

CREA

-MONT-BLANC-

Climate Science in Chamonix

*An Invitation to Participate in a
Familiarization Trip Visit to the French Alps*

July 3-6, 2017



What is CREA Mont-Blanc?

Having just celebrated its 20th anniversary, the Research Center for Alpine Ecosystems (CREA) Mont-Blanc is one of the world's preeminent non-governmental organizations dedicated to the study of the impact of climate change upon alpine environments. While CREA Mont-Blanc's team of scientists performs specialized research in the study of natural mountain environments, the organization also maintains a strong commitment to participatory science. CREA is dedicated to sharing its knowledge and skills with the public through their direct engagement in the production of scientific knowledge and innovation.

Founded in 1996 by Dr. Anne Delestrade, CREA Mont-Blanc has a dual purpose. First, to perform scientific research in altitude environments through the implementation of programs in the area of France's Mont-Blanc massif and the Alps. CREA Mont-Blanc has 70 climate stations in the Alps region at different elevations and in a variety of alpine environments. And second, to disseminate knowledge and raise awareness by organizing initiatives which promote exchanges with researchers. CREA Mont-Blanc has one of the longest experiences with citizen science in France, including *Phénoclim*, its 13 year-old initiative enabling schools, individuals, protected areas, and associations to contribute their observations measuring the impact of climate change on the region's vegetation.

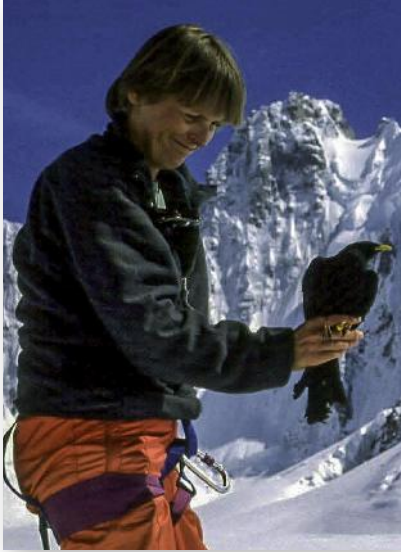
CREA Mont-Blanc has also spent many years working with students at every educational level in France. The organization has offered programs geared towards the interests of both students and educators to provide a true scientific research experience, meeting the needs of everyone from school children to graduate students in a variety of disciplines.

CREA's offices are located in Chamonix, France's historic Mont-Blanc Observatory, built in 1890 by one of the founding fathers of science at Mont-Blanc, Joseph Vallot. CREA Mont-Blanc continues to honor the legacy of Vallot with its work on Europe's highest mountain.

More information about CREA Mont-Blanc can be found on its website at <http://creamontblanc.org/>. (The website is currently being translated into English, but can be translated now with most commonly-used browsers.)

Meet the CREA Mont-Blanc Team

While CREA Mont-Blanc includes a larger team of scientists and other professionals dedicated to the mission of assessing climate change in the Alps, the individuals below will be most responsible for your familiarization visit and will be your primary contacts.



Anne Delestrade

With a PhD in ecology, Anne founded CREA Mont-Blanc in 1996 on the idea that research should be more directly linked to society and involve a larger public. As a researcher, she has been studying the Alpine Chough for 30 years, offering a long-term perspective on the distribution and behavior of this typical alpine bird. As the CREA Mont-Blanc Director, she initiated two of CREA's lead projects: *Phenoclim*, one of the first and longer-lasting citizen science programs in France, and the Mont-Blanc Atlas, an observatory of the ecological and climatic evolution of this emblematic mountain range. She is passionate about the field and about sharing scientific methods with the public. In addition, she is a certified ski instructor in Chamonix Valley where she has been living for 35 years. Anne will lead discussions during the fam visit to ensure the connection

between universities' pedagogical objectives and CREA Mont-Blanc's scientific needs. She will also lead students in field protocols and data analysis.



Irene Alvarez

Originally from Lyon, France, Irene moved to Chamonix six years ago after 12 years studying African nature conservation. Trained in political science and economics at Sciences Po Paris and a graduate of Georgetown University with a master's of science in Foreign Service, she has always been passionate about nature and the link between nature and society. At CREA Mont-Blanc, she heads the NGO's programs and administration, in particular the development of volunteering as a main endeavor for CREA Mont-Blanc. She is also a certified mountain leader, guiding visitors around the Mont-Blanc or on trails of the Alps to share with them the beauty and secrets of mountain ecosystems. She will ensure that the fam trip runs smoothly and meets everyone's objectives, and will oversee the organization of all study abroad trips. As a mountain leader, she will

be responsible for all participants' security in the field.



