

出國報告（出國類別：國際會議）

**2012 年臺英與臺愛(爾蘭)之癌症與幹  
細胞雙邊研討會及兩國之科研補助  
機構合作訪問**

服務機關：行政院國家科會委員會

姓名職稱：林宗泰國合處處長

陶正統副研究員

派赴國家：英國、愛爾蘭

報告日期：101 年 12 月 17 日

出國時間：101 年 09 月 15 日 ~

101 年 09 月 22 日

## 摘 要

此次本處林處長宗泰於 101 年 09 月 15 日至 09 月 22 日赴英國及愛爾蘭係其至國科會擔任國際合作處處長以來，第一次到此兩個國家進行業務訪問，無論在政策或是實務面均具體促成臺灣與英國及愛爾蘭兩國科研之進一步合作。

此行林處長除了在臺灣與英國以及臺灣與愛爾蘭的2場雙邊幹細胞與癌症研究學術研討會開幕予以致詞，並與本會在英國4個協議單位進行工作會議，同時，與愛爾蘭科學基金會（SFI）及研究委員會（IRC）2個主要科研補助機構商洽未來合作，主要決議摘要包括與：

- (一) 生技及生科研究委員會（BBSRC）：在持續繼有之雙邊研討會之外，同意共同開辦及補助International Partnering Award（IPA）方案。
- (二) 英國人文社會科學院（BA）：持續雙方合作，於年底第 2 回對外公告徵求 IPM 計畫；雙方不排除主動推動政策性或跨領域主題之雙邊研討會。
- (三) 人文及藝術研究委員會（AHRC）：同意參與英方Research Networking Scheme（RNS）補助方案以促進兩國學者在尖端主題合作研究機會；未來可能共商提供博士生海外6-18個月研究補助方案；共同研議在數位人文（我人文處推薦主題）或創新經濟等主題籌辦雙邊研討會等。
- (四) 愛爾蘭研究委員會（IRC）：雙方表達簽署合作協議意願，並共同訂定補助台、愛兩國年輕研究人員（含研究生）之交流補助方案。

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## 壹、緣起及目的

國科會在英國科研之協議單位除了與英國皇家學院(Royal Society)等科學院長久維持關係且有實質合作方案外，與英國部份研究委員會(Research Council, RC)雖簽有合作協議，唯因其國際合作政策以往僅對少數國家主動開放，餘均採由下而上之作法，是以與本會較無具體的合作機制。而本會在 2010 年與英國文化協會(British Council) 共同規劃與籌組我國頂尖大學策略聯盟 (Taiwan Top Universities Alliance) 之大學研發長團、由臺灣大學校長李嗣涔教授擔任團長赴英國訪問 7 所大學及舉辦合作論壇，讓雙方大學了解彼此間研究專長與特色、尋求共同研究興趣及建立雙方研究合作的網絡之後，本會連續 3 年徵求「臺灣與英國頂尖大學前期合作計畫」讓國內的大學研究人員以團隊的模式與英國大學進行長期的合作研究，並補助了 50 個團隊！在創造並累積了如此的兩國學術合作需求與能量之後，加上英國在國際合作政策調整，本會認為現在是與這些 RC 洽談並強化彼此共同合作補助之適當時機，是以規劃本處處長至國合處到任以來，第一次的英國之行。

同時，由於愛爾蘭近幾年國家金融狀況不佳，明確表示政策上以其極有限的科技預算上，主要在以經營”企業”的概念來加速科技人才投入並求快速的研發產出或經濟效益，無法以保留固定額度模式進行國際合作。是以站在科技外交立場，本會只能與愛國學術機構以每年舉辦一場學術研討會維持兩國科研合作熱度與交情。因本會與英國 BBSRC 已於 9 月共同補助一場癌症及幹細胞研討會，而生醫領域亦洽為愛爾蘭優先推動的科研領域，是以在我駐愛代表處大使的全力支援與熱心協調下，本會安排於同一時段愛爾蘭進行同主題的研討會，提升整項學術活動效益；同時，安排處長能順道訪問，與愛爾蘭主要科研補助機構面對面商談了解該國科研發展政策與短中期規劃，以及探討雙方建立合作關係與機制之可能性及其方向。

## 貳、過程

### 甲、 訪問行程

日期/時間	行 程
<b>9月15日 (星期六)</b>	
19:15	抵達英國倫敦Heathrow機場Terminal 3 (長榮BR 067班機) 駐英科技組接機搭乘Heathrow Express赴旅館check-in Lancaster London Hotel LANCASTER TERRACE LONDON W2 2TY Tel: 44-20-72626737 Fax: 44-20-77243191 Website: <a href="http://www.lancasterlondon.com/home">http://www.lancasterlondon.com/home</a>
<b>9月16日 (星期日)</b>	

	自由活動
<b>9月17日 (星期一)</b>	
13:00	<p>出席2012台英幹細胞與癌症雙邊研討會 會議地點: King's College London Guy's Hospital Campus (Henriette Raphael Function Room) St Thomas Street London SE1 9RT</p> <p><b>Day 1:</b> Open Remarks 英方會議召集人: Dr Karen J. Liu King's College London Email: <a href="mailto:Karen.liu@kcl.ac.uk">Karen.liu@kcl.ac.uk</a> Tel: 020 7188 8035</p>
16:00	NSC/BBSRC工作會議
17:00	Dr. Tim Willis, Head of International Relations, BBSRC
19:30	<p>Day 1 Closing Remarks</p> <p>晚宴接待台英與會人員 地點 Grand Imperial London 101 Buckingham Palace Road, London SW1W 0SJ</p> <p>BBSRC與會人員:  <ul style="list-style-type: none"> <li>➤ Professor Douglas Kell, Chief Executive, BBSRC</li> <li>➤ Mr. Tim Willis, Head of International Relations Unit, BBSRC</li> </ul> </p> <p>KCL與會人員:  <ul style="list-style-type: none"> <li>➤ Prof Paul Sharpe, Department of Craniofacial Development and Stem Cell Biology</li> <li>➤ Prof Agi Grigoriadis, Department of Craniofacial Development and Stem Cell Biology</li> <li>➤ Dr Albert Basson, Department of Craniofacial Development and Stem Cell Biology</li> <li>➤ Dr Karen Liu, Department of Craniofacial Development and Stem Cell Biology</li> <li>➤ Dr Dusko Ilic, Embryonic Stem Cell Laboratories</li> <li>➤ Prof Mahvash Tavassoli, Clinical &amp; Diagnostic Sciences</li> <li>➤ Prof Lucy DiSilvio, Restorative Dentistry</li> </ul> </p>
<b>9月18日 (星期二)</b>	
10:00	<p>拜會英國工程暨物理科學研究委員會(EPSC)執行長Professor David Delpy及國際合作主管Dr Edward Clarke 地點:</p>

