

出國報告（出國類別：其他-國際會議）

第四屆世界研究倫理大會與會報告

服務機關：科技部

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摘 要

負責任的研究行為是科學研究的基石，研究倫理更是學術社群的自律規範，鑒於層出不窮的研究不端行為發生，經由參與世界研究倫理大會，瞭解各國於促進科學研究誠信的政策、法規、標準和培訓等發展趨勢，除增進對執行科技部補助研究計畫違反學術倫理行為案件的審議及判斷知識，亦提供從制度面思考如何塑造良好的科研環境，讓誠實與負責的研究能夠在常軌上合理進行，成果產出為社會大眾信賴，並發揮其促進社會進步的正面效益。

關鍵詞：負責任的研究行為、研究倫理、研究不端

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一、目的

研究倫理為學術社群對科學研究行為之自律規範，只有在此基礎上，科學研究才能合宜有效進行，並獲得社會的信賴與支持，而「世界研究倫理大會」(World Conference on Research Integrity, WCRI)，旨在研討跨界研究倫理議題，包括促進科學研究誠信的政策、法規、標準和培訓等，更是世界各國科研從業人員互動交流的重要場域，透過此研討會之參與，有助於瞭解國際間在研究倫理發展上最新的趨勢與作法。

二、會議簡介

世界研究倫理大會係由歐洲科學基金會(ESF)與美國研究倫理局(ORI)合作於 2007 年催生，由於研究方法取向逐漸創新、研究工具日新月異，加以層出不窮的研究不端行為，嚴重影響外界對科學研究的信任，亟需學術社群正視，爰於葡萄牙里斯本舉辦首屆大會，透過跨國的研討，試圖架構出全球性的研究倫理規範及行為準則。迄今已邁入第四屆，歷次會議資訊¹如下：

屆次	年份	主辦國	主題	與會數
一	2007	葡萄牙(里斯本)	全球研究倫理的未來發展方向	47 國-275 人
二	2010	新加坡	研究倫理的全球性指標	51 國-340 人
三	2013	加拿大(蒙特婁)	跨界合作研究的倫理準則	40 國-360 人
四	2015	巴西(里約熱內盧)	促進負責任研究的獎酬制度	50 國-500 人

首屆會議旨在勾勒出全球關於研究倫理的基礎架構與未來發展方向，並對抄襲、數據與圖像變造、不當作者列名等研究不端課題加以研討，開啟科研從業人員彼此對話的管道，清楚的指出這些努力付出都是為了促進科學研究的昭信。

第二屆共同簽署發表《新加坡研究倫理聲明》(Singapore Statement on Research Integrity)，勾畫出研究倫理的基本原則，提供一個全球性的負責任研究行為指標，維持科學研究的高標準以獲得公眾的信賴與支持，該聲明已為世界各國廣泛使用，反映出科研界對研究倫理的關注，也影響了科研資助及行為模式的改變。

第三屆訂定《蒙特婁研究倫理聲明—跨界之合作研究》(Montreal Statement on

¹ 資料來源：<http://wcric2015.org/index.html>

Research Integrity in Cross-Boundary Research Collaborations), 受全球化影響所及, 跨國家、跨領域及跨部門合作日益普遍, 合作研究間的相互責任及共同研究成果的展現等亦需有一指引, 透過此聲明以凝聚科研界對於合作研究之倫理準則的共識。

三、參與過程

(一)大會議程

本(四)屆於2015年5月31日至6月3日共四天三夜在巴西里約熱內盧 Barra da Tijuca 所在 Windsor Barra Hotel 舉辦, 共有來自 50 個國家約 500 餘位學研機構研究人員、期刊編輯、資助機關代表、博碩士生等參與, 聚焦促進負責任研究行為獎酬制度及有關議題的研討, 議程如下所列:

