive a summary of all consultations in a formal report from the Division of AIDS Pathology.

## Deputy Director Reviews Quality Assurance Programs At AFIP

CAPT Glenn N. Wagner, MC, USN, recently appointed as AFIP's Navy Deputy Director, oversees the Institute's Quality Assurance Program. In a wide-ranging interview, he discusses the program's impact on the international pathology community.

Q. What do you see as the primary goals of the program?

A. Pathology has often been described as the quality control specialty of medicine. Over the years, the AFIP has emerged as a consultative center in pathology, led by our Center for Advanced Pathology (CAP) and its twenty-two departments. CAP continuously perfects diagnostic criteria to achieve accurate diagnoses and provides contributors with the basis for each diagnosis and its implications. The overall goals in achieving this level of performance revolve around state-of-the-art diagnostic criteria and procedures, sound quality control measures, including acceptable turnaround times, and a viable educational program backed by necessary research and consultation. The resulting diagnostic or consultative report must be accurate, timely, and relevant.

Q. How does the new administration view the AFIP's missions relative to Quality Assurance?

A. Our current organizational structure is designed to maximize Total Quality Management or Leadership (TQM/TQL), and our efforts are directed towards Continuous Quality Improvement (CQI) for the patient and his well-being. This is particularly challenging because we most frequently interact with the pathologist, not with the patient. Every case received

in consultation must, therefore, be handled in a timely fashion to provide the local pathologist with an accurate diagnosis. Towards this goal, the AFIP has developed a series of indicators and



thresholds to evaluate our performance and identify existing defects. This involves evaluating and reviewing test selection, specimen collection and transportation, test performance and interpretation, and results reported through ongoing monitoring, priority setting, and the use of indicators. These indicators and thresholds evaluate, appraise, review, and manage our products and services.

Q. What about turnaround time for consultations?

A. A common complaint in the past has been about turnaround time in consulta-

tive cases. While still a concern, the average turnaround time per case today is six days; our goal is seventy-two hours for a surgical case. Cases are often delayed for a variety of reasons, including the need for special studies or missing material from the contributor. Like any other consultation, the more information available to the reviewer, the better the analysis and resulting conclusions. The reviewing pathologist is in a far better position to work through the differential diagnoses if he receives relevant clinical histories and representative histological, radiographic, and tissue sections.

Q. Why are the educational aspects of the AFIP so important?

A. There is a considerable degree of interaction between our three missions of consultation, education, and research. Many of the consultative cases received will become part of a clinicopathological study, and a number of them will also become the basis for ongoing research projects. They help identify the topics discussed and the problems encountered in pathology. They identify continuing areas of difficulty in diagnoses or treatment, variants and defects in existing nomenclatures, differentials, and treatments as well as new or unusual presentations. The educational aspects provide the AFIP with a means of sharing its collective experience with its contributors.

Q. What about the upcoming questionnaire which will be sent to the pathology community?

A. We want to assess our performance in consultation and education. In many ways, this will be a 'report card' on our performance relative to contributors. This survey, supported by the American Registry of Pathology, will help us to identify areas requiring further attention while providing the contributor with a 'menu' of our products and services perhaps not previously utilized. We have a number of new initiatives at the AFIP,

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## Linda K. Johnson, Chief Pathologist, Registry of Comparative Pathology

Linda K. Johnson, DVM, is the new chief pathologist of the Registry of Comparative Pathology. Dr. Johnson plans to continue many of the projects



initiated by her predecessor, Dr. George Migaki, including serving as editor of the Comparative Pathology Bulletin and the Animal Models of

Human Disease fascicles. New projects include preparation of a videodisc, sponsorship of a summer student research position, and an outreach program in comparative pathology.

