Report on the exploratory visit to Lima, Peru
4-8 March 2012
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Pontificia Universidad Católica del Perú (PUCP)

Overview
Founded: 1917
Ranking: #3 in Latin America
18,085 BS Undergraduate Students
5,027 MS Graduate Students
111 PhD Graduate Students
Selectivity: accepts/applications = ¼

The school is trying to make the transition from a PUI to an institution with more of a research focus. There are currently 10 PhD programs.

BS Programs
Students leave HS at 16 and enter five year programs for the BS. Students spend the first two years in general studies. They enter into their program of study in year three.

MS Programs
Majority are part time, self supported, and finished in 3 semesters. Degree consist of coursework, research, and a thesis. Entrance requirements are a BS degree, CV, and transcripts. Exit requirements are 50 cr hrs, a thesis, a published article, and English. Job advancement is the #1 reason for getting a MS.

PhD Programs
Full time program. Entrance Requirements: a MS degree; one conference publication; speaking, reading, and writing English skills as proven by TOEFL; thesis proposal; and an advisor. Advisor determines GRE and TOEFL scores for acceptance into program. Peruvian government requires fluency in two languages besides Spanish for graduation. Typically 3 years and 48 cr hr to graduate. Advisor provides $15k tuition ($5k/year) and $800/mo stipend.

Exchange Programs
Approximately 68 exchange students go abroad per year. Students coming to PUCP need to be survival fluent in Spanish. There are no dorms on the PUCP campus.

Field School Program – Jeanette Sampe
A program where students come to Peru for studies through Peru, typically the summer. $4k covers everything from when they arrive to when they depart the Lima airport. Programs include Archeology in San Jose de Moro, Art & Science of Peruvian Gastronomy, Biomedical approach to the Peruvian Health System, Peruvian Politics, Peruvian Ethnomusicology, Bioarcheology in San Jose de Moro, Spanish and Inca Culture in Cusco, and Archeology & Conservation.
**College of Science - Elizabeth Doig**

Degree Programs
Math: BS, MS, PhD 13 PhD Faculty
Physics: BS, MS, PhD(optics) 10 PhD Faculty
Chemistry: BS, MS 8 PhD Faculty

Faculty in the college have a good background but need a research focus, perhaps a collaboration with established researchers. Faculty and students can get money to collaborate with researchers abroad. Administration is thinking of ways to jump start research, one is for faculty to collaborate with scientists in the USA. There is no NSF or NIH in Peru. The mining industry funds a great deal of research. There are many remote sensing opportunities with the mining industries.

She envisions BS and MS study abroad programs with a research program. Two faculty members, one at each university, collaborate. They exchange their students who are working on the same projects. Faculty exchanges are also a part of this.

**Chemistry Department – Eric Cosio**

Met with MS program faculty. (Patricia Morales – MS program head) They presented the following points of interest for PUCP MS program.
1. RIT faculty to visit PUCP and teach short courses in 2013 and 2014.
2. PUCP students to visit RIT for either short term research or attending courses. (Virtual Courses, i.e. DL Courses) Exchange program between RIT and PUCP students.
3. Establish contacts between some faculty members in both universities with the same research interests.

This is a good opportunity for chemistry to establish collaborations in the area of natural products.

**College of Engineering – Domingo Gonzalez**

Degree Programs in Engineering: 18 BS, 7 MS, and 1 PhD
Accredited by the Board for Engineering and Technology (ABET).

The department is interested in the following opportunities.
1. Dual degree programs between PUCP and RIT. They have this with several other universities. Students essentially get degrees from both institutions. Students must apply and be admitted to the US university.
2. Exchange students. (Students must have Spanish survival skills.)
3. DL programs for their students.
4. Establishing coop experience opportunities in Peru for RIT students.

**Medical Imaging Laboratory – Benjamin Castaneda**

This lab is in the College of Engineering.
Interests/Desires
1. Collaborating with our faculty, especially CIS.
2. Submitting an NSF PASI or PIRE grant with us, perhaps for a conference.
3. Networking opportunities and programs.
4. Exchange of students.
5. Taking our CIS DL courses.
They are doing parallel processing with CUDA in Matlab.

**Corrosion Institute** – Santiago Flores
Study corrosion of metals by accelerated processes.

**Geology** – Carlos Tavares Correa
Very interested in coastline morphology changes and how remote sensing could help their study.

**Radio Science** (not Radio Astronomy) - Jorge Heraud
Setting up 30 m dish on campus for training. Next step a sub mm dish 2 hr away in the mountains connected to campus via optical fiber. 30 m dish delayed because of 2k year old Incan ruins found when digging the foundation for the dish. He was very calm for such a 3 to 4 year setback. He said he was involved with other things. A satellite construction & launch, and seismic luminescence!

**Fulbright Commission of Peru**
Henry A. Harman Guerra

RIT has prestige with Fulbright. Felicitas Bazan, an RIT MBA and Fulbright Scholar, started Danper Trujillo S.A.C. which is now the top asparagus producer and exporter.

In Latin America, Peru is second to Brazil in most things.

Sciences and Engineering a top priority, but the arts should not be forgotten. They do not care about the proposed science (they will not rate it). For them the important part is the cultural exchange in the sciences and engineering.

Fulbright wants to send 15 Peruvians per year to the US for MS on J1 visa. No one will be funded to study in the USA with a TOEFL less than 80. They will not send students to law schools or for MBA any more. Scientists and engineers are top priority candidates. MS degree scientists and engineers are in high demand in Peru by industry. Peruvian universities produce only a fraction of the MS grads that are needed in the country.

Peruvians do not have a philanthropic nature. Peruvian government does not contribute to Fulbright either. He has personally raised $10M from mining companies to help support Fulbright initiatives.

His quotes… “RIT is not well known in Peru. We do not participate in educational fairs in Peru. RIT does not promote itself. We should send them brochures about our programs. These can be on display for students who come to the Commission office.”