Professor Lafer, Fellow Presidents and colleagues, Good morning and Bom dia. It is a great pleasure for me to be here in this great city and at FAPESP the São Paulo Research Foundation.

All global institutions have their attention on Brazil, as indeed was evidenced by the success of FAPESP Week in London at the Royal Society two weeks ago and the eminence of the speakers and attendees. Professor Greenaway and I are hugely grateful therefore for the opportunity afforded to us by Professor Lafer and colleagues at FAPESP to meet with you all here today, to share with you reflections on internationalisation and collaboration in higher education, and to discuss how we might work together to address the common challenges we face as leaders of research-intensive organisations.

The University of Birmingham and The University of Nottingham first embarked on a strategic partnership in February 2011, combining strengths in international activity to enhance both universities' global impact. This was a bold step in deciding to collaborate rather than compete.

The partnership unites two leading, research-intensive UK universities with global reach, with a combined annual turnover of over £1 billion; a combined annual research income in excess of £300 million; campuses in China and Malaysia and regional offices in Delhi, Shanghai, Santa Catarina, Nigeria, Ghana, and Brussels.

Given the notable quality and ambition of Brazilian universities and one of the world's largest economies, both universities recognised the potential to enhance research connections and develop mutually beneficial partnerships with the leading Brazilian organisations to enhance research impact.

Over the past 3 years of enhanced engagement with Brazil, since our Pro Vice Chancellor for Research's initial visit with a delegation headed by the UK's Deputy Prime Minister, we have learnt a considerable amount about the research priorities for FAPESP and Brazilian Higher Education, and how we might work together in areas of key significance to address the common challenges we face.

By working in partnership and continuing our dialogue with our colleagues in Brazil over last 3 years we have learnt that:

1. Priorities for FAPESP and Brazilian higher education align closely with our own interests (and areas of research excellence), priorities for UK research councils, and indeed priorities for European Union funding streams. The new European Union Horizon 2020 scheme will provide €70.2bn funding over the next 6 years in areas of key importance to Brazil. The Universities of Nottingham and Birmingham, as two of the most successful institutions in securing research funding from the European Union, are well positioned to work on future European Union initiatives with colleagues in Brazil and to bring together our brightest and best researchers.

2. Priority research areas for Brazil, such as climate change, bio-energy and bio-diversity, are those where our research strengths align well with those of institutions in Sao Paulo. We already have academics working together on these areas with colleagues in Sao Paulo and have held successful workshops supported by FAPESP and other funding streams, on Bio-Energy, oil and gas with future workshops planned around bio-materials and food security.

3. Brazilian institutions are, like us, placing increased importance on internationalisation and global partnerships and your success in this area is evident: 30% of scientific papers by Brazilians now have a foreign coauthor, and Brazil's share of scientific papers globally continues to increase. Indeed, the number of jointly authored papers between the University of Birmingham and Brazilian academics has increased from only 22 in 2005 to 224 in 2012, tripling in the last year.

The higher education landscape has witnessed enormous changes over recent years with changing global orders through the rapid expansion and investment in research and development in emerging economies in the Far East and Latin America. We recognise that it is universities in these regions that will be the global power houses of the future, universities such as those sat around the table here today.

4. Finally, we recognise that the importance of national and international partnerships and collaborations in both the UK and Brazil, that drive impactful research outputs which can be translated to fuel the knowledge economy and economic development, cannot be underestimated. There is an increasing realisation that impactful research will cross all disciplines, and benefit societies in many ways from direct benefits to health and well-being, to impact on societal behaviour and social cohesion.

Much of our most impactful research at the University of Birmingham is conducted in partnership. In the UK, we have successfully implemented a number of co-investment approaches with partnership organisations. In 2012 we were awarded £60 million for the development of a High Temperature Research Centre in partnership with Rolls Royce. The Centre will help develop future generations of aero engines, making greener, more efficient air travel possible.

The new centre will be a unique casting, design, simulation and advanced manufacturing research facility. Focussed initially on the key manufacturing areas of investment casting, design for manufacture and systems simulation, the centre will then draw in additional research competencies related to these areas through wider industry and academic involvement.

Bringing together a leading global company with an internationally-recognised research group this new centre builds on a longstanding successful collaboration between the two organisations.