A native of Kansas, she received

her BS, DVM, and MS in pathology from Kansas State University, Manhattan, Kansas. After completing her veterinary training in 1983, Dr. Johnson joined the Peace Corps and served as a veterinarian for a draft animal project in Togo, West Africa. The many infectious diseases she encountered while there, both human and animal, motivated her to academia and pursuit of further training in pathology. In 1987, she studied for several months in the AFIP's Department of Infectious and Parasitic Disease Pathology.

Dr. Johnson recently completed a 3-year postdoctoral fellowship in the Division of Comparative Medicine at the Johns Hopkins School of Medicine. She has also researched ovine lentiviral infection in Dr. Bill Narayan's retrovirology laboratory in Baltimore, and has earned an MPH from the Johns Hopkins School of Hygiene and Public Health. In 1990, she became a member of the American College of Veterinary Pathologists.

Dr. Johnson is married and has 2 young children who happily monopolize her free time.

## TIPS ON KEEPING METANIL YELLOW CONSTANT

0.25% Metanil Yellow is used in Mayer's mucicarmin procedure as a counter stain. Preparing this solution in the usual manner combining the metanil yellow, the distilled water, and the glacial acetic acid in one bottle leads to a shorter shelf life than can be gained using a simple technique. By preparing two separate stock parts (A & B), the stability of the solutions are extended for many months. Stock Solution A will consist of 1 gram of metanil yellow in 200 milliliters of distilled water. Stock Solution B will consist of 1 milliliter of glacial acetic acid in 200 milliliters of distilled water. Just prior to a metanil yellow staining step, combine equal quantities of both stock solutions and flood slide(s) two times by pouring on and off. An extended time at this step is not desired as it will tend to mask the primary stain used. If a coplin jar is used, the working solution should be discarded after use.

### Oral Pathology, continued from page 1

Otolaryngic and Endocrine Pathology. "We are currently working to produce an educational videodisc that will contain about 8,000 clinical, radiographic, and photomicrographic images accessible by barcode," Auclair says. "The disc will be marketed commercially as well as used for training within each department."

One of the more popular and long-lived educational programs is known as the "Registry of Oral Pathology Case of the Month," Auclair says. "Each quarter, three cases are sent to 145 oral pathologists around the world. These cases represent diagnostically challenging lesions or are good examples of particularly unusual entities," he notes. The department tabulates each participant's response and then forwards its interpretation and the tabulated list of partici-

pants' responses, along with a discussion of the diagnostic features and differential diagnosis.

Most military oral pathology residents are assigned to the department for a minimum of one year. "Oral surgery residents are frequent visitors, and foreign pathologists from Korea, Indonesia, Iran, Chile, and other countries have visited for a year or less," Auclair notes. Members of the department have lectured at national and foreign meetings, including the American Academy of Oral Pathology, the American Society of Clinical Pathology, and the International Academy of Pathology.

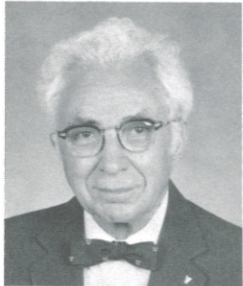
A second important mission of the department is responsibility for forensic dental identification in support of the Armed Forces Medical Examiner's Office. Members of the department have been involved in identifying remains from countless mishaps,

including the Gander air disaster, the USS Iowa explosion, Congressman Leland's aircrash in Ethiopia, Just Cause, the USS Saratoga, the USS Iwo Jima, Desert Shield, and Desert Storm.

The department is also primarily responsible for training military dentists to conduct dental identifications in cases of mass disasters. Each year the department conducts a one-week course in forensic dentistry that includes the hands-on mass disaster dental identification laboratory. This is the oldest and most comprehensive course of its kind and will be held March 16-20, 1992, in Bethesda, MD. The department has assembled mobile laboratories that are loaned to oral pathologists in all branches of the military so that the laboratories may be conducted on-site. A growing number of active-duty military dentists have successfully completed this training exercise. □

## AFIP STAFF "IN THE NEWS"

■ **F.K. Mostofi, MD, Chairman, Department of Genitourinary Pathology**, presented papers at the Second Mediterranean Congress of Urology Conference in Rome, Italy, 3-6 July 1991; at the Beijing International



Symposium on Recent Advances in Urology, Beijing, China, 16-19 September 1991; at the First International Congress of the Dutch Urological

Association, Rotterdam, Holland, 9-13 October 1991; and, at a clinical pathology conference at the International Congress of Urology in Seville, Spain, 3-7 November 1991.