	<p>MRC head office (London) 14th Floor, 1 Kemble Street London WC2B 4AN <a href="http://www.mrc.ac.uk/About/Findus/index.htm">http://www.mrc.ac.uk/About/Findus/index.htm</a></p> <p>午餐簡餐 拜訪英國人文社會科學院(BA) Dr Debbie Soothill, International Manager (Policy), Ms Kate Kenyon, International Officer 地點: The British Academy 10 Carlton House Terrace London SW1Y 5AH 聯絡人: Dr Debbie Soothill +44 (0) 207 969 5276 <a href="mailto:d.soothill@britac.ac.uk">d.soothill@britac.ac.uk</a></p> <p>12:00 14:30</p> <p>拜訪英國藝術暨人文研究委員會(AHRC) Professor Mark Llewellyn, Director of Research 及 Miss Pippa Craggs, International Policy Manager 地點: The British Academy The Marks Room 10 Carlton House Terrace London SW1Y 5AH 聯絡人: Ms. Kate Kenyon +44 (0) 207 969 5276 <a href="mailto:k.kenyon@britac.ac.uk">k.kenyon@britac.ac.uk</a></p> <p>15:30</p>
<b>9月19日 (星期三)</b>	
上午	駐英科技組工作會議
下午 17:30 19:10	<p>文化導覽 抵達英國倫敦Heathrow機場第一航站 搭乘Aer Lingus EI-177班機赴愛爾蘭都柏林</p> <p>從機場搭乘至旅館check-in Mespil Hotel Mespil Road Dublin 4, Ireland Booking ref: 647574 Phone: +353 1 488 4600 Fax: +353 1 667 1244 <a href="http://www.mespilhotel.com/">http://www.mespilhotel.com/</a></p>

9月20日 (星期四)	
	台愛研討會 地點: Dublin City University (DCU)
09:05—09:10	DCU處長致詞
10:30	Coffee Break離開DCU赴Dublin市區
12:30—14:30	與愛爾蘭科學基金會(SFI), Professor Mark Ferguson, Director General餐敘
10:30	地點: The Shelbourne Dublin 27 St Stephens Green North Dublin 2
18:00	晚宴host by駐愛爾蘭代表處
21:30	回Mespil Hotel休息
9月21日 (星期五)	
上午	Dublin 文化導覽
10:30	拜訪愛爾蘭高等教育研究單位
14:20	抵達愛爾蘭都柏林機場
15:50	搭乘Aer Lingus EI 174班機赴倫敦Heathrow機場Terminal 1
21:35	赴倫敦Heathrow機場Terminal 3 轉乘長榮BR 068班機返台
9月22日 (星期六)	
21:00	抵達台灣中正機場第二航廈

## 乙、臺灣與英國幹細胞及癌症研討會

本項研討會是本會與英國 BBSRC 於今年初正式共同開辦雙邊研討會來的第一場合作活動，英國又是生醫領域的強國，我們確實希望透過這場研討會能顯著促進兩國學者進一步之合作研究。而英方為表與我合作補助的重視與誠意，是以本會議安排由 BBSRC 國際關係處負責人與本處國台處處長代表彼此單位於會議開幕時致詞。

本項會議名稱“UK-Taiwan Workshop on Stem Cell & Cancer Research”，英方夥伴為倫敦大學國王學院，我國由陽明大學副國際長，同時也是臨床醫學研究所李光申教授率團，與會成員包括陽明大學生化所張治芬教授、臨床醫學研究所楊慕華副教授、藥理所岳岳忻副教授及台北醫學大學臨床醫學研究所何慧君副教授等 5 人與會；會議於 9 月 17 日下午開始，以下茲將會議活動日程簡述如下(資料由何副教授提供)：在第一天的研討會中，英國倫敦大學國王學院由 Prof. Karne Liu 主持，李教授闡述了間質幹細胞研究的最新進展，楊教授發表了頭頸癌症細

胞轉移分子機制之最新觀念，何教授則發表眼窩脂肪幹細胞治療肺損傷及糖尿病的前臨床研究，而 Prof. Agi GGrigoriadis 闡述如何使用基因轉植於多能性幹細胞的技術研究骨發育及骨癌，Prof. Albert Basson 發表成體神經再生時染色體重整之機轉，Prof. Karen Liu 介紹小分子調控蛋白質活性的機制。會議第二天，英方的博士班學生進行研究進度報告，我方五位教授參與並給予英方學生研究上的建議。第三天的研討會，張教授發表了細胞力學受賀爾蒙調控之分子機制，兵教授闡述微型核糖核酸在胃癌發生與惡化之關鍵角色，Prof. Mahvash Tavassoli 闡述如何從分子生物的角度改善頭頸部癌症的治療，Prof. Eileen Gentleman 發表細胞內磷酸鈣在骨分化角色的研究成果。最後，由 Prof. Dusko Ilic 介紹英國倫敦大學國王學院多能性幹細胞庫的現況。藉由本次研討會，我方在幹細胞及癌症上的研究引起了英方的廣大興趣，並讓英方留下極為深刻的印象。

而在前往研討會會場之前，也特別安排處長與老師們拜會沈大使，向他報告整個行程的宗旨、安排與預期目標，獲得他極大的讚賞。



【圖一】國內代表團拜會駐英代表處沈大使呂巡(中)，並於會後合影。



【圖二】臺英研討會前重要與會人員合影；BBSRC 國際處長 Tim Willis 為右 3。



【圖三】本會林處長宗泰於會議開幕時致詞。



【圖四】臺英幹細胞與癌症研討會一瞥。

### 丙、與英國協議機構工作會議

國科會目前與英國簽有協議的合作單位大略有兩大群組，一是科學院，包



括：英國皇家學院 (Royal Society of London)、英國人文社會科學院 (British Academy，BA)及愛丁堡皇家學科學院(Royal Society of Edinburgh)，另一是研究委員會(Research Council, RC)。RCUK 共有 7 個，是英國主要的科研計畫補助機構，其功能與本會相當，本會與其中的 3 個 RC(包括 BBSRC、EPSRC 及 AHRC) 簽有合作協議建立關係，並與 BBSRC 自今年開辦雙邊研討會之共同補助。經過這一、兩年我駐英科技組定期會晤，與三單位已建立非常友好的關係，加上之前所提「臺灣與英國頂尖大學前期合作計畫」所補助計畫的醞釀，這次安排與多個協議單位進行工作會議，期在共同合作補助上能有所突破。

