

University College London, Quimsa Cruz, Bolivia 2004



Laguna Larum Kkota, Quimsa Cruz, Bolivia

University College London, Quimsa Cruz, Bolivia 2004

Abstract

As a team of six people (including four students at University College London; UCL), we proposed an expedition to climb in the Quimsa Cruz, Bolivia. The Quimsa Cruz is the smallest, lowest and least explored cordillera in Bolivia and it offered good potential for new alpine-style ascents. We put together funding proposals to climb new routes and also to research the history of climbing in this region; the information regarding ascents in this region is notoriously poor.

We flew to La Paz and after a weeks acclimatisation and shopping for supplies, we travelled in two 4x4 vehicles to the Quimsa Cruz. We spent three weeks in the Mountains, establishing a base camp and embarking on a number of routes. As well as repeating ascents of mountains close to our base camp, we believe we achieved at least two new routes.

We all returned safely to London having had an enjoyable and successful expedition.

Sarah Griffin

Malmsmead
Charter Alley
Tadley
Hampshire
RG26 5PZ

s.griffin@ucl.ac.uk
griffinsarah2002@yahoo.com
sarah@quimsacruz.info
07786921172

University College London, Quimsa Cruz, Bolivia 2004

Contents	Page
Expedition dates	4
Objectives	4
The concept	4
Expedition members	5
Our Destination	6
Planning	8
Insurance	9
La Paz	11
Maps	12
Acclimatisation	12
Travel	13
Camp	14
The weather and environmental conditions	14
Routes	15
Health and Safety	23
Equipment	24
Return to La Paz	24
Fulfilling our objectives	25
Diary	26
Sponsorship	27
Additional help and support	28
Accounts	29
Food List	30
Group kit list	31
Personal kit list	31
Group medical kit	32
Contacts	33
References	33

Expedition Dates

→ Monday 12th June – Saturday 10th July 2004

Objectives

- Climb new and existing Alpine-style and rock routes.
- Record location, heights and names of ascents.
- Attempt to collate information about routes climbed in the range.

The Concept

In November 2003 I attended Explore 2003 at the Royal Geographical Society. This excellent weekend seminar is devoted to planning expeditions. I had wanted to climb in the Andes and had some unformed plans to go to Bolivia. During the weekend I arranged to speak to Stuart Halford about Mountain Leadership; I was concerned that I did not have sufficient skills to lead a group to the Greater ranges. He was reassuring, explaining that it was important to have realistic aims, within our abilities but that it should be possible to plan an expedition. He pointed me in the direction of his expedition report, "Lakeland Quimsa Cruz 2001 (MEF 01/27)," and suggested that there was still potential for new routes in the Quimsa Cruz.

The more I read about the Quimsa Cruz, the more sure I was that this would be a good destination. Five people agreed to join me. With under a month to write sponsorship applications to UCL, the BMC and MEF, we put together a proposal to climb in the Quimsa Cruz.

Sarah Griffin

Expedition members

We applied to UCL expeditions fund as a group of four UCL students: Sarah, Tim, Ted and JC. We applied for funding to the BMC and MEF as a group of six people. We all know each other through UCL Mountaineering club, although Matt and John were not UCL students when the expedition was planned.

Name: ***Sarah Griffin*** (Leader)

Age on 14/06/04: 26

Nationality: British

Occupation: PhD. Neuroscience student

Experience: Lead rock climb up to E1 5b
Five Scottish winter seasons, lead grade II/III
Scottish and Alpine Conville courses
Two Alpine trips, routes up to PD/AD.
Outdoors specific first aid course
Trekking in Hindu Kush, Pakistan and in the Gobi desert, Mongolia.
Learning Spanish since September 2003
Explore 2003, at the RGS.

Matthew Freear

25

British

Press Officer, Home Office

Lead rock climb up to HVS
Five Scottish winter seasons, lead grade III
Three summer Alpine trips, routes up to AD on snow and ice, D on rock.
Scottish and Alpine Conville courses
Trekking in Pakistani Himalaya
Climbed Mt. Triglav (highest in Slovenia),
Trekking at high altitude in Ecuador

Name: ***John Tomlinson***

Age on 14/06/04: 23

Nationality: British

Occupation: Parliamentary research assistant

Experience: Lead rock climb up to E1
Four Scottish winter seasons,
One Alpine trip – routes to TD,
Plas y Brenin Alpine apprenticeship
REC outdoor first aid course, ML trained

Tim Saunders (Ted)

23

British

BSc. Genetics student

Lead rock climb to E1
Two Scottish winter seasons
Scottish Conville course
Outdoor specific first aid course
SPA trained, ML trained
Spanish GCSE

Name: ***Timothy Moss***

Age on 14/06/04: 21

Nationality: British

Occupation: Bsc. Psychology student

Experience: Lead rock climb to VS.
Alpine Conville course, Alpine routes to PD
Expedition to Kyrgyzstan (2003) including attempt on Peak Gorky, (6050m).
Learning Spanish since September 2003

Jingwen Chen (JC)

22

British and Chinese

Bsc. Biochemistry student

Lead rock climb to E1
Trekking at high altitude in China
Scottish winter Mountaineering course
First aid