■ **Jeanne M. Meis, MD, Chair, Department of Soft Tissue Pathology**, was one of several speakers recently invited to speak to a group of approximately 150 Italian pathologists at Istituto Nazionale per lo Studio e la Cura dei



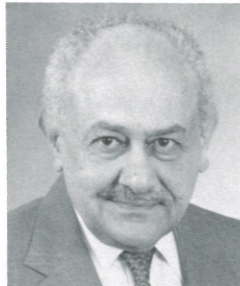
Tumori in Milan, Italy, 12-13 December 1991. The seminar, entitled Recent Advances in Histopathology of Tumors (Seminar No. 32), was one of

several hosted by Dr. Franco Rilke, Head, Division of Anatomical Pathology and Cytology, and Deputy Director for Education Affairs at the tumor institute in Milan.

Dr. Meis spoke on "Dedifferentiation" in Bone and Soft Tissue Tumors as well as Recently Described Soft Tissue Entities, including inflammatory fibrosarcoma of the mesentery and retroperitoneum, proliferative fasciitis and myositis of childhood, plexiform fibrohistiocytic tumor, ossifying

fibromyxoid tumor of soft parts, and juxta-articular myxoma.

■ **Kamal G. Ishak, MD, Chairman, Department of Hepatic and Gastrointestinal Pathology**, presented a slide seminar on "Diseases of the Liver—Medical and Surgical" to the New Jersey Society of Pathologists at their 41st annual meeting on November 23, 1991, at the Robert Woods Johnson Medical



School, Piscataway, NJ. On December 10, 1991, Dr. Ishak gave the "20th Annual Memorial Lecture" at the annual meeting of the Los

Angeles Society of Pathologists. The topic of the lecture was "Chronic Cholestasis."

During his stay in Los Angeles, Dr. Ishak was invited to lecture at Cedars-Sinai Medical Center and to present grand rounds at the School of Medicine, University of California at Los Angeles. Following his presentations at both institutions, he reviewed many hepatic biopsy specimens with the pathology residents and staff, as well as with the clinicians at the liver transplant centers.

■ **Ann Marie Nelson, MD**, staff pathologist (ARP) in the AIDS Division, Department of Infectious and Parasitic Diseases, attended the VIth Annual International Conference on AIDS in Africa in Dakar, Senegal, 16-19 December 1991. The findings presented at the conference emphasized that Africa is the continent most affected by AIDS and HIV infection, with seroprevalence rates as high as 35% in some cities. The findings underline the importance of locating effective and affordable prevention strategies, defining natural history, and developing treatment algorithms appropriate for use in the developing world.

■ **Donald E. Sweet, MD, Chair, Department of Orthopedic Pathology**, participated in the Fifth Annual Basic



Science Course in Orthopedics, December 1-6, 1991, in Ottawa, Ontario. This course attracts an international group of resident and practicing orthopedic

surgeons as attendees.

■ **Richard C. Froede, MD, the Armed Forces Medical Examiner**, received the Secretary of Defense Medal for Meritorious Civilian Service at a



Pentagon ceremony on December 19, 1991. The award honored Froede for his role as Chief Medical Examiner during Operations Desert Shield/Desert Storm, in

which he oversaw the entire joint services mortuary program at Dover Air Force Base, Delaware. The citation and medal were presented to him by Brig Gen Jimmy G. Dishner, USAF.

