# **NMSI Best Practice in Research Policy**

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This policy should be read in conjunction with the NMSI Policy on External Researchers, NMSI Policy on Research Involving Human Participants and NMSI Policy on Visitor Research. (This statement will appear in the beginning of each of these policies)

### 1. Nature of Research at NMSI

Facilitating and carrying out research is one of NMSI's core functions, as is stated in the Museums Association's (MA) 'Code of Ethics' (see Appendix 1). Conducting research, be it curatorial or audience-related, develops the collections, the staff and the Museums' offer to the public. The purpose of research is to ensure that the information the Museums share and interpret is accurate, up to date and based on the highest standards of scholarship. Audience research is covered by a separate policy.

Research at NMSI can be defined in terms of three key features: research questions or problems, context and methods. Firstly, any research project should address a series of research questions or problems, and should seek to increase knowledge and understanding relating to these questions or problems. Secondly, the research context should be addressed: the reasons for focusing on particular questions or problems, what other research is being or has been conducted in the area, and what contribution the project makes to the advancement of creativity, insights, knowledge and understanding in the area should be clarified. Lastly, any research project should be able to demonstrate why the methods chosen to carry it out would be considered the most appropriate to answer the particular questions or problems. The nature of outputs may vary considerably, from published papers

to exhibitions, but the aim to enhance the dialogue between the Museums and their audiences remains.

#### 2. Integrity

Researchers should be honest in respect to their own actions in research and in their responses to the actions of other researchers. Researchers are bound by the MA Code of Ethics, which expects museum staff to apply the highest possible standards of objectivity to the research they are undertaking, and distinguish clearly between evidence and deduction. This applies to the whole range of research work, including generating and analysing data, applying for funding, publishing results, and when peer reviewing the work of other researchers. The direct and indirect contributions of colleagues, collaborators and others should be acknowledged. (see Section 9, Publication of Results). NMSI expects researchers to comply with any other codes of ethics they might be subject to by their own professional body.

Researchers are accountable to society, their professions, NMSI, the staff, volunteers and students involved and, in particular, to the sponsor that is funding the research. Researchers should however strive for editorial integrity and remain alert to the pressure that can be exerted by particular interest groups, as advised by MA Code of Ethics. Researchers are encouraged to raise concerns about any improper conduct, for further information see Section 10.4 'