A TRIBUTE

Dr. Emmanuel Cauchy (1960–2018)—Reflections from Around the World

United States—Linda Keyes

It is with great sorrow we reflect on the loss of Dr. Emmanuel Cauchy, our friend and colleague, who

died in an avalanche in the Aiguilles Rouges near Chamonix, France, on April 2, 2018. Manu, as he was known by everyone, exemplified a wilderness medicine physician who combined his passion with his profession.

Manu and his wife Dr. Sandra Léal.

Manu playing trumpet at Bridal Veil Falls, Telluride, CO.

It is fitting that we offer this tribute and remembrance in *Wilderness & Environmental Medicine*.

Manu was an emergency physician, a researcher, and mountain guide. He founded and ran L'Institut de Formation et de Recherche en Médecine de Montagne (IFREMMONT), an institute for training and research in mountain medicine in Chamonix, France. In the 1980s, his initiatives helped develop helicopter rescue medicine in the Alps. His participation in important high-altitude medical research expeditions around the world, including Operation Everest III, furthered our understanding of altitude physiology. Manu was most well known, however, for developing a novel treatment for frostbite using iloprost and promoting early field treatment of frostbite. The Wilderness Medical Society (WMS) recognized him for his important contributions to cold injury and high-altitude medicine with the WMS Research Award in 2017. His death is a great loss for the international mountain medicine community.

Manu's enthusiasm for life and the mountains was contagious. He made all his endeavors fun, whether conducting an altitude illness study on the Aiguille du Midi, rappelling down a wet gully to escape a thunderstorm, or practicing English with my mother. His open and warm personality made him a pleasure to climb and work with. He had friends and colleagues everywhere. He sought collaboration for his many mountain projects and eagerly recruited students, residents, and fellows from around the world to work at IFREMMONT.

Manu's sudden death came too soon. He had embarked on several new endeavors in the past year. He opened a center for high altitude sports in Geneva and secured a new research space at the renovated Refuge du Gouter on Mount Blanc at 3815 m. His international expedition telemedicine service was growing rapidly and received great publicity with the telemedicine-assisted rescue and treatment of a French climber on Nanga Parbat. Just 6 months before his death, he married Dr. Sandra Léal.

Manu is survived by Dr. Léal and his adult children, Alix, Pierrot, and Khando. As his family will attest, Manu was a man of many talents outside medicine. He was a writer, a musician, a gracious host, and a connoisseur of good wine and silly jokes. His memoir *Doctor Vertical: Hanging by a Thread* bounces between a humorous and a deeply personal account of his life in the mountains. He fictionalized his adventures as a rescue medic and mountain guide in a series of "Doctor Vertical" mystery novels, and contributed a regular column for a French climbing magazine. I first met his daughter Alix at a music gig they played together during the annual Chamonix Music Festival, Manu strumming his familiar hand-painted guitar. A testament to his

courage and curiosity in all things, he began trumpet lessons in his 50s.

I cherish a memory of him blowing his trumpet surrounded by the mist of Bridal Veil Falls on a day hike after the joint ISMM/WMS meeting in Telluride. Like the notes reverberating through the foggy canyon, let Manu's memory inspire us in our work and play.

Switzerland–Beat Walpoth

I was deeply saddened to learn about the death of our dear friend, Dr. Emmanuel Cauchy, on Easter Monday. When I informed my colleagues in the mountain medical community of this tragic event, I received an overwhelming number of poignant tributes to Manu.

I had the chance to meet Manu at several mountain medicine meetings due to my early involvement in the rewarming of deep accidental hypothermic victims by cardiopulmonary bypass at the Inselspital in Bern, Switzerland. I was fortunate to be cited in Manu's book, *Dr. Vertical*. From that time on, we collaborated in the field of hypothermia. Thanks to Manu, we obtained permission from the French government to transfer severely hypothermic patients from the French Alps directly to the Geneva University Hospital. Manu was one of the first contributors to the international hypothermia registry and was very influential in the creation of the frostbite registry.

Outside our professional collaboration, I was fortunate to know him as a friend. The distance between Geneva and Chamonix is short, and we met on many occasions at the lakeside or on the slopes of Chamonix. We lost a great mountaineer, a pioneer of mountain medicine, and, above all, a friend whom we will all miss.

France–Marc Blancher

On behalf of the French mountain rescue community and the International Commission for Mountain Emergency Medicine (ICAR-MEDCOM), a subcommittee of the International Commission for Alpine Rescue, I would like to acknowledge a great figure of mountain medicine in France and abroad, Manu Cauchy, who died in an avalanche in the very place where he himself rescued so many people. Manu had a wonderful talent for writing about alpine rescue missions, and he dedicated his life's work to mountain medicine. Manu was at the forefront of research in this field in France and was the creator of a unique expedition telemedicine service that has helped many climbers.

Today in Chamonix, and in the worldwide mountain rescue community, we must live without one of our great confreres. In the words of Reinhold Messner: "Mountains are not fair or unfair, they are just dangerous."

Switzerland–François Becker

Dr. Emmanuel Cauchy died in the mountains at the age of 58 on April 2, 2018. How is this event related to vascular medicine? Frostbite of the extremities. Thanks to Manu, the diagnosis and treatment of frostbite has progressed immensely.

Although frostbite is what gave him international recognition, Manu Cauchy had many more strings to his bow. In Chamonix, after studying medicine in Rouen, he invested himself very early in mountain rescue. In addition to his role as an emergency physician, he obtained the status of French mountain guide. He revolutionized alpine rescue by being one of the first physicians to be winched from a helicopter directly to the scene of a critical casualty in the mountains.

Manu organized and provided medical assistance to many high-altitude expeditions throughout the world, including the poles. Early on, his experience led him to understand that guides and climbers needed specific first aid training oriented toward the dangers of the mountains. To do this, he created the IFREMMONT, which has attracted many young physicians to study mountain medicine. He also realized very early that telemedicine, and his novel service “Altidoc,” would provide lay-people with broad access to mountain medical advice. Some of his less well-known work includes his study with a small group of vascular physicians and students on the harness syndrome and his experiments on brain

blood flow and digital vascularization at high altitude. These projects included Doppler studies to measure cerebral blood flow, vasomotor reserve, high intensity transient signals, and nailfold capillaroscopy at the Aiguille du Midi at 3800 m. What an adventure! Manu was also a sailor, writer, musician, handyman, and a very good baker. He was a champion for ideas and knew how to share his passion and help others. Farewell to the artist!

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