■ **Isabell A. Sesterhenn, MD, Department of Genitourinary Pathology**, presented a poster on "Numerical Aberrations in Chromosomes in Genitourinary Tumors," at the International Congress of Urology, Seville, Spain, November 3-7, 1991.

# Processing cases accurately, Receiving and Accessions Division works to improve turnaround time

With over 150 cases received at the AFIP each duty day, contributors can be assured that each one receives individual attention to assure accuracy and accountability.

According to department administrator Capt Annette Anderson, USAF, MSC, at least three different individuals review each case before releasing it to the assigned

pathology department. "The Receiving and Accessions Division is comprised of a staff of 21 dedicated personnel, many of whom have worked in this division for over ten years," she says. "They are committed to insuring that each case is accessioned and processed in the most timely and accurate manner possible. In fact, most cases are processed and delivered to the appropriate pathology department within two hours of being received."

Contributors should send their cases directly to the Receiving and Accessions Division in order to insure the most timely processing, Capt Anderson notes. "If a contributor sends his or her case directly to the pathologist, it must be sent back to be entered into our database, and this causes delays in turnaround time," she says.

The Receiving and Accessions Division personnel are broken down into

five teams, each having a team leader. "Our 'input team' receives and opens all shipments, reviews and verifies associated paperwork, and contacts the

contributor if discrepancies are found," Capt Anderson says. Among the most common discrepancies encountered are conflicting laboratory numbers, missing

paperwork, and missing materials. "Our personnel work very closely with the contributor and AFIP staff pathologists to resolve these problems as quickly as possible," she notes.

Following input, a case is passed on to one of three data processing and assignment teams to verify all documentation and materials for correctness. "These personnel are all experienced medical records technicians with an extensive knowledge of medical terminology, anatomy, physiology, and pathologic disease processes," Capt

Anderson says. Demographic data as well as case types are also entered into the institute's database system for storage and retrieval.

One final team - the 'previously indexed team' - reviews all cases flagged by the computer as having been previously submitted to the AFIP. "This team is responsible for insuring the retrieval of previous records and specimens, adding new material, and finishing the case processing," Capt Anderson says. A series of additional tasks follow, including the assignment of a unique AFIP accession number and notification to the contributor that the case has been accessioned. Cases are then reviewed one final time for accuracy at the Case Transfer Station, which in turn releases them to the appropriate pathology department. "Through our computer system each pathology department must then acknowledge receipt of the case when received," notes Capt Anderson.

To further improve turnaround time the division recently implemented a case delivery service, with a messenger delivering all case materials to the appropriate department every two hours.

"This has significantly reduced the amount of time cases are in this division and frees pathology department administrative personnel from having to make frequent distribution runs," she

says. "The AFIP couldn't keep track of or utilize the information from our over 2.3 million cases without the diligent and hard work of these dedicated personnel."

*Left: Gloria Countiss: Catching contributors' errors pays. Accessions Employee of the Month three times in 1991. Right: Frances Damian: Reviewing the cases for the third and final review makes for a 1.5% error rate on cases leaving the R&A Division.*



including the environmental pathology program, the telepathology initiative, the ongoing AIDS and infectious disease program, and the developing pediatric pathology program. We plan to use the results of this survey to evaluate many of them and to make appropriate changes.

Q. I understand that the AFIP has an important role in the Department of Veterans Affairs Quality Assurance Program in Anatomical Pathology. How does that role work?

A. The AFIP has had a central role in the VA's Quality Assurance Program since 1947. At present, we have a number of programs with the VA, including the SERS/SERA programs, the Histopathology Case Study program, and the Legal Medicine program which evaluates selected tort claims against the VA for trends, as well as maintaining several registries which have an impact

on veterans, including the Agent Orange and Kuwait Oil Fires studies, and the Prisoner of War registry. We are also working with the VA to develop a comprehensive program in cytology and cytopathology. This interaction between agencies provides multiple opportunities to evaluate, appraise, and review our performance. In this climate of increased regulatory control of medical practice, such programs are likely to be expanded as well as improved.

