**A LOOK BACK**

### MEDICAL FRONTIERS OF YORE

In 1804, the legendary Lewis and Clark expedition commissioned by President Thomas Jefferson put wilderness medicine to the ultimate test. The party of 33 lived off the land in nearly continual physical discomfort, surviving miserable winters, infectious diseases, lacerations, snakebites, and gunshot wounds. A recent Reynolds Library lecture by retired cardiovascular surgeon Bruce C. Paton, MD, shed light on many medical aspects of what was arguably America's greatest wilderness adventure.

Author of *Lewis & Clark: Doctors in the Wilderness* (2005, Fulcrum Publishing) and former president of the Wilderness Medicine Society, Dr. Paton captured the attention of a packed house of medical history buffs with his dry British wit and insight. Dr. Paton came to UAB at the invitation of Lister Hill Library Associate Director of Historical Collections Michael Flannery, himself a scholar of medical botany and pharmacy history.

Colonels Meriwether Lewis and William Clark were experienced wilderness travelers even before they set out to fill in the virtually blank cartography gap between the Missouri River and US west coast. Their team of unmarried, healthy men was chosen specifically for its ability to withstand extraordinary hardship. Accompanying the party was Sacagawea, the expedition guide’s native Shoshone wife, who gave birth during the journey, and whose illness during the expedition is the subject of much speculation.

The medical “training” that Lewis received from none other than

---

**DE CARLO IS DIRECTOR OF CENTER FOR LOW VISION REHABILITATION**

Dawn DeCarlo, OD, associate professor of ophthalmology in the School of Medicine, was recently named director of UAB’s Center for Low Vision Rehabilitation.

The center combines the expertise of ophthalmologists, optometrists, occupational therapists, and mental health counselors to provide quality patient care, teaching, and research to advance knowledge in the area of vision rehabilitation.

“Our clinical goal is to help individuals make the most of their remaining vision, preserve their independence, and improve their quality of life,” Dr. DeCarlo says.

---

*continued page 2*
E. Eugene Marsh III, MD, has been named dean of The University of Alabama College of Community Health Sciences (CCHS) and associate dean of the School of Medicine (SOM) at UAB.

Robert R. Rich, MD, senior vice president and dean of the UA SOM and Judy Bonner, PhD, UA provost and vice president for academic affairs, announced the appointment.

Dr. Rich said, “He is an outstanding doctor, professor, and administrator.”

CCHS provides the last 2 years of clinical education and training for a portion of medical students enrolled at UA SOM. Students can choose any field of specialization, but CCHS encourages and trains medical students to practice in the state’s smaller, rural, and often underserved communities. The college also offers a 3-year family practice residency program that is one of the southeast’s oldest and most productive. The college's educational programs are designed to increase health care accessibility and availability, particularly in the state’s rural areas, and to improve the quality of that care through teaching, clinical service, research, and community outreach.

CCHS also operates a comprehensive, state-of-the-art medical clinic, University Medical Center, where college faculty conduct medical practices and students and residents receive clinical experience and training. In addition, college research supports faculty and student research efforts, including clinical trials, and has been a participant in federal and state grants totaling more than $24 million.

Benjamin Rush, MD (1745-1813), considered by many as the “father” of American medicine, would have led to the demise of less hardy souls. Dr. Paton says it is “nonsense” that Lewis received a medical education from Rush, with whom he spent all of a day. More useful was his mother’s knowledge of medical botany, as well as his experience treating wounds and disease as an army officer.

Dr. Rush asked Lewis to return with details of Native Americans’ life expectancies, disease profiles, and morals. “Rush would have viewed the sexual behaviors of both the Indians and soldiers as vices,” Dr. Paton says. “His questions and advice for Lewis indicate Rush had no idea what the men would encounter on this expedition.” Among Rush’s directions to Lewis were:

- Rest in a horizontal position when feeling the least indisposition;
- Take two or more purging pills for unusual costiveness (constipation), a sign of approaching disease;
- Wear flannel constantly next the skin, especially in cold weather;
- Wash the feet with a little spirit after their being much chilled.

The men evidently wasted little of their 125 gallons of spirits on their feet, which were constantly chilled. Dr. Rush’s confidence in flannel was based on antiquity, when Roman soldiers believed the fabric protected against malaria. “It was too thick for mosquitoes to penetrate,” says Dr. Paton. And apparently Dr. Rush was obsessive about purging and bleeding. “Basic theory was to eliminate whatever bad was inside by laxatives, bleeding, or vomiting,” says Dr. Paton. “But no one had the faintest idea of the body’s blood volume. Poor George Washington was bled 3 liters in his last 24 hours, which surely accelerated his departure.”

With luck on its side, the expedition lost only one member and avoided potential disaster. “Fortunately, they didn’t come into a village with smallpox, which wiped out the Mandans in 1837,” Dr. Paton says. There were, however, three medical emergencies. In his retrospective medical history of Sergeant Floyd, the one casualty, Dr. Paton says eminent abdominal surgeons today do not attribute the sudden onset of abdominal pain, vomiting and diarrhea to appendicitis, instead chalk up his death to a gastrointestinal infection. Sacagawea’s fever and abdominal pain were probably due to a urinary tract infection, with mineral water restoring her electrolyte balance, he says, noting that her illness was recorded as “a stoppage of menses from taking cold” – possibly a polite 19th century reference to miscarriage. The third mishap, he says, was when
“Captain Pierre Cruzatte, blind in one eye and with poor vision in the other, shot Lewis in the buttocks during an elk hunt. He spent the next 2 weeks lying on his stomach in the canoe.”