SUNDAY, MAY 31			
9h00 - 19h00	Registration open (Foyer Aranjuez)		
9h00 - 17h00	WORKSHOP AND DOCTORAL FORUM		
12h30 - 17h00	ORI Workshop on handling research misconduct allegations in a global context (Segovia I)	Doctoral Forum (Segovia II)	WORKSHOP AND EDUCATION TRACK
			Education Track (Itamaraty) COPE Workshop for editors (Starts at 13h30) (Segovia III)
18h00 - 19h00	PLENARY A (Segovia I, II, III)		
19h00 - 20h30	RECEPTION (Foyer on Second Floor)		

MONDAY, JUNE 1							
8h00 - 17h00	Registration open (Foyer Aranjuez)						
9h00 - 10h30	PLENARY B (Segovia I, VII, III)						
10h30 - 11h00	Break (Alhambra)						
11h00 - 12h30	CONCURRENT SESSIONS 1-5A AND PARTNER SYMPOSIUM A						
	1. Countries' systems and policies to foster research integrity (Alvorada I)	2. Examples of research integrity education programmes in different countries (Segovia IV)	3. The research environment and policies to encourage research integrity (Alvorada II)	4. Expressions of concern and retractions (El Pardo I)	5. Funders' role in fostering research integrity (El Pardo II)	5A: Education: For whom, how, and what? (Segovia I, II, III)	Partner Symposium A Organized by EQUATOR (Itamaraty)
13h00 - 14h15	Lunch (Queluz)						
14h15 - 15h45	FOCUS TRACKS ON IMPROVING RESEARCH SYSTEMS			EDUCATION TRACK		PART. SYMPOSIUM B	
	The role of funders (Alvorada I)	The role of countries (Segovia I, II, III)	The role of institutions (Alvorada II)	Education Track (Itamaraty)		Partner Symposium B Organized by EMBO (Segovia IV)	
16h00 - 17h30	PLENARY C (Segovia I, II, III)						
17h30 - 18h00	Break (Alhambra)						
18h00 - 19h30	CONCURRENT SESSIONS 6-10 AND PARTNER SYMPOSIUM C						
	6. Country examples of research reward systems and integrity (Alvorada I)	7. Education and guidance on research integrity: Country differences (Alvorada II)	8. Measuring and rewarding research productivity (Segovia IV)	9. Plagiarism and falsification: Behaviour and detection (El Pardo I)	10. Codes for research integrity and collaborations (El Pardo II)	Partner Symposium C Organized by ENRIO (Itamaraty)	
19h45 - 20h30	POSTER SESSIONS						
	A: Authorship and publication ethics (Alvorada I)	B: Education, training, promotion and policy (Alvorada II)	C: Ethics and integrity intersections (Segovia I, II, III)	D: International perspectives (Segovia IV)	E: Perspectives on misconduct (El Pardo I)	F: Views from the disciplines (El Pardo II)	

TUESDAY, JUNE 2							
8h00 - 17h00	Registration open (Foyer Aranjuez)						
9h00 - 10h30	PLENARY D (Segovia I, II, III)						
10h30 - 11h00	Break (Alhambra)						
11h00 - 12h30	CONCURRENT SESSIONS 11-15 and PARTNER SYMPOSIA D&E						
	11. Countries' efforts to establish mentoring and networks (Alvorada I)	12. Training and education in research integrity at an early career stage (Alvorada II)	13. Systems and research environments in institutions (Segovia IV)	14. Peer review and its role in research integrity (El Pardo I)	15. Research ethics and oversight for research integrity: Does it work? (El Pardo II)	Partner Symposium D Organized by IEEE (Segovia I, II, III)	Partner Symposium E Organized by ICSU (Itamaraty)
13h00 - 14h15	Lunch (Quehuz)						
14h15 - 15h45	FOCUS TRACKS ON IMPROVING RESEARCH SYSTEMS			EDUCATION TRACK	PARTNER SYMPOSIA F&G		
	The role of funders (Alvorada I)	The role of countries (Segovia I, II, III)	The role of institutions (Alvorada II)	Education Track (Itamaraty)	Partner Symposium F Organized by Online Resource Center (Segovia IV)	Partner Symposium G Organized by CGS (El Pardo I)	
16h00 - 17h30	PLENARY E (Segovia I, II, III)						
17h30 - 18h00	Break (Alhambra)						
18h00 - 19h30	CONCURRENT SESSIONS 16-20 AND PARTNER SYMPOSIUM H						
	16. Research integrity in Europe (Alvorada I)	17. Training programs for research integrity at different levels of experience and seniority (Alvorada II)	18. Research and societal responsibility (Segovia IV)	19. Publication ethics (El Pardo I)	20. The causes of bad and wasteful research: What can we do? (El Pardo II)	Partner Symposium H Organized by ORI, Universitas 21 & Asia Pacific RI Network (Segovia I, II, III)	
20h00 - 22h30	GALA DINNER WITH SAMBA SHOW (Quehuz)						