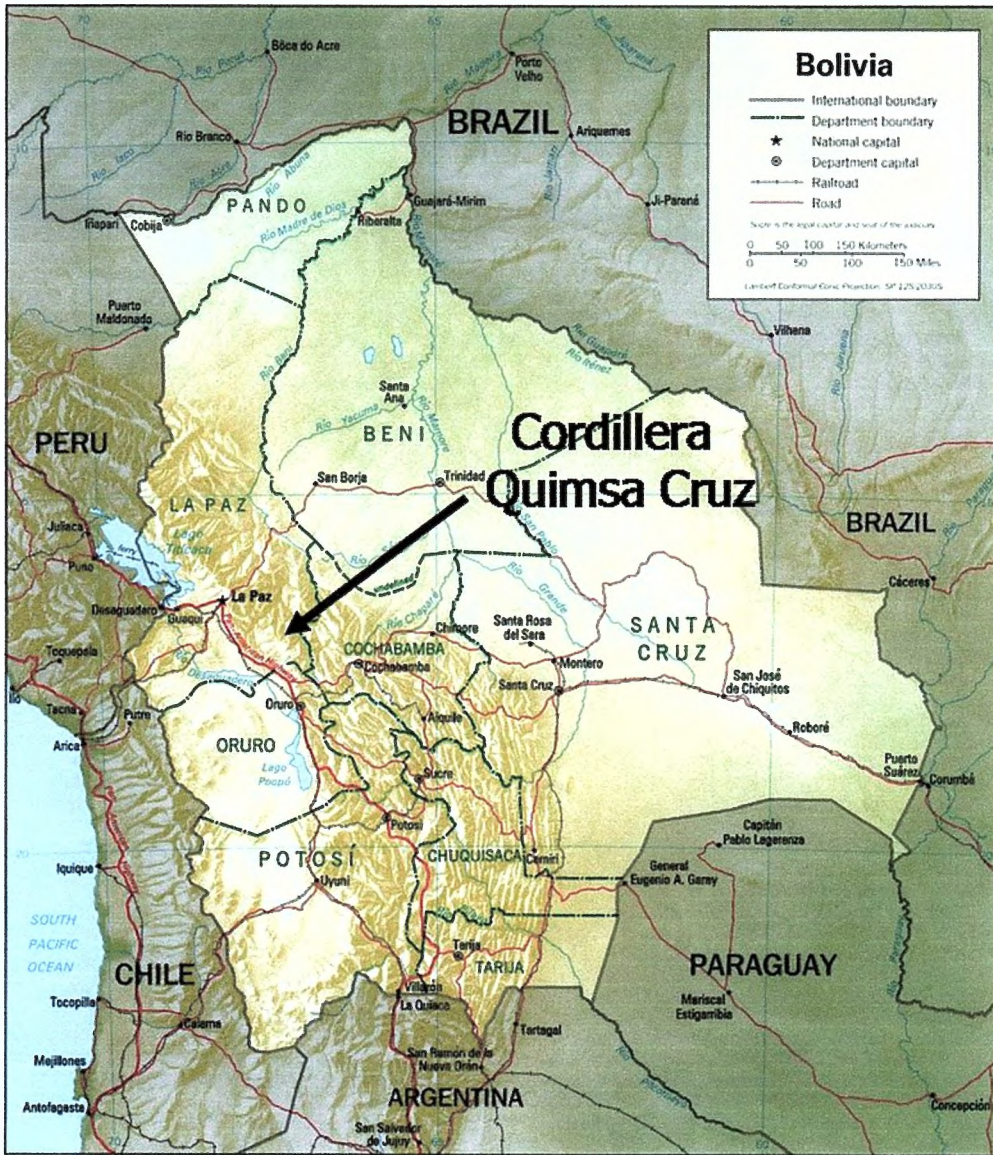
Our Destination

The Cordillera de Quimsa Cruz is the smallest, lowest and least visited of the four Bolivian Cordilleras. It is about the size of Snowdonia, but at an altitude of over 4000m with ~ 80 peaks between 4900m and 5800m. This range is composed of intrusive massifs of granodiorite rock, providing, in the North of the range, some of the best rock climbing in Bolivia (according to the guide books!). The south of the range is glaciated and alpine-style ascents are possible. The Quimsa Cruz starts ~ 80 km South East from La Paz. By road, it is an 8 hour journey.

The Quimsa Cruz is rich in tin and has been mined extensively. The village of Viloco, in the north of the range, is an old mining settlement. With the cheap price of plastics, Tin is no longer as financially viable as it was. A few miners remain working in the area, gaining a subsistence income. The local people are Aymaran.

Many of the Mountains in the Quimsa Cruz have been climbed, initially by indigenous peoples then miners and surveyors. There were foreign expeditions to the area in the early 1910s and again around the 40s. In 1987 there was a large German expedition to the Quimsa Cruz. More recently, there have been 5 British expeditions to the area.

We were attracted by the relatively few expeditions to the Quimsa Cruz and consequently the potential for achieving new routes. We also decided to attempt to research what routes had been climbed in the area and try to collate the existing information. As John Biggar writes in his guide book, "There is more confusion over names and heights in the Quimsa Cruz than in any other area of Bolivia."



The location of Bolivia and the Quimsa Cruz within South America.

Planning

We obtained copies of past expedition reports to the Quimsa Cruz and in particular, we referred to five recent British expeditions. We obtained the Lakelands expedition report from Paul Platt and read the others at the Royal Geographical Society and at the Alpine Club. We also obtained copies of Yossi Brain's and John Biggar's climbing guides.

Ted took on the challenge of trying to work out which areas and mountains had been explored previously. We were particularly keen to be based in the South of the range to undertake snow and ice routes but were hoping to find a location where there was also potential for rock climbing. The more recent "Alpine" style expeditions had found rock near their camp that they were able to climb. Ted identified the area around Laguna Larum Kkota (See Illustrations 2 & 3). This had not been visited by another British expedition and had the lure of being close to two of the highest peaks in the range: Gigante Grande and Torre Jihauna.



Laguna Larum Khota

An aerial view of the Cordillera Quimsa Cruz obtained after the expedition

At our BMC/MEF interview at which we were provided with extra contacts. Sarah spoke to John Biggar who sent us some maps of the region. She also emailed Alain Messili who has recently produced another guide book to climbing in Bolivia which we obtained in La Paz. He was happy to meet us in La Paz (We never managed this.) We eventually managed to contact Sue Savage. She was very helpful and showed us some of her slides of the region.

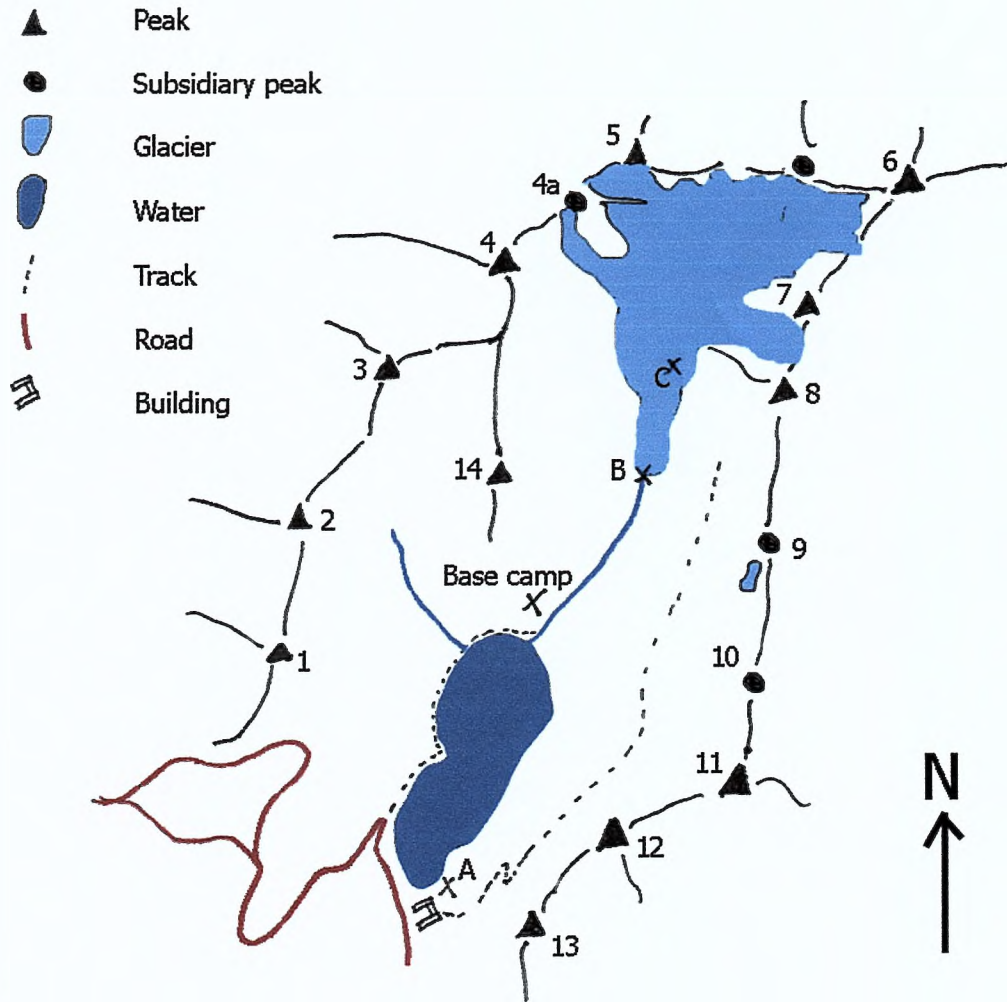
Carlos Escobar is head of the Bolivian Guides association and is joining a Jagged Globe expedition to Everest next year as a guide. He came very highly recommended by previous expeditions and we contacted him about arranging transport and fuel for our expedition. We met him in La Paz and he was very helpful, organizing two Toyotas and our petrol.

