

Interest in Wilderness Medicine Is Growing

Wilderness medicine is 'not anything that you learn in medical school. It's ... improvisational medicine.'

BY DOUG BRUNK
San Diego Bureau

A new Wilderness Medicine Society training program is one way for physicians with a love of the outdoors to combine that passion with their medical practice.

In July 2007, the Lawrence, Kan.-based program graduated its first 38 clinicians to become Fellows of the Academy of Wilderness Medicine (FAWM). Dr. Paul S. Auerbach, one of the society's cofounders who also completed the FAWM program, said that interest in wilderness medicine is at an all-time high, largely because of the current popularity of outdoor recreation.

"Outdoor recreation is the fastest-growing form of recreation worldwide, whether that be adventure travel or visiting foreign countries or outdoor activities like skiing, backpacking, or scuba diving," said Dr.

agency medicine with her love of the outdoors. She got a job working summers at the hospital, a post that "changed my life because I found that I was really able to take care of people while I was looking out the window and seeing the wilderness. Part of the excitement was not only being in the wilderness but [also] learning this whole new body of knowledge which is wilderness medicine. It's not anything that you learn in medical school. It's a lot of hands-on stuff and a lot of improvisational medicine: trying to make the best with limited resources."

Today, the Bozeman, Mont.-based Dr. Freer works in the wilderness medicine field as the medical director for Yellowstone, where she oversees staff who treat visitors for everything from high-altitude sickness and snakebites to broken bones and wounds from grizzly bear attacks. Four years ago, she founded the first medical

Dr. West, of "High Altitude Medicine and Physiology" (London: Hodder Arnold, 2007). "The mountains have made more difference in my life than almost anything. I couldn't imagine not having that overlap."

Dr. Freer noted that organizers of outdoor adventures are hiring physicians or medics with specific training in wilderness medicine to accompany groups of travelers. "Ten to fifteen years ago, it used to be that taking along any doctor was good enough," Dr. Freer said. "But expeditioners are becoming savvy to the fact that just any doctor or any nurse or any paramedic is not good enough. We are held to a standard that is being created through the WMS. You can't just show up and not have a clue about how to treat a snake bite. You need some experience with it and [have to] know what the latest recommendations are so you can give your patients the best care. If you don't have all that knowledge, not only are you not providing good care but you [also] could be held liable for not knowing."

Dr. Auerbach considers wilderness medicine a personal avocation, but he is a noted expert, having recently produced the fifth edition of "Wilderness Medicine" (Philadelphia: Mosby, 2007), a textbook that is a bible for the field. He also writes his own blog on the topic (www.healthline.com/blogs/outdoor_health) and has a particular interest in hazardous marine animals.

On a recent diving trip with his son and others near La Paz, Mexico, Dr. Auerbach was stung by two Portuguese men-of-war when he neglected to cover his skin with a topical jellyfish sting inhibitor before he dove into the water.

"I didn't practice what I preached to others on the boat," he said.

He treated the wounds with topical vinegar to take away the sting but had an itchy, painful rash "for a couple of days."

Other situations have been more dramatic. During an expedition in Nepal, he assisted a trekker who had developed high-altitude cerebral edema. He placed her inside an inflatable body-size pressure bag known as a Gamow bag, and zipped it up. But she became claustrophobic and began to panic, so he climbed in the bag with her. "Then she vomited," Dr. Auerbach said. "That wasn't real pleasant, but it's part of the job. She made it okay."

Going forward, Dr. Freer said, a key challenge for the wilderness medicine field is to develop "a strong scientific body of knowledge." Wilderness settings may not

In Bear Country, Don't Hike Alone

Despite being warned to not hike alone through "bear alley," a portion of Wyoming's Yellowstone National Park that many wild grizzly bears consider home, one man decided to make the trek solo.

Some people just don't listen.

"The park rangers advise people to hike in groups because when we hike in groups, we make more noise and give the bears warning that we're coming so they clear out," recalled Dr. Freer, who was working at Lake Hospital in Yellowstone at the time, in the early 1990s. "This fellow wanted to have an experience by himself."

He hiked about 10 miles into the backcountry and surprised a female grizzly bear with her cubs, which "is the most dangerous thing to come across," Dr. Freer said. "They're very aggressive."

The grizzly bear mauled the man, who had learned from park rangers to play dead in the event of a bear encounter to demonstrate that he was not a threat.

"He curled up in a ball and slept outside with the grizzly bear in the area," Dr. Freer said.

The man survived the ordeal and hiked out the next morning. "He came to our hospital and we spent about 3 days caring for him, getting his wounds cleaned up, [and] giving him medication and rabies prophylaxis," Dr. Freer said. "He had a good outcome."

lend themselves to large controlled, randomized trials, she acknowledged, "but more research is needed. Like a lot of what we do in general medicine, sometimes what we recommend in wilderness medicine is based on what we've always done, not because it's based on controlled, scientific studies that prove a particular treatment works best."

Dr. Auerbach agreed. "In wilderness medicine, as in all of medicine, good science trumps anecdotes," he said. "The progress of our specialty will be measured by the quality of our research investigations."



ROB BECKER

Wilderness medicine expert Dr. Luanne Freer attends to a badly frostbitten patient in the midst of a rescue in the Khumbu icefall on Mount Everest.

Auerbach, of the division of emergency medicine at Stanford (Calif.) University. "Health care providers are attracted to it because they want to be outdoors and they want to feel competent in that setting. They want to participate in these adventures."

As described on the WMS Web site (www.wms.org), completion of the 100-hour program offers a way to "identify those who have achieved a demanding set of requirements validating their training in wilderness medicine for the assurances of patients, clients, and the public at large." Applicants have 5 years to complete course work that includes core curricula in diverse wilderness medicine topics; diving and hyperbaric medicine; expedition medicine; and wilderness emergencies and trauma management.

Among the first class of FAWM graduates was Dr. Luanne Freer. During a vacation one summer, Dr. Freer spotted a hospital sign while driving through Yellowstone National Park and realized that she could combine her training in emer-

clinic at base camp on Mount Everest. She also runs a medical clinic on Midway Island, which is located between Japan and Hawaii.

There are other ways to combine medicine with an interest in the outdoors. During his pulmonary fellowship at the University of Washington, Seattle, internist Robert "Brownie" Schoene joined Dr. John B. West and other researchers on a trip to Mount Everest, where they studied cardiopulmonary capacity.

"That was the first point where my professional research interests overlapped with my passion for mountain climbing," said Dr. Schoene, a pulmonary/critical care physician who now directs the internal medicine residency program at the University of California, San Diego.

His subsequent high-altitude research projects involved expeditions to Mount McKinley (also called Denali) in Alaska and to the Andes mountains in South America.

"I weave a lot of lessons from high-altitude work into the bedside teaching and care of patients," said Dr. Schoene, an author, along with Dr. James S. Milledge and

UPCOMING MEETINGS

American Academy of Hospice and Palliative Medicine

American Contact Dermatitis Society

American Academy of Dermatology

Conference on Retroviruses and Opportunistic Infections

American Academy of Pain Medicine

American Heart Association: International Stroke Conference

Canadian Digestive Disease Week

We Are There For You