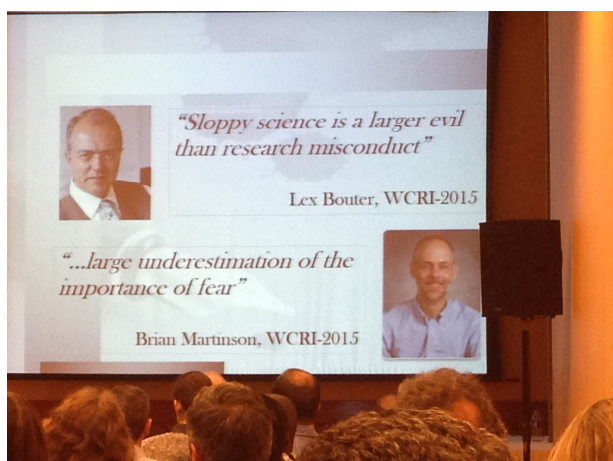
WEDNESDAY, JUNE 3							
8h00 - 11h00	Registration open (Foyer Aranjuez)						
9h00 - 10h30	PLENARY F (Segovia I, II, III)						
10h30 - 11h00	Break (Alhambra)						
11h00 - 12h30	CONCURRENT SESSIONS 21-25 AND PARTNER SYMPOSIUM I						
	21. Are there country-specific elements of misconduct? (Alvorada I)	22. Research integrity teaching programmes and their challenges (Alvorada II)	23. Commercial research and integrity (Segovia IV)	24. The interface of publication ethics and institutional policies (El Pardo I)	25. Reproducibility of research and retractions (El Pardo II)	Partner Symposium I Organized by COPE (Segovia I, II, III)	
13h00 - 14h15	Lunch (Quehuz)						
14h15 - 15h45	PLENARY G (Segovia I, II, III)						
16h00 - 17h30	CONCURRENT SESSIONS 26-30 AND PARTNER SYMPOSIUM J						EDUCATION TRACK
	26. Research integrity and specific country initiatives (Alvorada I)	27. Responsible conduct of research and country guidelines (Alvorada II)	28. Behaviour, trust and honesty (Segovia IV)	29. Reporting and publication bias and how to overcome it (El Pardo I)	30. The research environment and its implications for integrity (El Pardo II)	Partner Symposium J Organized by Litewka/Heitman (Segovia I, II, III)	Education Track (Itamaraty)
17h45 - 18h30	PLENARY H (Segovia I, II, III)						

(二)專題探討

大會安排 24 場次專題演講、115 篇論文發表、44 個壁報展示，邀請各國科研從業人員分享彼此對於研究倫理課題的觀察與心得。

荷蘭阿姆斯特丹自由大學的 Lex Bouter 教授於演講中提到，馬虎科學的危害比研究不端還嚴重，選擇性的資料處理影響研究的效度及信度，造成研究不端行為主要受系統(發表壓力、高度競爭、獎酬制度)、文化(錯誤行為典範、監督失靈、缺乏教育訓練、無清楚指引準則)與個人(行為辯解、利益衝突、道德觀、人格特質)等因素的影響，惟有正視如此困境並調整獎酬制度才能有所改變。

