Preface

Professor Colin B. Grant, leader of the delegation

I led a UK delegation to Chile and Argentina in March 2014. It was clear from our interactions both with major universities and state funding bodies in Santiago and Buenos Aires and from across the region that there was a strong desire for deeper collaboration with UK universities, which are rightly held in high esteem.

The visit also granted instructive insights into the diversity of both HE systems. The sense of partnership for reciprocal benefit was well conveyed by our delegates and equally well received by our hosts. Tangible follow-up will be vital and there are already positive signs of bilateral collaboration and Newton Fund applications.

Professor Colin B. Grant

Professor Grant is Pro-Vice-Chancellor for Internationalisation at the University of Bath, and a member of the IU International Strategic Advisory Board (ISAB).
Introduction

From 17-21 March, a delegation of 12 representatives from 12 different UK higher education institutions met with government ministries, research funding councils, and leading universities in Chile and Argentina. The aim was to identify new partnership opportunities for UK higher education in these two neighbouring, but quite different, higher education sectors.

The mission was organised by the UK Higher Education International Unit (IU) and the UK Foreign & Commonwealth Office (FCO). The enthusiastic support of the British Ambassadors and officials in Santiago and Buenos Aires was fundamental to the success of the visit. The delegation was led by Professor Colin Grant - Pro-Vice-Chancellor for Internationalisation at the University of Bath, and a member of the IU’s International Strategic Advisory Board (ISAB).

While the delegation programme was confined to the capital cities of Santiago and Buenos Aires, a number of Chilean and Argentinean higher education institutions from further afield were able to join for workshops and speed-dating sessions. The arrival of the delegation in Santiago coincided with the installation of a new government led by President Michelle Bachelet – one which has placed higher education right at the top of an ambitious reform agenda.

This visit report provides an overview of the mission’s principal objectives, detailed notes of the key meetings, and identified areas for follow-up work.

Comments or queries arising from the visit report, or enquiries regarding future IU delegations to the Americas region are invited via the contact details provided below.

Sean O’Connor
Policy Officer, Americas
020 7419 5415
sean.oconnor@international.ac.uk

General enquiries
info@international.ac.uk
Context: Chile

- The arrival of the IU delegation closely followed the inauguration of a new government in Chile, led by Michelle Bachelet (president 2006-2010). Education in general - and higher education in particular - had been the focus of campaign promises, following a series of student protests complaining at the high cost and variable quality of provision.

- President Bachelet promises to dramatically increase public funding of the education sector, and to reverse the privatisation of education which commenced in earnest during the 1980s. Bachelet has a strong mandate for change but may find it challenging to deliver the depth of reform promised during electoral campaigning, given the depth of expectation.

- Chile wants to move to a more knowledge based economy, and expects to double expenditure on research and development to 0.8 of GDP in the next three years.

- A number of universities in Chile have mature relationships with Europe and the USA. A limited number have well-developed relationships with UK higher education institutions. All those universities visited by the delegation were keen to increase the number of partnerships they operate with the UK.

Context: Argentina

- Overall state investment in Argentina’s education system has increased considerably during recent years, growing from 3.86% of GDP in 2003 to 6.47% of GDP in 2011.

- In March 2013 the Argentinean government launched a new strategy for science, technology and innovation: *Innovative Argentina 2020*, outlining a national plan in these areas and declaring an ambition to increase public expenditure on research from 0.65% of GDP to 1.65% of GDP by 2020.

- As part of the *Innovative Argentina 2020* plan, CONICET - the National Scientific and Technical Research Council - aims to create 720 new positions for science and technology researchers and approximately 4,000 new fellowships for graduate students and postdoctoral researchers. Argentina is also working to increase the number of engineering graduates it produces each year, from 5,000 in 2013 to 10,000 by 2021.
## UK delegates

<table>
<thead>
<tr>
<th>INSTITUTION</th>
<th>DELEGATE</th>
<th>POSITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cranfield University</td>
<td>Professor Tom Stephenson</td>
<td>Head of School of Applied Sciences</td>
</tr>
<tr>
<td>Durham University</td>
<td>Professor Andrea Noble</td>
<td>Professor of Latin American Studies</td>
</tr>
<tr>
<td>Glasgow Caledonian University</td>
<td>Janet Roberts</td>
<td>Director of Development and International Engagement</td>
</tr>
<tr>
<td>Middlesex University</td>
<td>Anthony Hackney</td>
<td>Deputy Director Business Development</td>
</tr>
<tr>
<td>Northumbria University</td>
<td>Rob Carthy</td>
<td>Director International Development</td>
</tr>
<tr>
<td>UK HE International Unit</td>
<td>Sean O’Connor</td>
<td>Policy Officer, Americas</td>
</tr>
<tr>
<td>University of Bath</td>
<td>Professor Colin Grant</td>
<td>Leader of the Delegation PVC, Internationalisation</td>
</tr>
<tr>
<td>University of Bristol</td>
<td>Professor Tim Gallagher</td>
<td>Dean of Science</td>
</tr>
<tr>
<td>University of Edinburgh</td>
<td>Dalinda Perez</td>
<td>Director, Office of the Americas</td>
</tr>
<tr>
<td>University of Kent</td>
<td>Professor Roger Vickerman</td>
<td>Dean for Europe</td>
</tr>
<tr>
<td>University of Sheffield</td>
<td>Jo Purves</td>
<td>Director of Sheffield International</td>
</tr>
<tr>
<td>University of Ulster</td>
<td>Professor Anne Moran</td>
<td>PVC, Education Partnerships and International Affairs</td>
</tr>
<tr>
<td>University of Warwick</td>
<td>Maria de la Pisa</td>
<td>Senior Liaison Officer, Latin America</td>
</tr>
</tbody>
</table>
Summary

- During the five day programme the delegation met with a range of representatives from the higher education, research and innovation sector in both countries, including officials from national research funding agencies and the Ministries of Education and, in Argentina, the Ministry for Science and Technology.

