

THE GREEN MEDICINE NEWSLETTER

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SRF

SRF: Ten Years of Taking Pharmacy Students to Find Their Roots: Part 2

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The precedent-setting trip to Belize was extremely satisfying and fulfilling to the students and faculty alike. The students spent three days of intensive fieldwork with Dr. Rosita. In the early years the students participated in an important plant collection in the forest for the benefit of the National Cancer Institute. Dr. Rosita was assigned to oversee an eight-year collection of Belizian plants that would be scrutinized in the laboratory for possible anti-cancer activity. It was a most rewarding project for the students to participate in. Working alongside many wonderful traditional healers over the years has been one of the hallmarks of the trips. Some of the traditional healers are midwives, well versed in the knowledge of local plants for healing and medicine. Others were authentic shamans, or "h'mans" as they are known in Belize. These gifted men are referred to as "doctor priests," and they retain the knowledge of thousands of medicinal plants as well as the spiritual aspects of healing patients with a variety of complications and/or diseases.

There was always time for some fun and exploration during the 8-10 day expedition. In Belize, the students routinely have visited the mysterious Mayan ruins that Belize is famous for. The ruins of Xunantunich, Caracol, and Cahal Pech are frequent stops on our itinerary. Some of the groups have had the chance to visit the Jaguar National Forest located in the central part of the country or the Pine Ridge Forest along the Guatemalan border. Others have traveled far south to the city of Punta Gorda and have had a chance to swim in the pristine ocean, or travel by motor boat to the many islands that dot the barrier reef that transverses the eastern shore of this tiny country. Belize offers a vast array of topographies, from deep rainforest to savannah to tropical coral reefs-a perfect place to snorkel or dive.



As the years went by, we got many more universities and colleges of pharmacy involved in the program. To date, students studying pharmacy, medicine, botany, and naturopathy have represented over 25 schools. Several schools of pharmacy have approved the SRF program as a rotation choice to fulfill their doctorate of pharmacy degree.

After completing eight consecutive years visiting the country of Belize, the 2004 SRF team visited the beautiful country of Costa Rica. It was an exciting diversion from the country we have come to know and love for so many years. Costa Rica offered new opportunities for the students. The largest group to date, 32, spent three days at the famous Wilson Botanical Gardens near the east coast. This garden is the largest in all of Mesoamerica. For the first time we worked closely with another environmental organization that is committed to student education and the preservation of medicinal plants. In Costa Rica the Organization of Tropical Studies (OTS) has a long history of providing eco-tourism and education to college students, graduate students, and educators alike. Once again, local indigenous healers were part of the faculty, and the students visited the botanical gardens of the traditional healers. We also afforded plenty of class time to understanding the plants and how the local people use them as medicines. Many large pharmaceutical manufacturers are in Costa Rica garnering plants for extensive study in American laboratories and universities. They are looking for a "hit," that one-in-ten-million chance that a tuber from the jungle will some day yield a compound from which a successful anti-cancer or anti-HIV drug can be derived.

In June 2005, SRF embarked on their most ambitious expedition to date-a journey to the vast Amazon rainforest. A team of twenty set out for southern Peru on a ten-day expedition. This trip had many memorable moments, and the response from the students was hugely favorable. Most often cited was the quality time we spent with the famed Amazonian Shaman, Don Antonio Montero. Don Antonio was our guild as we walked through the rainforest trails along the Madre de Dios River. He lead us to his ethnobotanical garden located near the port city of Puerto Maldonado. On our last day in the rainforest we walked a few miles from the river to visit Lake Sandoval. This hidden lake is surely one of the most ecologically pristine environments I have ever encountered. Places like this give us all hope that the timeless natural environment of the Amazon will be preserved for our grandchildren. Our journeys to the 12,500 foot-high city of Cusco and the ancient Inca city of Manchu Picchu were pure magic. The Amazon is a place everyone should visit at least once in their lives.

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PRESIDENT'S MESSAGE

2006 STUDENT RAINFOREST FUND EXPEDITION: BACK TO THE AMAZON WITH A TWIST

After a highly successful expedition to the lower Amazon in Southern Peru and high up to the fabled Inca city of Machu Picchu in 2005, the SRF students will return to this spectacular rainforest in 2006 with a special side trip! On our 11th consecutive trip, the SRF team will explore the steamy jungles of the Amazon rainforest, visit for 2 days in Cusco and Machu Picchu, and take a 2-day side trip to Lake Titicaca, the highest navigable lake in the world, and the Taquile Islands.

We are proud to announce that once again SRF will team up with the Amazon Center for Environmental Education and Research (ACEER) in 2006. We will once again fly from Houston to Lima, Peru. Then on to Puerto Muldonada and the Reserva Amazonica, which lies near the 10,000 hectare Inkaterra Ecological Reserve. We will once again connect with SRF Board member Don Antonio Montero Pisco, the famous shaman from the Peruvian Amazon basin, who I personally met on my first Amazon expedition over 12 years ago. I am so pleased that he is a member of our team. His knowledge of medicinal plants is uncontested, and he the perfect instructor for the students.