美國明尼亞波里教育與研究健康伴侶研究所的 Brian Martinson 研究員指出，沒有造假、變造及抄襲並不表示具有研究倫理，錯誤行為亦與故意欺騙本質不同，傳統認知於科學上的錯誤行為歸咎於個人，其實仍有外在環境使然，大家都低估了研究人員在高度研究壓力下所面臨的恐懼，以及隨之衍生而來的不當行為。



專題演講



壁報展示

德國肺癌研究中心的Klaus Rabe研究員以該中心為例認為，維護科研誠信迫切需要一套統整建構出來可供遵循的行為準則以及處理標準，透過教育訓練加強研究人員的認識，同時以身作則及相互信任，如此將有益於整個社群網絡。

日本學術振興會理事 Makoto Asashima 教授於專題演講中指出，日本學術研究振興會於今(2015)年2月編印出版了「科学の健全な発展のために－誠実な科学者の心得」專書，該書彙編了各個領域研究人員應有的基本行為準則，分為八個章節闡述何謂負責任的研究行為及其對社會發展的重要性，也希望該書普遍為日本各研究單位使用，並對科學進步有所助益與貢獻。

負責擬訂美國研究倫理政策的研究倫理局代表Zoë Hammatt律師分享了美國的經驗，該局隸屬於美國衛生部，除代表監督美國聯邦公共衛生機構的研究倫理相關活動，

亦被授權執行與提升負責研究行為相關的教育工作，在其推動下已使美國各大學與研究機構紛紛建立教育訓練、問題諮詢及研究不端案件的調查及處理機制，政府主要扮演督導角色而不過度干預，審議確定屬實的調查結果會公布於該局網站²。

(三)教育課程

本課程由曾任英國出版道德委員會主席，英國醫學期刊的倫理委員會及世界醫學編輯協會成員，對研究倫理有深入研究的 Elizabeth(Liz) Wager 博士講授，以下列四個主題深入淺出的說明，引導與會人員思考何謂正確的研究態度：

- Who's the Author?: Authorship, transparency and conflicts of interest
- Show us the data: Data fabrication, falsification, image manipulation and data storage
- Words, words, words: Plagiarism, redundant publication and retractions
- Going public: Dealing with the press, communicating with the public, and social media

關於作者歸屬，其核心在於對研究內容中有關實驗設計、資料的分析與詮釋等有顯著貢獻，至於一篇文章如何決定作者列名，因學術社群不同而有所差異，依貢獻程度排列或按姓名字母順序者均有之，並無一致性通用標準，惟為避免作者歸屬爭議，應加強研究團隊內部溝通，亦須尊重共同研究者意見。

研究資料或數據應盡可能蒐集及完整呈現並據此嚴謹分析，避免過度或不當的推演與詮釋，研究紀錄也應完整保存，並以他人能夠重複驗證的方式，清楚且完整記錄研究方法及所有數據，畢竟資料是科學研究的根本，有幾分證據說幾分話，才是從事研究工作的基本態度。

科學研究是個日積月累的長期性工作，研究往往在前人建立的科學基礎上繼續推演，過程中無可避免引用他人資料或論點，適當註明出處是必要的，其目的在清楚區分何者係屬個人的創見，適度地反映出自身的研究貢獻，疏於適當引註往往是造成抄襲的開端。

科學研究的目的是在於發掘真理及突破創新，當研究成果有成，將研究資料與結果公開與分享，有助於知識的累積並供學術社群使用，當然也必須接受嚴峻的檢驗，是所有研究者於發表研究成果後均需面對的課題。

² 網址：https://ori.hhs.gov/case_summary

(四)論文發表

參與聆聽的論文發表中，有下列印象深刻的研究：

美國阿拉巴馬大學的 Eric Fong 博士與 Al Wilhite 教授調查美國 5 萬名商業及社會科學領域的研究者，以驗證個人投稿文章遭期刊編輯不合理要求新增引文普遍性的假設，回收 6 千份有效樣本中產生足夠的支持證據，在高度出版競爭的環境下，期刊出版商為了提升排名，確實有以這種不當引用手法來操控期刊排名現象。