- In Chile, the Newton Fund was an important focus for discussion. The opportunities associated with this £4 million UK commitment (£8 million when match funding is included) were discussed at a workshop with Chilean academics and officials at the headquarters of the national science and technology council, CONICYT.

- The delegation undertook site visits and bilateral meetings to six Chilean universities. It also met with the Chilean Council of Rectors, CRUCH, representing the leaders of 25 of Chile’s traditional, established HEIs and discussed opportunities for UK students to study in Chile via the Learn Chile network.

- Further meetings took place in Santiago with biotechnology institute ‘Science for Life’ (Ciencia & Vida) with education analysts, to discuss the implications of the new government’s education reform package. A GREAT-branded reception at the British Ambassador’s residence provided an opportunity for networking with approximately 200 attendees from Chilean higher education institutions and lead agencies.

- In Argentina, the programme opened with a morning of presentations from representatives of UK Trade & Investment, BecAR - Argentina’s principal scholarship funding agency, the Ministry of Education, national science and technology council (CONICET), and the Ministry of Science and Technology, before a networking lunch with invited Argentinean universities.

- An afternoon of speed dating meetings at the British Embassy in Buenos Aires allowed UK and Argentinean participants to discuss opportunities for collaboration, and to discuss how these might be taken forward. Day two of the programme in Buenos Aires was dedicated to site visits to Argentinean higher education institutions in the Buenos Aires area.

- The delegation - and related opportunities - will be tabled for discussion at the next meeting of the International Unit’s Latin America Community of Practice (June 18th 2014). Follow-up to the mission will be coordinated collectively via the British Embassies in Santiago and Buenos Aires and the UK Higher Education International Unit.
Meeting notes: Chile

Breakfast Briefing with Ambassador Fiona Clouder

- British Ambassador Fiona Clouder had been in post for only a few weeks at the time of the UK delegation’s visit. Having worked for the UK Research Councils prior to entering the diplomatic service, she voiced her enthusiastic support for the UK higher education delegation’s objectives, and spoke warmly of the importance of higher education and research to the UK-Chile bilateral relationship.

- The Newton Fund was expected to effect a step change in research activity between the two countries, Ambassador Clouder explained, noting the quality of Chilean science in particular. The extensive possibilities for research which draws on Chile’s specific natural resources and environment - such as Astronomy, Marine Science, and Renewables - were also discussed.

- The Chilean undergraduate degree typically entails a six to seven year period of study, which includes a substantial thesis element and concludes with a period of one to two years’ professional training. Some within the Chilean sector would prefer to bring undergraduate degrees more into line with European/US norms, though change is not anticipated for the foreseeable future.

- Opportunities for PhD, post-doctoral, and researcher mobility are well provisioned for by central agencies such as CONICYT. There is less comparatively less by way of dedicated funding to support mobility of students at Master’s level.

Pontificia Universidad Católica de Chile (PUC)

- Founded in 1888, the Catholic University of Chile (or PUC, by its Spanish acronym) is an institution committed to academic excellence. It receives 42% of the top performing students in the PSU - Chile’s national university entrance exam - and is currently seeking to develop new international partnerships for undergraduate and PhD programmes, collaborative research, and innovation.

- Juan Larrain, Vice-President for Research, outlined an internationalisation strategy focusing on Europe, North America, and Asia, but noted that links with the UK to date had been limited. PUC already hosts approximately 1,600 international students each year but would like to increase this, to support an ambition to improve standards of spoken English at the university.

- An introductory presentation stressed the centrality of research to PUC’s institutional identity, and highlighted the extent to which PUC has contributed to pivotal innovations in Chile’s national development. Former President Sebastian Piñera is among PUC’s alumni.

- PUC representatives noted the importance, in the Chilean context, for institutions to demonstrate the wider or societal impact of university research; UK institutions should bear this in mind when introducing proposal for joint research projects.

- PUC is seeking to improve the central coordination of its numerous research units, and to develop joint post-doctoral training approaches for these centres in collaboration with international partners.
The UK system of Doctoral Training Centres was of particular interest.

- Around two-thirds of academic staff at PUC are qualified to PhD level (a very high proportion by Chilean standards; the national average is estimated at approximately 10%). The percentage of PhD-qualified staff will increase with the introduction of new blood to the academic staff over the coming years; it is now a requirement that all new appointments hold a PhD. Increasingly, PUC also expects new appointees to have undertaken post-doctoral training, ideally with overseas experience.

- Undergraduate students at PUC are encouraged to begin developing their research skills from an early stage. The university identifies itself as playing a leading role in nurturing the next generation of leading Chilean researchers and innovators. In the past two years, PUC has worked to develop its relationships with local high schools to support teacher training programmes at the university.