Q. Where do you see the AFIP relative to this emphasis on regulation, proficiency testing, and performance evaluation?

A. QA is central to meeting regulations outlined for pathology. As a non-hospital medical institution, the AFIP is inspected and accredited by the College of American Pathologists (CAP). Our current emphasis is on outcome measurements based on ongoing monitoring, priority setting, and use of indicators. We have increased our participation in

available proficiency testing programs offered by the CAP, and all of our laboratories are being brought on line with NCCLS guidelines.

Documentation is a central issue as is external peer review. Each of our departments is establishing the best means of meeting expected goals and measuring our performance routinely. This means a system of duplicative checks and evaluations which involve a number of working committees and sub-committees here at the Institute.

Today, there are many institutions which can provide much of what we offer in services and products; however, the AFIP is unique in its repositories and registries, and we will market this area of expertise aggressively. The underlying requirements will remain the same: quality diagnostic accuracy, timeliness, and relevant communication and education with our contributors. Meeting those goals will lead to improved patient care and involve continuous quality improvement. □

## Museum to receive \$250,000-plus CDC grant for AIDS activities

Under a formula still to be finalized, AFIP's National Museum of Health and Medicine expects to receive more than \$250,000 from the Centers for Disease Control. As a founding member of the National AIDS Exhibit Consortium (NAEC), this sum represents NMHM's share of a \$1.5 million grant to the members of the NAEC. The Consortium will produce AIDS education exhibits and programs that will serve audiences throughout the United States. Like the NMHM, the National AIDS Exhibit Consortium is a public-private cooperative effort, which is encouraged to raise matching private sector funds. The National Museum of Health and Medicine Foundation will play a key role in this process on behalf of the Consortium. The Museum will also receive a share of all private funds raised to support Consortium activities.

In other news, the National Marfan Foundation will award the Museum a \$15,000 grant to underwrite the cost of a second Lincoln panel to study the scientific and technical issues associated

with the possible cloning of the sixteenth President's DNA. It is anticipated that the second Lincoln panel will convene in Washington during April.

## Division of AIDS Pathology has new telephone numbers, mailing address

**The AIDS Pathology Division and Registry has moved to a new location within the AFIP. Please note that tissues clearly identified as pertaining to**

**HIV/AIDS patients accessioned under the Division of AIDS Pathology are exempt from the fee-for-service charge.**

### The new official address:

**ATTN: AIDS Pathology  
Division and Registry  
Room # M003B-AIDS  
Armed Forces Institute of  
Pathology  
Washington, DC 20306-6000**

### New telephone numbers:

**Secretary – (202) 576-2838  
Staff pathologists –  
(202) 576-0453/54  
Registrar – (202) 576-2232  
Division chief –  
(202) 576-2825**

### Long-term clinical and histopathological follow-up of chronic posttransfusion hepatitis

Adrian M. Di Bisceglie, Zachary D. Goodman, Kamal G. Ishak, Jay H. Hoofnagle, Jacqueline J. Melpolder, and Harvey J. Alter

We have evaluated the clinical and histopathological outcomes of patients who contracted chronic non A, non B hepatitis as a result of transfusions administered during heart surgery at the National Institutes of Health. Posttransfusion hepatitis developed in 65 of 1,070 (6.1%) patients and became chronic in 45 (69%) of those cases. Antibody to hepatitis C virus was detectable in 53 patients (82%) with posttransfusion non A, non B hepatitis. Thirty-three patients with chronic non A, non B hepatitis agreed to liver biopsy (group 1). In addition, six other patients with chronic posttransfusion non A, non B hepatitis were evaluated (group 2). These 39 patients were followed between 1 and 24 yr (mean = 9.7 yr). Cirrhosis developed in 8 patients (20%) between 1.5 and 16 yr after blood transfusion. Of the 33 patients in group 1, 11 (33%) died during follow-up. In two cases (6%), this was related to liver failure. At this writing, two additional patients (6%) have decompensated cirrhosis and one (3%) has debilitating fatigue. Twenty of 33 patients (61%) with histological evidence of chronic active hepatitis or cirrhosis are asymptomatic and have no clinical evidence of liver disease.