RC 的總部在倫敦近郊的 Swindon，一般需搭一小時多火車，此次訪問活動安排時，時機恰巧是 RC 在倫敦召開年度檢討會議，所以各 RC 執行長人都在倫敦，是以我們不但不需舟車勞頓，還可以在 24 小時內與 4 個單位進行會議！另外，科技組與對方均在好幾個月前即著手規劃會議議題，期讓會議能有效進行並能有具體結論！以下就以會議紀錄模式將與各單位與會時、地、人員及決議書寫於後。

#### 一、BBSRC (生技暨生物科學研究委員會)

##### Meeting Minutes of NSC-BBSRC Annual Working Meeting

**Time:** 15:00~16:30 pm, 17<sup>th</sup> September, 2012

**Venue:** King's College London, Guy's Hospital Campus, St Thomas Street, London  
SE1 9R

**Participant:**

NSC—

Prof. Tsung-Tai Lin, Director General of Dept. of International Cooperation (DIC)

Dr. Yu Han Tsou, Director of Science and Technology Division Taipei

Representative Office in UK

Ms. Hsin-Wu Lee, Deputy Director of Science and Technology Division Taipei

Representative Office in UK

Ms. Cheng-Tung Tao, Program Director of DIC

BBSRC— Dr. Tim Willis, Head of International Relation

**Conclusions**

1. Both sides agree to continue their joint support on “International Workshops” programme by following the working schedule which has been set by BBSRC. The NSC will call for proposal once receiving the application form and announcement information from BBSRC. The BBSRC panel meeting and the date to exchange primary reviewing results of both sides will be anticipated in January 2013.
2. In order to enhance the further cooperation of UK and Taiwan scientists, especially as a follow-up after the bilateral workshops or symposia, both sides

agree to initiate “International Partnering Awards” together. This new cooperative programme will be set to a grant scale of £25K from each side and up to 2-year period for every funded project and will start to run immediately with the same working timetable of “International Workshops”.

3. After reviewing the joint activities including one conference on Green Chemistry and Biomass Energy held in Taiwan 2011 and the other symposium on Stem Cell and Cancer Research held in London 2012, both sides regard the cooperation between BBSRC and NSC is successful and agree to continue it under the Memorandum of Understanding signed on November 25, 2010.

## 二、EPSRC (工程暨物理科學研究委員會)

### Meeting Minutes of NSC-EPSRC Annual Working Meeting

**Time:** 10:00~11:00 am, 18<sup>th</sup> September, 2012

**Venue:** MRC head office (London), 14th Floor, 1 Kemble Street, London WC2B 4AN

**Participant:**

NSC—

Prof. Tsung-Tai Lin, Director General of Dept. of International Cooperation (DIC)

Dr. Yu Han Tsou, Director of Science and Technology Division Taipei

Representative Office in UK

Ms. Hsin-Wu Lee, Deputy Director of Science and Technology Division Taipei

Representative Office in UK

Ms. Cheng-Tung Tao, Program Director of DIC

EPSRC—

Professor David Depledge, Chief Executive, EPSRC

Dr. Edward Clarke, Manager of International, EPSRC

**Conclusions**

#### 1. **Joint Funded Activities:**

Both sides consent the joint funding for **EPENET** collaborative research has positive result. A workshop is scheduled to be held in early 2013. Dr. Edward Clarke will attend it as EPSRC delegate.

- \* EPENET: Taiwan and Japan Showcase/Workshop to be held on 1st to 6th March 2013

#### 2. **Potential activities to Promote** :

- (1) EPSRC delegate introduces its whole funding picture including multi-disciplinary areas jointly funded by EPSRC and MRC. As to the scientific

priority areas in Taiwan and the UK and where these overlap, both sides warmly discussed and identify areas of common interest as such :

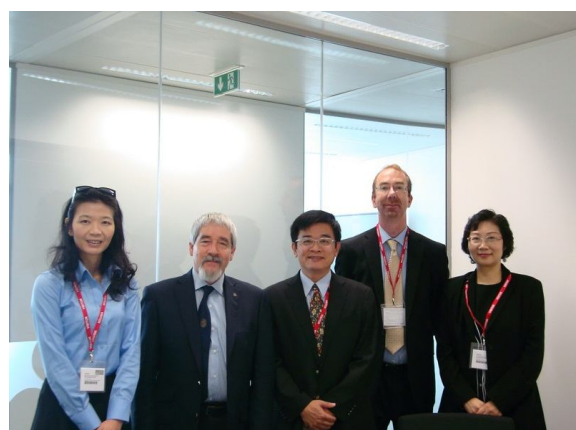
- Green ICT
- Automatic system
- E-Health

(2) On discussion about Knowledge Transfer schemes in the UK and Taiwan and how these operate to benefit the development of research, both sides express great interest on the topic and broadly exchange opinions. The practical operational mode will be further discussed by contact points at regular meetings.

(3) NSC delegate proposes an invitation that EPSRC officials visit Taiwan on an academic occasion in the nearest future.