- There is a keen appetite to develop PhD co-supervision agreements with UK institutions. PUC is not necessarily seeking to formalise joint-award programmes with UK institutions; short stays for PUC PhD students in the UK - and the opportunity to host UK PhDs at PUC - would also hold strong appeal (and, in some cases, could be facilitated with grants from CONICYT).

- PUC currently supervises around 1,000 PhD students, of which 20% are international (a majority from the Americas region). PUC is well networked with universities across Latin America and should be considered an important point of entry for UK HEIs seeking to connect with a wider constituency of researchers in the region.

- Alvaro Ossa Daruich, Director of Innovation at PUC, described PUC’s new innovation centre; with the new centre, PUC aims to centralise a majority of innovation activity in a single campus location, to promote cross-disciplinary approaches and accelerate the patenting of PUC research. PUC has won government innovation funding for applied research in astroengineering, biomedicine and education, which comes with a requirement for international collaboration.

- PUC is seeking to refine its IP commercialisation strategies in conjunction with UK and wider international partners. PUC is also very keen to develop partnership with UK institutions so as to access the Horizon 2020 research funding mechanism.

- PUC would like to host high level academic forums involving a large number of academics from a single institution spending a week or more at the university. A recent, successful example of this type of visit had seen 50 academics from the University of Tokyo spend time at the PUC campus.

- Around a quarter of all research at PUC is in the field of biomedicine. Research priorities for collaboration with the UK were summarised as follows: astronomy; natural disasters; indigenous studies; political sciences; sustainable development and urbanism; biodiversity; education and inclusion; nanotechnology; nursing; Chilean literature, and Chilean cultural heritage. There was strong interest in a multi-university collaboration centred around some broad research areas, to be kicked off by a follow up delegation.
Universidad de Santiago de Chile (USACH)

- Founded in 1849, USACH is one of Chile’s oldest universities. It maintains a significant number of international links with Europe but has limited engagement with UK institutions at present. The delegation was welcomed by a range of USACH staff, including senior representatives from the university’s offices and departments of Research and Innovation; Chemistry; Biology; Architecture; Linguistics and Literature; Mathematics; and Advanced Studies.

- The university has three principle research centres: Nanoscience and Nanotechnology; Food Science and Technology; and Agricultural Biotechnology - this latter focusing mainly on salmon aquaculture. USACH also has a Felix Klein Centre for Mathematics. Discussion focused principally on collaborative opportunities in the field of nanotechnology, food science and technology, biotechnology, mathematics pedagogy and teaching, Latin American studies, and English language teaching.

- The Dean of Science at USACH commented that USACH was keen to host groups of UK academics and researchers for month-long stays, to identify prospects for collaboration and to consider potential for joint research in USACH’s priority areas. USACH is particularly keen to learn from UK expertise in technology transfer.

- USACH representatives highlighted the extent of the English language challenge facing Chile, and welcomed the opportunity to collaborate to improve English language teaching and pedagogy. USACH is undertaking extensive work in widening participation, to which it is clearly very committed - the university would like to understand how UK institutions have successfully implemented such policies.

- USACH’s Faculty of Languages and Linguistics has exchange agreements with universities in the USA, Australia, and Europe but has not yet secured an agreement with a UK institution. All faculties are interested in opportunities for undergraduate exchange and would like to identify a UK partner.

Universidad del Desarrollo (UDD)

- The Universidad del Desarrollo or ‘University of Development’ (UDD by its Spanish acronym) is a young institution, founded in 1989, but one which has developed very rapidly during its short lifespan. It currently has 13,000 undergraduate students, 17 research centres, and describes itself as committed to widening participation - it provided scholarships to 1,500 students in 2013.

- UDD aims to cultivate a spirit of entrepreneurship in its students and prides itself on close links with industry - industrial placements are an important element of UDD programmes. The physical sciences and Medicine were identified as UDD’s principle areas of interest for international collaboration. UDD is currently host to approximately 200 international students from diverse sources, and sends a similar number of its own students overseas each year.

- Medicine and Business are perhaps UDD’s standout subjects; UDD medical students score second highest in the country in Chile’s National Medical Exam (completed following graduation) - only PUC students achieve overall higher scores. The UDD MBA is ranked second in the whole of Latin America.
• UDD has its own business incubator which it encourages UDD students to make use of in developing new start-up companies (UDD has secured a seed funding grant of $1.5m via Chile’s CORFO - agency for economic development - to support projects linked to the UDD business incubator).

• UDD is currently developing a Technology Transfer Office (TTO) and visited the UK in 2013 and 2014 to learn from UK models of TTO. At the time of the visit, UDD had recently received a sizable and sought-after grant from the Chilean government to explore ‘Scientific innovation in Medicine’; the university is interested in working in collaboration with UK academics with relevant expertise to secure strong outcomes from research linked to this grant. The Institute of Sciences and Innovation (ICIM) project will focus on four broad areas: regenerative medicine; genomics; neuroscience; and cancer.

• Some UDD undergraduate programmes offer teaching in English (particularly Business, but a growing number of other subjects such as Architecture). This was highlighted as an advantage for UK universities seeking UG exchange opportunities.