The last month before the expedition went very quickly. We had produced a kit list and acquired sponsorship from a number of companies. We acquired the relevant vaccinations, purchased insurance, flights and packed large rucksacks! We had also made an effort to improve our aerobic fitness.

Insurance

We decided to take out BMC Alpine & Ski insurance. It was difficult to find out whether we required expedition insurance. Eventually we concluded that the altitude and the fact that many of the peaks we would climb had previously been summited justified us taking the lower level of cover.

Map of area and routes climbed



Item	Description	Item	Description
A	Drop off point	6	Cerro San Pedro
B	Snout of glacier	7	Cerro Sofia
C	Crevassed region	8	Gigante Grande
1	Cerro Laram Kkota Chico	9	Subsidiary peak of Gigante Grande
2	Cerro Pobre Cristo	10	Unnamed peak JC & John climbed
3	Unnamed on BIGM map	11	Cerro Santa Rosa
4	Cerro Torre Jihuana	12	Cerro Ferrocia
4a	Subsidiary peak of Torre Jihuana	13	Cerro Choina Kkota
5	Cerro Bengala (on BIGM map)	14	Cerro San Francisco

La Paz

Matt and John arrived in La Paz on 15th June. Unfortunately, due to some American Airlines staffing issues, the rest of us spent a day in Miami, arriving on 16th. (We even swam off Miami beach, ensuring we arrived in La Paz straight from sea level.)

La Paz is one of Bolivia's capital cities and is where we based our pre-expedition operations. The city is located in and around a huge crater surrounded by high mountains, a fantastic setting that you can begin to appreciate through the window of your plane before you've even set down. The airport (at 4100m) is situated on the high plane (the altiplano) that surrounds La Paz, surrounding it is the shanty town (actually a separate city called 'El Alto'), and as you progress further down the valley into La Paz the quality of buildings, roads and standard of living gradually increases, along with the temperature and the partial pressure of oxygen.

Understandably, every other road is on a slope which only seems all the more steep at the altitude (~3400-4000m). It's as busy as any other city but seems more hectic. The driving style deserves mention: right of way at an intersection goes to whoever sounds their horn first and driving straight into crowds of people is apparently fair game. It would all no doubt go horribly wrong if they didn't drive comparatively slowly.

Shops and market stands line the streets. Cholitas (Aymaran ladies) wearing boleros (bowler hats) sit on the pavement selling everything from salteñas (delicious, if potentially stomach upsetting, Bolivian pasties) and nuts, to pirate DVDs with Spanish subtitles and spare handsets for your house phone. Streets are quite often arranged on a theme: similar to how Tottenham Court Road is associated with electronic goods, only to a greatly exaggerated. One road might be entirely filled with stalls selling fruit and veg, another nothing but butchers and another still solely dedicated to gent's hair dressing.

Prices are extremely cheap by Western standards. Almuerzos (set lunches) go from 5 Bolivianos (less than 50p), chocolate bars from 1Bs (if you don't buy Snickers), an expensive main course will rarely cost more than 30Bs (most cost notably less) and even an Alpaca jumper, sold exclusively to tourists, won't cost much more than 60Bs (little over five pounds).

We stayed in a brilliant place called Hotel Rosario located on Calle Illampu which we would highly recommend. Whilst in La Paz we organised supplies for our 3 weeks in the Quimsa Cruz. We devised a menu plan and we split into 3 groups of 2 to do the shopping. In addition, we visited the BIGM and bought the map we needed, we registered with the British Embassy and we visited Carlos to organise our transport.

Maps

We obtained maps from the Bolivia Instituto Geographico Militar (BIGM) in La Paz. Unlike in recent years, they had newly printed colour copies of the map we required (BIGM Mina Caracoles 6143 III, 1:50,000). This was beautiful and we now all have copies on our walls! The map was generally reliable although it was clear that the glaciers had retreated from their marked extents. We also obtained photocopies of maps of the neighbouring regions, at 1:50,000 for use in researching the region.

Acclimatisation

La Paz is at an altitude of around 3600m and the airport is closer to 4000m, so we felt the effects of altitude as soon as we arrived. We were in La Paz for 6 or 7 days before setting off for Base Camp. Base Camp was at 4865m, which is higher than Mont Blanc (4808m) and not far short of Everest Base Camp (~5400m).

Spending time at 3600m in La Paz was of obvious benefit and a necessary step. That was enough for us with the extra excursions (see below), more time would be preferable.

Downhill mountain biking on the World's Most Dangerous Road:

We undertook the Bolivian tourist's rite of passage of cycling two vertical kilometres downhill on what a World Bank report described as the most dangerous road in the world. Our excuse for the excursion was that we would be driven up to somewhere around 4600m and would thus help us acclimatise. We were only there briefly before heading back down at high speed, all the way to around 2500m.

Zongo Valley, Huayna Potosi Hut:

We spent a night in a hut at 4700m shortly before leaving for Base Camp. This was a huge jump from our previous sleeping arrangement at 3600m. The reason for this rapid ascent was that we were scheduled to leave for Base Camp in two days and decided it would be better to experience the altitude whilst still in civilisation should anything go wrong. Four out of six members suffered badly at the altitude: One remained unwell in bed for the duration; three vomited and all four suffered severe headaches. The two healthy members were both using Diamox. We descended to La Paz (3600m) within 24 hours and everyone was instantly better. We left for Base Camp the

next day and were dropped at 4800m. Everyone felt the altitude in as much we all lacked energy and were short of breath but no one suffered beyond that.

During climbing, some found the ascents (up to 5700m) harder work than others but no one suffered any serious or enduring problems.

Travel

After arriving in La Paz, Sarah contacted Carlos to arrange our travel needs. To save money we had wanted just one jeep. However, we were convinced that it was impossible to carry all our equipment in the same jeep as us. On the day of departure we were able to load the fifteen odd bags and sacs onto the roofs of the two 8 seat Toyota Land Cruisers which gave us plenty of room. We were accompanied by three drivers and were on our way.



The winding dirt road to the Quimsa Cruz.

The journey took approximately 8 hours including a stop for lunch. Tim later regretted the chicken sandwich he obtained en route. The road south from La Paz was good; it had a good surface and we made quick progress. The route involved travelled South and then turning North-East. The surfaced road eventually ran out and we continued along dirt roads. When we arrived at Laguna Larum Kkota, it became obvious there was no way we were going to be able to drive around the lake, as we had hoped. After a brief attempt at driving around the North side of the lake, we spent an hour trying to prevent the Toyota sliding into the lake and reversing it to the road. We set up two tents near the road, on the South side of the lake. We began to transfer our bags by foot the next day. On the third day in we had completely moved base camp to the other side of the lake.

