

Foundation for Glacier and Environmental Research Juneau Icefield Research Program 4616 25 th Avenue NE, PMB 302 Seattle, WA 98105	E-mail: fger.jirp@gmail.com
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IMPORTANT INFORMATION REGARDING YOUR SUMMER EXPERIENCE ON THE JUNEAU ICEFIELD

Congratulations on your selection as a participant in the Juneau Icefield Research Program! This is a program unlike any other in the world, in that you will live and work on, and travel across, a major glaciated region, all while being deeply involved in academics and research. You will be one of approximately 50 students, faculty, and staff – all living in close quarters in a sometimes harsh environment. The information presented here will give you an idea of what you can expect during your two months with the program. Please read this information carefully. Our faculty and staff will always be available to answer any questions you may have during the summer. If you have any pre-season concerns, please e-mail them to fger.jirp@gmail.com or call 907.500.8913.

Travel to and from Juneau

Airline travel to Juneau is somewhat limited. For large commercial carriers, only Alaska Airlines and Delta Airlines fly into Alaska's capital city. All of their flights will come into town from either Seattle or Anchorage. There are some small plane operators who fly between Whitehorse, Yukon and Juneau if you are joining us from Canada; but these options can be quite expensive. You might consider driving from Whitehorse to Skagway, AK (or possibly to Haines, AK) and taking the ferry (Alaska Marine Highway System).

2015 Program Dates

Arrival in Juneau: June 23

Arrival in Atlin : August 11 and 12

Depart Atlin for Juneau: August 16

Depart Juneau: August 18

Please be aware that the dates of the program are fixed. If students arrive prior to June 23 or depart after August 18, they will be responsible for their own lodging, board and transportation for anytime outside the Program dates.

Arrival in Juneau

One or more of our staff members will meet you upon your arrival at the Juneau airport.

Don't worry; we will know who you are, as JIRPers are the only people who arrive in Juneau at the height of summer with huge backpacks and skis! Upon disembarking from the plane, proceed downstairs to the baggage claim carousel – our staff will meet you there. You'll then be driven to the housing location where you will have time to get settled in and meet your fellow participants.

Housing and Transportation in Juneau and Atlin

All JIRP participants – students, faculty, and staff – will be housed in the University of Alaska Southeast residence halls during their stay in Juneau. Students will share a bedroom with a roommate in a comfortable quad-style suite with shared bath facilities. The first five to seven days of the program will take place in Juneau, with the first day devoted to a thorough equipment check and time to meet the other participants. The following days will include introductory academic lectures, multiple half-day hikes, field trips to the Mendenhall Glacier, a visit to the National Weather Service forecast office, and possibly a beach-side picnic or two. All meals and transportation while in Juneau will be provided for you. Consistent with our procedures on the Icefield, we will ask for volunteers to assist with cooking and cleanup duties during our stay in Juneau. On about the sixth or seventh day, trail parties will depart Juneau for the one-two day hike to Camp 17; the first main camp on the Icefield. After we exit the Icefield in mid-August, everyone will spend several days at our Canadian headquarters in Atlin, British Columbia. Here, we'll have several final wrap-up lectures, field trips, and host an open house for Atlin residents. Students will be expected to give a short oral and illustrated presentation of their summer research projects during the main program of the open house. A second, final presentation will be made to the Juneau community at the Mendenhall Glacier Visitor Center the night before your departure for home.

Alcohol and Drug Policy

Alcohol of any kind (such as beer, wine, and liquor), non-prescription drugs, and marijuana in any form are absolutely prohibited in any and all JIRP camps on and off the Juneau Icefield. Participants who violate this policy will immediately be removed from the icefield with the full expenses of the removal to be paid by the violator. Emergency contact individuals will be notified to immediately assume full responsibility for the violator. This policy also applies to the Atlin phase of the program, when all participants will be in Atlin, British Columbia. **There will be no exceptions to this policy.**

Typical Daily Schedule on the Icefield

Decades of experience on the Juneau Icefield have enabled us to develop an effective daily schedule of camp duties, field work, and academics. Each day will be guided by a Plan-of-the-Day, displayed on a whiteboard in a prominent location. Typically, each day will start with wake up at 0700 (we use military time notation), breakfast at 0800, and morning announcements at 0845. There is usually a short period of time at 0900 devoted to camp maintenance and cleanup. This is followed by field work or academic lectures until lunch time at 1300. Field work and/or lectures continue in the afternoon with dinner at 1900. Evenings are normally devoted to one or two academic lectures. Lights out is at

2300. Each day, students will rotate through the required camp duties – cooking, taking meteorological readings, and radio operations. Typically there will be two or three cooks each day, and one person to do the meteorological and radio duties each day. You can expect to be on cook duty somewhere between four to seven times during the summer.