Thus, chronic non A, non B posttransfusion hepatitis appeared to be due to hepatitis C virus infection in most cases. It was associated with the development of cirrhosis in approximately 20% of cases and end-stage liver disease in 12% of patients followed prospectively. Most patients with histological evidence of cirrhosis or chronic active hepatitis, however, had minimal clinical evidence of liver disease within the time frame of this study.

*Hepatology* 1991;14:969-974.

### Usefulness of antikeratin immunoreactivity in osteosarcomas of the jaw

Jin Kim, DDS, Gary L. Ellis, DDS, and Thomas A. Mounsdon, DDS

The immunohistochemical typing of cytoplasmic intermediate filaments has proved helpful to the pathologist in classifying poorly differentiated malignant neoplasms. In general, identification of keratin-type intermediate filaments has been associated with epithelial histodifferentiation, but several exceptions to this generalization have been reported in the literature. A recent report identified

false-positive immunostaining for keratin in osteosarcomas of the jaws that was attributed to cross-reactivity induced by enzyme digestion of the tissue specimens before immunostaining. Because the jaws are unique in the skeletal system because of their relatively high incidence of intraosseous epithelial neoplasms, false-positive immunoreactions for keratin could complicate differentiating sarcomatoid epithelial neoplasms from poorly differentiated osteosarcomas. To evaluate this possible pitfall in our laboratory, eight osteosarcomas of the jaws were evaluated for keratin immunostaining with polyclonal and monoclonal antibodies on tissue sections that had been enzymatically treated with protease. No immunostaining was demonstrated in these tumors. Repudiation of the usefulness of antikeratin immunohistochemistry for intraosseous jaw tumors was not confirmed with the procedures used in our laboratory.

*Oral Surg Oral Med Oral Pathol.* 1991;72:213-7.

### Histopathology and doxycycline treatment in a previously healthy non-AIDS patient systemically infected by *Mycoplasma fermentans* (Incognitus strain)

Shyh-Ching Lo, Curtis L. Buchholz, Douglas J. Wear, Robert C. Hohm, and Aileen M. Marty

The newly recognized human pathogenic mycoplasma *M. fermentans* (incognitus strain) causes a fatal systemic infection in experimental monkeys, infects patients with AIDS, and apparently is associated with a fatal disease in previously healthy non-AIDS patients. An apparently immunocompetent male who lacked evidence of HIV infection developed fever, malaise, progressive weight loss, and diarrhea and had extensive tissue necrosis involving liver and spleen. *M. fermentans* (incognitus strain) was centered at the advancing margins of these necrotizing lesions. Following the treatment of 300 mg doxycycline per day for 6 weeks, he recovered fully. He has no fever or diarrhea, and his abnormal liver function tests have returned to normal. He regained all lost strength and 14 kg of lost weight and has remained disease free for more than one year.

*Mod Pathol.* 1991;4:750-754.