• At the time of the visit UDD was in the process of coordinating a study visit of 30 UDD academics to Finland for a one week programme examining the Finnish approach to teaching and pedagogy. UDD would be glad to consider similar visits to UK institutions focusing on identified priority areas which reflect UDD strengths.

Ministry of Education of Chile

• [At the time of the visit some senior officials still had yet to be appointed, following the inauguration of the new governing administration just a few days earlier.]

• Chile’s education reform programme under President Michelle Bachelet was outlined in broad terms, with the focus on supporting workplace skills for Chile’s young people, increasing social mobility, and increasing access to quality education.

• Ana Maria Quiroz of DIVESUP – the Ministry’s higher education division – confirmed the Ministry’s commitment to a UK-Chile mutual qualifications recognition agreement, to facilitate the free movement of students, academics, and graduates between the two countries.

• Isabel Gonzalez of Chile’s English Opens Doors outlined the context for English language learning in Chile. English is mandatory from Chile’s fifth grade onwards (this translates into eight years of total provision). The English Opens Doors programme organises English language learning summer camps, competitions, and similar initiatives to promote the study of English. The programme also funds initiatives to improve the quality of teaching of English in Chile, in which the British Council already collaborates with the Ministry.

• English Opens Doors has only recently begun to focus on provision within the Chilean higher education sector (as opposed to school-age provision). Programmes offering short-stay immersion opportunities for Chilean teachers at UK higher education institutions would have very strong appeal. An initial cohort of e.g. 20 teachers was suggested as a starting point for this type of collaboration.
The Ministry of Education has experience of organising seminars in Chile at which invited academics from institutions overseas deliver guest lectures on pedagogy and teaching to cohorts of Chilean trainee teachers. The Ministry is keen to ramp up this type of activity as part of a drive to dramatically improve the quality of English teaching in Chile. The government’s ambition is for all trainee teachers of English to have achieved a C1 level of proficiency at the conclusion of their training.

The Ministry runs an outward mobility programme for undergraduate university students of English pedagogy to spend a term abroad in the UK. Currently few of these students go to the UK. There could be the opportunity for a framework agreement between the Ministry and IU to rectify this.

Beyond English language teaching, the Ministry is keen to host UK academics with expertise in science teaching for a similar series of teacher training seminars (Spanish language delivery would be the preferred model here, however; UK academics wishing to present in this capacity would ideally need Spanish language fluency).

The Ministry operates a teacher training centre which focuses on upskilling qualified teachers and education professionals - this operates across all areas of teaching, but is particularly focused on teachers of Maths and Science.

The Ministry is potentially interested in distance learning technologies for the delivery of English language training for trainee teachers of English, but demonstrated a clear preference for a blended mode of delivery rather than online-only.

**Universidad de Chile**

Universidad de Chile is the country’s oldest university, founded in 1842. In addition to the great potential for direct collaboration with the university’s principle faculties and academic staff, its longstanding and mature relationship with CONICYT and CORFO mean it is also an important access route to national laboratory facilities and research initiatives throughout Chile. In terms of research collaboration with the UK, the following priority areas were highlighted:

- Medicine
- Astronomy
- Food and nutrition
- Architecture
- Economics
- Arts
- Physical sciences and Engineering
- Mathematics

When developing new agreements with UK higher education institutions Universidad de Chile places high importance on the following elements in particular:

- Reciprocal student mobility
- Academic mobility
- Double degrees programmes
Doctoral co-tutelle agreements

- The university has a very high number of agreements with French universities - about 90% of all international postgraduate level exchange is with French institutions. This was explained in terms of Universidad de Chile researchers’ strong professional ties to the French sector, and has not been the result of a strategic prioritisation (nor should it be interpreted as a reluctance to work with UK HE).

- Universidad de Chile hosts around 30% of all CONICYT-funded PhDs in Chile; around 80% of all Universidad de Chile PhD students are in receipt of CONICYT funding, reflecting the national importance of the institution and its research facilities.

- The university is able to access CONICYT funding to support its staff in pursuing overseas fellowship opportunities of up to eight months’ duration, or PhD students following co-tutelle agreements lasting up to two years. Universidad de Chile is also interested in international agreements focusing on sharing of laboratories and high-tech equipment, and has ready access to CORFO ‘centres of excellence’ (discussed below) and their facilities as well as the university’s own research installations.

- Interest in collaborating with Universidad de Chile in the field of innovation and technology transfer should be directed to the central office for Innovation; collaborative research proposals, exchange opportunities, or co-tutelle agreements can be developed at the level of Faculty or via the International Office (the university is flexible on this point).

- Universidad de Chile has been very closely involved in an initiative of the Chilean economic development agency, CORFO, to establish centres of research excellence in areas of national priority, most of which involve the participation of international research teams. CORFO centres of excellence established to date - a majority of which have Universidad de Chile staff as part of their core research teams - focus on the following areas:
  - Mathematical modelling
  - Complex engineering
  - Mining technology
  - Nanotechnology
  - Solar energy
  - Climate change
  - Genomics
  - Geothermics

- Universidad de Chile is involved in Erasmus+ programmes and would very much like to increase its participation in Erasmus+ and Horizon 2020 funding in collaboration with UK partner universities. For UK students seeking short-stay study opportunities in Chile, the university offers intensive Spanish language courses and provides summer school courses in Latin America politics, human rights and transitional justice (all taught in English).