【圖五】9月17日與英國BBSRC工作會議後宴請執行長 Kell(左8)，並邀請臺英幹細胞與癌症研討會雙方學者一同參加。



【圖六】9月18日本會與EPSRC工作會議並於會後合影，執行長 D. Depley 為左2、Dr. Clarke 為右2。

### 三、BA (英國人文社會科學院)

#### Meeting Minutes of NSC-BA Annual Working Meeting

**Time:** 14:30~15:30 pm, 18<sup>th</sup> September, 2012

**Venue:** The British Academy, 10 Carlton House Terrace, London SW1Y 5AH

**Participant:**

NSC—

Prof. Tsung-Tai Lin, Director General of Dept. of International Cooperation (DIC)

Dr. Yu Han Tsou, Director of Science and Technology Division Taipei

Representative Office in UK

Ms. Hsin-Wu Lee, Deputy Director of Science and Technology Division Taipei  
Representative Office in UK

Ms. Cheng-Tung Tao, Program Director of DIC

BA—

Dr. Debbie Soothill, International Manager (Policy)

Ms. Kate Kenyon, International Officer

#### Conclusions

1. Both sides regards the International Partnership and Mobility (IPM) scheme run in the first year is quite successful, with many good proposals received and 20% (3/14) passing rate, and agree to continue the cooperation for the second year with two awards. The planned call will open in coming November, 2012. BA will refer NSC the detailed working timetable.
2. In general, the NSC gives the grant with fixed executive period and the BA provides PIs with a couple of months as window to start the funded project. The NSC will consider the possible way, ex. the allowance of 3-6 month extension, to make the executive period of co-funded projects of both sides remain consistent.
3. For the potential activities in the near future, both sides agree to initiate bilateral workshops to consolidate UK-Taiwan joint research once the priority themes justified by consulting the relevant panels of the NSC and BA.

#### 四、AHRC (藝術暨人文科學研究委員會)

##### Meeting Minutes of NSC-AHRC Working Meeting

**Time:** 15:30~16:30 pm, 18<sup>th</sup> September, 2012

**Venue:** The British Academy, 10 Carlton House Terrace, London SW1Y 5AH

**Participant:**

NSC—

Prof. Tsung-Tai Lin, Director General of Dept. of International Cooperation (DIC)

Dr. Yu Han Tsou, Director of Science and Technology Division Taipei

Representative Office in UK

Ms. Hsin-Wu Lee, Deputy Director of Science and Technology Division Taipei

Representative Office in UK

Ms. Cheng-Tung Tao, Program Director of DIC

AHRC—

Professor Mark Llewellyn, Director of Research

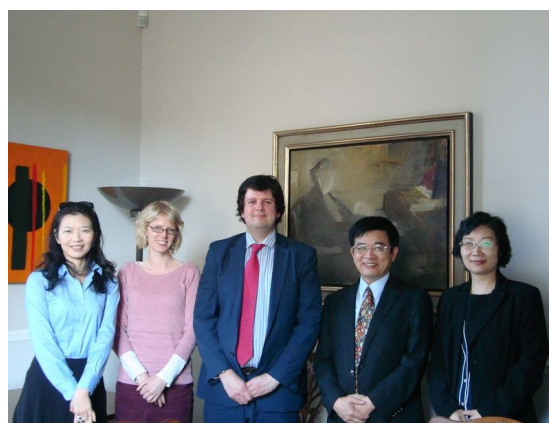
Ms. Pippa Craggs, International Policy Manager

## Conclusions

1. Both sides agree to initiate collaboration under AHRC Research Networking Scheme to enhance the connection of scientists between UK and Taiwan. AHRC's funding scale for each International project is up to £45K for 2 years. The NSC could support Taiwanese researchers' international airfare fee as extra funding to encourage their participation if the proposal has been approved by AHRC. To publicize it, AHRC will high light on website this UK-TW collaborative initiative opportunities.
2. The NSC expresses the intention to join AHRC's new establishing International Ph.D. student fellowship (?) programme, which support Ph. D. students for research visit abroad from 6 to 18 months. AHRC will provide detailed information.
3. Both sides agree to support a topic-selected bilateral workshop jointly to enhance further research cooperation. The possible topics including Digital Humanities, Heritage and the Creative Economy will be discussed by NSC and AHRC thereafter.



【圖七】9月18日本會與BA工作會議並於會後合影，左3為Dr. Debbie Soothill、左2為Ms. Kate Kenyon。



【圖八】9月18日本會與AHRC工作會議並於會後合影，中間為研究處長M. Llewellyn，左2為Ms. Pippa Craggs。

## 丁、臺灣與愛爾蘭癌症及幹細胞研討會

如報告一開始曾提，本項會議是以耕耘及維持臺灣與愛爾蘭兩國科研合作熱度為前提，並期予科技外交目標，由本會與愛國學術機構以每年舉辦一場學術研討會辦理；本年度會議主題為”2012 Ireland-Taiwan Symposium on Cancer and Stem Cell Research”，我方學術代表團與前2天在英國的會議是同一批學者，愛爾蘭方則由都柏林城市大學 Prof. Michael Berndt 統籌及主持此雙邊研討會，其他愛方人員包括 Prof Richard O’Kennedy, Prof. John O’Leary, Dr. Mark Tangney, Dr Finbarr O’Sullivan 及 Dr Sharon McKenna。會議開始仍請我駐愛爾蘭代表曾厚仁及本處林處長宗泰於開幕致詞，處長在致詞中激勵雙方學研在幹細胞及癌症研究上等生醫專業上進行實質合作與交流。之後參加人員雙方學者針對癌症及幹細胞研究得最新進展進行深入而廣泛的交流，我方學者優異的研究成果，讓愛方學者留下極為深刻的印象。



【圖九】本會與愛爾蘭科學基金會(SFI)共同補助之”2012 台愛癌症與幹細胞研討會”於會前由駐愛曾代表及我方代表團與愛方主要召集人合影。

### 戊、拜會愛爾蘭科研補助機構

在科研計畫補助之功能上，愛爾蘭科學基金會與本會地位相當，是以本會從多年前即與該單位展開聯繫，惟因該國金融狀況不好，常態性雙邊合作活動無法建立，此行希望透過面對面拜會了解兩國科研現況與推動政策，並探詢兩單位合作之可行性。

