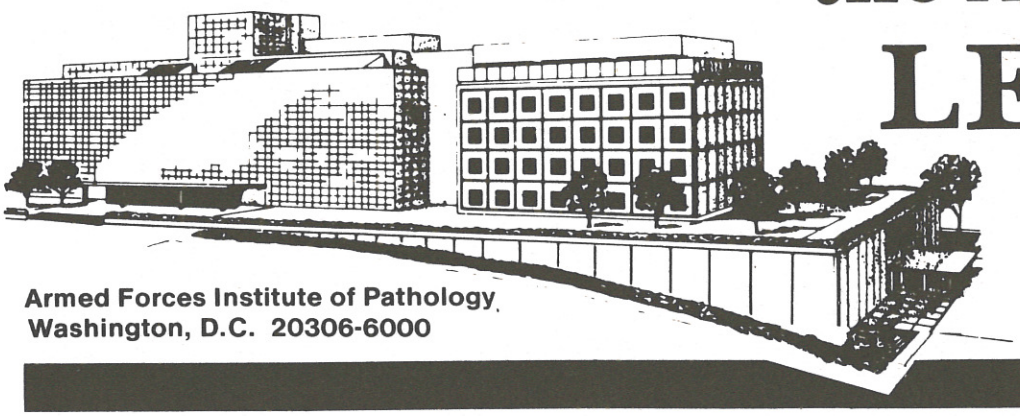
the AFIP LETTER



Armed Forces Institute of Pathology
Washington, D.C. 20306-6000

Vol. 147, No 2
April 1989

Director's Message: The Division of Histopathology— Improved Substance, Support & Services

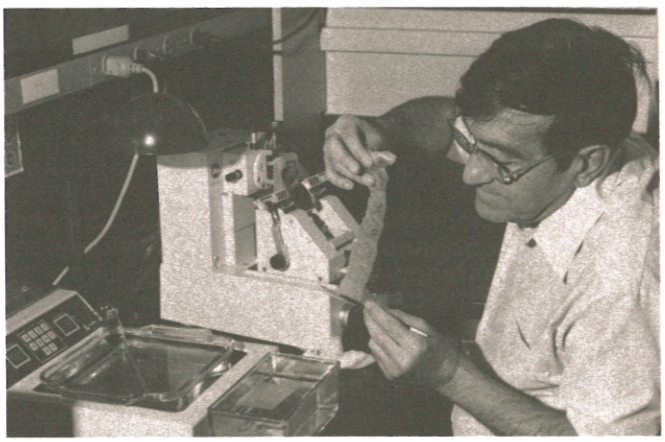
The several laboratories comprising our Histopathology Division, which have consistently provided state-of-the-art histotechnical support within the context of our consultation, education, and research missions, are now an integral component of the newly formed Department of Scientific Laboratories. The reconfiguration capitalizes on multidisciplinary advances in applied technology, and will guarantee increasingly safe and environmentally sound working procedures.

Traditional histotechnologies required labor intensive manual processing techniques. Hand processing specimens for celloidin or paraffin embedding hampered diagnosis with technically produced artifacts and excessive time delay. Initial equipment advances and modifications concentrated on the immediate product, often overlooking operator safety. Inherent risks for histotechnologists included unwitting contact with contaminated tissue samples and exposure to unquantifiable toxic fumes. With the subsequent automation of the specimen dehydration and infiltration process, total processing time and artifact occurrence were dramatically reduced. Industrial hygiene and environmental safety standards, when applied to the laboratory, established guidelines and safety parameters for the safe handling of hazardous materials.

No longer a "tail-wagged dog," safety considerations now evolve concurrently with technological innovations and their practical application. Quality control documentation, environmental toxins, and employee safety are key issues here at the Institute, and have driven the procurement of increased information processing capability and intensive training programs in toxic waste management. These initiatives, combined with active pursuit of less/non-hazardous chemicals for tissue processing and staining, ongoing testing and evaluation of new equipment, increased cost effectiveness and more efficient quality assurance, set the tone for AFIP facilities as we enter this century's last decade.

The new AFIP Histopathology Procedures Manual, now nearing its final stages, specifically addresses environmental, safety, and technology issues. Comprehensive in scope, the updated manual draws on multidisciplinary advances, and details specimen preparation for transmission electron microscopy, as well as

Mrs. Arnicia Downing, Branch Chief, Neuropathology Lab, sections paraffin embedded whole brain with macrotome.



Mr. Peter Emanuele, Branch Chief, Ophthalmic Pathology Lab, having sectioned a whole paraffin embedded eye, prepares to float ribbon of section in distilled water.