Camp

Near our camp, we established toilet facilities and designated a cooking area. Initially water was collected in large containers for drinking and cooking, but due to low temperatures the water remained frozen much of the morning. The team members paired up into the three tents, but the cooking responsibilities remained a group activity. We made some shelter to cook in using rocks but this wasn't very successful. We lacked a sheltered area where we could cook and get together. Nightfall usually meant returning to our tents!

Our stay alternated between rest and active days. On rest days, most of our time was spent cooking. JC's Chinese delights were greatly appreciated. He'd managed to bring along extra cooking ingredients including pork belly and some very strong sauces. Eventually we used the flour and yeast we'd brought. There was an attempt at bread, the day Sarah made donuts she was very popular and Matt and JC's pizzas were another highlight. Another favourite rest day activity involved trying to clean ourselves as best as we could. Our efforts here were hampered by the cold. It was practically impossible to bathe in the stream or the lake as the water came directly from the glacier and any time spent in it would have given us pneumonia! We also did our laundry and tried to dry our clothing in the brief midday sunshine. Frozen socks and long-johns became a campsite decoration.

The weather and environmental conditions

The weather started clear and sunny. The sun rose at 6am and set at 6pm. Unfortunately, because we were camped in a valley with mountains to the East and West, we didn't get any sunshine until ~ 9am and it disappeared again at 3pm. On a sunny day, it was possible to walk

around camp in trousers and a long-sleeved top. At other times Down jackets were popular. It always froze over night. Our full 16 litre water containers would freeze completely solid.

The weather soon became windy. The wind funnelled down the valley and caused dust to get everywhere. The tent zips all broke; they refused to do up. Safely pins and needle and thread were used to improve the situation. We had a few snow showers. This transformed the landscape beautifully and caused us few problems.



About the campsite

Routes

All the routes that we climbed were one day long from our base camp. We were soon disappointed to discover that the metamorphic rock in our chosen location was very loose. Consequently, all our attempts at climbing the rock were very frightening. The snow and ice, however, was in excellent condition. As there had been little snow fall over the previous summer, the avalanche risk was minimal (Route 8 was the exception to this.) and the glacier was almost dry. In addition to the following list, we also went for a few shorted walks during rest days or when the weather was less agreeable. We believe routes 6 and 8 to be previously unclimbed.

2. Cerro Torre Jihuaña **Height:** 5740m **Grade:** AD **Climbers:** Matt, Sarah,
(Peak 4a on map, pg 10) Ted & Tim

A 4am start for a 5:30am departure. We scrambled along the boulder field on the west side of the valley, heading northward towards the glacier. The boulders were awkward in the dark (it may have been easier to follow the faint path more or stay in the base of the valley and ascend the snout of the glacier). We joined the glacier above the snout (Map Item B) and proceeded in crampons, roped up as a four. We moved north across the left hand side of the glacier and swung around to the right when we'd passed the heavily crevassed region (Map Item C). We followed a ridge running west towards the summit. A short section of north-facing steep snow led us to a small rock band that was climbed in crampons followed by a further stretch of snow. Contrary to the map, the mountain is not glaciated the whole way up: the first rock band is located at around 5500m and the last 50-100m is entirely rock.

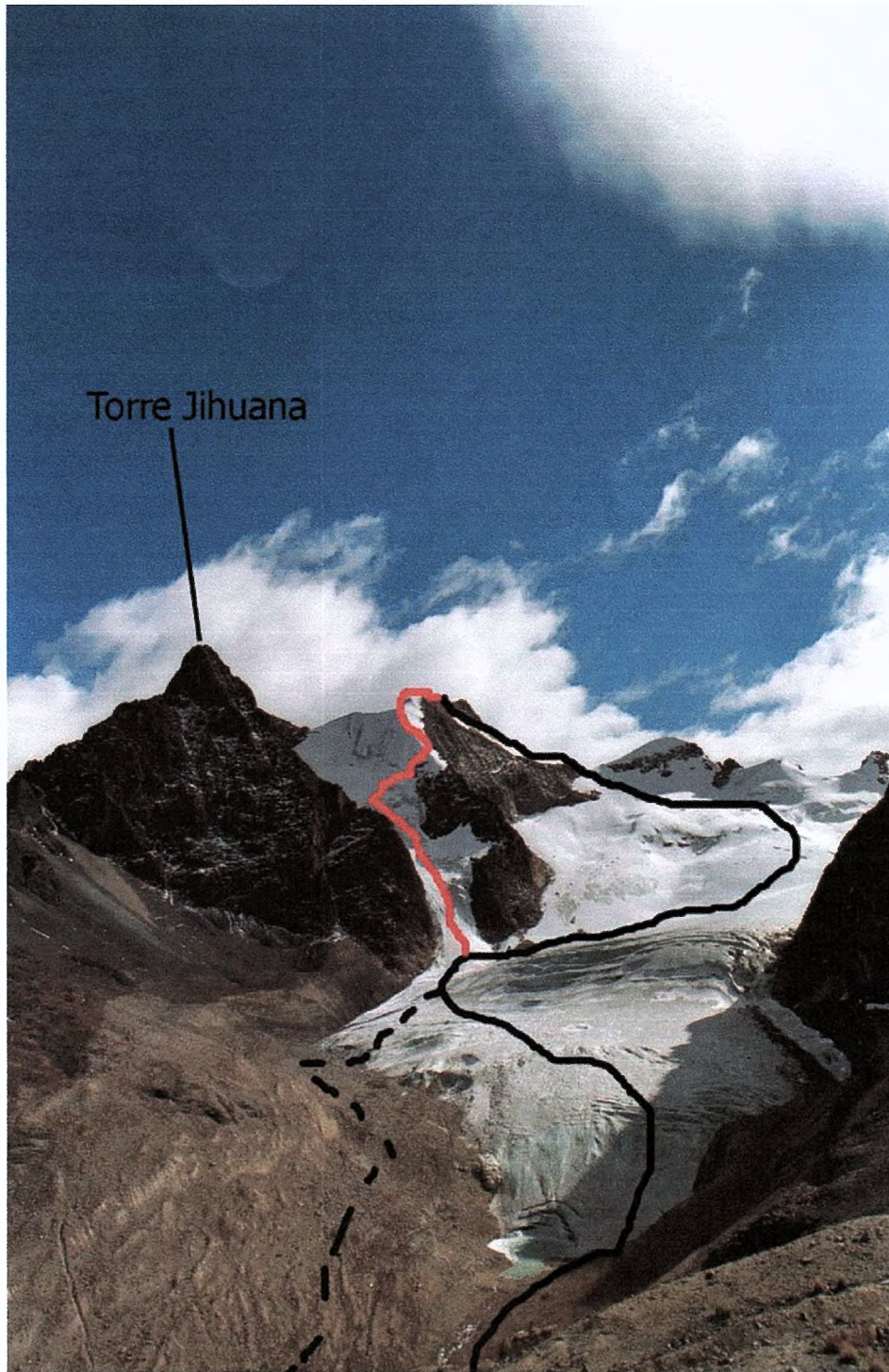
We left our rucksacks, axes and crampons at the foot of the final rock section that led to the summit. Sarah and Tim moved left to scramble scree and follow the knife edge ridge to the top whilst Matt and Ted climbed directly up *Severe* rock. We followed the same route back to camp.