Brad Carlson

Originally from Vermont, Brad attended Middlebury College where he majored in geography and minored in French. During that time, he published his first scholarly article, “The distribution of alpine tundra in the Adirondack Mountains of New York, USA”. After moving to France, he completed a master’s degree and a PhD at the University of Grenoble, where he specialized in remote sensing and the effects of snow cover on alpine plant communities. He has been working with CREA Mont-Blanc since he began his master’s program. Brad has a particular affinity for high-elevation cliff-dwelling plants, which he seeks out while climbing. In addition to his research, he is currently the first American to train at the French National School of Skiing and Alpinism to become certified as a high mountain guide. He is one of CREA Mont-Blanc’s scientists and

will be leading discussions and field experimentations during the fam visit and the study abroad trips. As a mountain guide trainee, he will also be responsible for safety in the field.



Hillary Gerardi

Hailing from the Northeast Kingdom of Vermont, Hillary graduated from Middlebury College in 2009 with a major in sociology and anthropology. During her time at Middlebury, she spent five summers as a hut caretaker and naturalist in the White Mountain hut system of New Hampshire, studied development and human rights issues in Thailand, and sailed from Tonga to New Zealand. She moved to the French Alps with Brad Carlson in 2010, and worked for five years teaching world literature at the American School of Grenoble. Currently, she is completing a master’s degree in international cooperation and multilingual communication (French-English-Spanish) at the University of Grenoble, where she is recognized as an elite trail runner. In recent years Hillary has worked as a freelance translator for the Ecrins National Park, the Conservatoire des Espaces

Naturelsm and the alpinist Reinhold Messner. At CREA Mont-Blanc she is responsible for setting up the study abroad program with American universities, and will ultimately be the prime contact for this initiative.



About Chamonix Mont-Blanc

Located in a high valley in the French Alps at the base of legendary Mont-Blanc, Chamonix is renowned for its dramatic scenery, alpine sports, and four-season climate. The site of the world's first Winter Olympics, Chamonix is both a charming French town and a dynamic base for skiing, snowboarding, climbing, mountaineering, and hiking. It is located just minutes from both Italy and Switzerland, and is surrounded by towering peaks, alpine meadows, and abundant glaciers. The town features a wide array of lodging choices and culinary options, from traditional French and Swiss cuisine to sushi and pizza. Chamonix is a year-round international destination enjoyed by visitors from around the world.

Chamonix is an easy 1 hour and 15 minute scenic drive from the nearest international airport in Geneva, Switzerland, which is served by both nonstop and connecting flights from the U.S. and many other nations. Several commercial shuttle services provide frequent transportation from the airport to Chamonix. The Chamonix Valley is also a 2.5-hour drive from Milan, Italy and its international airport.

Chamonix has very modern healthcare facilities, including a hospital with helicopter ambulance capabilities, and there are trained mountain rescue teams in the area.

For more information about Chamonix Mont-Blanc, visit the area's official tourism website: <http://www.chamonix.com/chamonix-mont-blanc,0,en.html>.



The Familiarization Visit Experience – July 3-6, 2017 ***We Invite You to Partner with Us***

Thanks to European grant funding, CREA Mont-Blanc is able to invite up to a dozen English-speaking academic professionals to participate in a familiarization visit experience in Chamonix from July 3 to July 6, 2017. The objective of this fam visit is to become acquainted with both CREA Mont-Blanc and Chamonix, learn about CREA Mont-Blanc’s planned summer 2018 research initiative for undergraduate study abroad students, and provide feedback which will help shape this program.

Here’s the itinerary for the summer 2017 familiarization visit...

- July 3 Evening** *Arrival in Chamonix and welcome dinner*
- July 4 Morning** *Introduction to CREA Mont-Blanc and research at the Observatory*
- July 4 Afternoon** *Hike to the Refuge de Loriaz mountain hut to spend the night*
- July 5 Morning** *Discussion and examples of CREA scientific protocols*
- July 5 Afternoon** *Return to Chamonix from Loriaz in late afternoon, with a free evening in Chamonix (dinner on your own)*
- July 6 Morning** *Discussion of proposed study abroad experience*
- July 6 Afternoon** *Visit to Aiguille du Midi via cable car*
- July 6 Evening** *Departure or stay in Chamonix on your own*

CREA Mont-Blanc will cover many of the expenses associated with the fam visit. This includes two nights' lodging (double occupancy) in Chamonix, one night's lodging at the Refuge de Loriaz mountain hut, three breakfasts, three lunches, two dinners, local transportation, and the cable car ride to the Aiguille du Midi. Expenses not covered by CREA Mont-Blanc include air transportation, ground transportation from the arrival airport to Chamonix, personal expenses such as souvenirs, and pre-trip expenses such as passport fees and all insurance.