ANNOUNCEMENTS

Musto Modified Movat's Pentachrome Stain Versus the Russell-Movat Pentachrome Stain

Recently, the Musto Modified Movat's Pentachrome stain has been used successfully in our laboratories. The primary difference between this procedure and the Russell-Movat stain is the addition of hydrochloric acid to the elastic stain solution. The Russell-Movat procedure uses an elastic staining solution containing ferric chloride, iodine, and alcoholic hematoxylin. Elastic fibers and other elements are overstained and subsequently differentiated with 2% ferric chloride solution. It is possible to destain elastic fibers or to have a dark background that obscures the elastic fibers. Improper

HM2 Curtis Sumpter, histopath technician assigned to Lab B-1, stains microslides to best demonstrate specific areas of interest. Lab B-1 performs over 15 special staining techniques daily.

differentiation may be prevented when the Musto modified procedure is used. In the Musto modification, hydrochloric acid is added to the elastic stain solution. Tissue sections do not require differentiation after treatment.

The elastic stain is prepared from the following stock solutions:

Solution A — 2% hematoxylin in 95% alcohol

Solution B — 12.4 g ferric chloride hexahydrate in 500 ml distilled water with 5 ml concentrated hydrochloride acid added

Solution C — 20 g potassium iodide dissolved in 500 ml of distilled water, add 10 g iodine; mix until iodine is dissolved

Just before use, mix 30 ml of Sol. A, 20 ml of Sol. B, and 10 ml of Sol. C for working elastic stain.

The intensity of elastic fiber staining varies with the amount of hydrochloric acid added to Solution B. We currently add 4 ml of concentrated hydrochloric acid instead of the recommended 5 ml to achieve desired staining results. The use of an acidified elastic staining solution decreases variations in staining results since stained sections need not be subsequently differentiated.

Telefax Capability

Effective immediately AFIP has telefax capability for transmission of consultations. If you would like to have your case returned by telefax, we will need the following information included on the consultation request (AFIP Form 288):

(a) Write telefax in the area for priority requested
(b) Write your telefax phone number and hours of operation.

This service is free for military institutions! Civilian institutions must include a check for $5.00 made out to the American Registry of Pathology.

Histopathology Control and Reference Slides

Available For Purchase From

AMERICAN REGISTRY OF PATHOLOGY

12 different controls are available: *P. carinii, M. tuberculosis, M. leprae,* gram-negative bacteria, gram-positive bacteria, fungus, amyloid, spirochetes, *Cryptococcus,* copper, hepatitis B surface antigen, and *Legionella pneumophila*. At a cost of $75.00 per box, each box contains 24 unstained known positive slides, one specifically stained slide and a copy of the recommended staining procedure.

There are no shipping costs for orders within the U.S. and Canada. Orders from other countries require an additional $7.50 shipping charge.

We now offer packages for laboratories which may prefer smaller numbers of control slides. Unstained slides of any control in any number desired will be priced at $3.50 per slide, with a minimum order of 5 slides for $17.50. Add $2.00 to each order for postage and handling. No stained slides are included in these small orders. Address orders to:

Histopathology Control Slide Program
AMERICAN REGISTRY OF PATHOLOGY
Room 1077, 14th St. at Alaska Ave, NW
Washington, DC 20306-6000
Telephone (202) 576-2978

REPRINTS

A Novel Virus-like Infectious Agent in Patients with AIDS

Shyh-Ching Lo, James Wai-Kuo Shih, Neng-Yu Yang, Chin-Yih Ou, and Richard Yuan-Hu Wang

A novel virus-like infectious agent (VLIA) obtained by direct transfection of DNA from Kaposi's sarcoma of a patient with acquired immune deficiency syndrome (AIDS), was transmissible from culture to culture by cell-free filtrate. VLIA contained an outer limiting membrane and had a buoyant density of 1.17-1.20g/ml in a sucrose gradient. The DNA genome of VLIA was estimated to be 150 kilobase (kb) pairs and carried repetitive sequences. An 8.6 kb pair cloned probe (psb-8.6) and a 2.2 kb pair cloned probe (psb-2.2) of VLIA detected specific sequences in DNA of VLIA infected cells, but not in DNA of uninfected NIH/3T3 cells. By Southern blot hybridization analysis, VLIA was distinct from all known members of human herpes virus, from vaccinia virus, monkey herpes virus saimiri (HVS), and mouse cytomegalovirus (MCMV). Using synthetic primers with the VLIA specific DNA sequences and the polymerase chain reaction (PCR) method, we detected VLIA sequences in DNA isolated from 7 out of 10 patients with AIDS. VLIA infection was identified in spleen, liver, brain, lymph node, Kaposi's sarcoma tissues, or peripheral blood mononuclear cells from these patients, but not in 5 different organs and a tumor from 5 subjects without AIDS. Antiserum raised against VLIA in rabbit positively immunostained brain and lymph node tissues from these AIDS patients.

