THE WILDERNESS INSTRUCTOR

A Model for Wilderness Medicine Education in a Family Practice Residency

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Many wilderness medicine curricula have been developed for prehospital care providers and lay people interested in outdoor activities. However, wilderness-oriented education at the physician level continues to be either experiential or obtained through continuing medical education courses. In response to the lack of a formal training program, the Montana Family Practice Residency has created a pathway for residents to become practitioners and educators in wilderness and environmental medicine.

This residency program in wilderness medicine was developed in response to an interest on the part of the faculty and residents and a perceived need in the local and national community. The residency program has a Core Curriculum, guaranteeing a uniform level of education for all residents; a Wilderness Medicine Interest Group, providing further exposure to educational topics for interested residents; and a comprehensive Intensive Study Track for the resident desiring in-depth exposure and experience in this area. The program also sponsors an annual Wilderness Medicine Conference.

Wilderness medicine education includes activities and responsibilities keyed to the resident's level of interest and commitment. At a minimum, the resident is exposed to a rotating lecture series of wilderness medicine topics over the 3-year family medicine residency program. Residents choosing the Intensive Study Track may be responsible for organizing the monthly Wilderness Medicine Interest Group meetings and educating other providers and the general community. They also have opportunities for research and publication in wilderness medicine. We believe that this curriculum can serve as

a model for other programs in which there is an interest in and need for wilderness medicine.

This program emphasizes preparing residents for rural practice, and all residents must complete a 4-week rural rotation in each of their second and third years. The resident is responsible for the location of this required experience and has the option of selecting an area with a wilderness medicine focus. The program has developed 2 rotations with a wilderness medicine focus, one in a regional national park medical clinic and another involving work with the ski patrol and with physicians providing care for those with ski injuries at a large area ski resort. Residents in the Intensive Study Track are expected to include one of these rotations in their schedule, and other interested residents may choose these rotations for their rural elective.

The wilderness medicine Core Curriculum includes a series of 12 regularly scheduled lectures to which all residents are exposed over 3 years as part of the regular educational family practice conference series. Core topics were selected because of their predominance in wilderness and environmental medicine texts, journals, and meetings, as well as because of their applicability to the northern Rocky Mountain region and Montana. These Core Curriculum topics are listed in Table 1. Speakers include local experts, our own faculty, and residents who have taken the opportunity to study these topics as they begin the process of promoting wilderness education.

The Wilderness Medicine Interest Group meets monthly for 1 hour. Participation is elective for all except Track residents. Members include both residents and faculty, and interested persons from the community are also invited to attend. Intensive Study Track residents are responsible for organizing these meetings. Therefore, this is resident-driven time for informal lectures on additional wilderness medicine topics and for group discussion. Topics have included medical-legal issues and ethics in the wilderness, search-and-rescue missions, helicopter safety, avalanche physiology and rescue, wild animal at-

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Table 1. Wilderness medicine Core Curriculum topics

Hypothermia
Frostbite
Heat illness and dehydration
Lightning injuries
Altitude illness
Near-drowning
Wilderness trauma and orthopedics
Travel medicine and diarrhea
Snake and arthropod envenomations
Plant dermatoses
Wilderness survival
Fundamentals of wilderness medicine

tacks, hunting injuries, women's roles in the wilderness, rabies, and wilderness medical kits. Any resident can present a topic for discussion or invite a speaker.

The Wilderness Medicine Conference is an intimate, annual gathering held for 2 days and led by local and national experts, residents, and faculty. Time is shared between didactics and hands-on workshops. Numbers of attendees are kept low to enhance one-on-one interactions. At this gathering, residents have the opportunity to meet and learn directly from experts—an experience that is much more valuable than any text or journal article can provide. Track residents are expected to assist in the organization of this meeting as well as participate as presenters. All residents are invited and are given the time to attend.

The rigorous wilderness medicine Intensive Study Track is an elective commitment to wilderness medicine education and research that extends far beyond the Core Curriculum. It allows motivated residents the opportunity to integrate a large amount of experience in wilderness medicine into their 3 years of residency training. It also prepares them to become practitioners, educators, leaders, medical directors, and researchers in

wilderness and environmental medicine. Interested residents declare their commitment to the Track during their first year of residency after a discussion of the requirements and responsibilities with their adviser and the program director.

The Intensive Study Track resident has substantial requirements to fulfill over a 3-year period (Table 2). These requirements include a series of formal and informal presentations, publications, research, clinical rotations, and conferences, as well as demonstrated leadership in pertinent resident activities and field workshops. These requirements are intended to be comprehensive.

The residency program recognizes the substantial time commitment necessary to fulfill these requirements and allows the resident choosing this Track a significant amount of scheduled elective time for this work. This program pays for the cost of Wilderness Medical Society membership and Wilderness Advanced Life Support certification and provides some financial support for course registrations and conference attendance fees when the resident is a presenter.

This family practice residency program is one of the first to integrate wilderness medicine education into the curriculum for all residents. To our knowledge, we are the first to offer a comprehensive Intensive Study Track promoting research, education, and leadership for family practice residents. While many programs offer rotations and interest groups for medical students in wilderness medicine, we believe we are one of the first to do so in a family practice residency.

Our intention is for all graduates of this program to be prepared to educate and care for a rural and outdoor-oriented population. Intensive Study Track residents will also have research skills in health-related concerns of outdoor and wilderness activities as well as leadership experience in wilderness education that will continue to develop throughout their careers. We believe

Table 2. Wilderness medicine Intensive Study Track requirements

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1. Complete a research project in wilderness medicine.
 2. Make a presentation at a wilderness medicine meeting.
 3. Publish at least 2 general interest wilderness medicine articles in local, regional, or national publications.
 4. Present 6 different wilderness medicine topics to residents, community health providers, students, or the general public.
 5. Complete a minimum of 2 month-long rotations involving wilderness medicine.
 6. Organize and lead all Wilderness Medicine Interest Group meetings.
 7. Attend a minimum of 1 CME conference in wilderness medicine.
 8. Organize and lead 2 field workshops.
 9. Attend and complete the Wilderness Advanced Life Support course.
 10. Maintain membership in the Wilderness Medical Society.
 11. Help organize the annual Wilderness Medicine Conference.
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*CME indicates continuing medical education.

that the wilderness medicine Core Curriculum and the Intensive Study Track established in our residency program serve as models for wilderness medicine education in family practice residency programs and will produce family physicians who will continue to contribute to public education and the body of knowledge in this field.

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