美國 Retraction Watch 的 Ivan Oransky 博士則反思撤稿的意義，從自然期刊報導指出 2011 年單一年度被撤銷的論文數量約 400 件，是 2001 年 30 件的十餘倍，期間總論文發表數量僅增加 44%，這意味著有瑕疵的研究大幅提高，增加的原因與資訊系統比對檢測技術進步有關，也代表著科研界對於研究倫理的日趨重視。

我國國立交通大學周倩教授分享開發數位學習教材經驗，以及應用於我國高等教育的倫理線上課程，並現場播放所製作的課程動畫，透過生動活潑的教材設計，引導年輕學子建立正確的研究倫理觀念，培養負責任的研究行為。

四、心得與建議

2014 年 11 月《自然》期刊登載專文「同儕審查騙局」³(The peer-review scam)，將我國學者利用期刊審查制度漏洞，偽造人頭帳號同儕審查自己投稿文章的行為，與 2012 年韓國學者類似手法相比，譏評為最令人嘆為觀止的實例，重創臺灣國際學術聲譽。一時國內輿情大譁，帶動了一波整頓學術研究風氣的聲浪，除了個人偏差行為的譴責外，更多的是關於制度面的深度檢討。

本次國際研討會議中，對於研究不端的成因及其防範，與會者紛從不同面向精闢剖析，制度面部分除了建立行為準則、加強教育訓練、強化查察監督外，透過獎酬制度改善以促進負責任研究行為更是本次會議焦點，各類獎補助評量方式均可能帶動發表論文的行為，過度追求論文發表篇數而錯置科學研究的本質及目的，此種現象國外亦然。

科技部基於科技主管機關職責，參考《新加坡研究倫理聲明》等文件，於 2013 年

³ 網址：<http://www.nature.com/news/publishing-the-peer-review-scam-1.16400>

已公布研究倫理行為準則，讓我國研究人員知所行止，2014 年更檢討修正了「科技部學術倫理案件處理及審議要點」、「科技部對學術倫理的說明」及「研究人員學術倫理規範」，既正面的宣示研究人員應有的態度與行為，以及研究機構應有的處理態度與機制，亦明列不該有的行為及課責處置。

借鏡各國的經驗與作法，除遏止研究不端行為反覆發生的防弊舉措外，諸多興利的思維及措施更可為制度精進的參考，建議如下：

(一)引導對研究本質的省思認識

科學研究的本質包括追求真理及創造知識的社會效益，因此引導研究人員提案思維，思考提案之潛在影響性至為重要，不論是探索未知或解決問題，透過計畫申請書格式的調整，從提案開始鼓勵研究人員多加思考研究的核心目的，強化科學研究的多元價值及影響力，而不僅是追求論文數量的堆砌，從而將研究成果形成外溢的社會效益，改變拚指標的研究風氣。

(二)調整補助計畫審查評量方式

計畫審查以申請人研究表現及計畫內容為主要考量，依實際執行狀況輔以多元的評估指標，不再使用單一且機械式僵化之加權指標，此外，向審查委員闡述釐清審查之需求、重點與標準，加強審查會議之實質功能與機制，以比較細膩的討論過程，取代呆板指標簡化學術判斷，提升研究品質及深度。

(三)強化教育訓練取代事後課責

再多的事後課責都無法彌補已形成的錯誤，處罰也無法改變研究不當行為發生的事實，因此強化負責任的研究行為教育訓練極為重要，可由各學門於例行宣導會中對該領域研究人員進行觀念講習，亦可不定期舉辦研究倫理的專題演講活動，輔以個案研討方式灌輸正確的研究態度及行為，防患於未然。

(四)適當公布違反學術倫理資訊

「陽光是最好的防腐劑」，公開透明是防止弊病叢生的關鍵之一，美國研究倫理局、IEEE 期刊等會將處理研究不端的調查結果公布於網站，提供警惕作用並接受社會各界檢驗，可參考其精神並衡酌國情差異，於個人資料保護及遏止科研不當行為中，採行