Leaving Port Maldonado, we will fly high into the Andes Mountains to Cusco, at an elevation of nearly 13,000 feet. We will board a bus to the Machu Picchu Inn, and be free to explore the famous Lost City of the Incas.

Our special trip extension this year is most exciting. From Machu Picchu the team will board a bus to Puno, traveling all day through magnificent scenery of the Andes, to Lake Titicaca, the world's largest tropical lake. The Titicaca National Reserve was established in 1978 to protect a 36,180 hectare area and the dozens of species of native birds, mammals, fish, and amphibians that live there. Along its seemingly endless shores and many green islands, the Quechua and Aymara inhabitants fish its bountiful waters or farm the fertile soil in the manner of the ancestors.

Lectures on medicinal plants and natural medicine will be presented by SRF vice-president Dr. Steve Morris and myself. I cannot thank you enough for your continued financial support for this unique and worthwhile venture. These college students are studying the health professions and are keenly interested in a more natural or 'holistic' approach to medicine. Many students attending will receive educational credits toward their degree from their perspective University. Over 225 American students have benefited from the SRF program over the past ten years, and we are pleased that the January, 2006 edition of *Pharmacy Times* published an article about our first decade. The green journey continues...

Dr. Daniel Wagner, RPh, MBA, PharmD, President

ACEER



A HUGE AND GRACIOUS THANK YOU!!!! SRF SUPPORTERS IN 2005

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Our exciting 2006 Itinerary! May 29-June 7, 2006

Houston-Lima. Overnight Lima

Day 02 Tuesday, May 30th LIMA/PUERTO MALDONADO/RESERVA AMAZONICA

After an early breakfast, transfer to the airport for the flight to Puerto Maldonado - departs at 10 am, arriving at approximately 11:35 pm. Puerto Maldonado, with a population of approximately 60,000, is the capital of the Madre de Dios region and is located at the confluence of the Tambopata and Madre de Dios Rivers. This small frontier town has a history of resource extraction beginning with the rubber boom, logging and gold prospecting, and more recently oil exploration. Despite this activity, 98% of the region is comprised of primary rainforest. There are three national parks and reserves in the area that together comprise more than 3.5 million hectares of protected forest ecosystems. They are: The Manu Biosphere Reserve, Tambopata-Candamo Reserve, and the Bahuaja Sonene National Park.

Day 03 Wednesday RESERVA AMAZONICA

After breakfast, we board the boats to visit to a rural school at Rolin, where ACEER and Inkaterra Association are working to expand the school and assist the teacher and children with supplies, training, and food. From Rolin, we depart for ACEER-Tambopata at Inkaterra (ATI). The ATI is located on a 340 hectare private reserve that joins the Tambopata Reserve and Lake Sandoval. We will visit the Interpretation Center for an overview of the region and to set the context for our study of conservation medicine. At ATI we will visit the Gardens at ATI, and the Useful Plants Trail. Emphasis will be on the traditional uses of medicinal plants and the promise they hold for new, modern medicines. Traditional healing techniques will be demonstrated.

Day 04 Thursday RESERVA AMAZONICA

After breakfast there will be a morning exploration of aquatic ecosystems at Sandoval Lake. Swimming in the lake is permitted. Sandoval Lake is an exceptional "oxbow lake" formed generations ago by the shifting waters of the Madre de Dios River. Sandoval is home to the endangered Giant Otter and is an exceptional place to observe small parrots, herons, kingfishers, hoatzins, caimans, and turtles. Brown Capuchin, Bolivian Squirrel, Red Howler, Saddle-backed Tamarin, and Night monkeys live in the forests surrounding the lake.

Day 05 Friday

After breakfast, we board the boats for Puerto Maldonado, where we connect for the flight to Cusco. Nestled in a high valley at nearly 13,000 feet, Cusco is surrounded by some of the highest peaks in the Andes. As we descend into Cusco, the oldest continuously inhabited city in the western hemisphere, we glimpse the red tiled roofs of this colonial capital that was built on the massive foundations created by the Inca Empire. We make our way by bus out of the city and into the historic Urubamba Valley.

Day 06 Saturday

After an early breakfast, we spend all day at Machu Picchu, Lost City of the Incas, where we will learn about its history, past and future in a two hour guided tour. There will be opportunity to climb Huyana Picchu, or walk to the Sun Gate, the end of the famous Inca Trail. Box lunches will be provided. Train to Ollayantambo departs at 4:45 p.m. Transfer to bus at Ollayantambo for drive to Cusco, and a late dinner.