# Postgraduate Short Courses in Continuing Education Academic Year 1992

Course Title	Scheduled Dates	Application Priority Deadline	Tuition	Military, DoD, VA & PHS Fee
Problems in Anatomic Pathology .....	22 Mar-3 Apr 92 .....	6 Jan 92 .....	\$1000 .....	\$250 .....
Surgical Pathology of the Gastrointestinal Tract. ....	30 Mar-1 April 92 .....	6 Jan 92 .....	\$325 .....	\$150 .....
Uroradiology .....	4-5 Apr 92 .....	10 Jan 92 .....	\$275 .....	\$100 .....
Perinatal & Pediatric Pathology .....	6-10 Apr 92 .....	13 Jan 92 .....	\$450 .....	\$100 .....
Comparative Pathology .....	20-22 Apr 92 .....	31 Jan 92 .....	\$250 .....	\$100 .....
Forensic Toxicology .....	29 Apr-1 May 92 .....	3 Feb 92 .....	\$400 .....	\$200 .....
Gastrointestinal Radiology Review .....	2-3 May 92 .....	18 Feb 92 .....	\$275 .....	\$75 .....
Hematopathology .....	5-8 May 92 .....	24 Feb 92 .....	\$500 .....	\$300 .....
Melanocytic Lesions of the Skin .....	6-8 May 92 .....	2 Mar 92 .....	\$350 .....	\$200 .....
Topics in Hyperbaric Medical Research:				
Oxidative Stress & Infections .....	9 May 92 .....	9 Mar 92 .....	\$85 .....	\$85 .....
Diagnostic Immunopathology & Molecular Pathology .....	11-13 May 92 .....	11 Mar 92 .....	\$400 .....	\$250 .....
DNA Databanks & Repositories .....	15-16 May 92 .....	16 Mar 92 .....	\$300 .....	\$125 .....
Veterinary Descriptive Pathology .....	8-11 Jun 92 .....	8 Apr 92 .....	\$350 .....	\$75 .....

## Course Descriptions

### Problems in Anatomic Pathology

Two-week intensive review of problem areas in anatomic pathology is directed towards pathology residents in their final two years of training, and will focus on difficult and problem areas in all subspecialties of pathology. Didactic lectures will be complemented by an extensive syllabus, and "hands-on" microscopic sessions proctored by leaders in pathology. Daily sessions will include 8-10 hours of supervised instruction. A library of microscopic slides and photomicrographs will be available for individual review. Approximately 75 CME credit hours.

### Surgical Pathology of the Gastrointestinal Tract

Seminar will provide comprehensive, practical review in diagnostic surgical pathology of the GI tract. Emphasis on interpretation of histological material, but clinicopathologic-radiologic correlation will be used to understand the disease process. Didactic lectures on neoplastic and non-neoplastic diseases of the GI tract will be supplemented by a slide seminar of selected cases. Approximately 25.25 CME credit hours.

### Uroradiology

This course is designed to offer radiologists and urologists a summary of the most important morphological principles that underlie the evaluation of roentgenologic signs. Particular emphasis will be placed on the differential diagnosis of abnormal urograms. Approximately 14 CME credit hours.

### Perinatal & Pediatric Pathology

The course will emphasize pediatric surgical pathology which will include the majority of malignancies seen in the pediatric age, as well as non-malignant and developmental disorders commonly encountered at the surgical pathology bench. Approximately 31 CME credit hours.

### Comparative Pathology

Course for scientists interested in comparative pathologic aspects of disease in animals and man is specifically designed to bring attention to disease processes in animals in which a similar entity occurs in humans. Differences and similarities of lesions as well as biological behavior of specific entities will be discussed. Pathologic entities cover a wide variety of species, including man, and will be compared by organ system and to specific cause. Approximately 23 credit hours.

### Forensic Toxicology

New course designed to provide full scope of forensic toxicology for forensic toxicologists and pathologists, and clinical chemists. It will cover major aspects of the field: postmortem, human performance, and drug abuse testing. Drugs encountered in forensic toxicology—abused and therapeutic will be discussed. Lectures will be given on analytical methods including chromatography, immunoassay, and mass spectrometry. Approximately 16.25 CME credit hours.

### Gastrointestinal Radiology Review

In a comprehensive review of gastrointestinal tract radiology, the faculty will lecture on radiologic presentation of diseases affecting the esophagus, stomach, small bowel, and colon. All modalities will be covered. Radiologic-pathologic correlation will be emphasized. Approximately 14 CME credit hours.