此外，同樣透過我駐愛代表處之鼎力協助，亦安排我代表團拜會愛爾蘭研究委員會，該單位隸屬該國教育部下，雙方之前並未接觸，此行亦希望能有突破性發展。

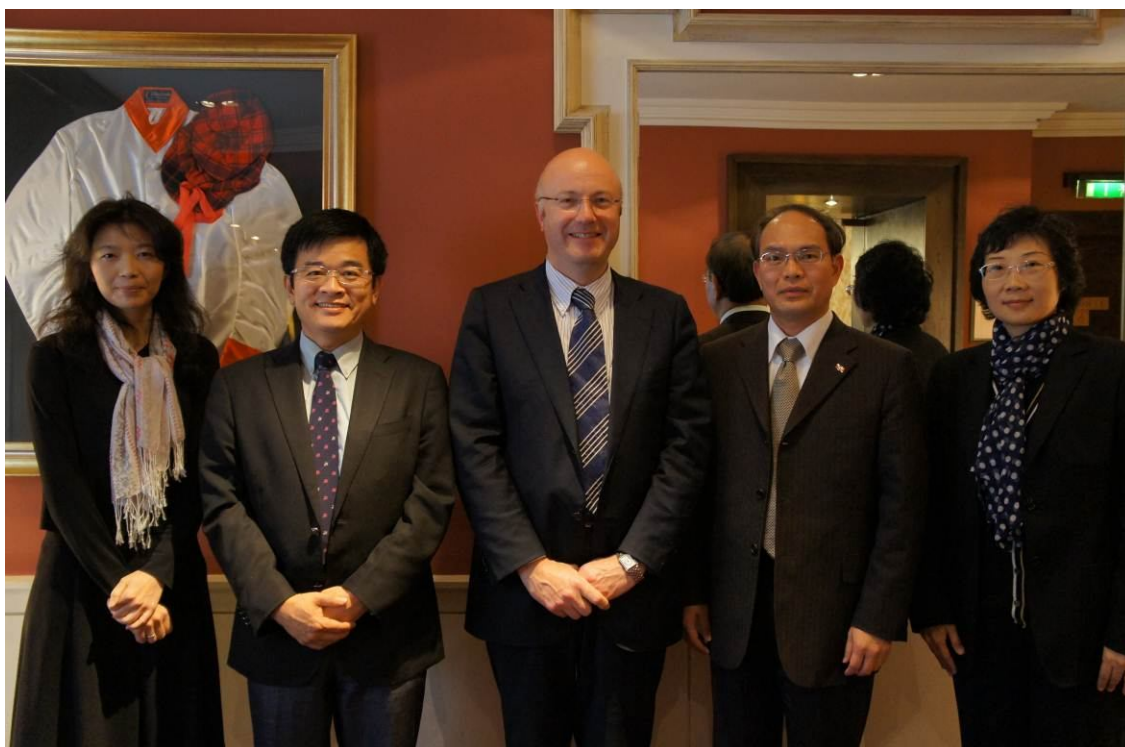
#### 一、愛爾蘭科學基金會 (SFI)

在聆聽臺愛雙邊研討會雙方主講人簡報之後，林處長一行離開會場，透過我駐愛代表處安排，與該國科學基金會執行長 Mark Ferguson 以餐敘方式進行雙邊會談。

國科會林處長首先表達台愛研討會，在駐愛代表增厚仁支持並獲雙方共同補助，順利圓滿舉行。餐會中簡要說明台灣研究發展經費及國科會預算規模外，就未來國科會改制為科技部，改組後業務增加研究發展等。另提及補助機制與國家型科技計畫，後續要推動相關科研交流，須兼顧雙方重點領域與科技計畫。

F 執行長表示在今年 2 月上任，即進行組織與資源的重整，SFI 預算規模為

150 百萬歐元。愛方也表達支持台愛雙邊研討會及未來的科研活動，愛爾蘭科學基金會重點放在政府優先推動的重點領域及及計畫，如生命科學、生物製藥及 ICT 等等，另外也配合補助科研機構申請歐盟計畫。



【圖十】9 月 20 日本處林處長宗泰(左 2)、駐愛爾蘭代表處曾代表厚仁(右 2)、駐英科技組鄒組長幼涵(右 1)與愛爾蘭科學基金會(SFI)執行長 Mark Ferguson 教授餐會後合影。

## 二、愛爾蘭研究委員會 (Irish Research Council, IRC)

本次拜會由 Dr.Eucharía Meehan 主任擔任接待，Meehan 主任首先介紹愛爾蘭研究委員會，該會於今年 3 月正式成立，係合併愛爾蘭人文和社會科學研究委員會 IRCHSS 和愛爾蘭研究委員會科學、工程與技術 IRCSET。其補助預算規模約 35 百萬歐元，合併後將提供更多補助跨學科的工作機會，包括產學研計畫，鼓勵個別學者申請計畫，並將學術研究應用於產業技術開發。IRC 另一重點是教育和培訓，特別是通過其博士和博士後研究人員。並邀請國科會及台灣學研參加在 9 月 22 日(星期六)在都柏林的會議中心的博士專業人士和畢業生的職業生涯座談會。

國科會林處長簡報說明國科會預算規模、組織架構及補助計畫政策及內容。因愛方覺得雙方補助內容與對象有相當多共同之處，多次進一步洽問對處長所提國際合作計畫中之博士研究交換及研究學者互訪等細節。國科會林處長最後曾表示，本會未來與 IRC 可以展開雙邊合作機制洽談，針對 Workshop、學者互訪計畫等雙邊合作方式進行。另台灣學研李光申教授亦表示在學術研究及產業應用連結的重要性，另介紹台灣的大學教育機構培訓及交換學生的方式。



【圖十一】9月21日駐愛爾蘭代表處及我方代表團拜會愛爾蘭研究委員會(IRC)，並於會後與主任 Dr Eucharia Meehan(中)及承辦人(右1)合影。

## 參、心得

此行訪問，首先要謝謝陽明大學李光申老師對與英國合作的投入，及本會對與愛爾蘭科技外交合作之配合執行，所率的學術團隊都是我國年輕優秀的老師，讓英國、愛爾蘭相關領域學者留下深刻印象，開啟合作契機，也讓我們與有榮焉！

再來，一定要謝謝的是我們在外先鋒夥伴：駐英科技組，謝謝她們的積極努力與細心安排，大家合作無間的共同付出！另外，也真心感謝我駐愛爾蘭代表處曾大使對臺灣與愛爾蘭科技合作的費心與支持！

## 肆、建議事項

- 一、持續辦理既有之雙邊研討會(BBSRC)及IPM(BA)2項方案。
- 二、與BBSRC開辦IPA計畫，並予單件計畫2年約新台幣1.25M元補助額度。[如附錄]
- 三、參與AHRC現有RNS方案，並對我國學者提供國際旅費補助。
- 四、與愛爾蘭研究委員會續洽合作補助及簽約事宜。



## 附錄

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## Guidance Notes

BBSRC is pleased to invite applications to its annual call for International Partnering Awards, aimed at fostering links with researchers in Brazil, China, India, Japan and the United States. Applications are invited from current BBSRC research grant holders and researchers employed at BBSRC institutes who are in receipt of BBSRC research funding. The deadline for receipt of applications is **17:00 Wednesday 14 November 2012**. Successful awards to be announced in early 2013, and to start after 1 April 2013.