Tim Moss

3. JC & John's route **Height:** 5500m **Grade:** **Climbers:** JC & John
(peak 10 on map, pg 10)

It was a late departure for us; it was after nine that we left base camp. Our initial goal was to climb the rocky mass that towered east of base camp. Wanting to do some traditional rock climbing, John and I took the most direct route. The conditions were not favourable for placing protection as all potential cracks and outcrops disintegrated upon application of minimal force. It took us a little over two hours to surmount this section. The mass of rock was much shorter than anticipated; in fact, it ended only half way to the top of the ridge that we were aiming for. We stopped for some snacks and then followed outcrops of rock and ice among a sea of scree. The going was in fact much tougher than anticipated, especially when the outcrops ended. Every step up involved a slip down and the trudge seemed relentless. After an hour or so, we had to take a rest every few minutes. When we finally reached the ridge and followed it to what we thought was the highest point, it had taken us more than four hours. We gained a magnificent vantage point and assessed other potential snow and ice routes. The way down was much easier; the scree slope took less than fifteen minutes and then followed a mining path we had discovered earlier down to the base camp.

Jingwen Chen



Route 2 (in black) onto the subsidiary peak of Torre Jihuana. Descent shown as a dotted line. Route 8 followed the descent of route 2 and then took the path of the red line. Descent was via route 2.

4. Recon route

Height: 5440m

Grade:

Climbers: JC, Ted, Sarah
& Tim

(peak 9 on map, pg 10)

This route finding mission was to find out whether we could scramble up the ridge south of Gigante Grande. We started off at around eight in the morning and followed the path that was discovered by John and I. It was easy work until we reached the scree slopes. We aimed for a small glacier toward the north and made our way around it towards what seemed like a break in the ridge line. Sarah, Ted and Tim decided to explore the break and headed up a steep slope of ice. It was dangerous work as loose rock kept rolling off, but they saw what they came to see. The 'break' was just an indentation in the ridge line and there was a sheer drop of hundreds of metres on the other side. It was decided that any further progress would be too hazardous and the team returned.

Jingwen Chen



Route 3 (black) and route 4 (red).

5. San Pedro**Height:** 5590m **Grade:** PD**Climbers:** JC, Matt, Tim &

(Peak 6 on map, pg 10)

Sarah

It was still dark as we departed base camp. There were five of us without the company of Ted. It had been snowing all night, but everything was calm. The trek to the base of the glacier was tough as visibility was limited to about ten metres and all we could see on the ground was six inches of snow. Everyone just traced Matt's footprints and he followed the sound of trickling stream under the ice and snow. John, feeling unwell at this stage, decided to return to base camp.

When we reached the glacier everything had began to clear and the ascent of the glacier was safer and quicker than expected. We went West around the more heavily crevassed part of the glacier. The climb became a long trek and it was a matter of stamina to keep going. The four of us were all tied into one rope and this continued to the base of the steep frozen neve slope that stretched to the ridge that would lead to the peak of San Pedro. We shortened the rope between us and got down on all fours. The climb was fairly short but sustained all the way until we straddled the knife sharp snow ridge. Unfortunately, the weather started to worsen and a white out became imminent. However, the route was obvious and we carried on. The wind increased and as we slowed down, we became colder. About ten meters from the top, we reached a slab of rock with minimal protection and Matt was given the task of overcoming the obstacle. After only a few minutes the elements were upon us, and the rest of us wanted off. After discussion, we started the descent. After the ice slope we met up with Ted who decided to come all this way to see what was happening. We all roped up and got down before it got dark.

Jingwen Chen

6. Cerro Sofia**Height:** 5720m **Grade:** AD+**Climbers:** Matt and Ted

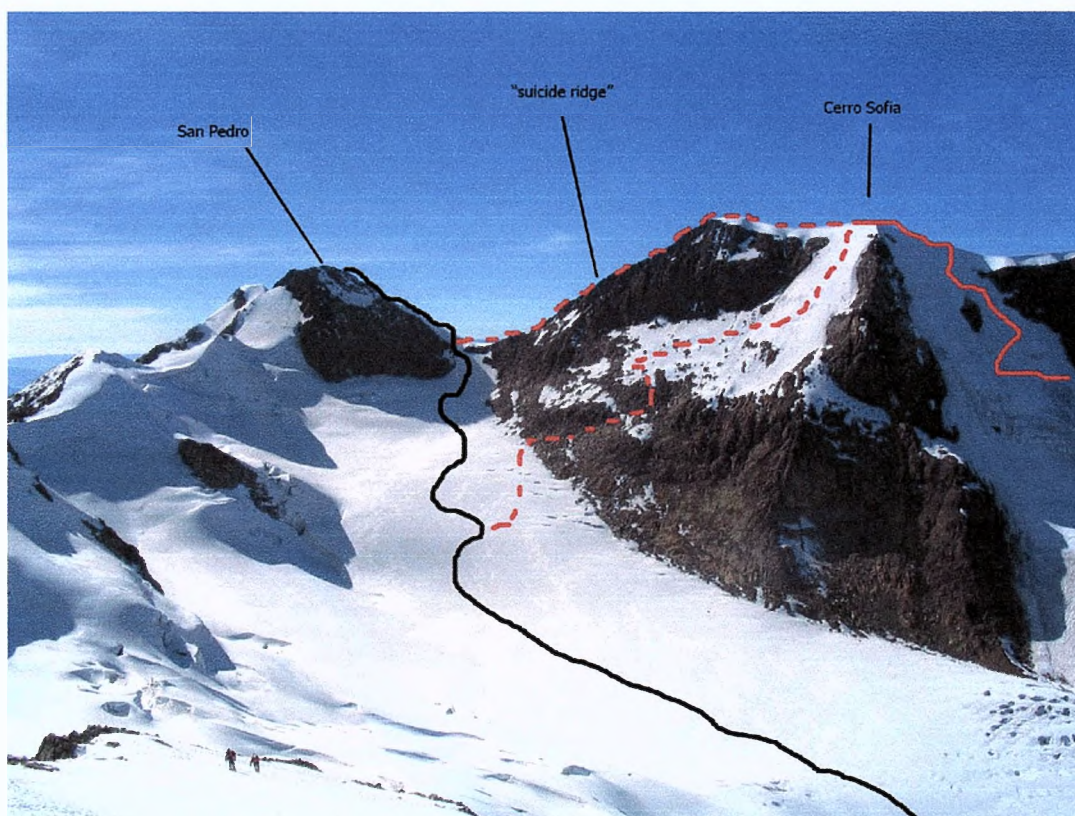
(Peak 7 on map, pg 10)