適切對外公布說明的原則及方式。

(五)成立研究倫理專責單位

負責任的研究行為不僅是審議判斷論文的造假、變造或抄襲與否，廣義而言還包括人體試驗、動物研究、利益衝突、合作研究行為、同儕審查等層面，成立專責單位並配置專職人力，能更系統性的統籌研究倫理政策的擬定，並建立教育訓練、問題諮詢及研究不端案件處理的長久制度，塑造利於科研穩健發展的環境。

Singapore Statement on Research Integrity

Preamble. The value and benefits of research are vitally dependent on the integrity of research. While there can be and are national and disciplinary differences in the way research is organized and conducted, there are also principles and professional responsibilities that are fundamental to the integrity of research wherever it is undertaken.

PRINCIPLES

Honesty in all aspects of research

Accountability in the conduct of research

Professional courtesy and fairness in working with others

Good stewardship of research on behalf of others

RESPONSIBILITIES

1. Integrity: Researchers should take responsibility for the trustworthiness of their research.

2. Adherence to Regulations: Researchers should be aware of and adhere to regulations and policies related to research.

3. Research Methods: Researchers should employ appropriate research methods, base conclusions on critical analysis of the evidence and report findings and interpretations fully and objectively.

4. Research Records: Researchers should keep clear, accurate records of all research in ways that will allow verification and replication of their work by others.

5. Research Findings: Researchers should share data and findings openly and promptly, as soon as they have had an opportunity to establish priority and ownership claims.

6. Authorship: Researchers should take responsibility for their contributions to all publications, funding applications, reports and other representations of their research. Lists of authors should include all those and only those who meet applicable authorship criteria.

7. Publication Acknowledgement: Researchers should acknowledge in publications the names and roles of those who made significant contributions to the research, including writers, funders, sponsors, and others, but do not meet authorship criteria.

8. Peer Review: Researchers should provide fair, prompt and rigorous evaluations and respect confidentiality when reviewing others' work.

9. Conflict of Interest: Researchers should disclose financial and other conflicts of interest that could compromise the trustworthiness of their work in research proposals, publications and public communications as well as in all review activities.

10. Public Communication: Researchers should limit professional comments to their recognized expertise when engaged in public discussions about the application and importance of research findings and clearly distinguish professional comments from opinions based on personal views.

11. Reporting Irresponsible Research Practices: Researchers should report to the appropriate authorities any suspected research misconduct, including fabrication, falsification or plagiarism, and other irresponsible research practices that undermine the trustworthiness of research, such as carelessness, improperly listing authors, failing to report conflicting data, or the use of misleading analytical methods.

12. Responding to Irresponsible Research Practices: Research institutions, as well as journals, professional organizations and agencies that have commitments to research, should have procedures for responding to allegations of misconduct and other irresponsible research practices and for protecting those who report such behavior in good faith. When misconduct or other irresponsible research practice is confirmed, appropriate actions should be taken promptly, including correcting the research record.

13. Research Environments: Research institutions should create and sustain environments that encourage integrity through education, clear policies, and reasonable standards for advancement, while fostering work environments that support research integrity.

14. Societal Considerations: Researchers and research institutions should recognize that they have an ethical obligation to weigh societal benefits against risks inherent in their work.

Montreal Statement on Research Integrity in Cross-Boundary Research Collaborations

Preamble. Research collaborations that cross national, institutional, disciplinary and sector boundaries are important to the advancement of knowledge worldwide. Such collaborations present special challenges for the responsible conduct of research, because they may involve substantial differences in regulatory and legal systems, organizational and funding structures, research cultures, and approaches to training. It is critically important, therefore, that researchers be aware of and able to address such differences, as well as issues related to integrity that might arise in cross-boundary research collaborations. Researchers should adhere to the professional responsibilities set forth in the *Singapore Statement on Research Integrity*. In addition, the following responsibilities are particularly relevant to collaborating partners at the individual and institutional levels and fundamental to the integrity of collaborative research. Fostering the integrity of collaborative research is the responsibility of all individual and institutional partners.