CONICYT (National Science and Technology Council) workshop

- Chile’s national innovation system is currently being reconsidered under the new government. CONICYT does not necessarily insist on 50:50 match funding for international projects; there is some
In terms of CONICYT’s international cooperation programme, 33% of funding went to partnerships involving European partner organisations in the period 2010-13. The approval rate for collaborative research projects is high: around 37% of all project applications are approved for funding.

CONICYT representatives confirmed that all funding mechanisms are open to some form of international collaboration. An increasing number of CONICYT mechanisms require projects to secure international collaboration in order to benefit from funding. Specific international co-operation funding instruments are as follows:

- International networking between research centres (researcher mobility: this year included in Newton Fund)
- Joint research projects (this year included in Newton Fund)
  - Study visits abroad for engineering students
- Doctoral degree in Chile (for foreigners)
- Short stays for foreign PhDs in Chile (2-12 months)
- Further programmes for formation of Chilean advanced human capital (details follow)

CONICYT-funded international student mobility is well provisioned for at all levels. Master’s and Doctoral level degree funding schemes (‘Becas Chile’) receive a high rate of applications. In the past 3 years, the UK has been the number 1 destination of such scholars. However, funding of international mobility at post-doctoral level is less well used; CONICYT is keen to increase post-doctoral exchange with the UK via such instruments.

The UK has succeeded in securing a very high number of Chilean students seeking international study opportunities at Master’s and PhD level. At the same time, however, the UK has performed relatively poorly alongside comparator countries in terms of the number of UK researchers accessing FONDECYT-funded projects in Chile - e.g. post-doctoral training opportunities. Only one of 124 top level scientists funded to work in Chile between 2010-2013 was from the UK.

CONICYT fund all areas of academic research; there are no subject-specific or thematic restrictions on projects eligible for funding. Senior figures at CONICYT were positive about working with the UK but clear that there was a need to change the UK relationship with Chile in HE and research - moving from an emphasis on hosting CONICYT-funded scholars in the UK towards a more reciprocal relationship. This was framed positively as ‘an opportunity for the UK’.

Further calls with CONICYT under the Newton Fund will be promoted via the IU.

CONICYT meeting with Denise St Jean and Sharapiya Kakimova

CONICYT’s human capital strategy focuses on increasing the number of researchers in Chile via PhD training through the Becas Chile programme. Typically CONICYT awards around 400 grants for international PhD study and 500 grants for international Masters study each year.

The UK was the number one destination for CONICYT Master’s students in 2012: 166 studied in the UK vs 131 in the USA. Denise St Jean confirmed that a major draw to the UK was the one year
Master’s programme (compared with two years in the USA).

- English language ability was identified as the major obstacle to international study for Chilean applicants. CONICYT has funding for considerably more PhDs than it currently provides; good applicants were described as being more or less guaranteed to have their application approved.

- CONICYT representatives highlighted some of the difficulties associated with Chile’s very long (six-to-seven year) undergraduate degree programmes. Reform of the Chilean undergraduate programme is not currently part of the new government’s agenda, though CONICYT would support such a measure - to bring Chile more into line with European and US norms.

- The UK has seen strong growth during the past few years in terms of the number of CONICYT-funded students hosted at UK HEIs. There has been a markedly increased tendency among CONICYT applicants to favour the UK over the USA for doctoral training (this is understood to be linked to the generally - shorter time frame associated with doctoral training in UK)

- As well as the standard Masters and PhD Becas Chile schemes, there are also a selection of more niche schemes aimed at:
  - Masters in Education (for teachers)
  - Medical non-degree programme (up to 3 years)
  - Postdoc (up to 2 years)
  - PhD internship (up to 10 months)
  - Co-tutelle (up to 2 years)

Some British universities not in the top 150 list with expertise in teacher training have found the easiest way to begin working with CONICYT is via the Masters in Education programme

- CONICYT funded students completing postdoctoral studies in Chile are further encouraged to apply for CONICYT funding to access overseas internship and training opportunities (typically 10 months). Co-tutelle agreements can also be supported via this route.

- While CONICYT favours partnerships with global top 150 ranked institutions (as identified via a blend of THE/ARWU rankings, or top 50 ranked faculties (THE ranking), senior staff confirmed that they would also consider new agreements with UK institutions based on faculty-level expertise or quality of supervisor. At Master’s level, 93% of CONICYT scholarship grant recipients attend top 150 institutions.

- There is limited provision for PhD study in Education and related areas in Chile, making this a popular field for study overseas via CONICYT. The most popular Master’s courses in UK under Becas Chile are the social sciences.

- CONICYT representatives acknowledged that the Chilean HE sector tended to be quite protective of its students and that students often followed a very linear progression route - through the same institution or under the same supervisor - which was not necessarily advantageous in terms of professional development.
• The average age of application for CONICYT-funded students for Master's level study is age 30 (bearing in mind the long duration of undergraduate studies in Chile).

• CONICYT has recently increased funding associated with pre-sessional English programmes. Denise St Jean affirmed that mutual recognition agreement would be a great support to UK-Chile mobility. It was also confirmed that research in the social sciences was as much a priority for CONICYT as STEM-oriented projects.

Universidad de los Andes (UANDES)

• Opening presentations emphasised the Christian values of the institution, as well as the centrality of research to Universidad de los Andes’ (UANDES) identity. UANDES is a relatively small institution, with 6,268 students at UG level and 1,514 students at PG level. It currently offers four PhD programmes.