Lewis knew they’d encounter venereal diseases such as syphilis, for which mercurious chloride was standard therapy. The expedition stocked 1750 doses that were administered to the point of toxicity. Although the men’s histories have been followed, there is no evidence that any of them developed tertiary syphilis, which typically doesn’t develop for 15 to 20 years. Dr. Paton says the theory that syphilis caused Lewis’s mental decline only 4 years after his triumphal return is, therefore, “farfetched.” Analyses of his subsequent lethargy also have pointed to bipolar disorder, malaria, and alcoholism. Some question whether he simply missed the adulation.

Professor Emeritus Arnold Diethelm, MD, an expert on Civil War medicine, has another theory about Lewis’s death, which today generally is accepted as suicide brought on by clinical depression. “Having accomplished one major goal in life, many men and women have nothing left. They really never get reoriented or fit in. More than just a few such cases are recorded in American history,” he says.

DR. HAZEL GORE — WOMEN’S HEALTH PIONEER HONORED

To honor the memory and contributions to the field of medicine of a beloved pioneer in women’s medicine, an endowed professorship housed in UAB Pathology with a specific focus on gynecologic issues has been established in the name of Hazel Gore, MD. She died on July 14, 2001.

Dr. Gore practiced in New York, Boston, Rochester, and Birmingham after graduating in 1945 from medical school at the University of Sydney in her native Australia, where both parents were well-known pathologists. Devoting much of her professional career to UAB and to the departments of Obstetrics and Gynecology and Pathology, she was also mother of two physicians. Her son, Ira Gore, MD, is hematologist/oncologist at St. Vincent’s Hospital, Birmingham, and her daughter, Meg Gore, MD, is a physician in Memphis, TN.

Helping guide the fundraising effort along with Drs. Ira and Meg Gore is a committee of her colleagues, including: Dwayne Lawrence, MD, of Brown University Medical Center and UAB physicians Bruce Alexander, MD, Ronald Alvarez, MD, Max Austin, MD, Michael Conner, MD, Larry Kilgore, MD, UAB cytology supervisor Janie Roberson, and Charles Robinett, MD, of Brookwood Medical Center.

Dr. Gore’s indelible influence is still strongly felt. “She was the consummate teacher,” says Edward Partridge, MD, professor and vice chairman, UAB Obstetrics and Gynecology, who holds the Margaret Cameron Spain Chair in Ob/Gyn. “Her attention to detail was a trait we learned that has served us all well.”

“She taught me that a small town country boy from Mississippi could do more, and be more, than he ever imagined,” says Dr. Lawrence, associate editor of the International Journal of Gynecologic Pathology and Brown University professor and vice chairman of pathology. Dr. Lawrence speaks of still consulting the “classic” Armed Forces Institute of Pathology fascicle on gynecologic pathology, which Dr. Gore co-authored in 1956 with Arthur T. Hertig, MD, at Harvard. “The text covered the entire female genital tract, whereas today the task has been split among at least nine gynecologic pathologists,” he says.

Nearly $280,000 has been raised toward the $500,000 required for an endowed professorship. Contact Director of Development Jennifer Philpot at the SOM at UAB, 205.975.7298, jphilpot@uasom.uab.edu.

CENTER FOR LOW VISION REHABILITATION

continued from page 1

Assistive devices ranging from spectacle-mounted magnifying lenses to telescopic eyewear for improving distance vision to sophisticated electro-optical aids, such as computer-assisted devices, are among options at the center. Occupational therapists also are on staff to help patients learn coping skills and to use assistive devices. Counseling is also available for those with depression or problems adjusting to living with low vision.

INFOBAHN

Encouraging Patients To Know Their Family Health History

The U.S. Surgeon General has released a Web-based version of a free, computerized tool that organizes family health information into a printout that individuals can take to health care professionals to help determine whether they are at higher risk for certain diseases. The tool is called “My Family Health Portrait.”

www.hhs.gov/familyhistory
Patients with low vision experience loss of visual acuity or visual fields that cannot be adequately corrected with conventional eyewear, medical therapy, or surgery. Common causes are glaucoma, diabetic retinopathy, and age-related macular degeneration, the leading cause of blindness in Americans aged 60 and older. Head injuries, brain damage, and strokes may also result in low vision.

“Our unique vision rehabilitation center can help patients with low vision lead more satisfying and productive lives,” Dr. DeCarlo says.

A graduate of UAB’s School of Optometry, Dr. DeCarlo joined the UAB optometry faculty in 1994 and previously served as director of the ocular disease and low vision service at UAB School of Optometry. She left in 2001 to serve as chief of low vision rehabilitation and geriatrics at Nova Southeastern University, rejoining the UAB faculty in the Department of Ophthalmology in September 2005.