Note that, for the 2012 call, the Japan Partnering Awards will not be run as a joint call with the Japan Science and Technology Agency (JST) and will be open across all areas of BBSRC's remit.

Note that the Brazil Partnering Awards are run as a joint call with the National Council for Scientific and Technological Development (CNPq) of Brazil.

See the **Brazil Partnering Awards Joint Implementation** section for more details.

**Note that all applications must be made through the Research Councils Joint Electronic Submission System (JeS):**

<https://je-s.rcuk.ac.uk/JeS2WebLoginSite/Login.aspx>

See the **Application Process** section for more details.

## Guidelines and Regulations

### Eligibility

Applications **must** be made by a Principle Investigator (PI) who is both eligible for BBSRC funding<sup>1</sup> and currently in receipt of BBSRC research funding through one of the following mechanisms:

<sup>1</sup> Further information on BBSRC's eligibility criteria can be found in section 3 of the Guide to Research grants at: <http://www.bbsrc.ac.uk/funding/apply/grants-guide.aspx>

- As a BBSRC responsive mode grant holder.
- As a BBSRC initiative grant holder, provided that they are currently eligible to apply for responsive mode grants.
- As a Project leader at one of the BBSRC Institutes (Rothamsted Research, the John Innes Centre, the Institute for Animal Health, the Roslin Institute, the Babraham Institute, the Institute of Food Research, the Genome Analysis Centre and the Institute of Biological, Environmental and Rural Sciences).
- As the recipient of a fellowship award from BBSRC or from RCUK.

Applications may also be accepted from co-investigators on large BBSRC research grants at the discretion of the International Relations Unit. In addition to the above criteria applicants should note that:

- The associated BBSRC grant **must** have started before the application deadline and must **not** have expired before the start of the award.
- We encourage joint applications by consortia of UK partners, which could include industrial and non-BBSRC funded partners; however a BBSRC funded applicant **must** be the lead consortia and submit the proposal using JeS.
- The presence of a BBSRC studentship award or BBSRC funding within an academic department does **not** confer eligibility for these awards.

## Objectives

The aim of the Partnering Award (PA) scheme is to provide resources to leading BBSRC-supported research groups to allow them to forge long-term relationships with overseas scientists in areas of research that are of direct relevance to BBSRC's current scientific strategy. Applicants should refer to BBSRC's Strategic Priorities, 10-Year Vision and International Strategy for further information.

The primary objective of a PA is to provide pump-priming, enabling UK research groups to embark on creating links with overseas scientists. Ultimately, the aim is that long-term partnerships will lead to new collaborative research programmes. Funds **can only** be used for travel, subsistence and other networking or collaborative activities, such as workshops or exchanges. A PA is **not** a vehicle by which to support single research projects. Applications for the UK costs of a joint collaborative research project can be submitted as a standard BBSRC grant through our normal committee procedures. Such applications are expected as one of the outcomes of a PA.

### **Scope**

In the past typical awards have been in the region of £25-50k (depending on the country), to enable leading UK laboratories to partner with one or more overseas equivalents. Previous Partnering Awards have created good international synergy, in that many have led to successful international research projects that have provided considerable added value to UK science. A list of awards funded through previous calls is available at:

**Brazil** Partnering Awards: <http://www.bbsrc.ac.uk/funding/internationalfunding/brazil.aspx>

**China** Partnering Awards: <http://www.bbsrc.ac.uk/funding/internationalfunding/china.aspx>

**India** Partnering Awards: <http://www.bbsrc.ac.uk/funding/internationalfunding/india.aspx>

**Japan** Partnering Awards: <http://www.bbsrc.ac.uk/funding/internationalfunding/japan.aspx>

**United States** Partnering Awards:

<http://www.bbsrc.ac.uk/funding/internationalfunding/usa.aspx>

The PAs are designed to be long term awards of between two and four years; however in exceptional circumstances we may accept applications of a shorter duration. It is acceptable for the proposed PA to outlast the associated research grant; however applications may be uncompetitive if there is little overlap between the research grant and PA. Applications **must** show how this pump-priming support will add value to BBSRC science (in particular their associated BBSRC research grant) and facilitate longer-term collaborations between UK and Brazil, China, India, Japan or the US. It is intended that the awards will fund scoping studies, workshops in emerging areas of science relevant to BBSRC's Strategic priorities, travel for one or more investigators in **either direction** and/or visits to access facilities not available in the UK. Collaborative activities are not limited to the PI and we encourage the involvement of early career researchers. PA funds can be used for students; however applications will **not** be accepted where this is the primary aim of the project. These awards **cannot** be used to fund salary costs, consumables, items of equipment or other research costs. Nor are they intended to link ongoing single collaborative projects. Additionally PA funds **cannot** be used to support conference attendance, although for convenience and cost efficiency, BBSRC do allow award holders to arrange collaborative meetings alongside conferences at which their partners are already present.

Please note that the funding should be seen as a pump-priming award and that research groups will be expected to access other sources of funding. This could include a monetary contribution from applicant's institution or department or an in kind contribution such as venue hire or accommodation costs.

### **Assessment Criteria**

Applications are assessed internally by BBSRC. This light-touch internal assessment allows PA applications to be processed swiftly and can be applied as they are based on an existing BBSRC grant, which has already undergone robust peer review. Proposals are assessed against the following criteria:

- The potential added value to BBSRC science (particularly the associated research grants) of the international partnership.

- The wider benefits and future joint research likely to accrue from the collaboration.
- The uniqueness of the opportunity and expertise of the overseas partners i.e. why these partners above any others around the world or within the UK.
- The opportunities for early career scientist exchanges.
- Whether the collaboration is a new linkage or an ongoing partnership. Ongoing partnerships must demonstrate the added benefit that would be provided by the PA over and above the interactions that currently occur.
- The level of the contribution made by other sources e.g. the UK Institution towards the development of the award.
- Alignment of the award to current BBSRC strategic priorities.

### **Costs**

Applications should be made at **current costs** in accordance with subsistence and travel regulations at the applicant's Institution. For each main activity, indicative costs should be shown. BBSRC may index approved costs so the award will include an allowance for inflation. Any award made will be cash limited, and whilst funds should be used for the activities requested, the use of funds to allow activities that were not originally envisaged will be allowed as long as they are in pursuance of the overall objectives of the PA. No indirectly incurred costs can be applied for under the PA scheme; consequently Full Economic Costing (FEC) is **not** applied to these awards. Applicants should therefore apply for 100% of the cost of the activities which they wish to undertake.

### **Transfers**

Should the award holder transfer to another eligible Institution the transfer of their PA will be subject to BBSRC and host institute approval, along with other BBSRC funding.

### **Initiation**

Please endeavour to put a realistic start date on your Partnering Award application. In accordance with GC4 of the grant terms and conditions, awards must start within 6 months of the start date stated in the offer acceptance letter. If the award is not started within 6 months, the offer of funding may lapse. Extensions to the start date of awards must be requested (via the JeS 'Grant Maintenance Facility') **before** the 6 month deadline has passed.

### **Termination**

When a PA is terminated early, BBSRC will only be responsible for funds already spent and will not be liable for the remaining instalments of the award.

### **Reporting**

As a condition of funding, successful applicants are required to submit a final report of the proceedings within three months of the visit. Applicants who applied through JeS i.e. those that applied for the 2010 and later calls **must** submit final reports through JeS. Guidance on submission on final reports through JeS can be found in the **Reporting Process** section. Applicants who applied using email or hardcopy up to and including the 2009 call should fill in a 'Final report form' from the BBSRC website and email it to the International Relations Unit: [iru@bbsrc.ac.uk](mailto:iru@bbsrc.ac.uk).

The success of each PA will be measured against the following criteria:

- Completion of the objectives set out in the application.
- The added value to BBSRC science.
- The value of the developing partnerships and whether the PA has led to further external funding opportunities.
- The value to wider UK international Science, Engineering and Technology (SET) objectives.
- The production of further grant applications and/or awards to BBSRC.

BBSRC may ask for further details of the visit for publicity purposes.

### **Final expenditure**

Expenditure should be in accordance with the Institution's regulations and detailed in the appropriate section of the Final Report form and signed off by the Finance Office. The balance of funding due, normally 10% of the cash limit awarded, will be paid on receipt of the

Final Expenditure Statement and the reconciliation of actual expenditure. Any funds that remain unspent once the Partnering Award has finished may be reclaimed by BBSRC. Expenditure cannot be charged to the award after the end date has passed, in accordance with GC3 of the grant terms and conditions. Award holders who intend to use funds after the end date of the Partnering Award must request an extension (via the JeS 'Grant Maintenance Facility') **before** the end date has passed, in accordance with GC7 of the grant terms and conditions.

***Data protection regulations***

BBSRC will use information provided in the application for processing the proposal, the award of any consequential grant, and for the payment, maintenance and review of the grant.

To meet the Research Councils' obligations for public accountability and the dissemination of information, details of awards may also be made available on the Research Councils' web sites and other publicly available databases, and in reports, documents and mailing lists.

## 附件二、新開辦 IPA 方案之國科會公告資訊

### 2013 年公開徵求國科會與英國生物技術暨生物科學研究委員會 國際夥伴關係建立暨交流計畫 (NSC--BBSRC International Partnering Awards)

2012/11/16

#### 一、目的：

國科會與英國生物技術暨生物科學研究委員會 (Biotechnology & Biological Sciences Research Council, BBSRC) 為了促進臺灣與英國在生科領域之合作研究，於 2010 年重新洽簽科學合作協定並議訂共同補助兩國相關領域人員交流費用。雙方已於 2011 年起合作補助雙邊學術研討會，並將自 2013 年起開辦補助「國際夥伴關係建立暨交流計畫(International Partnering Awards, IPA)」。

本項 IPA 方案目的在媒合臺、英兩國學者，特別是年輕研究人員，期透過雙方在生科議題共同研究之交流活動(包括赴彼國利用其大型設備或儀器設施執行研究)，對個人現階段或兩國該領域之研究有提升或顯著加值之效；同時，藉由本方案開拓其國際合作關係且發展為長期合作夥伴，未來組成合作團隊共同執行大型研究計畫。

#### 二、BBSRC 單位簡介：

英國生物技術暨生物科學研究委員會(BBSRC)為英國 7 個研究委員會之一，經費來自於政府，2009/2010 之年度預算為 470M 英鎊，專責英國生命科學領域(臨床醫學除外)研究的補助，對於提升人類生活品質成效卓著，並且支持農業、食物、化工、健康照護以及製藥等領域的產業研究。BBSRC 補助具有國際競爭性的研究計畫、提供生物科學的訓練、促進知識移轉及創新、以及提升大眾對於重要研究議題的關切。英國的生物科技研究表現能位居全球領先地位，BBSRC 具有其重要功能與角色！

#### 三、申請資格：

1. 我方計畫主持人須符合本會專題研究計畫申請人資格；並鼓勵年輕研究人員提出申請。
2. 英國合作對象應符合其申請規定，須為目前獲有 BBSRC 研究計畫補助者。

**四、合作領域：**一般之生物科學及生技相關領域(屬 BBSRC 所涵蓋之範圍)均可提出；得包括如：a. Food Security, b. Bioenergy and Industrial Biotechnology 或 c. Basic Bioscience underpinning Health，惟，人體醫學不屬 BBSRC 補助範疇。

#### 五、補助項目及經費分攤：

1. 本項方案屬 2 年期計畫，可提供雙方參與計畫之研究人員、博士後與博士生之人員交流差旅費用，以及共同舉辦之專題討論或研討會等活動直接產生之費用。但不得包括薪資、耗材、設備採購等研究用花費。
2. 交流互訪費用之編列以雙方一致且對等為原則，由台英雙方主持人事先議定之。如：一方由派遣國負擔來回機票費，地主國負擔日支費用及會議舉辦費用，則另一方訪問時亦如是，此為最經常之模式。
3. 每項計畫 2 年之經費額度上限英方為 25K 英鎊、我方為新台幣 120 萬。我方計畫主持人於線上填具表格 I002A 時，只編列我方所需負擔費用。

#### 六、作業時程：

1. 受理申請截止日期：**101 年 11 月 16 至 102 年 01 月 15 日止**(以申請機構系統送出及發文日為憑)。**[本年度 BBSRC 受理時程為 101 年 12 月 18 日至 102 年 1**