• Presentations highlighted the following areas of expertise/research concentration:
  - Health and medicine
  - Engineering
  - Economics and Business
  - Physics
  - Social sciences
  - Law
  - Philosophy
  - History
  - Education

• Vice-Rector Research and Postgraduate commented: UANDES is the only non-traditional university in Chile which has secured accreditation in all five concentrations/areas from Chile's national accreditation council (CNA) - a mark of quality.

• Director of Research commented that there were around 150 researchers at present, working on a balanced portfolio across the social sciences, medial and biomedical sciences and engineering subjects. UANDES coordinates approximately 50 FONDECYT funded projects at present, and received $2m USD per year from CONICYT to support research activities

• Director R&D and Innovation recently visited the UK and toured Oxford Isis. Innovation and technology transfer is increasingly to UANDES; it has opened two new innovation centres - one for Engineering, one in Biomedicine.

• $40m USD has been secured from external sources during the past three years for research and innovation - primarily in Medicine. Three spinout companies developed from medical research/innovation including Cells4Cells and Regeneros. UANDES tends to fund research projects 50:50 public:private. Highly ambitious in terms of securing future patents and marketing the institution’s innovations.

• Lays claim to several institutional firsts in terms of national research activity; secured the first 3D printer in Chile, which UANDES is using for medical innovation. Has successfully attracted a number
of international researchers from US Ivy League schools. Notes the appeal of the very high rate of approval for research funding in Chile.

- **UANDES** offers a one year foundation/general studies programme for students yet to determine their study priorities. Health, social sciences and law are the most popular taught courses.

- Robotics (including optics and artificial vision) and electrical engineering are of particular interest for future international collaborative projects. UANDES is also undertaking significant work in traffic research.

- **UANDES** has won government innovation funding for applied research in engineering, biomedicine and neuroscience, which comes with a requirement for international collaboration.

- An area of further development would be to identify short-stay opportunities for UANDES PhD and wider postgraduate student community to study/work in the UK. Study placements in the areas of Artificial intelligence and Electrical Engineering would be of primary interest. The ideal duration for a short-stay placement was described as six months to a year.

- **UANDES** has close ties with CONICYT and Chilean government - its excellent accreditation plays a key role in this - and aims to significantly increase its researcher community by 2017, particularly in:
  - Medicine
  - Education (including pedagogy, public policy).
  - Engineering disciplines
  - Management

- **UANDES** is keen to host UK PhD researchers and post-docs, and to host academics for short stays and longer term fellowships.

**Universidad Adolfo Ibáñez**

- A private, non-profit university, created in 1953 as an offshoot of the Valparaiso School of Business (Escuela de Negocios de Valparaiso). Adolfo Ibáñez became a fully-fledged university in 1988, and currently has 8,000 undergraduate and postgraduate students at campuses in Santiago, Viña del Mar, Valparaiso, and Miami. The university has a particular orientation towards Business, Liberal Arts and Humanities, Engineering (various), Law, and Social Sciences.

- Adolfo Ibáñez hosted the delegation for a short lunch meeting with a range of International and academic staff. A presentation, providing an overview of the university’s subject strengths and international priorities, is available from the International Unit on request.
Meeting notes: Argentina

Dr Esteban Rinesi, National University Council

- There has been significant expansion in Argentina’s education sector in recent years; a five-fold increase in the number of higher education institutions, and a similar increase in the total student population.

- Free, universal access to public higher education is an important core principle in Argentina. The Argentine higher education sector was described as having a relatively high level of internationalisation, particular with regard to postgraduate teaching and research collaboration with Latin American and European partners.

- The EU-Latin America Alfa Puentes programme was highlighted as an important initiative linking the two regions. Ministry officials suggested that Argentina would seek to bring Argentina more closely into line with European systems of higher education in the coming years (particularly concerning the length of degree programmes, to support the delivery of dual award degrees).

- Two declarations emerging from the 2008 Cartagena conference were flagged as guiding principles:
  1. Higher education as a universal human right and a priority for government investment.
  2. A commitment to progressively harmonise Latin American and international HE systems.

- Latin America is working towards the creation of a Latin American ‘higher education area’, and has witnessed the formation of new regional associations of universities, rectors’ clubs, and similar initiatives over the past few years which recognise the utility of collaboration to address shared challenges.

Ministry of Education

- Stressed the importance of quality assurance in the public HE system and highlighted a commitment to inclusion, access, and widening participation.

- Described the Ministry’s international cooperation as running across several strands:
  - Bilateral agreements between Argentina and other nations
  - MERCOSUR,UNASUR, CELAC regional cooperation programmes
  - International cooperation with global agencies e.g. UNICEF, UNESCO.
  - Soft loans programme for the development of human talent overseas
    - System of grants for international and Argentinean student
    - Language assistants programme, operated with British Council, Fulbright Commission, and French Embassy

- The creation of nine new regional universities in Argentina is an important, large-scale programme which could benefit from consultation with UK experts. A majority of these nine new universities do not yet have postgraduate programmes in place, which could represent an opportunity for the UK in
an advisory or consultancy role.