Sarah & Tim

Matt, Ted, John and I awoke at 4am and ate chocolate pudding. Matt and Ted left slightly ahead of John and I. We were to climb in two teams of two. Our planned route was the west facing snow slope between Socavon Gigante Grande and Cerro Sofia. We started up the valley and gained the snout of the glacier (Map item B). Matt and Ted remained ahead of John and I; we could see them starting up the steep snow as we made our way to the right of the crevassed region of the glacier (Map item C). We zig-zagged up the slope, moving with crampons facing down and moving French-style as necessary. Matt and Ted made quick progress, generally using one axe and continuing to zig-zag. It was wonderful, compact neve. John and I took longer, front-pointing and using two axes, largely to help John feel more secure on the terrain. We accessed the ridge by climbing over the large crevasse and cornice at the top of the slope. Turning left, we headed uphill to the summit of Cerro Sofia. We spotted Matt and Ted, already

back down on the glacier below. It was ~ 1 pm. The summit was a beautiful, flat, snow peak. The weather was moody; there was cloud in the sky but it never snowed. We were unsure of the best descent and eventually chose the north rock ridge down to the col with San Pedro. We moved together and John lead, placing occasional pieces of protection as he went. There was one point where I stopped to belay John. The rock was typically loose. We moved carefully but relatively slowly; it was 4pm before we got to the col. The col was another steep neve slope. Unfortunately, we were further delayed on the descent of this because John's crampon fell off. It was 6pm before we reached the glacier. We headed back in the encroaching darkness. As we descended the lateral remain on the north-west side of the glacier snout we spotted the head torches of Tim and JC coming to find us. It was after 7pm when we returned. Matt and Ted were long back but were also shattered. We discovered that they had descended a short, north facing, snow slope on Cerro Sofia. They had deemed the ridge suicidal because of the loose rock so we nicknamed it "suicide ridge." The Wayfayrers' meals came in useful at the end of the day.

Sarah Griffin



Route 5 (black) and route 6 (red). Descent from Cerro Sofia (route 6) was either via "suicide ridge" or the north snow slope. The climbers in the foreground are Matt and Ted.

7. Laram Kk'ota Chico / Height: 5380m Grade: Moderate Climbers: Tim
Cerro Pobre Cristo Height: 5460m
(Peaks 2 and 1 on map)

I left at 8:30am and followed the path around the west side of the lake, back towards the road. I left the path and took a more direct line up the steep slope to my right. Two hours of slogging brought me to the first summit, Laram Kk'ota Chico, at the southernmost tip of the ridge. I then followed the skyline ridge to the second summit, Cerro Pobre Cristo which took a further ninety minutes. The final summit slope had a covering of snow but rocks protruded through making for easy scrambling. I descended the summit slope then left the ridge and picked my way through the selection of scree slopes. A few slopes came out at the top of cliffs but otherwise the descent was straightforward.

Tim Moss

John and Sarah also scrambled onto Cerro Laram Kkota Chico from the south ridge. It was a very blustery day and the ridge was reminiscent of Crib Goch, but shorter (and less busy). It was, however, an excellent little trip.

Sarah Griffin

8. Ice Angel's falling Height: 5740m Grade: D Climbers: Matt and
(Peak 4a on map, pg 10) Sarah

Matt and I left at 4.30 to climb the ~300m ice route onto Torre Jihuana. This was a side glacier that we had been eyeing up all week. It was not quite vertical but looked challenging. We decided to walk up to the base of the climb via the northern lateral moraine. We roped together and I went ahead until I was no longer comfortable moving without protection. Matt went ahead, placing ice screws in solid ice. We continued to moved together. Eventually he belayed me on two ice screws and I joined him. The sun was coming up and we put our sunglasses on. It wasn't a sunny, clear day but was rather windy with fast moving clouds that partially obscured the sun. I lead on, placing ice screws such that there were one or two between us. Small crevasses in the ice provided welcome rests for aching calves. I stopped when I was out of ice screws and Matt continued ahead, soon reaching easy-angled ice. The ground became snowy. As we moved up it became apparent that we were on perfect wind-slab. The snow of a few days previously had collected on this easier angled slope and chunks were falling off beneath our feet. This was my

scariest moment of the trip. We were committed to the slope and moved quickly, reaching steeper ground that felt safer and then back into deep snow again. We hadn't been able to see this top slope clearly and were now aware of the huge Bergshrund ahead of us. We crossed it via a snow bridge on the right hand, North side. We traversed rightwards and reached the rock ridge on our right. This afforded us some security but we were still forced to wade up steep snow to the top. It was 2pm. We were now at the South end of the ridge that we have reached previously (route 2). The rock ridge was loose and horrible but we now knew the descent down, the same as for route 2. We made it back around 5.

Sarah Griffin

9. Cerro Ferrocia **Height:** 5720m **Grade:** **Climbers:** Ted and John
(Peak 12 on map, pg 10)

Ted and I left base camp at about 9am. We walked round the lake and up several hundred metres of scree, the ascent of which was hard-work and dispiriting. We then followed the ridge; from the evidence of the mast that we found concreted into it, we were probably not the first ascensionists. At one point we both had to jump across a deep chasm. We had hoped to travel all the way along the ridge back to base camp, but encountering a tricky descent where the ridge was very narrow and extremely loose, and there was nothing to belay from, we decided that, as this was our last route before we went home, discretion was the better part of valour and we returned the way we came. Our descent of the scree was much more rapid than our ascent: ~250m in about 10 minutes.

John Tomlinson

Health and safety

All six members of the expedition had basic first aid training. Ted had completed an outdoors-specific course in December 2003 and Sarah and JC both completed the "Far from help" first aid course at the Royal Geographical Society in 2004. A list of the first aid equipment that we took with us can be found on page 28. No major health and safety incidents occurred on the expedition. We did experience the minor problems listed below.

Altitude sickness

This only caused us problems during our acclimatisation excursion to Huayna Potosi base camp (see Acclimatisation).

The inevitable stomach upsets

Tim seemed particularly prone to this. Treatment involved rest and re-hydration sachets.

Chesty cough/infection

Tim had brought a cold with him to La Paz which John caught. This developed into a persistent chesty cough which he eventually took a course of erythromycin for. Sarah also developed a similar cough which was worse after climbing to over 5000m.

Cuts and scrapes

Matt managed to take a chunk of skin off his finger whilst cleaning his stove. Feeling a little foolish, he nursed it back to health, taking care to keep the wound clean. Sarah managed to open the skin at the base of her calf, after having walked for too long with her boots too tightly laced up. Similar care was taken of the injury!

Snowblindness

On the day we climbed San Pedro, the weather was overcast. Without anyone else in the group realising, Tim had not worn any eye protection on the glacier. He spent the next night in some discomfort and was forced to rest the following day.

Equipment

Unfortunately, the tents we borrowed from UCL let us down. Tent zips breaking was the biggest problem that we had with our equipment. Otherwise, we felt our equipment helped us cope well with the conditions we entered. We bought a lantern that we never used; we lacked a communal area where this would have been most useful. We brought far too much rock climbing gear from the UK. We had hoped we would find more solid rock than we actually encountered.

Return to La Paz

The same drivers that had taken us to the Quimsa Cruz arrived to pick us up at the road on 9th July. It had taken us the previous day to move back around the lake. At the end of that day we'd cooked up our remaining supplies. This involved Matt mixing together our last Wayfayrers' meals

which happened to be in 3 different flavours. The Wayfayers meals were, as a rule, excellent and very useful at the end of long days out. The chocolate pudding had soon become the breakfast of preference too; however, one should be very cautious about mixing the flavours. We gave our excess of pasta and flour to the Bolivian Cholita and miners who lived at the road side of the lake. The miners were the only other people we had seen during our time in the Quimsa Cruz. Occasionally, they were spotted heading onto the ridges along well worn paths and once two came by our camp. We had a broken Spanish conversation in which my, "Donde Vive," seemed a little limited! The cholita brought us a bog of piping hot potatoes in return for the pasta.