### Hematopathology

Course is designed to provide an in-depth review of hematologic and lymphoid pathology, including data provided by immunopathology, molecular biology, and cytogenetics. For the pathology of lymphoid tissue, emphasis will be on personal study of slide set provided; most lectures will follow a case presentation format and additional time will be allotted to review slides. The course is intended to update practicing pathologists on recent developments and latest diagnostic techniques in current problem areas. Approximately 26 CME credit hours.

### Melanocytic Lesions of the Skin

This course will cover benign and malignant cutaneous melanocytic lesions, and histologic criteria to differentiate these lesions will be emphasized. Known and unknown microscopic slides will be available for review with formal discussion of the unknown cases. Separate lectures will be presented on the clinical appearance of melanoma, and recent advances in the medical therapy of malignant melanoma. Approximately 20.75 CME credit hours.

### Topics in Hyperbaric Medical Research: Oxidative Stress & Infections

One day Scientific Meeting/Annual Spring Research Conference will examine the role of oxidants in creating cytotoxic and microbicidal effects in pathogenic microorganisms. Oxygen radicals generated by phagocytic cells or high oxygen tensions kill microorganisms by damaging membranes, generating toxic lesions in DNA molecules and by inactivating microbial antioxidant enzymes. The course is intended for physicians, immunologists, microbiologists, and other researchers interested in oxygen toxicity. Approximately 7.25 CME credit hours.

### Diagnostic Immunopathology & Molecular Pathology

This course will cover new developments in diagnostic immunohistochemistry and molecular biology, with careful attention to how these technological approaches are most appropriately integrated into routine histopathologic methods. Methods for detecting and identifying viruses, bacteria, fungi, and protozoa in formalin-fixed, paraffin-embedded tissue will be presented, as will methods for detecting, quantitating and determining the sequence of genes and gene products associated with neoplastic diseases. Approximately 23 credit hours.

### DNA Databanks & Repositories

This conference is a practical discussion on the creation and set-up of DNA databanks/repositories, focusing on forensic identification. It is intended for DNA repository directors, policy makers, and administrators considering establishment of a DNA collections program. Special topics include FBI's national DNA database program, records handling, cryopreservation, and ethical and legal concerns. Approximately 10.25 credit hours.

### Veterinary Descriptive Pathology

Skill at describing lesions is necessary for success on the American College of Veterinary Pathologist's certifying exam. The ability to make good written and oral descriptions enhances the professional image of veterinary pathologists. This course will teach attendees how to describe the gross and microscopic lesions in a variety of organs. Oral as well as written descriptive techniques will be reviewed. Approximately 23 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, 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

## APPLICATION FORM - AFIP COURSES

Course Title & Dates \_\_\_\_\_

Name (Last, First, MI) \_\_\_\_\_

Mailing Address \_\_\_\_\_

City, State, Zip \_\_\_\_\_

Phone \_\_\_\_\_ Specialty \_\_\_\_\_ Board Status:  Certified  Eligible

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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 \$ \_\_\_\_\_

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## Recent Publications by AFIP Staff

1. Di Bisceglie AM, Goodman ZD, Ishak KG, Hoofnagle JH, Melpolder JJ, Alter HJ. Long-term clinical and histopathological follow-up of chronic posttransfusion hepatitis. *Hepatology*. 1991;14:969-974.
2. Kim J, Ellis GL, Mounsdon TA. Usefulness of antikeratin immunoreactivity in osteosarcomas of the jaw. *Oral Surg Oral Med Oral Pathol*. 1991;72:213-217.
3. Lo SC, Buchholz CL, Wear DJ, Hohm RC, Marty AM. Histopathology and doxycycline treatment in a previously healthy non-AIDS patient systemically infected by *Mycoplasma fermentans* (incognitus strain). *Mod Pathol*. 1991;4:750-754.