Responsibilities of Individual and Institutional Partners in Cross-Boundary Research Collaborations

General Collaborative Responsibilities

- 1. Integrity.** Collaborating partners should take collective responsibility for the trustworthiness of the overall collaborative research and individual responsibility for the trustworthiness of their own contributions.
- 2. Trust.** The behavior of each collaborating partner should be worthy of the trust of all other partners. Responsibility for establishing and maintaining this level of trust lies with all collaborating partners.
- 3. Purpose.** Collaborative research should be initiated and conducted for purposes that advance knowledge to the benefit of humankind.
- 4. Goals.** Collaborating partners should agree at the outset on the goals of the research. Changes in goals should be negotiated and agreed to by all partners.

Responsibilities in Managing the Collaboration

- 5. Communication.** Collaborating partners should communicate with each other as frequently and openly as necessary to foster full, mutual understanding of the research.
- 6. Agreements.** Agreements that govern collaborative research should be understood and ratified by all collaborating partners. Agreements that unduly or unnecessarily restrict dissemination of data, findings or other research products should be avoided.
- 7. Compliance with Laws, Policies and Regulations.** The collaboration as a whole should be in compliance with all laws, policies and regulations to which it is subject. Collaborating partners should promptly determine how to address conflicting laws, policies or regulations that apply to the research.
- 8. Costs and Rewards.** The costs and rewards of collaborative research should be distributed fairly among collaborating partners.
- 9. Transparency.** Collaborative research should be conducted and its results disseminated transparently and honestly, with as much openness as possible under existing agreements. Sources of funding should be fully and openly declared.
- 10. Resource Management.** Collaborating partners should use human, animal, financial and other resources responsibly.
- 11. Monitoring.** Collaborating partners should monitor the progress of research projects to foster the integrity and the timely completion and dissemination of the work.

Responsibilities in Collaborative Relationships

- 12. Roles and Responsibilities.** Collaborating partners should come to mutual understandings about their roles and responsibilities in the planning, conduct and dissemination of research. Such understandings should be renegotiated when roles or responsibilities change.
- 13. Customary Practices and Assumptions.** Collaborating partners should openly discuss their customary practices and assumptions related to the research. Diversity of perspectives, expertise and methods, and differences in customary practices, standards and assumptions that could compromise the integrity of the research should be addressed openly.
- 14. Conflict.** Collaborating partners should seek prompt resolution of conflicts, disagreements and misunderstandings at the individual or institutional level.
- 15. Authority of Representation.** Collaborating partners should come to agreement on who has authority to speak on behalf of the collaboration.

Responsibilities for Outcomes of Research

- 16. Data, Intellectual Property and Research Records.** Collaborating partners should come to agreement, at the outset and later as needed, on the use, management, sharing and ownership of data, intellectual property, and research records.
- 17. Publication.** Collaborating partners should come to agreement, at the outset and later as needed, on how publication and other dissemination decisions will be made.
- 18. Authorship and Acknowledgement.** Collaborating partners should come to agreement, at the outset and later as needed, on standards for authorship and acknowledgement of joint research products. The contributions of all partners, especially junior partners, should receive full and appropriate recognition. Publications and other products should state the contributions of all contributing parties.
- 19. Responding to Irresponsible Research Practices.** The collaboration as a whole should have procedures in place for responding to allegations of misconduct or other irresponsible research practice by any of its members. Collaborating partners should promptly take appropriate action when misconduct or other irresponsible research practice by any partner is suspected or confirmed.
- 20. Accountability.** Collaborating partners should be accountable to each other, to funders and to other stakeholders in the accomplishment of the research.

The Montreal Statement on Research Integrity in Cross-Boundary Research Collaborations was developed as part of the 3rd World Conference on Research Integrity, 5-8 May 2013, in Montréal, as a global guide to the responsible conduct of research. It is not a regulatory document and does not represent the official policies of the countries or organizations that funded or participated in the Conference.