The drivers woke us up on the morning of the 9th and we headed back to La Paz without incident. We'd all had an enjoyable expedition. Matt flew back to London the following morning and the rest of us had some travelling time in Bolivia. This included visiting Lake Titicaca, the Salar de Uyuni and Sarah and Tim climbed returned to Huayna Potosi and climbed the 6088m peak.

Fulfilling our objectives

(by Sarah)

We are still collating information about the climbing that has occurred in the Quimsa Cruz. This is a bigger task than I ever imagined. Some knowledge has been gained through reading the climbing literature and visiting the area. However, knowledge is accompanied by more confusion! Peaks in the Quimsa Cruz have been named by all the visitors to the regions including Aymaran, Quechuan, Spanish, German, Japanese and English-speaking people. Routes have been reported on mountains that have been given names but little or no indication of location.

After some discussion with Lynsay Griffin, we have decided to appeal to the climbing community for pictures and information about routes climbed in the Quimsa Cruz. Please get in touch with me. (sarah@quimsacruz.info)

After meeting Bill Thurston at the Alpine Club library, I was invited to the Alpine Club seminar about the Andes. I met Jose Carmalingi of Andean Summits and the idea to set up a Quimsa Cruz website was born. This will provide an easy means to collate and make available this information about the Quimsa Cruz. Please visit www.quimsacruz.info

Diary

Getting There		
Day	Date	Description
1	Monday 14 th June	Flights from Heathrow; JC, Sarah, Ted & Tim stuck in Miami
2	Tuesday 15 th	John & Matt arrive in La Paz, others spend day on South Beach
3	Wednesday 16 th	Recon La Paz, adjust to time difference/altitude

La Paz		
Day	Date	Description
4	Thursday 17 th	Shopping: food, base camp supplies, maps etc; meet Carlos
5	Friday 18 th	Downhill mountain biking on the World's Most Dangerous Road
6	Saturday 19 th	Spend night in Huayna Potosi Hut (~4700m) in Zongo Valley
7	Sunday 20 th	Return to La Paz; last minute shopping and last supper

Base Camp		
Day	Date	Description
8	Monday 21 st	Drive to Quimsa Cruz; set up temporary camp (Item A)
9	Tuesday 22 nd	Shuttle gear around to north side of lake for Base Camp (see map)
10	Wednesday 23 rd	Finish carrying gear around the lake and establish Base Camp
11	Thursday 24 th	Recon walk up valley to glacial snout (Item B)
12	Friday 25 th	Rest Day

The Climbing		
Day	Date	Description
13	Saturday 26 th	Sarah/Tim climb <i>San Francisco</i> (1); Matt/Ted recon up glacier
14	Sunday 27 th	Rest day (eat hot dogs)
15	Monday 28 th	Matt, Sarah, Ted & Tim climb <i>Torre Jihuaña</i> (2); JC/John climb an unnamed summit (3)
16	Tuesday 29 th	Rest day (eat greasy sausage and egg sandwiches)
17	Wednesday 30 th	JC, Sarah, Ted & Tim recon <i>Gigante Grande route</i> (4)
18	Thursday 1 st July	Rest day (and short walk)
19	Friday 2 nd	High winds stop climbing plans; go walking instead. Sarah & John climb Cerro Laram Kkota Chico (7)

20	Saturday 3 rd	JC, Matt, Sarah & Tim climb <i>San Pedro</i> (5)
21	Sunday 4 th	Rest day (eat donuts and pizza)
22	Monday 5 th	John, Matt, Sarah & Ted climb <i>Cerro Sofia</i> (6)
23	Tuesday 6 th	Tim climbs <i>Laram Kk'ota Chico & Pobre Cristo</i> (7)
24	Wednesday 7 th	Matt/Sarah climb <i>Ice Angel's Falling</i> (8); John/Ted climb <i>Cerro Ferecio</i> (9)

Getting Back		
Day	Date	Description
25	Thursday 8 th	Clear Base Camp and move gear back to other side of lake
26	Friday 9 th	Rendezvous with jeeps and drive back to La Paz
27	Saturday 10 th	Matt flies home; everyone else starts their holiday...

Sponsorship

We received sponsorship from three different organisations:

- The University College London Expedition and Travel Committee £3,000
- The British Mountaineering Council and the UK Sports Council £600
- The Mount Everest Foundation (Ref: MEF 04/27) £500

We were also given support by way of discounted equipment from the following companies:

- First Ascent UK (UK providers for Black Diamond, MSR, Platypus, Therm-a-Rest and more)
- Rab Carrington
- Wayfayrer Foods

We would like to thank: Ingrid Crossland and First Ascent for supplying us with more equipment than we could possibly have hoped to use; Steve Bridges and the rest of Rab for keeping us warm and looking good out in the mountains; also, Karen Gill, Natalie Winmill and Wayfayrer Foods for their tasty pouches which were infinitely less effort to cook at the end of hard day's climbing.

And for going one step further and just giving the stuff away, we would also like to thank:

→ Nikwax Waterproofing

Additional Help and support

A number of people lent us equipment and we would like to acknowledge the following people:

Dave Barlow

Eric Schaberg

Richard Lee

Ian Lau

Drew Ferguson

Nick Shuttleworth

John Dale

Thom Allen

UCL Mountaineering club

And finally, we'd like to thank the following people.

Thanks to Stuart Halford for suggesting climbing in the Quimsa Cruz and to Paul Platt for sending us a copy of their expedition report.

Thanks to John Biggar for sending us our first copies of the BIGM map.

Thanks to Sue Savage for her advice and for letting us see her slides of the Quimsa Cruz.

Thanks to Carlos Escobar for arranging our transport and fuel.

Thanks to Adolfo in the Hotel Rosario for all his help.

Accounts

Exchange rates: 1.74 US\$ to £ 1
7.95 Bs to US\$ 1
US Bs £

Income in pounds sterling

UCL expeditions fund	3000.00
BMC and UK Sports Council	600.00
MEF	500.00
Cleaning North London hut	150.00
Interest	0.05
Total income	4250.05

Total income excluding UCL expeditions fund	1250.05
--	----------------

The student, UCL, members of the expedition shared the money from UCL expeditions fund. Our working colleagues paid more of their own way.