Day 07 Sunday PUNO

After breakfast, we will take a bus to Puno, traveling all day through the magnificent scenery of the Andes, to Lake Titicaca, the world's largest tropical lake.

Day 08 Monday LAKE TITICACA

The Titicaca National Reserve was established in 1978 to protect a 36,180 hectare area and the dozens of species of native birds, fish and amphibians that live there. The world's largest tropical lake, Titicaca is enormous. It covers an area of 8000 square kilometers and is 170 kilometers wide.

Day 09 Tuesday PUNO TO LIMA TO USA

OUR MISSION

Our mission is to provide higher education for college and university students with the opportunity to explore the natural history of medicine and evoke the healing edge of knowledge regarding natural products and phytochemicals in the world's greatest pharmacy--the rainforest. We are pursuing a holistic approach to the healing of the body, mind, and spirit by learning from unique practitioners. Our organization gains an invaluable international perspective from the indigenous peoples of different cultures that we encounter.

NEWS AND NOTES

DR. STEVE MORRIS NAMED SRF VICE PRESIDENT

With the retirement of SRF co-founder Dr. Norbert Pilewski, SRF is pleased to name Dr. Steve Morris as Vice President. Steve has been a Board member since the inception of SRF 11 years ago. He is a successful and nationally-recognized naturopathic physician and a certified herbalist. Steve has traveled many times to the rainforests of the world, many with SRF. He teaches ethnobotany at Bastyr University in Washington. He and his wife, Paula, operate the Mukilteo Natural Health Clinic in Mukilteo, WA. Steve, Paula and their "tribe" resides on Whidbey Island.

SRF Board Mark Plotkin is Recognized by *Smithsonian Magazine*

In late 2005, the prestigious *Smithsonian Magazine* celebrated its 35th year of publication by recognizing "35 Innovators of Our time." SRF Board member Dr. Mark Plotkin was a recipient of this very exclusive club. He was recognized for his tireless work rainforest conservation and the habitat protection of indigenous peoples. Mark, an ethnobotanist, is founder of the Amazon Conservation Team (ACT) that works mainly in Suriname, South America. See the ACT website: www.amazonteam.org

DR. DAN NAMED 'CHIEF' OF NIGERIAN VILLAGE

The Azara Traditional Council of Azara-Nassarwa State, Nigeria, named Dr. Dan Wagner *Sarkin Turawan Azara (Chief of the Whiteman of Azara)* on March 4, 2006. It is a distinctive honor and states that all non-black Africans must show respect to the chief. Dan has contributed to digging a new borehole for the village of 5,000, and has also preformed diabetes screening clinics in the village.

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Ten years after that novel idea, the SRF is still providing college students with an opportunity to explore the natural history of medicine and evoke the healing edge of knowledge regarding natural products and phytomedicinals in the world's greatest pharmacy-the rainforest. The students benefit from a more holistic approach to the healing of body, mind, and soul by learning from unique practitioners, and they gain an invaluable international perspective by working with indigenous peoples from different cultures.

Those of us who have traveled to the rainforest envision a world where plant life in a natural environment is abundant and extinctions are rare. We recognize that nearly 80 percent of the world's people (mostly in developing countries) still rely mainly on medicinal plants to treat their diseases and illnesses. We know that 20-25 percent of all pharmaceuticals and drugs carried in pharmacies are still natural products or come from semi-natural sources. We have learned that nearly half of the pharmaceutical manufacturers in the world are making efforts to go back to nature to possibly find new blockbuster drugs. They are risking research dollars for that one-in-ten-million chance that a plant or tuber from the rainforest might produce a drug that can someday cure AIDS, cancer, diabetes, or many other diseases for which modern medicine has no cure. We fear that continued destruction of precious and bio-diverse rainforests may eliminate any chance that these miracle drugs could be discovered.

After one decade, the *SRF* has assisted over 225 college students to make a once-in-a-lifetime trip to the rainforest. More than 25 universities have been represented, and the vast majority of the voyageurs have been pharmacy students. The Board of Advisors of *SRF* is an impressive group of individuals dedicated to the proliferation of medicinal plants and the preservation of these treasured forests-individuals like Dr. Mark Plotkin, Dr. Rosita Arvigo, Dr. James Duke, Dr. Steve Morris, Dr. Wendell Combest, Dr. Douglas Kay, and natural Canadian pharmacist Harlan Lahti. The traditional healers who are part of our team include Belizian bushmaster Mr. Polo Romero and midwife Beatrice Waite. We have recently added Amazonian shaman Don Antonio Montero.

After ten successful years, we believe that *SRF* is coming of age. Plans are in the works to add a second trip a year and travel to new locations including Cuba, Suriname, Panama, and Africa. There is no other student program in the United States quite like the *SRF* program. We are independent of any particular university, individual, business and/or foundation mandate, but we cherish their input, donations, and participation. And so, the adventure continues.



SRF

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