Safety Training and Camp Orientation

You will hike and ski 80 miles across the Juneau Icefield on the traverse from Juneau to Atlin Lake. There are numerous crevasse zones and other dangers to avoid, therefore one of the primary focuses while at Camp 17 will be on safety training. Expect four or five full days of lectures, demonstrations, and in-the-field practice on all aspects of glacier travel, skiing, and overall safety. Additionally, upon arrival at each camp, you will be given a complete orientation and tour of the camp. This is to familiarize you with the layout and operation of each camp, and to point out any potential safety-related issues specific to each camp.

Icefield Accommodations

While on the Icefield, you will be staying in wood-framed, metal-sheathed buildings located on the exposed rock of nunataks. While rustic in nature, the buildings provide a warm and dry shelter from the often harsh weather outside. It is an experience in communal living. You will sleep in bunkhouses with several other roommates. Wood or metal-frame bunks with 3” thick foam mattresses are provided – you provide your own sleeping bag. Cooking and dining facilities are located in the cookshack, which provides propane stoves, ovens, and everything else required to cook for 50 people. Gas-powered electric generators supply electricity to the main buildings – typically, the cookshack, lecture hall, and staff quarters. The main camps have a basic, gravity-feed shower. Outhouses provide relief when you need it. The two-day ski trip from Camp 17 to Camp 10 requires an overnight stay in a tent on the glacier. Some field work will require several overnight tent camping trips, and there will be an overnight stay on the shore of Atlin Lake. The program will supply tents. You will use your tarp for the overnight stay at the lake. See past years Blogs on our website to get an idea of camp conditions and the terrain.

Camp-to-Camp Movements

You will typically stay at each of the main camps (17, 10, 18, 8, and 26) anywhere from a few days to two weeks. Everyone will hike up to Camp 17 and will be there for 8-10 days for orientation, safety training, and field work. Trail parties, each comprised of 6-8 students and two staff, will then begin the two-day ski trip to Camp 10 in the middle of the Icefield. Camp 10 is the main camp (and the largest). Here, the focus will shift to field work and student projects, with academics in the evenings. Around the 29th of July, parties will begin making their way upglacier to Camp 18. This phase will see us occupying several camps simultaneously in order to carry out field work and to support the logistics of the program. Around August 9th, we will begin the exit phase and ski to Camp 26 on the Canadian side of the Icefield. Time spent here will be limited – one or two days at the most. Finally, we will hike the remaining 13 miles across the Llewellyn Glacier to the shore of Atlin Lake, where we will be picked up by a boat and taken to our

Atlin headquarters.

All ski and hiking portions of the Juneau Icefield traverse will be done carrying a pack with all of your gear except for the first Juneau to C-17 where we will transport your ski equipment, that is not needed for the hike, by helicopter. Traversing the Icefield can be challenging, very strenuous at times, and requires a high degree of physical stamina and mental toughness. You must be in good to excellent physical condition to make the traverse with the least amount of physical discomfort. Those who do best are very active and do some sort of physical conditioning at least four days a week prior to arriving in Juneau. We recommend starting an endurance and cardiovascular fitness/ training regimen immediately after acceptance to the program. A variety of aerobic exercises work well for training, including climbing and descending hills, stairs or stadium bleachers, skiing, running and cycling. Build your aerobic training over time, beginning with shorter sessions and increasing to longer workouts. Upon leaving for Juneau, you should feel comfortable with an aerobic exertion that resembles an 8-mile hike up 4500 ft with a loaded pack. If you have never skied before, please find a way to take a few ski lessons. This will help you be more efficient travelling and will increase the safety of the group. The nature of group travel is that everyone is only as fast as the slowest member. It is not a race across the icefield, but there are times when a reasonable level of swiftness is necessary. By the time you arrive in Juneau you should be in good to excellent physical condition.

The following is a brief description of travel mileage, elevation gain, and length of time needed to get from camp to camp.

- Juneau to Camp 17: 8 miles, hiking 4,500 ft. of elevation gain taking one or two days.
- Camp 17 to Camp 10: 23 miles, taking two days. Both camps are at about the same elevation, however there are some steep slopes to ascend and descend both on skis and on foot. The first day of this trip is physically the most difficult and strenuous of all the ski trips across the icefield.
- Camp 10 to Camp 18: Skiing 19 miles, taking one to two days. A gradual elevation gain of 1,800 feet.
- Camp 18 to Camp 26: 17 miles, mostly a gradual descent. One day ski and hike.
- Camp 26 to Llewellyn Inlet: 13 mile hike taking one day, most of it downhill.
- Llewellyn Inlet to Atlin: 33 mile boat ride.

You may also be traveling, under your own power, to other outlying camps. So please arrive in Juneau in the best shape possible. Every bit of physical conditioning you can do in preparation for your time on the Icefield will be helpful. Remember, you will be carrying all of your gear from camp to camp.

Equipment List

The Equipment List is posted on our Web site. Most of the items on your equipment list can be acquired year-round. However, the type of ski equipment recommended for the icefield is hard to find at the last minute. Because the ski-selling season ends in spring, we strongly recommend arranging for the appropriate skis, bindings, boots and poles immediately upon acceptance to the program to have the highest chance of finding the proper equipment in your size. The good part is that usually it will be on sale during this time.

Also get your hiking boots as soon as possible as well, so that you can break them in as part of your training program prior to arrival in Juneau. This will lessen the chances of getting blisters. Also any good outdoor store can help customize the fit of boots of all kinds.

REMEMBER - BREAK YOUR BOOTS IN BEFORE ARRIVING IN JUNEAU!

Field Trips and Icefield Explorations

The primary mission of JIRP is to provide an educational, research, and expeditionary experience. This is accomplished by immersing students in academic lectures, field trips, and research projects. Lectures are conducted both indoors and outdoors. Field trips are designed to expose students to real-world examples of concepts learned in the classroom. You will have the opportunity to go on several field trips at each of the main camps, in addition to traveling to various parts of the Icefield in order to assist with research projects and to conduct student projects. While we can appreciate the desire to explore your surroundings, we must require that all travel away from the immediate surroundings of the main camps be restricted to authorized and approved faculty and staff-led trips. This is for your safety, and the safety of all participants. During the orientation and tour at each camp, you will be informed of the areas near camp where you can roam freely, and those areas which require the presence of a faculty or staff member. **All travel must be in support of our primary mission, must be approved in advance by operations director and/or senior staff, and must be led by approved staff members.**

Unauthorized travel, either solo or with others, will not be allowed under any circumstance. Additionally, we realize that many participants have mountaineering expertise and may desire to explore crevasses or climb the numerous peaks on the Juneau Icefield. These activities are beyond the scope of our primary mission and are **strictly prohibited**. Individuals who engage in such unauthorized activities or unauthorized travel will be sent home immediately and will be required to pay the full cost of their helicopter evacuation.

Emergency Contact While on the Icefield

We will have scheduled twice-daily radio communications between Juneau and the camps on the Icefield (we also continuously monitor the radio – 24 hours round the clock). If your parents or others need to get in touch with you for emergency purposes only, they may contact our Juneau logistics manager at **907-500-8913** . The logistics

manager will take a message and relay it via radio or Sat phone to the appropriate camp on the Icefield. Typically, callers can expect a response either immediately or within just a short time period. Please inform your parents and others that this capability is for emergencies or other staff-approved purposes **only**.

Special Dietary Needs

Unfortunately, JIRP cannot accommodate special dietary needs and choices that limit the scope of meal preparation. Therefore, it is not possible for JIRP to prepare vegetarian, vegan, or kosher meals, or meals that cater to food allergies. These situations are far too costly to accommodate and much too inefficient for meal preparation in a wilderness environment. This is regrettable, but is a limiting factor that we must accept in order to function efficiently. For those of you who are vegetarians, please understand that it is generally possible to eat a vegetarian meal most of the time. Please consider easing your eating restrictions for the duration of the Program.

Meal Planning and Preparation

You will be expected to share in the duties of meal planning, preparation, and cleanup. Staff will schedule cooks so that everyone is involved and the workload is evenly distributed throughout the summer. Tasty and nutritious meals are critically important for the health and morale of all participants. When assigned cooking duties for the day, you will also be responsible for washing dishes and general cookshack cleanliness. Refer to separate hand-out for detailed meal preparation information.