Am. J. Trop. Med. Hyg., 40(2), 1989, pp. 213-226 (8-246).

A Comparative Morphometric and Cytophotometric Study of Endometrial Hyperplasia, Atypical Hyperplasia, and Endometrial Carcinoma

Henry J. Norris, M.D., Robert L. Becker, Major, USAF, MC, and Ulrika V. Mikel, B.S., M.G.A.

The DNA content and nuclear measurements of five groups of endometrial proliferations — proliferative endometrium (PE), simple hyperplasia (SH), atypical hyperplasia (AH), well-differentiated carcinoma (WDC), and poorly differentiated carcinoma (PDC) — were compared using 14 descriptors in a stepwise discriminant analysis. Classification using the discriminant rules agreed with the pathologic interpretation for 78% of the specimens. All PEs were assigned to the correct group, and 97% of benign endometria and carcinomas were correctly classified as benign or malignant. Only two of 39 hyperplasias (5%) were misclassified as malignant, and only one of 36 carcinomas was classified as benign. In the difficult distinction between AH and WDC, using all descriptors for the five groups, only 68% of the AH and 60% of the WDC classifications were in agreement with the pathologist of record. However, when discriminant rules addressing only AH and WDC were used, 37 of 39 AHs and WDCs were in concordance. This suggests that a morphometric distinction between AH and WDC is feasible.

Hum. Pathol. 20:219-223, 1989.

Primary Carcinoma of the Gallbladder: A Pictorial Essay

John Lane, M.D., James L. Buck, LCDR, MC, USNR, and Robert K. Zeman, M.D.

This paper is an overview of the imaging characteristics of primary carcinoma of the gallbladder, based on the premise that more general knowledge of the imaging patterns of the primary tumor and its modes of spread might increase the likelihood of accurate preoperative diagnosis of this lesion. Primary tumor patterns discussed and illustrated are: (1) an intraluminal mass, (2) focal or diffuse thickening of the gallbladder wall, and (3) replacement of the gallbladder by a mass. Illustrated patterns of tumor spread include direct extension and lymphatic and hematogenous metastases.

RadioGraphics, Volume 9, Number 2, March 1989, pp. 209-228.

Infiltrating Syringomatous Adenoma of the Nipple

Mirka W. Jones, M.D., H. J. Norris, M.D., and R. C. Snyder, COL, MC, USA

The clinical and pathologic findings of 11 infiltrating syringomatous adenomas of the nipple (ISA) were studied. All neoplasms were composed of small ducts and solid strands of epithelial cells surrounded by desmoplastic stroma. Ten of the 11 invaded the smooth muscle of the nipple, four extended to underlying breast tissue, and one showed perineural invasion. All lesions had an infiltrative margin, but 10 were treated successfully by local excision, even though five (45%) recurred. None metastasized. ISA must be distinguished from nipple duct adenoma and tubular carcinoma. Its clinical significance lies primarily in its recognition as a distinctive benign neoplasm. In the past, a variety of terms have been used to describe this lesion, whether it occurred in the skin, nipple, or substance of the breast. "Infiltrating syringomatous adenoma" is the preferred term to avoid using "carcinoma" for lesions involving the breast.

Am. J. Surg. Pathol. 13(3): 197-201, 1989.

Incidence of Second Neoplasms in Patients with Bilateral Retinoblastoma

John D. Roarty, M.D., Ian W. McLean, COL, MC, USA, and Lorenz E. Zimmerman, M.D.

The cumulative incidence of second neoplasms in 215 patients with bilateral retinoblastoma was calculated using the life-table method. Second tumors developed in 4.4% of the patients during the first 10 years of follow-up, in 18.3% after 20 years, and in 26.1% after 30 years. The 30-year cumulative incidence was 35.1% for the 137 patients who received radiation therapy compared with an incidence rate of 5.8% for the 78 patients who did not receive radiation. In the 137 patients who received radiation, second tumors developed both inside and outside the field of therapy. There was a 30-year incidence rate of second tumors of 29.3% within the field of irradiation and 8.1% outside the field. The rate outside the field of irradiation (8.1%) was similar to that observed in nonirradiated patients (5.8%). Our findings indicate that carriers of the retinoblastoma gene have an increased incidence of second tumors, and that the incidence rate is further increased in patients who receive radiation therapy.