- Argentina’s public universities receive dedicated funding from the government to attend the annual EIAE conference - many will attend the 2014 event in Prague.
- MINEDU has its own grant award systems to support Master’s level training and short stays for PhD students overseas. Opportunities for training of Argentinean teachers in the UK would hold considerable appeal.

**BecAR**

- ‘Supporting graduate studies abroad in science and technology’. BecAR is a young programme, set up in 2012 with the support of the Inter-American Development Bank (IADB).
- BecAR operates via three main grant structures, catering to the following areas:
  - Master’s programmes
    - Existing agreements with Fulbright, Campus France, CUIG (Italy)
  - Specialisations in innovation, science and technology management
    - Existing agreements with Getulio Vargas, Ajou (South Korea), offering three-four month programmes abroad
  - Short stays overseas for Argentinean PhD students
    - Caters for up to nine months’ overseas placements
- Students funded by BecAR are required to return to work in Argentina following completion of their course of study. Preferred subjects for BecAR support are those which support national socio-economic development. BecAR is keen to support ‘productive innovation’ and technology transfer, and wider university-industry links.
- BecAR emphasises academic excellence in the selection of awardees but also seeks to support those from outlying regions of Argentina and students from lower socio-economic strata.
- Results of BecAR 2012-13 applications:
  - 2,300 applicants
  - 348 candidates selected for funding, from 100 towns and cities across Argentina
  - USA and Brazil the most popular destinations
  - Getulio Vargas centres in Brazil a major attraction in that country
  - Programme with South Korea focuses specifically on ICT, nanotech and biotech
  - Short stays for doctoral students are a major element of the BecAR programme - 80 awards will be offered annually, commencing 2014. Spain has been the most popular destination under this strand; English language ability is a barrier to be overcome (pre-sessional courses would be crucial to working with UK).
CONICET

- CONICET has research institutes across Argentina, staffed by 7,500 full time researchers. About 80% of research institutes are physically located within public universities. 90% of CONICET research units are co-administered with universities.

- CONICET focuses particularly on supporting early career researchers. It provides approximately 3,000 research grants annually, across a broad range of subjects. It was stressed that CONICET funding and research activity is comprehensive across all disciplines, and not confined to STEM.

- Argentina's research in Astronomy has particularly high impact and would be a fruitful area of collaboration with the UK. But collaborative research with the UK is currently very low - UK HEIs do not have any formal research agreements with CONICET research institutes at present. CONICET is keen to change this.

- Argentina is ranked 4th in the region (Latin America) in terms of the extent of co-authorship in scientific papers. UK-Argentina co-authorship is typically highest in the biological and physical sciences.

- Full PhD funding is available via CONICET for international applicants seeking to study in Argentina. CONICET has various mechanisms to train Argentinean experts overseas and to host international experts or researchers in Argentina for short stays. Typically, international researchers would undertake a 3-6 month stay in Argentina.

- CONICET has mature research agreements with a number of French research institutes and favours the ‘twin-laboratories’ model developed with partner agencies in France. CONICET encourages a consortia approach for large-scale research projects - drawing on expertise from multiple international partners - and currently coordinates a number of ‘big data’ type projects with overseas agencies.

- CONICET has a number of International Research Centres, established in conjunction with international partners’ expertise; e.g. Max Planck, CNRS France. CONICET would be open to approaches from the UK to establish new centres.

- Argentina has a number of research facilities which would hold singular appeal for UK experts in the respective fields, e.g. Pierre Auger observatory on cosmic particles for Astronomy.

Ministry of Science and Technology (MINCYT)

- Argentina has a strong track record of collaboration with European agencies and was the first Latin American country to sign a bilateral cooperation agreement with the EU in the field of science and technology - in 1999. Argentina has been active in EU FP7 projects, participating in 138 projects.

- MINCYT administers a significant number of international research partnerships, co-funding and coordinating joint calls for researcher mobility with 19 partner countries and 27 science and technology organisations. It operates a small programme to support research fellowships.
In terms of bilateral research projects, MINCYT currently operates 61 projects with institutions in 6 different countries (UK collaboration appeared to involve one HEI only). CONICET and ANPCYT (National Agency for Promotion of Science and Technology) are both coordinated via Ministry of Science and Technology (MINCYT).

MINCYT operates 34 'binational research centres' (many are 'virtual centres') in partnership with other countries, including a number of European partners (the UK did not appear to be among those listed). MINCYT very interested in establishing such a 'binational centre' in partnership with UK.

MINCYT has 5 international institutes focusing on:
- Industrial Design
- Biomedicine
- Biotechnology
- Bio-nanoscience
- Engineering Sciences

CONACYT Paraguay [attended meetings at the British Embassy, Buenos Aires]

- Annual operating budget of $97m USD. At time of meeting CONACYT was due to bid for a new allocation of $7-9m USD dedicated funding to support internationalisation of Paraguay’s HE and research sectors.

- CONACYT funds postgraduate programmes at Master’s, PhD and post-doctorate level. It is primarily interested in funding of PhD/post-doctoral study for Paraguayan researchers abroad, plus hosting international researchers in Paraguay (research grants of $7,000 USD are available for short stays in Paraguay).