Hygiene

With up to 50 people at a camp, it is critical that we adhere to strict hygiene practices to prevent the possibility of camp-wide outbreaks of sickness. This typically involves frequent hand washing, particularly after trips to the outhouse. Each main camp will have a dedicated hand-washing station, complete with regular and anti-bacterial soap, a stove to heat water, and a 5-gallon insulated container to keep water warm all day long. Daily work details will include thorough outhouse cleaning. Each main camp is equipped with a gravity-feed shower; however due to the nature of our program, it is not possible to take daily showers. It is much more important to keep your hands clean, particularly before meals and after outhouse use.

Student Research Projects

All students are required to be involved in a research project. This can be allied to our on-going research in the areas of mass balance, surveying, meteorology, geophysics, or botany. Alternatively, students can develop, in coordination with faculty and staff, an independent research project. Examples of past and on-going projects include: mass balance determination and comparison with past conditions, measuring glacier movement and changes in glacier surface elevation, botanical inventory and vegetation change detection, and assessing and analyzing meteorological conditions across the Icefield. Early in the program, at Camp 17 and Camp 10, our faculty and staff will present other ideas for projects. You will begin receiving detailed descriptions of the student projects shortly.

Receiving and Sending Mail

You will be able to receive and send mail while in Juneau and while on the Icefield. The only exception to this will be that no mail can be delivered to, or sent out from the Icefield after August 5. We will exit the Icefield via Canada which makes it very difficult to deal with mail once we move north into Canada.

Be sure to bring plenty of envelopes and postage stamps to meet your needs. All mail received must be no larger than a large, flat envelope. **Tell your parents and friends to not send boxed packages**, as these take up too much of our limited helicopter capacity. Any boxed packages received in Juneau will be stockpiled and distributed upon your return to Juneau at the end of the program. All other mail will be picked up at the post office daily and will be put on the next scheduled helicopter for delivery to camps on the Icefield. Outgoing mail from the Icefield is similarly sent out on helicopters to Juneau, where it will be taken to the post office by our Juneau logistician.

Use the following address to receive mail in Juneau:

Your Name
c/o Foundation For Glacier Research
P.O. Box 35054
Juneau, AK 99803

Student Project Presentation and Final Exam

All students will be required to participate in giving a short (5-minute) oral and illustrated presentation of their research project at two seminars – at our annual open house in the community of Atlin, and at the Mendenhall Glacier Visitor Center in Juneau. These presentations are at the end of the summer program, so you will have time to prepare presentations during the final weeks of JIRP. The presentations are not meant to be comprehensive, in-depth treatises on your project, but rather a general overview of student project objectives, research methods, and results. Computers, software, and printers are available at the main camps on the Icefield, as well as in Atlin, for use in preparing presentations.

Atlin Activities and Return to Juneau

We will begin making our way off the Icefield around August 9/10 and will all be in Atlin around August 11/12. Although we will be off the Icefield, it is important to note that the program is not over – there will be a Plan-of-the-Day, work details, cook assignments, an academic program and field trips. You will have several days to put the finishing touches on your student research presentation for the open house for the Atlin community.

Please note that the alcohol and drug policy previously stated also applies to all time spent in Atlin.

We will depart Atlin for Juneau on August 16th. A bus will transport everyone from Atlin

to Skagway, where we will board the ferry (Alaska Marine Highway System) for the trip to Juneau. We will again stay at the University of Alaska Southeast residence halls. Staying at the UAS dorms on this end of the program is a generous accommodation by UAS, as it is very close to the beginning of Fall semester for them. JIRP participants are expected to be diligent in keeping the dorms as clean as possible and cleaning up any messes to ease the burden on UAS Housing staff. This will ensure their willingness to work with JIRP in future years. Students will give their final project presentations on the evening of the 17th at the Mendenhall Glacier Visitor Center. The program will officially end on August 18, when you will depart Juneau and fly home.

Please remember that until you board the plane in Juneau for your flight home, you are still a member and representative of JIRP. We know you will be excited to return to civilization after seven weeks on the Icefield, but please don't let your excitement get the better of you or your judgment. Your actions – either positive or negative – will reflect on all of us and our program. Act responsibly, show courtesy and respect to our neighbors in Atlin and Juneau, and be a positive role model for JIRP and its future participants.