Similarly, the University of Birmingham is uniquely co-located with the University Hospitals Birmingham National Health Service Foundation Trust whom we have formed a partnership with called the Birmingham Health Partners. The aims of this partnership are to advance medical research and improve patient outcomes. Together, the Birmingham Health Partners are developing an Institute of Translational Medicine which will optimise clinical academic delivery in translational research.

We have also become increasingly active in the development of spin-out companies based on intellectual property from the University. We currently have a portfolio of around 26 companies valued at c. £230 million.

Globally, we are pursuing a partnership engagement strategy which focuses on three key regions: Brazil, China, and India, and on the city region of Chicago as our traditional partner North America. Our approach in each region is unique recognising the differences in each education system and approaches to internationalisation.

In Guangzhou, in south China, our engagement is based on a favoureduniversity partnership with the municipal government, dynamic research partnerships, bilateral relationships with leading universities, and nascent but very exciting industrial partnerships.

In the US we are developing exciting institutional partnerships in the Mid-West with institutions such as University of Illinois at Urbana-Champaign and we are starting to align our work with our partners in Brazil to ensure that we have a joined up approach to engagement and research collaboration.

This will be increasingly important where future funding streams encourage trilateral country partnerships, such as the Global Innovation fund shortly to be launched between the UK and US government which will prioritise collaboration with Brazil, China and India.

The University of Birmingham and University of Nottingham partnership seeks to use the combined strength and resource of our two institutions to strengthen links with Brazil through the development of mutually-beneficial research and education partnerships with a range of stakeholders including leading peer institutions, funding councils, government organisations and industry, many of whom are here today. Genuine partnership with Brazilian organisations like you will enable us to collectively enhance our research power, raise our profile and demonstrate our global engagement.

Our international engagement has at its foundation faculty-to-faculty relationships and that is why we believe that supporting our academic engagement is key to the success of strategic partnerships.

Our academic engagement with Brazil also has a clear focus on enhancing mobility of students and research staff. Indeed this academic year we welcomed over 100 Science without Boarders Students to our campus and more than 20 jointly funded PhD scholars with CAPES.

We also have a successful Brazil Visiting Fellows scheme which has attracted over 25 early career researchers to our campuses over the past two years.

All of us that are serious about the internationalisation of our institutions must do so in ways that don't lead to homogenisation of institutions, partnerships, and institutional identity but rather to continuing developing and accentuating that which defines and distinguishes us in a global environment.

Perhaps the easiest *cliché* now in higher education is that higher education systems are being globalised and most higher education institutions are shaped most profoundly by that process that we often glibly christen globalisation. Here, though, there is a deep paradox.

As I have argued recently in *The Globalisation of Higher Education*, the challenge for universities is to understand the nature of the global challenge, to respond to global opportunities and the possibilities provided by the emergence of a mass market in international higher education, and indeed developments such as distance learning, trans-national education and Mass On-line Open Courses, whilst simultaneously retaining or even enhancing their identities as institutions. A process I described as 'being global and sounding local'.

The principal agent of change and development will remain institutions and funding organisations themselves, sometimes working alone, sometimes working collaboratively.

In facing the future we have much to learn from one another, much to gain from strategic collaboration, and much to share in terms of student and faculty exchanges.

We can then face a dynamic future with confidence that our current success can be the harbinger of future greatness. We must not, however, be complacent. To do so would be to fail both our institutions and the peoples and countries that we serve.

Through our partnership with FAPESP the Universities of Birmingham and Nottingham with FAPESP are already jointly funding 7 pump-priming initiatives with leading institutions in the State of Sao Paulo, all of whom are here today.

We are greatly encouraged by the success of these collaborations which we believe have the potential to lead to larger scale research projects. Today, we will launch the second round of funding which will further enhance the partnership between Birmingham, Nottingham and Sao Paulo.

Successful teaching and research partnerships that will define successful global institutions of the future are characterised by three things:

- First, <u>shared agendas and challenges</u>, which we have already started to identify jointly and will continue to do so.
- Second, availability of funding
- Third, trust and understanding and that is why as VCs of leading research universities in the UK being here today is so important, by having an opportunity to share with you first hand our experiences, by learning from you how we might work together more closely in future to address the common challenges we face; and most of all to demonstrate our long term commitment to working in partnership with Brazil.

David Eastwood

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