Total income per UCL member	958.34
------------------------------------	---------------

Total income per non-UCL member	208.34
--	---------------

Expenditure prior to leaving the UK in pounds sterling

Flights (for 4 people)	3026.80
(for 2 people)	1600.00
BMC Insurance	1284
Radios	50.00
Drugs for first aid kit	32.00
30 Dehydrated pasta meals	11.85
Flapjack	30.00
Wayfarers meals	135.60
Alpine club library photocopying	6.00
Total	6176.25

Expenditure in Bolivia

Cash charges for withdrawing money in Bolivia		16.51
Hotel Rosario 6 people for 5 nights 2 people for 1 extra night plus breakfasts and airport collection		316.41
Food, travel and accommodation for Huayna Potosi base camp (Acclimatisation trip)	188	108.046
Maps from BIGM	70.00	5.06
Hardware (spade, bowl, etc.)	200.00	14.46
lantern	35.00	20.11
batteries	50.00	3.61
Gas canisters	150.00	10.84
30 litres Petrol	150.00	10.84
Food and veg	1435.50	103.77
Transport to the Quimsa Cruz	1240.00	712.64
Travel around La Paz, extra food, misc.		28.91
Total		1351.23
Total expenditure		7527.48
Total expenditure per person		1254.581

Personal contribution from each UCL member	296.24
---	---------------

Personal contribution from each non-UCL member	1046.24
---	----------------

Food List

Wayfayers meals from UK

2	x6	Chicken Casserole
2	x6	Chilli con carne
6	x6	Beef stew & dumplings
1	x6	Sausage Casserole
1	x6	Chicken pasta and mushrooms
2	x6	Treacle pudding
3	x6	Chocolate pudding

From a newsagent in Camden:

60	Flapjacks
----	-----------

From Iceland in Camden

5	x6	Add boiling water-type pasta meals
---	----	------------------------------------

From Tim Moss from the UK

1	box	PG Tips
---	-----	---------

From La Paz

Pasta

2	kgs	Tagliatelli
1	kgs	Spaghetti
1	kgs	Penne
1	kgs	Quick cook pasta
3	kgs	butterfly past
2	kgs	u-bend pasta
2	kgs	rice
2.4	kgs	noodles

breakfast and baking

6	bags	semolina
5	kgs	oats
10	kgs	flour
4	kgs	sugar
2	large tins	milk powder
1	sachet	dried yeast
1	bags	salt

jars and bottles

		cooking
1	bottle	oil
1	bottle	olive oil
1	jar	ketchup
1	jar	mustard
1	jar	olives
1	jar	strawberry jam
1	jar	apricot jam
2	jar	honey
1	jar	chocolate spread

From La Paz

Snacks

~100	bars	chocolate
~ 50	bars	nuts
~ 50	bars	fudge
lots of		dried fruit & Nuts
2	bags	sweets
5	packets	plain sweet biscuits
1	packets	iced sweet biscuits
1	packets	crackers
1	packets	cinnamon crackers

Tins and packets

18	tins	tuna
6	large tins	fruit
4	tins	sardines
2	tins	corned beef
8	tins	tomato puree
11	tins	chopped tomatoes
2	packets	tomato puree
1	bag	assorted soups

drinks

1	jar	nescafe
1	packet	coca tea
4	kgs	hot chocolate mix

meat

7	x10	frankfurters
5	packets	bacon (but not as we know it)
6	large	chorizos

fresh food

4		cabbages
1	bag	onions
2		pineapples
2		broccoli
1	net	potatoes
1	bag	spring onions
1	sack	potatoes
32		green apples
1	bag	peppers
1	bag	carrots
	small	
1	bag	green beans
1	bags	garlic cloves
20		Bread rolls
30		eggs
2	slabs	cheese
1	round	mozzarella

Group kit list

Main Kit

3 x MSR multi-fuel stoves	1x Gas stove	5x Cooking pots	4xLid pans
5x Fuel Bottle	2x GPS/Altimeter	2x Altimeters	6x Maps
Guide Books	2x three person tents	1x two person tent	
Heavy Duty Shovel	6x 60m 8mm Ropes	Tent Spairs	
5x Water/Fuel Containers	6x short-range radios		

3 x Rock climbing Lead Rack (List for each rack)

6x Slings	10x Quickdraws	1 Sets Wires	Set of Friends
Set of Hexcentrics/Hexes	Loads of Ab tat	Selection of pegs	5x screwgates

Winter rack (Total)

13x Assorted Ice Screws	2x Snow Shovels	2x avalanche probes	3x pulleys
-------------------------	-----------------	---------------------	------------

Personal kit list

Main Kit

2 * Trekking Poles (optional)	Climbing axe + hammer	Mountaineering axe	Pair Crampons
Pair Anti-balling plates	Mountaineering Boots	Helmet	Head torch
Goggles/Glacier Glasses	Main rucksack (70-80l)	Daysack (approx 50l)	Harness
Belay Devise	2 Prussik Loops	4 Slings	2*screw gates

Essential Clothing

Thermal top+trousers	Warm trousers	Salopettes	Down Jacket
Waterproof jacket+trousers	Thick+liner Socks	Gaiters	Balaclava+hat
Gloves (3 pairs)			

Other Items

Washkit	Iodine tablets	Sun Cream	Lip Salve
Pocket Knife	Watch	Camping/Bivi Gear	Thermarest
Down Sleeping Bag	Bivi Bag	Water Bottle	Mug
Thermos	Knife, fork, spoon	Mess tin	Lighter
Needle+Thread			

Optional Items

Pee Bottle	Logbook	Reading book
------------	---------	--------------

Group Medical Kit

Equipment:

Scissors
Antiseptic wipes
Bottle of antiseptic
Safety pins
Assorted plasters x 25
Assorted adhesive/Micropore tape x 6
Crepe bandages x 6
Assorted Non-stick dressings x15
Tulle dressings x 5
Triangular bandage x2
Steristrips 3 packets
Assorted gauze swabs

Sterile kit consisting of needles, syringes and gloves

Drugs:

Pain relief:

Paracetamol 500mg
Ibuprofen 400mg
30mg dihydrocodein x32

Antibiotics:

Ciprofloxacin 500mg x 32
Erythromycin 500mg x 150
Antiseptic cream 1x tube

Antifungals:

Canesten 1% 1x tube

Antiemetics:

Cetirizine Tablets

Others:

Imodium Capsules x16
Dioralyte x 20

Each pair of climbers carried their own preferred first aid kit and their own medication. Most took Acetazolamide (Diamox) 250mg to help acclimatize.

Useful Contacts

Paul Platt	Paul.Anne2@btopenworld.com
Stuart Halford	stuart.halford@impact-dtq.com
Sue Savege	sue@savege.com
Carlos Escobar	newhorizons20@hotmail.com
Royal Geographical Society	http://www.rgs.org/
The Alpine Club	www.alpine-club.org.uk/
Dr. Hugo	
Alain Messilli	alain@mesilli.com
John Biggar	john@andes.com
<i>Bolivian embassy in the UK:</i>	www.embassyofbolivia.co.uk/
<i>Foreign and Commonwealth office:</i>	www.fco.gov.uk/
<i>British embassy in Bolivia:</i>	
www.britishembassy.gov.uk/servlet/Front?pagename=OpenMarket/Xcelerate/ShowPage&c=Page&cid=1025281354212	

References

<i>Previous expedition reports</i>	<i>MEF number</i>
Quimsa Cruz Lakeland 2001	01/27
Women's Quimsa Cruz/Illmani	00/13
Cymru/Bolivia Quimsa Cruz 2000	00/27
Sheffield Bolivian 2000	00/28
Welsh 1999 Quimsa Cruz	99/34

Guide books:

Bolivia: A climbing guide. (1999) Yossi Brain. Cordee, UK

The Andes: A guide for Climbers (1999) John Biggar. BigR publishing

The Andes of Bolivia: An adventure and climbing guide (2004) Alain Messilli.

The Lonely Planet and Rough Guides to Bolivia were also helpful.

University College London, Quimsa Cruz, Bolivia 2004



From Left to right: Tim, JC, Matt, Sarah and John. Ted's in front!