Physical Requirements of the Familiarization Visit Experience

While the center of the town of Chamonix is not located at a high mountain altitude (3,400 feet), much of CREA Mont-Blanc's work occurs at higher elevations surrounding the town. Sites to be visited on the fam trip include the Refuge de Loriaz mountain hut (elevation 6,628') and the Aiguille du Midi (elevation 12,605'). Individuals who are affected by health problems associated with high altitudes should avoid participation in this experience.

Additionally, the hike to the Loriaz site includes an elevation gain of over 2,600 vertical feet during a 2.5-hour trek through an alpine environment. While experience in mountaineering is not required for the fam visit or for the study abroad trips, individuals should be in good physical shape in order to finish this hike and be able to spend the night in the higher altitude environment at Loriaz.

Other Important Information

- Lodging while in Chamonix will be at a three-star hotel and will be double occupancy with breakfast provided at the hotel.
- The Refuge de Loriaz mountain hut offers spectacular views of the Mont-Blanc massif and is a welcome reward after your hike. Lodging is rustic, however, and is dormitory-style, with shared sleeping rooms. Bedding, linens, and pillows are provided and there are toilets and sinks, but no shower facilities. It is a truly unforgettable experience, but participants should be aware of the accommodations there.
- Fluency in French is not required. All of the CREA Mont-Blanc team members working on this initiative also speak excellent English, and English is widely spoken in Chamonix.



The Proposed Summer 2018 Student Research Experience— *Climate Science in Chamonix*

Participants in the fam visit experience will be asked to provide feedback and help shape CREA's debut research program for English-speaking student audiences, *Climate Science in Chamonix*. While CREA has experience with citizen science through its *Phénoclim* initiative, has worked with numerous student audiences in France, and has recently implemented voluntourism programs for the French domestic market, this will be its first program for the English-speaking student market.

CREA is planning a summer 2018 launch of a research program aimed at English-speaking undergraduate college students wishing to participate in an academic study abroad program focused upon climate change issues. The program will consist of 7 nights and 6 days of immersion into climate change research and the Alps, led by the CREA team of research professionals.

The CREA student research program will enable participants to participate in the collection of scientific data, work directly with climate change researchers, and understand better the issues affecting flora and fauna in the Alps. It will be one of the only climate science study abroad programs based in Europe, allowing students the opportunity to engage with a respected scientific program while visiting a popular destination. While the Climate Science in Chamonix program will be accessible to almost any undergraduate student, it is particularly relevant to those who are studying in fields related to environmental science, biology, botany, ecology, and climate science. Other related fields of interest may include sustainable tourism and data visualization (as CREA collects and analyzes substantial amounts of climate-related data).

The week-long Climate Science in Chamonix initiative is best suited for the period mid-June through August, when most of Mont-Blanc is accessible to researchers after the spring thaw, although the program may also be adjusted to fit the needs of academic professionals who wish to lead trips from mid-May to mid-June. CREA has designed a program that combines extensive outdoor field scientific research with some time spent in the classroom and the Mont-Blanc Observatory.

CREA brings extensive knowledge of both climate change research protocols and the local region. The organization will be responsible for developing the program content and managing all of the logistics while participants are studying in the Chamonix Valley. CREA will always work with its academic partners to ensure that its student program is consistent with the classroom objectives of the professor. Participating universities or other organizations will pay a fee to CREA for participation in CREA's research programs, enabling the university to market a unique and academically rigorous study abroad experience to its students at an attractive price. This income helps sustain CREA's important program of work as an NGO and is reinvested in scientific research. CREA wants to work closely with field trip participants to refine the program content and schedule to meet the needs of both students and professors.





Join Us

In order to ensure our research and mission is aligned with your academic objectives, CREA is now accepting applications from interested professionals to participate in the familiarization trip experience. We are interested in working with passionate individuals from universities who are familiar with study abroad programs and who teach English-speaking students in one of the academic fields described above, and who have the capability of leading a group of students on an international trip. Applicants should be prepared to participate in all aspects of the fam visit and to provide feedback to CREA.

We welcome your interest in CREA and its research programs, and look forward to working with you and your students.