月 16 日，雙方不同，請提醒英方主持人注意。]

2. 公告補助名單：102 年 3 月底前。
3. 計畫執行日期：102 年 4 月 1 日起至 104 年 03 月 31 日止（計 2 年）
4. 雙方第一次之交流活動應於執行起日之 6 個月內發生，若否，該案以計畫註銷辦理，雙方均不提供經費補助，若已撥款，須全數繳還。

**七、申請程序：**本項台英國際夥伴關係建立暨交流計畫案，必須由台灣及英國各一位主持人針對共同之研究主題，分別向本會及英國 BBSRC 同時提出計畫申請書，申請案始獲成立。其中，

1. 台方計畫主持人應至本會網站(<http://www.nsc.gov.tw>) 首頁「線上申辦登入」處，身份選擇「研究人員(含學生)」，輸入申請人之帳號(ID)及密碼(Password)後進入「研究人才個人網」，在「研究人才網線上申辦」項下，點選「國際合作類」下的「雙邊研究計畫」。進入個人基本資料畫面，確認後即進入本系統之「主畫面」，從主畫面視窗上點選【國科會與英國生物技術暨生物科學研究委員會國際夥伴關係建立暨交流計畫】類別並予以「新增」，即可新增一筆申請類別計畫；新增計畫時，請填具各項申請資訊欄位，同時將英文活動規劃書 (Table\_K11)、雙方參與人員英文履歷及近五年著作目錄等各項文件以 PDF 檔上傳至系統後送出。
2. 計畫主持人任職機構於系統中彙整後送出；並備文檢附申請清冊（系統產生）到會。
3. 國外計畫主持人申請程序請參考英國 BBSRC 相關規定於其系統（Research Councils Joint Electronic Submission System (JeS): <https://je-s.rcuk.ac.uk/JeS2WebLoginSite/Login.aspx>）在線上提出申請，有關英方公告資訊請參考以下網址：  
<http://www.bbsrc.ac.uk/funding/internationalfunding/taiwan.aspx>

**八、審查重點：**

1. 其探討主題是屬於前瞻、創新(或突破)或國際關心之議題。
2. 雙方研究團隊之訪問與活動時程規劃是否合理?
3. 雙方團隊研究方向或專長之互補或加乘性，以及彼此結為夥伴關係之獨特必要性
4. 對彼此現有研究計畫之加值意義與程度
5. 雙方交流與合作對於國家學術發展及其他應用方面預期之貢獻
6. 雙方未來發展為長期夥伴關係之可能性

**九、注意事項：**

1. 本項臺英 IPA 計畫需由申請人自行尋求合作對象。另，雙方研究團在提出規劃書前，應經過詳細溝通及討論合作議題及活動內容，雙方申請計畫之名稱應相同，合作內容應經雙方同意。
2. 含以下任一情況的申請案恕不受理---
  - a. 只有單方提出計畫申請書；
  - b. 超過規定之申請截止日；
  - c. 申請資料不全。
3. 本方案優先考量新進研究人員提出申請，也鼓勵研究生參與活動，但並不得以人才培育為本計畫提送之唯一目標。
4. 雙方進行之訪問或活動舉辦地點應在英國或台灣，雙方每年應相互至對方機構

訪問研究至少一次。

5. 本項計畫鼓勵參與合作之研究人員任職機構對本交流計畫之共同贊助(可為場地或住宿提供等非現金投資),若有國科會及英國生物技術暨生物科學研究委員會以外之經費配合款,得將該單位之同意或補助文件於申請作業時以 PDF 檔上傳提供參考。
6. 本項合作計畫須經本會與 BBSRC 兩方獨立進行學術審查,及兩單位之共同複審會議等兩階段以選定補助之計畫;通過之計畫可不受本會一般專題計畫補助件數之限制。

#### 十、計畫核定後相關作業：

1. 計畫變更：若配合計畫研究實際執行情況,有需要延長計畫執行期限、變更訪問人員或調整下年度訪問規劃時,計畫主持人得經線上作業系統向本會提出計畫變更申請,經本會審查核准後,始得據以執行;惟計畫期限延長以不增加原核定經費為原則並以半年為限,且需要計畫執行迄日前 6 個月由計畫主持人任職機構備函提出相關申請。
2. 報告繳交：獲補助之計畫,應於第一年期執行日期結束後 3 個月內於線上系統繳交期中進度報告,並於整件計畫執行結束後 3 個月內再次於線上系統繳交結案報告。格式得參照本會專題研究計畫成果報告撰寫格式之相關規定及附表一、二及六;期中報告內容建議包括:雙方人員是否依原規劃赴對方機構訪問及其訪問重點、該年度交流成果和下年度人員交流之工作重點;結案報告內容建議包括:是否符合/達到原先目標、執行期間雙方所遭遇之困難、全期人員交流活動之簡要敘述及效果,雙方合作交流之重要成果,以及雙方研究工作是否可能繼續發展為共同研究計畫。
3. 經費核撥與結案：經費撥付事宜將於本會核定公文內說明;計畫執行日期截止後三個月內,至本會相關作業系統以線上登錄擬結報之費用,並檢附所需原始憑證,由機關備函向本會提出辦理結案。執行機構應將經費支用原始憑證按補助項目分類整理裝訂成冊後,併同 a.本會核定公文與清單影本、b. 計畫收支明細報告表一份函送本會辦理經費結報。倘有餘款,應予繳還。

#### 十一、附件：

1. 雙邊人員交流計畫之線上申請資料表 (Table\_I001-I002)
2. 規劃書撰寫提綱 (Table\_K11)
3. 英方 BBSRC 方案說明及申請指導與規範

#### 十二、業務聯絡人：

台方 (NSC)	英方 (BBSRC)
Ms. Cheng-Tung TAO (陶正統副研究員) Program Director Department of International Cooperation National Science Council 國科會 國際合作處 Tel:886-2-2737-7431 Email: cttao@nsc.gov.tw Web: <a href="http://www.nsc.gov.tw">http://www.nsc.gov.tw</a>	Ms. Jenny Wilson International Relations Manager BBSRC North Star Avnue, Swindon SN2 1ET UK Tel: +44(0)1793 414686 Fax: +44(0)1793 414674 E-mail : <a href="mailto:jenny.wilson@bbsrc.ac.uk">jenny.wilson@bbsrc.ac.uk</a>