- Priorities for international research collaboration were presented as follows:
  - Water
  - Transport
  - Infrastructure
  - Agronomy
  - Veterinary medicine
  - Health
  - Engineering
Chevening Argentina

- Chevening Officer Constanza Galli is keen to increase opportunities via Chevening in Argentina through partnerships with UK HEIs, in the following subject areas in particular:
  - Economics
  - Communications
  - Business
  - Environment
  - Public Policy

- The UK Foreign & Commonwealth Office has increased funding of Chevening programmes by a third as of 2014, and is seeking to expand corporate sector sponsorship to increase the number of awards available. Further work is being undertaken to develop the Chevening alumni network.

- Agreements can be developed both locally - via Chevening Officer Constanza Galli - and via Chevening’s central administrative office in the UK.

Universidad Nacional de San Martín (UNSAM)

- A young institution (established 1992), yet among the most important HEIs in Argentina in terms of research - rated second in Argentina in terms of citation impact. Closely connected to national research institutes, CONICET, INTA, SEGEMAR, and other national agencies for research purposes.

- Caters to a broad spread of disciplines across four principle faculties:
  - Science and technology
  - Business and economics
  - Humanities
  - Politics and Government

- Around half of UNSAMs various institutes are linked to Argentina’s national research institutes - UNSAM is an important point of entry for UK researchers seeking to national experts and high quality facilities across Argentina.

- Offers a wide range of taught Engineering disciplines across eight specialisms, with particular strength in medical and health technologies.

- PhDs programmes focus particularly on:
  - Molecular Biology and Biotech
  - Chemistry
  - Physics
  - Advanced materials
  - Nuclear
  - Applies sciences
A new building which will focus on cultural heritage research is under construction and will be unique in Argentina (a potential attraction for UK researchers with interests in the field).

UNSAM has undertaken significant investment in new facilities and buildings over the past few years, which has meant a progressive expansion of the university's physical footprint. A 14 hectare site has been developed purely for the development of technical innovation projects with private sector and public actors.

Numerous national research institutes are housed at UNSAM facilities, including the national nanotechnology institute, Antarctic institute, and CONAE (space) institute. Noted that all agreements in Argentina for nuclear collaboration would go through the national nuclear institute rather than via UNSAM, in the first instance.

UNSAM’s social and outreach activities are core to its identity. Furthermore, it is proud of its status as a public institution providing free tuition. It hosts a high number of international students, including many from the USA, and has a number of co-tutelle agreements with French universities. It is well connected to European HEIs and has significant collaborations with Georgetown University and the New School, New York.

UNSAM’s school of Architecture had been established for only a few weeks at the time of the visit; there may be opportunities to support the new school in its early teaching and research activities.

Dual degree programmes hold considerable appeal and would be a promising area for development with UK universities. UNSAM is engaged with the Erasmus+ programme with European partners and is committed to deepening participation in international research networks.

**Universidad Catolica Argentina (UCA)**

UCA is proud of its strong performance in the regional rankings. Pope Francis was Chancellor of UCA until a recent 'change in career direction'. Interests in international collaboration were summarised in the following general areas:

- Staff mobility
- Multilateral and research collaborations
- Moving from diverse international collaboration to prioritise a smaller number of deep international partnerships

Research and teaching had been perceived as distinct activities until quite recently in UCA’s institutional development; UCA is now seeking to integrate the two much more closely and to increase the impact of UCA research. Research areas of particular note/interest for collaboration include:

- Biomedical Research institute
- Food technology and farming
- Global Change/Atmospheric institute
- Argentina’s social debt observatory
- Chronobiology and sleep research
- Musicological research
- Modern Languages department is strong in translation and provides some courses delivered in English language. Legal translation is noted as an UCA specialism. A primary research interest is in the teaching of Spanish as a foreign language.

- The psychopedagogy department hosts a number of students (40) with Downs Syndrome and is interested in student and staff mobility and joint research.

**Universidad Argentina de la Empresa (UADE)**

- 22,000 students, located centrally in Buenos Aires. Offers intensive Spanish language tuition for international students, and short study abroad programme for home students.

- Student exchange with UK described as well developed (no statistics provided). ‘Doing Business in Latin America’ course a popular option for international students. Postgraduate Business courses via Graduate School of Business very popular.

- Multidisciplinary approach to teaching – bringing together students from across different disciplines (centralised campus highlighted as lending itself to this kind of cross-disciplinary process). Not active in research.
Key contacts

Chile

British Embassy Santiago

Karl Zammit-Maempel
Head of Economic Affairs and Climate Change
British Embassy Santiago, Avda. El Bosque Norte 125, Las Condes, Santiago, Chile
Tel. (0056) 2 2370 4184
karl.zammit-maempel@fco.gov.uk

Argentina

British Embassy Buenos Aires

Holly Tett
First Secretary Prosperity
holly.tett@fco.gov.uk

Constanza Galli
Chevening Officer, British Embassy Buenos Aires
(0054) 11 4808 2257
constanza.galli@fco.gov.uk
For further information

In the majority of instances, copies of institutional PowerPoint presentations for each of the universities visited are available on request from the International Unit.

Queries concerning the delegation or requests for contacts at the Chilean and Argentinian universities and higher education agencies which featured in the delegation programme should be directed to Sean O’Connor, Policy Officer Americas at the UK Higher Education International Unit:

Sean O’Connor
Policy Officer, Americas
T +44 (0)20 7419 5415
sean.oconnor@international.ac.uk

General enquiries: info@international.ac.uk