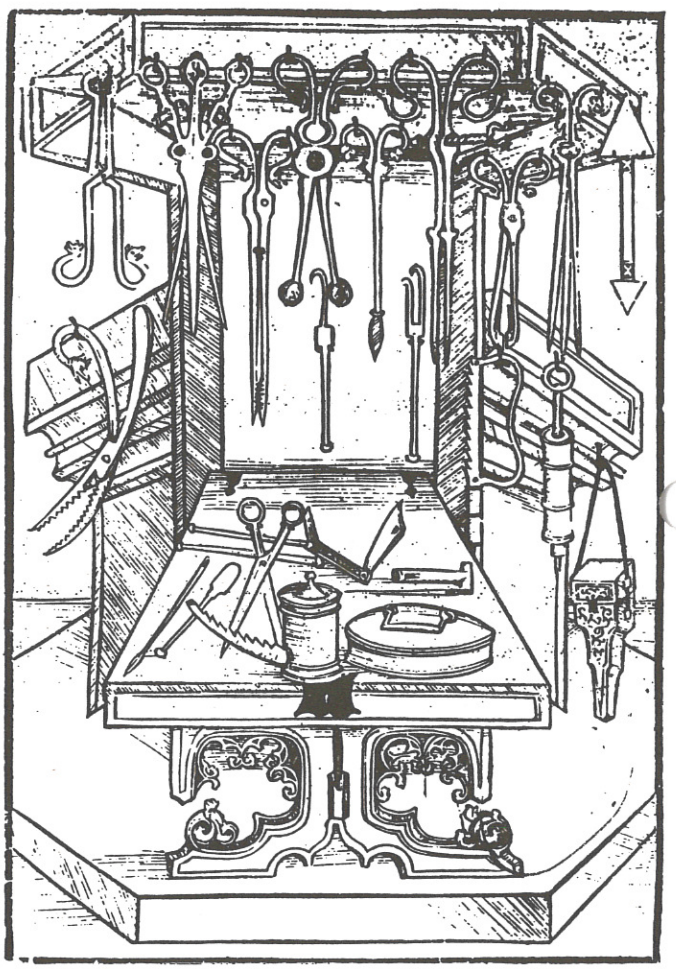
Ophthalmology, Vol. 95, No. 11, November 1988.

Moderately Differentiated Neuroendocrine Carcinoma of the Larynx

Bruce M. Wenig, M.D., LCDR, MC, USNR, Vincent J. Hyams, M.D., CAPT MC, USN Ret, and Dennis K. Heffner, M.D., CAPT, MC, USN

Fifty-four cases of primary laryngeal moderately differentiated neuroendocrine carcinoma from the Armed Forces Institute of Pathology Otolaryngic Tumor Registry (AFIP-OTR) are reported. The tumors most often present in men in their sixth and seventh decades of life and are heralded by an array of symptoms, the most frequent being hoarseness. The primary site was most often the supraglottic larynx. The investigation has included light-microscopic, histochemical, immunocytochemical, and electron microscopic analyses which support expression of both neuroendocrine and epithelial differentiation. conservative surgery alone can be utilized if early identification of the tumor and complete surgical removal are assured. The follow-up of the patients reveals 62% as remaining tumor-free after surgical extirpation over periods ranging from 1 month to 16 years (median: 3 years, 9 months). Factors adversely affecting prognosis include metastatic disease at initial presentation, incomplete surgical removal, and vascular or lymphatic invasion. There was no correlation between tumor size, morphologic pattern, mitoses or necrosis, and survival. Sixty-eight percent of the patients gave a history of long-term cigarette smoking. The classification and pathogenesis of these neoplasms remains the focus of much speculation. They are suggested as arising from the cells of the dispersed neuroendocrine system (DNES). However, a more uniform and descriptive nomenclature is necessary. This study resolves this and other issues along with a presentation of clinicopathologic data of the tumor entity.

Cancer 62: 2658-2676, 1988.



*If you are not a U.S. citizen and you plan to submit an application for this course, you must contact the AFIP Education Division immediately for special instructions. Write to the following address or call (202)576-2939 between 7:30 a.m. and 4:30 p.m. Eastern Standard Time, Monday through Friday.

