AUSTRALIAN MUSEUM POLICY

Keywords: **Research, Code of Conduct, Responsible Research**

Title of Policy: **Research Policy, 2009**

Approved by: Executive

Date Approved: 18 November, 2009

Last Revision: (see Notes below)

Policy Manager: Assistant Director, Research and Collections

TRIM File: **09/040**

Notes:
- This replaces the Australian Museum *Guidelines on Research Practice, 1998.*
- The framework for resolving allegations of breaches of this *Research Policy, 2009* and research misconduct is dealt with in the Australian Museum *Employee Related Concerns and Grievances Policy 2007*.

STATEMENT

Following a recommendation by the Australian Museum (Museum) Research and Collections Advisory Committee (RACAC), the AM Trust, at its December 2008 meeting, agreed to adopt *The Australian Code for the Responsible Conduct of Research, 2007* (the Code). This AM *Research Policy, 2009* reflects that decision.

The Code was jointly developed by the National Health and Medical Research Council, the Australian Research Council and Universities Australia, and was released in 2007. The purpose of the Code is to guide institutions and researchers in responsible research practices. In describing good practice, the Code promotes integrity in research for researchers and explains what is expected of researchers by the community. In providing advice on how to manage departures from best practice, the Code assists researchers, administrators and the community in this important matter.

Compliance with the Code is a prerequisite for receipt of National Health and Medical Research Council and Australian Research Council funding.

The Code consists of two main parts:
- Part A describes the principles and practices for encouraging the responsible conduct of research, for institutions and researchers.
- Part B provides a framework for resolving allegations of breaches of this Code and research misconduct, addressing the responsibilities of both institutions and researchers.

Part A has been adopted as the benchmark for the management of research activities at the Museum, and this Australian Museum *Research Policy, 2009* (Policy) has been developed per the Code.

Part B is dealt with in the *AM Employee Related Concerns and Grievances Policy 2007.*

The format of this Policy reflects that of the Code in that each section and sub-section/s of this Policy has the same numbering and related content as the Code. Further information about the Code may be found in Appendix 1.

Authorisation has been granted to use the Code as a basis for this Policy from the Commonwealth Copyright Administration, Attorney General's Department, Robert Garran Offices, National Circuit, Canberra, ACT, 2600. http://www.ag.gov.au/cca

Defining research
The meaning of 'research', as used in the Code, is original investigation undertaken to gain knowledge, understanding and insight. It is a broad concept and there is no simple, single way to define research for all disciplines. Refer to Appendix 1.

Contents

1 GENERAL PRINCIPLES OF RESPONSIBLE RESEARCH

Introduction

The Australian Museum *Research Policy, 2009* (Policy) sets guidelines whereby responsible research is encouraged and guided by the research culture of the Australian Museum (Museum). A strong research culture will demonstrate:

- honesty and integrity
- respect for human research participants, animals and the environment
- good stewardship of public resources used to conduct research
- appropriate acknowledgment of the role of others in research
- responsible communication of research results.

This section discusses the responsibilities of the Museum and researchers to maintain an environment that fosters responsible research.

Responsibilities of the Australian Museum

1.1 Promote the responsible conduct of research

The Museum will:

- promote awareness of all guidelines and legislation relating to the conduct of research
- provide documents setting out clearly the policies and procedures based on this Policy
- actively encourage mutual cooperation with open exchange of ideas between peers, and respect for freedom of expression and inquiry
- maintain a climate in which responsible and ethical behavior in research is expected.

1.2 Establish good governance and management practices

Good institutional governance and management practices encourage responsible conduct by researchers. Such practices promote quality in research, enhance the reputation of the institution and its researchers, and minimise the risk of harm for all involved.

1.2.1 The Museum provides an appropriate research governance framework through which research is assessed for quality, safety, privacy, risk management, financial management and ethical acceptability. The framework specifies the roles, responsibilities and accountabilities of all those who play a part in research.

1.2.2 The research governance framework demands compliance with laws, regulations, guidelines and codes of practice governing the conduct of research in Australia (see Appendix 2). Common law obligations also arise from the relationships between institutions, researchers and participants, while contractual arrangements may impose further obligations.

1.2.3 The Museum will ensure the availability of the documents that help guide good research governance, conduct and management.

1.2.4 The Museum's procedures on collaborative research projects with other organisations, *Administration of Funded Projects Procedures, 2009*, requires arrangements to be agreed before a project begins. These arrangements cover financial management, intellectual property, authorship and publication, consultancies, secondments, ethics approval, and ownership of equipment and data. Refer to Section 8 (Collaborative research across institutions).

1.2.5 The Museum has a well-defined process for receiving and managing allegations of research misconduct. Refer to the *Australian Museum Employee Related Concerns and Grievances Policy, 2007* which is consistent with Part B of the Code

1.2.6 There is a process for regular monitoring of the institution's performance with regard to this *Research Policy, 2009*.

1.3 Train staff[1]

The Museum provides induction, formal training and continuing education for all staff undertaking research, including research trainees. Training will cover research methods, ethics, confidentiality, data storage and records retention, as well as regulation and governance. Training also covers the Museum's policies regarding responsible research conduct, all aspects of this Policy, and other sources of guidance that are available. Where relevant, training including induction will be conducted jointly with other institutions. Refer also to Section 3.2.1 (Workplace specific training).

1.4 Promote mentoring

The Museum promotes effective mentoring and supervision of researchers and research trainees. This includes advising on research ethics, research design and methods, and the responsible conduct of research.

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[1] Museum staff: employees, volunteers, interns, students, trainees, honorary associates, research associates, senior fellows, visiting students and researchers

1.5   Ensure a safe research environment

The Museum ensures a safe working environment in which to conduct each research project.

The Australian Museum's *Occupational Health and Safety Policy (OH&S), 2007* sets out the Museum's general framework for ensuring a safe workplace. This is supported by the Museum's *Occupational Health, Safety and Injury Management Strategic Plan, 2008 – 2011* and related forms per the OH&S risk assessment information on the Museum intranet.

Responsibilities of researchers

1.6   Maintain high standards of responsible research

Researchers must foster and maintain a research environment of intellectual honesty and integrity, and scholarly and scientific rigour. Researchers must:

- respect the truth and the rights of those affected by their research

- manage conflicts of interest so that ambition and personal advantage do not compromise ethical or scholarly considerations

- adopt methods appropriate for achieving the aims of each research proposal

- follow proper practices for safety and security

- cite awards, degrees conferred and research publications accurately, including the status of any publication, such as under review or in press

- promote adoption of the *Australian Code for the Responsible Conduct of Research, 2007* and avoid departures from the responsible conduct of research

- conform to this Museum *Research Policy, 2009* as endorsed by the Museum Research and Collections Advisory Committee [insert date], Executive [insert date] and Trust [insert date] and bodies funding the research.

1.7   Report research responsibly

Researchers should ensure that research findings are disseminated responsibly.

1.8   Respect research participants

Researchers must comply with ethical principles of integrity, respect for persons, justice and beneficence.

Written approval from appropriate ethics committees, safety and other regulatory bodies must be obtained when required.

The *National Statement on Ethical Conduct in Human Research and Values and Ethics — Guidelines for Ethical Conduct in Aboriginal and Torres Strait Islander*

Health Research (or any replacement documents) sets out principles for protecting human participants in research (see Appendix 2).

1.9 Respect animals used in research

Researchers must respect the animals they use in research, in accordance with the *Australian Code of Practice for the Care and Use of Animals for Scientific Purposes* (see Appendix 2). Refer to Animal Care and Ethics on the Museum intranet regarding information and resources necessary to meet obligations under NSW Legislation.

1.10 Respect the environment

Researchers should conduct their research so as to minimise adverse effects on the wider community and the environment.

1.11 Report research misconduct

Museum staff who consider that research misconduct may have occurred must act in a timely manner, having regard to the Museum's policies as per Appendix 3. Refer to the Museum *Employee Related Concerns and Grievances, 2007.*

Special Responsibilities

1.12 Aboriginal and Torres Strait Islander peoples

It is acknowledged that research with Aboriginal and Torres Strait Islander peoples spans many methodologies and disciplines. There are wide variations in the ways in which Aboriginal and Torres Strait Islander individuals, communities or groups are involved in, or affected by, research to which this Policy applies.

The Australian Museum *Repatriation Policy for Australian Aboriginal Secret/Sacred and Aboriginal Ancestral Remains Collections, 2007* includes closing relevant collections to researchers until such a time that appropriate Aboriginal owner/managers desire otherwise. Also refer to the Australian Museum *Collection Management Policy, 2008*.

This Policy must be read in conjunction with *Values and Ethics: Guidelines for Ethical Conduct in Aboriginal and Torres Strait Islander Health Research* (NHMRC 2003) and the *Guidelines for Ethical Research in Indigenous Studies* (Australian Institute of Aboriginal and Torres Strait Islander Studies 2002) (see Appendix 2).

1.13 Consumer and community participation in research

Appropriate consumer involvement in research should be encouraged and facilitated by research institutions and researchers. This Policy should be read in conjunction with the *Statement on Consumer and Community Participation in*

Health and Medical Research (NHMRC and Consumers' Health Forum of Australia Inc, 2002) (see Appendix 2).

2 MANAGEMENT OF RESEARCH DATA AND PRIMARY MATERIALS

Introduction

The Australian Museum *Research Policy, 2009* (Policy) sets guidelines whereby ownership of research materials and data, their storage, their retention beyond the end of the project, and appropriate access to them by the research community is addressed. The Museum *Collections Management Policy, 2008* establishes an overall policy for development, maintenance and use of the Museum's natural science and cultural collections to ensure application of standards of best practice for collection management procedures and services. Also refer to the Museum *Records Management Policy, 1999* regarding administration of records of Museum research.

The responsible conduct of research includes the proper management and retention of the research data and collections. Retaining the research data and collections is important because it may be all that remains of the research work at the end of the project. While it may not be practical to keep all the primary material (such as ore, biological material, questionnaires or recordings), durable records derived from them (such as assays, test results, transcripts, and laboratory and field notes) must be retained and accessible. Disposal of any primary material that constitutes collection objects must conform to the Australian Museum *Collection Management Policy, 2008* and must be discussed with Collection Managers.

The Australian Museum *Collection Management Policy, 2008* and the Australian Museum *Records Management Policy, 1999* determine which data and materials should be retained, although in some cases this is determined by law, funding agency, publisher or by convention in the discipline. The central aim is that sufficient materials and data are retained to justify the outcomes of the research and to defend them if they are challenged. The potential value of the material for further research is also to be considered, particularly where the research would be difficult or impossible to repeat.

Responsibilities of the Australian Museum

2.1 Retain research data and primary materials

The Australian Museum is a public office and subject to the NSW *State Records Act, 1998* (see Appendix 3). The Museum *Records Management Policy, 1999* Museum *Collection Management Policy, 2008* includes the retention of materials and research data that is consistent with practices in the discipline, relevant legislation, codes and guidelines.

2.1.1   The Australian Museum Disposal Schedule (DR55731998) minimum
        retention periods are:

- working papers, drafts and project management correspondence –
  destroy 10 years after completion of project
- routine research data that can be replicated or reproduced from other
  sources –destroy10 years after completion of project
- final, master project report – transfer to Archives and Records for
  permanent retention
- original research data – transfer to Archives and Records for permanent
  retention

If the work has ongoing community or heritage value, research data
should be transferred to Archives and Records for permanent retention
or transferred to a significant national collection as required.

Consideration should also be given to the retention of online
publications of the Australian Museum.

2.1.2   The Museum *Records Management Policy, 1998* and the Museum
        Collection Management Policy, 2008 cover the secure and safe disposal of
        research data and primary materials when the specified period of
        retention has finished.

2.2   Provide secure research data storage and record-keeping facilities

The Australian Museum *Records Management Policy, 1998* and the Museum
Collection Management Policy, 2008 provide for the safe and secure storage of
research data and for maintaining records of where research data are stored.
Records are registered in the Museum's central records management database,
and collection records are held in the Integrated Collection Management System.

2.2.1 The Museum *Records Management Policy, 1998* and the Museum *Collection
      Management Policy, 2008* includes research data ownership and storage.
      This covers all situations that arise in research, including when researchers
      move between institutions or employers and when data are held outside
      Australia. Agreements covering ownership and storage of research data
      should be reviewed whenever there is movement or departure of research
      staff.

2.2.2 Wherever possible and appropriate, research data should be held in the
      researcher's department or other appropriate Museum repository, such as
      Archives and Records, although researchers are permitted to hold copies of
      the research data for their own use. Arrangements for material held in
      other locations must be documented in the Museum's central records
      management database.

2.2.3 In projects that span several institutions, an agreement must be developed
      at the outset covering the storage of research data, collections and primary
      materials within each institution.

2.2.4 Research data, collections and primary materials must be stored in the safe and secure storage provided.

2.3 Identify ownership of research data and primary materials

The Australian Museum *Intellectual Property Policy, 2007* (Section 4) includes ownership of research materials and data during and following the research project. The ownership may also be influenced by the funding arrangements for the project. As a general rule, the most satisfactory arrangement will be that the materials and data retained at the end of a project are the property of the institution that hosted the project, another institution with an interest in the research, or a central repository. Agreement about ownership of research data, collections and primary materials must be documented in the Museum's central records management database.

2.4 Ensure security and confidentiality of research data and primary materials

The Australian Museum *Records Management Policy, 1998* includes the ownership of, and access to, databases and archives that is consistent with confidentiality requirements, legislation, privacy rules and other guidelines such as the NSW *State Records Act, 1998*

2.4.1 The Museum *Records Management Policy, 1998* and the Museum *Collection Management Policy, 2008* guide researchers in the management of research data and primary materials, including storage, access, ownership and confidentiality.

2.4.2 The processes ensure that researchers are informed of relevant confidentiality agreements and restrictions on the use of research data.

2.4.3 Computing systems must be secure, and information technology personnel must understand their responsibilities for network security and access control. Refer to the Museum *Information Technology Security Policy, 2005.*

2.4.4 Those holding primary material, including electronic material, must understand their responsibilities for security and access.

Responsibilities of researchers

2.5 Retain research data and primary materials

When considering how long research data and primary materials are to be retained, the researcher must take account of professional standards, legal requirements and contractual arrangements. The Australian Museum Disposal Schedule (DR5573 1998) provides minimum retention periods for research records. Refer to 2.1.1.

2.5.1 Researchers must retain research data and primary materials for sufficient time to allow reference to them by other researchers and interested parties. For published research data, this may be for as long as interest and discussion persist following publication.

2.5.2 Research data and collections should be made available for use by other researchers unless this is prevented by ethical, privacy or confidentiality matters. Access to secure records less than 30 years old by outside researchers is through special agreement or Freedom of Information application. All records over 30 years are open access (unless by special restriction approved by State Records Authority of New South Wales) in line with the NSW *State Records Act, 1998* (see Appendix 3).

2.5.3 Research data must be retained for at least the minimum period per the Australian Museum Disposal Schedule (DR55731998) as specified in the Australian Museum *Records Management Policy, 1998.* Refer to 2.1.1.

2.5.4 If the results from research are challenged, all relevant data and materials must be retained until the matter is resolved. Research records that may be relevant to allegations of research misconduct must not be destroyed.

2.5.5 The Australian Museum *Records Management Policy, 1998* and related procedures on the secure and safe disposal of primary materials and research data must be followed.

2.5.6 Where ever possible, specimens and objects that form the basis for research publications should be housed in Museum collections, or those of other appropriate archival institutions. This is particularly true for type material. If conditions of permits set lodgment conditions, these conditions must be adhered to.

2.6 Manage storage of research data and primary materials

Researchers must manage research data and primary materials in accordance with the Australian Museum *Records Management Policy, 1998* and related procedures, and the *Collection Management Policy, 2008*. To achieve this, researchers must:

2.6.1 Keep clear and accurate records of the research methods and data sources, including any approvals granted, during and after the research process. Project administration records (approvals, contracts, grants, reports etc) are registered in the Museum's central records management database.

2.6.2 Ensure that research data, collections and primary materials are kept in safe and secure storage provided, even when not in current use. Files not in current use may be transferred to Archives and Records for long term, secure storage.

2.6.3 Provide the same level of care and protection to primary research records, such as laboratory notebooks, as to the analysed research data.

2.6.4 Retain research data, including electronic data, in a durable, indexed and retrievable form within a centralised museum repository.

2.6.5 Maintain a catalogue of research data in an accessible form.

2.6.6 Manage research data and primary materials according to ethical protocols and relevant legislation.

2.7 Maintain confidentiality of research data and primary materials

Researchers given access to confidential information must maintain that confidentiality. Primary materials and confidential research data must be kept in secure storage. Confidential information must only be used in ways agreed with those who provided it. Particular care must be exercised when confidential data are made available for discussion.

3   SUPERVISION OF RESEARCH TRAINEES

Introduction

The Australian Museum supervises research trainees[2] who are enrolled at other institutions, such as universities, and those institutions have the primary responsibility for trainee training. It is a requirement that a letter or form of agreement, such as a Memorandum of Understanding, be made with the relevant institution before supervision of any postgraduate student by Museum staff is accepted. However, all research trainees at the Museum will receive training on research ethics, the *Australian Code for the Responsible Conduct of Research, 2007*, the Australian Museum *Research Policy, 2009* and relevant Museum policies and guidelines as per Appendix 3. This has high priority for completion early in their careers. Researchers and supervisors must ensure that the role model they provide to junior colleagues is positive and conducive to a research culture of excellence, integrity, professionalism and mutual respect.

In return, research trainees must understand that in undertaking research they are joining an endeavour that requires dedication and accountability. Thus, research trainees also have responsibilities under this section. Consideration of the supervision of interns involved with research at the Australian Museum must also occur.

Responsibilities of the Australian Museum

3.1   Set standards for supervision and mentorship

The Museum will ensure that each research trainee, whether part of the Museum or from elsewhere, has an appropriately qualified and trained supervisor. It follows that the ratio of research trainees to supervisors must be low enough for effective intellectual interaction.

3.2   Induct research trainees

The Museum will ensure that research trainees understand the importance of responsible research conduct.

3.2.1   The Museum will provide workplace specific induction and training for all research trainees. This training will cover collection management, research

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[2] i.e. student

ethics, occupational health and safety, and environmental protection, as well as technical matters appropriate to the discipline.

3.2.2 The Museum will maintain the ready availability of key documents on the responsible conduct of research, including the *Australian Code for the Responsible Conduct of* Research, 2007, institutional guidelines on the conduct of research, requirements for research involving humans and animals, privacy and confidentiality, and the Museum's mechanisms for dispute resolution. Refer to Appendix 2 and Appendix 3.

Responsibilities of researchers and supervisors of research trainees

3.3 Ensure training

Supervisors of research trainees should ensure that training starts as soon as possible in the career of a researcher. Training should encompass discipline-based research methods and other relevant skills, such as the ability to interact with industry and to work with diverse communities.

3.4 Mentor and provide support

The research supervisor should guide the professional development of research trainees. This involves providing guidance in all matters relating to research conduct and overseeing all stages of the research process, including identifying the research objectives and approach, obtaining ethics and other approvals, obtaining funding, conducting the research, and reporting the research outcomes in appropriate forums and media.

3.5 Ensure valid and accurate research

Supervision includes oversight of the research outcomes from those under supervision. A supervisor must be satisfied that the research methods and outcomes of researchers and research trainees under their supervision are appropriate and valid.

3.6 Ensure appropriate attribution

Researchers and supervisors must ensure that research trainees receive appropriate credit for their work.

Responsibilities of research trainees

3.7 Seek guidance

A research trainee must demonstrate a professional attitude towards the research. Frequent sessions with the supervisor are important, requiring the

cooperation of both parties. The trainee should not wait until approached by the supervisor but should play an active part in maintaining an appropriate schedule of meetings.

3.8   Undertake induction and training

A research trainee should complete all induction and training courses as soon as practical after starting research in an institution.

4   PUBLICATION AND DISSEMINATION OF RESEARCH FINDINGS

Introduction

Dissemination of research findings is an important part of the research process, passing on the benefits to other researchers, professional practitioners and the wider community. Research activities supported by public funding are rarely complete until the results have been made widely available. However, research is expensive and often cannot be undertaken without the support of commercial sponsors, who seek rewards in the form of rights to commercial exploitation of the research outcomes. In such cases, sponsors may seek to delay or otherwise restrict the release of research results. In publications and dissemination in such instances, the general principles of responsible research set out in Section 1 of this Code apply.

There are many ways of disseminating research findings. Formal publication of the results of research will usually take place in academic journals or books, but this is not always the case. This section of the Australian Museum *Research Policy, 2009* applies to all forms of dissemination, including non-refereed publications, such as web pages, and other media such as exhibitions or films, as well as professional and institutional repositories.

This section should be read in conjunction with Sections 5 (Authorship) and Section 6 (Peer review).

Responsibilities of the Australian Museum

4.1   Promote responsible publication and dissemination of research findings

The Museum promotes an environment of honesty, integrity, accuracy and responsibility in the dissemination of research findings.

4.2   Protect confidentiality and manage intellectual property

4.2.1   The Museum will ensure that all parties to the research are made aware of the nature and scope of confidentiality agreements (refer also to Section 2.7).

4.2.2   The Australian Museum's *Intellectual Property Policy, 2007* provides for the protection of the intellectual property rights of the institution, the researcher, research trainees and sponsors of the research, as appropriate.

4.2.3   The Museum will ensure that the sponsors of research understand the importance of publication in research and do not delay publication

beyond the time needed to protect intellectual property and other relevant interests.

4.2.4 The Museum will ensure that researchers are aware of contractual arrangements that restrict, delay or limit publication.

4.3 Support communication of research findings to the wider public

4.3.1 The Museum makes available assistance, through media relations or science communications staff, to researchers when communicating research findings through the media. This includes online publications. Refer to the Australian Museum *Media Relations Policy, 2008.*

4.3.2 When reporting research results for publicity purposes, the Museum makes every effort to acknowledge partner institutions and sponsors involved in collaborative research.

Responsibilities of researchers

4.4 Disseminate all research findings

Researchers have a responsibility to their colleagues and the wider community to disseminate a full account of their research as broadly as possible.

4.4.1 The account should be complete, and, where applicable, include negative findings and results contrary to their hypotheses.

4.4.2 Publication activities must take account of any restrictions relating to intellectual property or culturally sensitive data. Refer to the following Australian Museum policies: *Intellectual Property Policy, 2007*; *Collection Management Policy, 2008*; and *Repatriation Policy for Australian Aboriginal Secret/Sacred and Aboriginal Ancestral Remains Collections, 2007*

4.4.3 Researchers must, where feasible, also provide research participants with an appropriate summary of the research results.

4.5 Ensure accuracy of publication and dissemination

Researchers must take all reasonable steps to ensure that their findings are accurate and properly reported. If they become aware of misleading or inaccurate statements about their work, they must correct the record as soon as possible.

4.6 Cite the work of other authors fully and accurately

Researchers must ensure that they cite other relevant work appropriately and accurately when disseminating research findings. Use of the work of other authors without acknowledgement is unethical.

4.7 Multiple submissions of research findings

It is not acceptable to include the same research findings in several publications, except in particular and clearly explained circumstances, such as review articles, anthologies, collections, or translations into another language. An author who submits substantially similar work to more than one publisher, or who submits work similar to work already published, must disclose this at the time of submission.

4.8 Obtain permission for republishing

Researchers must take all reasonable steps to obtain permission from the original publisher before republishing research findings.

4.9 Disclose research support accurately

A publication must include information on all sources of financial and in-kind support for the research and any potential conflicts of interest. Researchers must acknowledge the host institution and funding sources of the research.

4.10 Register clinical trials

n/a

4.11 Manage confidentiality

Sometimes the confidentiality requirements of a sponsor can prevent or delay peer review until after the research results are delivered to the sponsor. In such cases, the researcher must explain to the sponsor that the work has not been subject to peer review. The importance of peer review in the research process is discussed in Section 6. Whenever a sponsor's confidentiality requirements prevent peer review of a research report before its delivery to the sponsor, the researcher must inform the sponsor.

4.12 Responsibly communicating research findings in the public arena

Subject to any conditions imposed by the research sponsor, researchers should seek to communicate their research findings to a range of audiences, which may include the sponsor, professional organisations, peer researchers, policy makers and the community. Researchers may be interviewed by the media, invited to participate in debates, and approached by individuals for comment. It is important that all these activities are considered and supported where possible.

However, while it is straightforward to discuss research findings with peers, it is harder to do so effectively with other groups and the media, where the scope for misunderstanding is much greater and frequently there is no opportunity to review the report of discussions before it becomes public.

Researchers should seek opportunities and be ready to participate in workshops and other activities where professional assistance is provided in communicating with the media and the wider community.

The following points should be noted in relation to publicly communicating research findings:

4.12.1 Discussing research findings in the public media should not occur until the findings have been tested through peer review. In discussing the outcomes of a research project, special care should be taken to explain the status of the project for example, whether it is still in progress or has been finalised. Ideally this should be by publication, or acceptance for publication, in a peer-reviewed journal, but it may be by oral presentation to a meeting of research workers. Where there are good reasons to release research findings prior to reporting them to an audience of experts, this may be done only following approval of the appropriate Branch Head or Senior Manager.

4.12.2 To minimise misunderstanding about research outcomes, researchers should undertake to promptly inform those directly impacted by the research, including interested parties, before informing the popular media.

4.12.3 The outcomes of research with a strong commercial element may have to be presented to a stock exchange or financial body before any public release.

4.12.4 Any restrictions on communications that have been agreed with the sponsor must be honoured.

5 AUTHORSHIP

Introduction

Criteria for authorship

The outcomes of research may be disseminated in a variety of ways but enduring forms, such as journal articles, are particularly important and to be an author for such a form is meritorious. To be named as an author, a researcher must have made a substantial scholarly contribution to the work and be able to take responsibility for at least that part of the work they contributed.

Attribution of authorship depends to some extent on the discipline, but in all cases, authorship must be based on substantial contributions in a combination of:

- conception and design of the project

- acquisition and/or interpretation of research data

- drafting significant parts of the work or critically revising it so as to contribute to the interpretation.

The right to authorship is not tied to position or profession and does not depend on whether the contribution was paid for or voluntary. It is not enough to have provided materials or routine technical support, or to have made the measurements on which the publication is based. Substantial intellectual involvement is required.

A person who qualifies as an author must not be included or excluded as an author without their permission. This should be in writing, and include a brief description of their contribution to the work.

Where a work has several authors, one should be appointed executive author to record authorship and to manage communication about the work with the publisher.

Sometimes the editor of a significant collective work or anthology has responsibilities analogous to those listed above for authorship and, in such cases, similar criteria apply to 'editor' as to 'author'. However, the term 'editor' should be applied only to a person who has played a significant role in the intellectual shaping of a publication.

Responsibilities of the Australian Museum

5.1 Have criteria for authorship

In order to minimise disputes about authorship and to help resolve disputes if they arise, the Australian Museum adopts the criteria for authorship as provided in this Section 5.

Responsibilities of researchers

5.2 Follow policies on authorship

Researchers should adhere to the authorship criteria expressed in this Policy.

5.3 Agree on authorship

Collaborating researchers should agree in writing on authorship of a publication at an early stage in the research project and should review their decisions periodically.

5.4 Include all authors

Researchers must offer authorship to all people, including research trainees, who meet the criteria for authorship listed above. Those offered authorship must accept or decline in writing.

5.5 Do not allow unacceptable inclusions of authorship

Authorship should not be offered to those who do not meet the requirements set out above. For example, none of the following contributions, in and of themselves, justifies including a person as an author:

- being head of department, holding other positions of authority, or personal friendship with the authors
- providing a technical contribution but no other intellectual input to the project or publication
- providing routine assistance in some aspects of the project, the acquisition of funding or general supervision of the research team
- non-substantive collection of data or participation in field work
- providing data that has already been published or materials obtained from third parties, but with no other intellectual input.

5.6 Acknowledge other contributions fairly

Researchers must ensure that all those who have contributed to the research, facilities or materials are properly acknowledged, such as research assistants and technical writers. Where individuals are to be named, their written consent must be obtained.

5.7 Extend the authorship policy to web-based publications

Authors of web-based publications must be able to take responsibility for the publication's content and must be clearly identified in the publication.

5.8 Maintain signed acknowledgments of authorship for all publications

The senior author must retain the written acknowledgment of authorship discussed above in the form of an original hand-written signature. Where it is not practical to obtain an original signature, it is acceptable to use faxed or emailed consent. This also applies to published conference abstracts and similar publications. If an author is deceased or cannot be contacted, the publication can proceed provided that there are no grounds to believe that this person would have objected to being included as an author.

6   PEER REVIEW

Introduction

The term 'peer review' is used here to describe impartial and independent assessment of research by others working in the same or a related field. Peer review has a number of important roles in research and research management, in the assessment of grant applications, in selecting material for publication, in the review of performance of researchers and teams, and in the selection of staff.

Participation in peer review processes is encouraged. Peer review provides expert scrutiny of a project, and helps to maintain high standards and encourage accurate, thorough and credible research reporting.

Peer review may also draw attention to deviations from the principles of the *Australian Code for the Responsible Conduct of Research, 2007*, such as double publication, errors and misleading statements. Peer review has been important in the detection of fabrication and fraud in research. However, on its own, it cannot ensure research integrity.

Responsibilities of the Australian Museum

6.1   Encourage participation in peer review

The Museum recognises the importance of the peer review process, as outlined in the Introduction above, and encourages and supports researchers to participate.

Responsibilities of peer reviewers

6.2   Conduct peer review responsibly

Criteria for peer review

It is important that participants in peer review:

- are fair and timely in their review

- act in confidence and do not disclose the content or outcome of any process in which they are involved

- declare all conflicts of interest, do not permit personal prejudice to influence the peer review process, and do not introduce considerations that are not relevant to the review criteria

- do not take undue or calculated advantage of knowledge obtained during the peer review process

- do not agree to participate in peer review outside their area of expertise

- give proper consideration to research that challenges or changes accepted ways of thinking.

- ensure that they are informed about, and comply with, this criteria

Responsibilities of researchers

6.3   Do not interfere during the peer review process

Researchers whose work is undergoing peer review must not seek to influence the process or outcomes.

6.4   Participate in peer review

Researchers in receipt of public funding have a responsibility to participate in peer review processes.

6.5   Mentor trainees in peer review

Supervising researchers have a responsibility to assist trainee researchers in developing the necessary skills for peer review and understanding their obligation to participate.

6.6   Declare conflicts of interest

Peer reviewers must declare all relevant conflicts of interest.

7   CONFLICTS OF INTEREST

Introduction

A conflict of interest exists where there is a divergence between the individual interests of a person and their professional responsibilities such that an independent observer might reasonably conclude that the professional actions of that person are unduly influenced by their own interests.

Conflicts of interest in the research area are common and it is important that they are disclosed and dealt with properly. Conflicts of interest have the potential to compromise judgments and decisions that should be made impartially. Such compromise could undermine community trust in research.

Financial conflicts of interest are foremost in the public mind but other conflicts of interest also occur in research, including personal, professional and institutional advantages.

The perception that a conflict of interest exists is also a serious matter and raises concerns about the integrity of individuals or the management practices of the institution.

There is a broad range of actual and potential conflicts of interest in the research environment, and the Museum has a comprehensive policy in place to cover the likely range of circumstances as given below.

Responsibilities of the Australian Museum

7.1   Maintain a policy

4.3.   Management of conflicts of interest is addressed in the Museum *Staff Code of Conduct, 2009* and the NSW Independent Commission Against Corruption document *Identifying and Managing Conflicts of Interest in the Public Sector, 2004*.

Advice on managing conflicts of interest is readily available from organisations such as law societies and institutes of company directors. In relation to the above policy and code, the following should be observed:

7.1.1   The Museum *Staff Code of Conduct, 2009* is available on the Australian Museum intranet, and the NSW Independent Commission Against Corruption document *Identifying and Managing Conflicts of Interest in the Public Sector, 2004* is available online at http://www.icac.nsw.gov.au/dmdocuments/IdentifyingManaging.pdf.

7.1.2   In each conflict of interest case, encouragement is given for full disclosure by those involved of the circumstances giving rise to concerns about the

conflict of interest. This sometimes involves information that people are unwilling to disclose publicly, and a process involving disclosure to a small group in confidence will be provided. Where those involved are unable or unwilling to make any disclosure at all, they must withdraw from processes that could be influenced by conflicts.

7.1.3 Where the circumstances constitute a conflict of interest, or may lead people to perceive a conflict of interest, the person concerned must not take part in decision-making processes. The most satisfactory approach is for complete withdrawal (e.g. leaving the room for the item) however in some instances the Museum may allow for general discussion of the matter before the person withdraws. It is preferable that the person concerned does not remain in the room, even if silent, while the matter is debated and decided.

7.1.4 A record must be kept of how each conflict is managed in the proceedings, even if confidential information must be omitted. It is important that the possibility of a conflict is acknowledged in each case, along with an outline of how it was managed.

7.1.5 The Museum *Staff Code of Conduct, 2009* and the NSW Independent Commission Against Corruption document *Identifying and Managing Conflicts of Interest in the Public Sector, 2004* cover the full range of possible conflicts of interest. All Museum policies are reviewed by a timetable set by the Museum Executive to enable amendment informed by experience and legislative and regulatory developments.

Responsibilities of researchers

7.2 Disclose conflicts of interest

Researchers frequently have a conflict of interest that cannot be avoided. Decision-making processes in research often need expert advice, and the pool of experts in a field can be so small that all the experts have some link with the matter under decision. An individual researcher should therefore expect to be conflicted from time to time, and be ready to acknowledge the conflict and make disclosures as appropriate.

7.2.1 Researchers should use the following approach to manage conflicts of interest:

- read and understand the Museum *Staff Code of Conduct, 2009* and the NSW Independent Commission Against Corruption document *Identifying and Managing Conflicts of Interest in the Public Sector, 2004*

- maintain records of activities that may lead to conflicts, for example: consultancies; membership of committees, boards of directors, advisory groups, or selection committees; and financial delegation or in receipt of cash, services or equipment from outside bodies to support research activities

- when invited to join a committee or equivalent, review current activities for actual or apparent conflicts and bring possible conflicts of interest to the attention of those running the process

- disclose any actual or apparent conflict of interest as soon as it becomes apparent.

7.2.2   While there is no requirement to disclose the details of a conflict of interest, for example, because of a confidentiality agreement or for personal reasons, the existence of the conflict must be declared, followed by withdrawal from the situation.

8 COLLABORATIVE RESEARCH ACROSS INSTITUTIONS

Introduction

Research can involve a wide range of collaborations within institutions, between institutions, and internationally. Collaborative research has increased markedly in recent times and this raises specific issues, such as sharing intellectual property, managing research findings, managing conflicts of interest, and commercialising research outcomes.

Research practices differ between countries, but researchers supported by Australian public funding should make every effort to comply with this Australian Museum *Research Policy, 2009* taking in to account the *Australian Code for Responsible Conduct of Research, 2007*, even when conducting research outside Australia. Any need to deviate from this Policy must be submitted for institutional approval.

Responsibilities of the Australian Museum

8.1 Establish agreements for each collaboration

Museum research staff and trainees involved in a joint research project should ensure that an agreement is reached with the partners on the management of the research. Such an agreement must follow the general principles of this Policy, including integrity, honesty and a commitment to excellence.

The agreement should be in writing. It must cover intellectual property, confidentiality and copyright issues; sharing commercial returns, responsibility for ethics and safety clearances; and reporting to appropriate agencies. It should address the protocols to be followed by the partners when disseminating the research outcomes, and the management of primary research materials and research data.

The agreement may take various forms, including a legal contract signed by the chief executive officer, an exchange of letters, or a research management plan signed by all parties, or management plans signed by appropriate representatives from all parties.

Each organisation must ensure that its researchers are aware of, and understand, the policy and agreements governing the joint research collaboration.

8.2   Manage conflicts of interest

Institutions must have a policy for managing conflicts of interest that arise in collaborative research (see Section 7).

8.3   Manage access to research materials

The collaborating parties should each identify a person to be involved in the management of research data, primary materials and other items to be retained at the end of the project.

Responsibilities of researchers

8.4   Comply with multi-institutional agreements

Researchers involved in joint research must be aware of, and comply with, all policies and written agreements affecting the project, particularly those relating to the dissemination of research findings and the management of research data and primary materials, including this Policy.

8.5   Declare conflicts of interest

When establishing research collaboration, researchers must disclose as soon as possible any actual or apparent conflicts of interest relating to any aspect of the project.

APPENDICES

Appendix 1: Australian Code for the Responsible Conduct of Research

The *Australian Code for the Responsible Conduct of Research, 2007* (the Code) is a living document and will be updated from time to time. Please refer to the NHMRC website at http://www.nhmrc.gov.au/index.htm to download updates.

About the Code

The purpose of the Code is to guide institutions and researchers in responsible research practices. In describing good practice, the Code promotes integrity in research for researchers and explains what is expected of researchers by the community. In providing advice on how to manage departures from best practice, the Code assists researchers, administrators and the community in this important matter.

Structure of the Code

The Code consists of two main parts:
- Part A describes the principles and practices for encouraging the responsible conduct of research, for institutions and researchers.
- Part B provides a framework for resolving allegations of breaches of this Code and research misconduct, addressing the responsibilities of both institutions and researchers.

Development of the Code

The Code has been jointly developed by the National Health and Medical Research Council, the Australian Research Council and Universities Australia, and has broad relevance across all research disciplines. This Code replaces the *Joint NHMRC/AVCC Statement and Guidelines on Research Practice* (1997).

The Code is a guide for responsible research conduct in Australia, providing a basic reference for the development of appropriate policies and procedures. It is written specifically for universities and other public sector research institutions. Compliance with the Code is a prerequisite for receipt of National Health and Medical Research Council and Australian Research Council funding.

The Code is a reference for people outside the research community who require information on the standards expected in the responsible conduct of research within Australia.

The Code does not incorporate all the laws, regulations, guidelines and other codes of practice that apply to the conduct of research within Australia. Key guidelines that should be read in conjunction with the Code are listed in Appendix 2.

Defining research

The meaning of 'research', as used in the Code, is original investigation undertaken to gain knowledge, understanding and insight. It is a broad concept and there is no simple, single way to define research for all disciplines.

A definition of research based on the *Research Assessment Exercise* for universities in the United Kingdom is provided in Box A.1. This definition has been used successfully for many years, and is useful for illustrating what the term 'research' can cover.

Box A.1   Definition of research used in the United Kingdom Research Assessment Exercise

Research is defined as that which:

'… includes work of direct relevance to the needs of commerce, industry, and to the public and voluntary sectors; scholarship; the invention and generation of ideas, images, performances, artefacts including design, where these lead to new or substantially improved insights; and the use of existing knowledge in experimental development to produce new or substantially improved materials, devices, products and processes, including design and construction.

It excludes routine testing and routine analysis of materials, components and processes such as for the maintenance of national standards, as distinct from the development of new analytical techniques. It also excludes the development of teaching materials that do not embody original research.'[2]

Here the term 'scholarship' has the particular meaning:

'... the creation, development and maintenance of the intellectual infrastructure of subjects and disciplines, in forms such as dictionaries, scholarly editions, catalogues and contributions to major research databases.'

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[2] RAE (2005). *RAE 2008 Research Assessment Exercise: Guidance on Submissions*, RAE 03/2005. See Annex B 'Definition of research for the RAE'.
http://www.rae.ac.uk/pubs/2005/03/rae0305.pdf

Appendix 2: Laws, Regulations, Guidelines and Codes Governing the Conduct of Research in Australia

References within the Australian Museum *Research Policy, 2009*

AIATSIS (2000). *Guideline for Ethical Research in Indigenous Studies*, (Australian Institute of Aboriginal and Torres Strait Islander Studies).
http://www.aiatsis.gov.au/_data/assets/pdf_file/2290/ethics_guidelines.pdf

NHMRC (1997). *Joint NHMRC/AVCC Statement and Guidelines on Research Practice*, Commonwealth of Australia, Canberra.
http://www.nhmrc.gov.au/funding/policy/researchprac.htm

NHMRC (2002, 2005). *Statement on Consumer and Community Participation in Health and Medical Research* (the Statement on Participation), Commonwealth of Australia, Canberra.
http://www.nhmrc.gov.au/publications/synopses/r22syn.htm

NHMRC (2003). *Values and Ethics: Guidelines for Ethical Conduct in Aboriginal and Torres Strait Islander Health Research*, Commonwealth of Australia, Canberra.
http://www.nhmrc.gov.au/publications/synopses/e52syn.htm

NHMRC (2004). *Australian Code of Practice for the Care and Use of Animals for Scientific Purposes*, 7th edition (the Code of Practice), Commonwealth of Australia, Canberra.
http://www.nhmrc.gov.au/publications/synopses/ea16syn.htm

NHMRC (2007). *National Statement on Ethical Conduct in Human Research* (the National Statement), Commonwealth of Australia, Canberra.
http://www.nhmrc.gov.au/publications/synopses/e72syn.htm

Examples of published guidelines for authorship

APS Guidelines for Professional Conduct, American Physical Society.
http://www.aps.org/statements/02_2.cfm

Authorship Guidelines, The British Sociological Association
http://www.britsoc.co.uk/Library/authorship_01.doc

Guidelines on Good Publication and the Code of Conduct, Committee on Publication Ethics.
http://www.publicationethics.org.uk/guidelines

Publication Policies, Nature. http://www.nature.com/nature/submit/policies/index.html
Uniform Requirements for Manuscripts Submitted to Biomedical Journals, International Committee of Medical Journal Editors.
http://www.annals.org/cgi/content/full/126/1/36?ck=nck

Statement on biosecurity

IAP (2005). IAP Statement on Biosecurity, InterAcademy Panel on International Issues. http://www.nationalacademies.org/morenews/includes/IAP_Biosecurity.pdf

Surveys of research misconduct

Geggie D (2001). A survey of newly appointed consultants' attitudes towards research fraud. *Journal of Medical Ethics* 27(5):344–346.

Henry DA, Kerridge IH, Hill SR, McNeill PM, Doran E, Newby DA, Henderson KM, Maguire J, Stokes BJ, Macdonald GJ, and Day RO (2005). Medical specialists and pharmaceutical industrysponsored research: a survey of the Australian experience. *Medical Journal of Australia* 182:557.

Martinson BC, Anderson MS and de Vries R (2005). Scientists behaving badly. Nature 435:737–738.

Other relevant Laws, Regulations, Guidelines and Codes

(ICZN 2000). *International Code of Zoological Nomenclature*, International Commission on Zoological Nomenclature. http://www.iczn.org/iczn/index.jsp

Appendix 3: Research Related Australian Museum Policies and Procedures

References within the Australian Museum *Research Policy, 2009*
- *Administration of Funded Science Projects Procedure, 2009*
- Animal Care and Ethics (intranet resource)
- *Collection Management Policy, 2008*
- Australian Museum Disposal Schedule (DR55731998)
- *Employee Related Concerns and Grievances Policy, 2007*
- *Information Technology Security Policy, 2005*
- *Intellectual Property Policy, 2007*
- *Media Relations Policy, 2008*
- *Occupational Health and Safety (OH&S), 2007*
- OH&S and Risk Assessment Information (intranet resource)
- *Records Management Policy, 1999*
- *Repatriation Policy for Australian Aboriginal Secret/Sacred and Aboriginal Ancestral Remains Collections, 2007*
- *Staff Code of Conduct, 2009*

Other relevant Australian Museum policies, procedures etc
- *The Use of Business Accounts in the Australian Museum, 2005*
- *Charges for Loans to other Cultural Institutions, 2007*
- *Child Protection Policy, 2009*
- *Collection Conservation Policy, 2007*
- *Corruption Prevention Policy and Procedures, 2005*
- *Ethnographic Collection Development Strategy 2008-2012*
- *Field Work Policy - Research and Collection, 2008*
- *Legislation and External Policy Requirements, 2006*
- *Natural Science Collection Development Strategy 2007-2012*
- *Procurement Policy and Best Practice Guidelines, 2001*
- *Science Research Strategy 2007-2012*

Other relevant Australian Government legislations, policies, procedures etc
- NSW Independent Commission Against Corruption *Identifying and Managing Conflicts of Interest in the Public Sector, 2004*
  http://www.icac.nsw.gov.au/dmdocuments/IdentifyingManaging.pdf
- NSW *State Records Act, 1998*
  http://www.records.nsw.gov.au/about-us/state-records-act-1998/state-records-act