Armed Forces Institute of Pathology
Education Division
Washington, D.C. 20306-6000
ATTN: Mrs. Montgomery

Failure to follow this instruction will delay processing of your application and may result in subsequent disapproval.

Postgraduate Short Courses in Continuing Education
Academic Year 1989

Course Title	Scheduled Dates	Application Deadline	Non-Federal Fee	Federal Fee
**Seminar & Workshop in Histopathology Techniques	7-10 Aug 89	7 Jul 89	*$125.00	N/A
Pathology of Laboratory Animals	7-11 Aug 89	7 Jul 89	$200.00	$30.00
Hepatic Pathology	16-18 Aug 89	17 Jul 89	$325.00	$25.00
Hepatobiliary Radiology Review Course	19-20 Aug 89	19 Jul 89	$250.00	$20.00
Pathology of Congenital Heart Disease	21-25 Aug 89	21 Jul 89	$250.00	N/A
Anatomy of the Eye	26-27 Aug 89	26 Jul 89	$200.00	$15.00
Ophthalmic Pathology	28 Aug-1 Sep 89	28 Jul 89	$450.00	$40.00
Pathological Effects of Radiation	11-13 Sept 89	11 Aug 89	$390.00	$125.00
Conference on Quantitative Histopatholgy	18-21 Sep 89	18 Aug 89	$350.00	$50.00
Conference on Cardiovascular Diseases	2-4 Oct 89	5 Sep 89	$375.00	$100.00
**Aerospace Pathology	10-13 Oct 89	11 Sep 89	*$125.00	N/A

** Sponsored solely by AFIP

1. **Course Fee:** All non-federal applicants will be charged the fee as indicated. This fee is payable upon submission of a completed registration form. Acceptable methods of payment are checks drawn on U.S. banks or international money orders payable in U.S. dollars. Please, do not send cash. Payments for courses sponsored solely by the AFIP are to be made payable to the Treasurer of the United States. All other courses (co-sponsored by the American Registry of Pathology) are to be made payable to the American Registry of Pathology or ARP.
2. **Application Deadline:** Fifty percent of the course spaces are reserved for military and federal applicants through the Application Deadline Date. After this date unused space will be made available to non-federal applicants until course space is exhausted.
3. **Military and Federal Employees Please Note:** To assure 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. **Creditation:** As an organization accredited for Continuing Medical Education, the Armed Forces Institute of Pathology (AFIP) certifies that the Continuing Medical Education activities designated Category 1 meet the criteria for Category 1 on an hour-for-hour basis for the Physician's Recognition Award of the American Medical Association. The Continuing Medical Education activities of the Armed Forces Institite of Pathology are acceptable for credit in Category 2D by the American Osteopathic Association.

REGISTRATION FORM — AFIP COURSES

Course Title & Dates _____

Name (Last, First, MI) _____

Mailing Address _____

City, State, Zip _____

Phone _____ **Specialty:** _____

Board Status: ☐ Certified ☐ Eligible **Citizenship (Country)** _____

Military/Federal Civilian Employees (Only):

Rank/Civilian Grade _____

Service/Agency _____

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

Tuition Enclosed: (Payable in U.S. dollars only) _____

☐ Non-Federal Civilian _____ ☐ Military/Federal Civilian Employee _____

Make all Payments to: **AMERICAN REGISTRY OF PATHOLOGY**

Mail to:

Non-Federal Civilians
American Registry of Pathology
Armed Forces Institute of Pathology
Washington, D.C. 20306-6000

Telephone: (202) 576-2980

Federal Personnel
Armed Forces Institute of Pathology
Education Division
Washington, D.C. 20306-6000

Telephone: (202)576-2939
AUTOVON: 291-2939

***Method of Payment:** ☐ Check/Money Order ☐ MasterCard ☐ Visa

Card Number _____ **Expiration Date** _____

Name as it appears on card _____

Signature _____

*Payment by MasterCard or Visa will only be accepted for courses starting on or after 1 August 1989.

COURSE DESCRIPTIONS

**Seminar & Workshop - Histopathology Techniques

Lectures cover a wide variety of topics in histotechnology. Workshops designed to provide a discussion of select methodologies, hands-on experience in performing procedures and a comprehensive discussion of results achieved.

Enrollment limited to 30. Applicants should have at least one year in histopath lab and the training request must be made by the sponsoring pathologist. To get the special application for this course write to: The Armed Forces Institute of Pathology, Education Division, Washington, D.C. 20306-6000; or call COMM (202) 576-2939 or AUTOVON 291-2939. Approximately 26 CME credit hours.

Pathology of Laboratory Animals

Course designed for veterinary officers, others with a special interest in lab animal pathology, and civilians responsible for recognition and interpretation of lesions in lab animals. Pathology is emphasized in course, but other features of diseases, i.e., etiology, diagnosis, and control are also covered.

Enrollment limited to 150. Approximately 30 CME credit hours.

Hepatic Pathology

Course covers general principles of liver biopsy interpretation, cholestatic disorders (including primary biliary cirrhosis and sclerosing cholangitis), alcoholic liver disease and differential diagnosis, acute and chronic viral hepatitis, drug-induced and toxic injury, diseases of the liver during pregnancy, transplant rejection, etc. Seminar on cases of drug-induced liver injury will be held. Attendee will receive a comprehensive syllabus of topics covered in course, and representative transparencies of the seminar cases.

Enrollment limited to 150 physicians. Approximately 20 CME credit hours.

Hepatobiliary Radiology Review Course

Will cover radiology of both congenital and acquired diseases of the liver, biliary ducts and gallbladder. All radiologic modalities will be discussed in didactic sessions on radiologic-pathologic correlation. Each day several unknown cases will be posted for attendees' interpretation, and at the end of each day, the cases will be reviewed by faculty.

Enrollment limited to 150. Course designed for radiologists, gastroenterologists, and other physicians interested in this course subject. Approximately 12 CME credit hours.

Pathology of Congenital Heart Disease

Designed for fellows, residents and board-eligible candidates in cardiology, cardiothoracic surgery, pathology, and radiology. Lectures on the gross and microscopic pathology of the major forms of congenital heart and aortic disease, and demonstration of these features with gross and microscopic preparations and select videotapes. Ample time allotted for interaction between faculty and attendees.

Enrollment limited to 15. Course offered Feb, May, Aug, and Dec each year. When applying, specify when you want to attend. Approximately 30 CME credit hours.

Anatomy, Histology & Electron Microscopy of the Eye, Orbit & Ocular Adnexa

Designed as a review of the anatomy, histology, embryology, and ultrastructure of the normal eye and ocular adnexa. Will cover gross exam of the eye, orbit and ocular adnexa, and histology of the same by light and electron microscopy. This course is not a prerequisite for Ophthalmic Path for Ophthalmologists course. Register for each course separately.

Enrollment limited to 200. Designed for physicians/veterinarians who are ophthalmologists, pathologists, or ophthalmic researchers. Approximately 14 CME credit hours.

Ophthalmic Pathology for Ophthalmologists

Consists of a basic and comprehensive survey of pathologic conditions of the eye and ocular adnexa. Sessions include review of general inflammation; acute, chronic and granulomatous lesions and their sequalae; injuries, cataract and glaucoma; vascular diseases; intraocular tumors; optic nerve pathology; epibulbar and orbital inflammatory and neoplastic lesions.

Enrollment limited to 250. Applicants should be board qualified/certified vision scientists well advanced in pathologic anatomy, histology, and ophthalmology. Approximately 40 CME credit hours.

Pathological Effects of Radiation

Addresses the morphologic effects of radiation on human tissues and related subjects. Designed for persons involved with the study of radiation especially (1) pathologists examining irradiated tissue from radiation therapy patients; (2) radiation therapy residents for board review of radiation pathology; and (3) persons who assist in medical management of acute radiation injury incidents.

Enrollment limited to 250. Approximately 20 CME credit hours.

*Conference on Quantitative Histopathology (3rd Conference)

Presents recent advances in technology-intensive quantitative pathology with emphasis on their use in cancer diagnosis, prognosis, and research. Introduces practical aspects of quantitative techniques to properly judge the planning and work necessary for the productive use of these techniques. Presentations of recent research results on the current or imminent application of results from quantitative pathology to clinical or basic science studies will be done. Technical matter will include flow cytometry, image analysis, and artificial intelligence applications.

Enrollment limited to 250. Designed for pathologists in training and practice, and research scientists interested in applying quantitative techniques to their own work in pathology. Presentation format includes practical tutorial, oral presentation of research results, panel discussions by an international faculty. Abstracts are welcome from attendees who wish to give oral or poster presentations of original work. (Call the AFIP Education Division for more information on this.) Course includes exhibition of instruments and software by vendors. Approximately 32 CME credit hours.

***This course is offered every other year.**

***Important! See note on page 8.**

Conference on Cardiovascular Diseases

A basic and comprehensive review of cardiovascular pathology. Will cover how to examine a heart with various pathologic conditions so clinical correlations can be easily done with the newer investigative tools used by cardiologists. Various changes seen in myocardial infarction will be shown; and how to diagnose early stages of ischemia, both at light and electron microscopy levels, will be reviewed. Types of prosthetic heart valves used today and also pericardial diseases and cardiovascular tumors will be covered.

**Aerospace Pathology

Designed for flight surgeons, residents in pathology and aerospace medicine, pathologists and other accident investigators with specialized instruction in areas of pathology concerned with aerospace vehicle accident investigations. Will cover pre-accident planning; operational correlations; identification procedures; special autopsy techniques in aircraft correlations; toxicological exam and correlation; practical evaluation and correlation of findings; crashworthiness, survivability and human tolerances; and the flight surgeon's responsibilities.

Enrollment limited to 100. Approximately 24 CME credit hours.

****Sponsored solely by AFIP.**

Please Type or Print Clearly

(Company or personal name)

(Additional address/attention line)

(Street Address)

(City, State, ZIP Code or Country)

☐ YES, please send me the following indicated publications:

Qty.	Stock Number	Second Series Atlas of Tumor Pathology	Year	Price Each	Total Price
	008-023-00057-3	Soft Tissues (Rev.)(1)	82	$14.00	
	008-023-00058-1	Breast (2)	68	8.50	
	008-023-00081-6	Peripheral Nervous System (3)	69	11.00	
	008-023-0009 -5	Peripheral Nervous System Supp	83	4.25	
	008-023-00059-0	Thyroid (4)	69	7.00	
	008-023-00093-0	Thyroid Gland Supplement	84	4.50	
	008-023-00060-3	Bone & Cartilage (5)	71	15.00	
	008-023-00087-5	Bone & Cartilage Supplement	81	4.50	
	008-023-00061-0	Central Nervous System (6)	72	20.00	
	008-023-00089-1	Central Nervous System Supp	82	4.75	
	008-023-00082-4	Esophagus & Stomach (7)	73	13.00	
	008-023-00097-2	Esophagus & Stomach Supp	85	4.75	
	008-023-00062-0	Male Genital System (8)	73	15.00	
	008-023-00063-8	Paraganglion (9)	74	5.50	
	008-023-00064-6	Major Salivary Glands (10)	74	8.00	
	008-023-00065-4	Urinary Bladder (11)	75	7.00	
	008-023-00096-4	Urinary Bladder Supplement	85	3.25	
	008-023-00066-2	Kidney (12)	75	8.50	
	008-023-00078-6	Thymus (13)	76	8.50	
	008-023-00067-1	Parathyroid Glands (14)	78	6.50	
	008-023-00068-9	Cardiovascular (15)	78	8.00	
	008-023-00080-8	Ovaries & Maldeveloped Gonads (16)	79	18.00	
	008-023-00083-2	Lower Respiratory Tract (17)	80	15.00	
	008-023-00088-3	Extragonadal Teratomas (18)	82	15.00	
	008-023-00094-8	Exocrine Pancreas (19)	84	16.00	
	008-023-00095-6	Tumors & Pseudotumors of the Serous Membranes (20)	85	10.00	
	008-023-00098-1	Tumors of the Pituitary Gland (21)	86	20.00	
	008-023-00099-9	Gallbladder & Extrahepatic Bile Ducts (22)	86	16.00	
	008-023-00100-6	Tumors of the Adrenal (23)	86	20.00	
	008-023-00101-4	Tumors of the Jaws (24)	87	11.00	
	008-023-00102-2	Upper Respiratory Tract & Ear (25)	88	20.00	

Special Publications

	008-023-00085-9	Atlas of Kidney Biopsies	80	18.00	
	008-023-00077-8	Tropical & Extraordinary Diseases Vol. 1	76	25.00	
*	008-023-00079-4	Tropical & Extraordinary Diseases Vol. 2	76	27.00	
	008-023-00076-0	Human Larynx, Coronal Section Atlas	71	2.25	
	008-023-00092-1	Perinatal Autopsy Manual	83	7.50	
	008-023-00075-1	Billings Microscope Collection	74	11.00	

All prices include regular domestic postage and handling. (See next column for expedited shipping).

Total Cost of Order

Total Cost of Order - Foreign

(Include 25% add. surcharge)

Armed Forces Institute of Pathology Publications Order Form

Airmail/First Class Service

All prices quoted in this order form include regular postage and handling costs. Orders are sent via surface mail or book rate unless otherwise requested.

For faster service, please contact us in advance by letter or telephone (202-576-2940) for estimated airmail or first class charges.

International Customers (Including Canada) Please Note

To provide the special handling required by international mailing regulations, a surcharge of 25 percent of the domestic price must be added on all items shipped to a foreign address. Please use space provided on order form to add this surcharge.

Payment in U.S. dollars must accompany every order in the form of a check drawn on a bank located in the U.S. or Canada, International MasterCard or Visa credit card (credit card number and expiration date required), a UNESCO coupon, or an International Postal Money Order made payable to the Superintendent of Documents. You may also charge orders to your prepaid Superintendent of Documents deposit account.

Discounts

A 25% discount is allowed to all bookstores when orders are shipped to their business address.

A 25% discount is allowed to any purchaser of 100 or more copies of a single publication when mailed to one address.

International Bookstores

International bookstores are entitled to our 25% discount for bookdealers. However, they should remit the domestic publication price, as the discount exactly offsets the additional charge for foreign orders.

Please Choose Method of Payment

☐ Check payable to Superintendent of Documents enclosed

☐ Federal Government Purchase Order

☐ Charge my GPO Deposit Account

☐☐☐☐☐☐☐—☐

☐ Charge my VISA, or MasterCard Account Number

☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

(Expiration Date)

Thank you for your order!

(Signature)

Purchase Order Number or NR Number
(If purchase order included or Federal Government Order.)

( )

(Business Phone (Required for credit card payment.)

Mail Entire Page to:

Armed Forces Institute of Pathology
GPO Sales Office, Room G–134
Washington, D.C. 20306-6000

Phone: (202) 576-2940
FAX: (202) 576-2164
AUTOVON: 291-2940

***Change since last list 15 Mar 89**

1 Jun 89

Armed Forces Institute of Pathology
Washington, D.C. 20306-6000
OFFICIAL BUSINESS

THIRD CLASS RATE
POSTAGE & FEES PAID
DEPARTMENT OF THE ARMY
PERMIT No. G-5

The AFIP Letter is published bimonthly by the Armed Forces Institute of Pathology. Its purpose is to furnish timely information on policies, activities, and programs relevant to the military and civilian pathology community. Use of funds for printing of this publication has been approved by DAAG-PAP, letter dated 6 August 1984, in accordance with the provisions of AF 310-1. The views and opinions expressed are not necessarily those of the Department of Defense or the Department of the Army. Comments or proposed material should be addressed to:

The Director
Armed Forces Institute of Pathology
ATTN: AFIP-PA
Washington, D.C. 20306-6000.

Telephone (202) 576-0233. Autovon 291-0233.

□

Director
CAPT Robert F. Karnei, Jr., MC, USN
Public Affairs Officer
Michael E. Howard
Graphics
Frances W. Card
Photography
Eugene L. Griffith
Michael E. Howard
Steve Kruger

NEW REPRINTS AVAILABLE

1. Jones, M. W., Norris, H. J., and Snyder, R. C.: **Infiltrating syringomatous adenoma of the nipple.** A clinical and pathological study of 11 cases. Am. J. Surg. Pathol. 13: 197-201, 1989.
2. Lane, J., Buck, J. L., and Zeman, R. K.: **Primary carcinoma of the gallbladder: A pictorial essay.** RadioGraphics 9: 209-228 (Mar.) 1989.
3. Lo, S.-C., Shih, J. W.-K., Yang, N.-Y., Ou, C.-Y., and Wang, R. Y.-H.: **A novel virus-like infectious agent in patients with AIDS.** Am. J. Trop. Med. Hyg. 40: 213-226 (Feb.) 1989.
4. Norris, H. J., Becker, R. L., and Mikel, U. V.: **A comparative morphometric and cytophotometric study of endometrial hyperplasia, atypical hyperplasia and endometrial carcinoma.** Hum. Pathol. 20: 219-223 (Mar.) 1989.
5. Roarty, J. D., McLean, I. W., and Zimmerman, L. E.: **Incidence of second neoplasms in patients with bilateral retinoblastoma.** Ophthalmology 95: 1583-1587 (Nov.) 1988.
6. Wenig, B. M., Hyams, V. J., and Heffner, D. K.: **Moderately differentiated neuroendocrine carcinoma of the larynx: A clinicopathologic study of 54 cases.** Cancer 62: 2658-2676 (Dec. 15) 1988.

Reprints are without charge and will be sent as long as the supply lasts. Please indicate items desired and mail entire page with a gummed label to:

The Director
Armed Forces Institute of Pathology
ATTN: Editorial Division (AFIP-ZSP-E)
Washington, D.C. 20306-6000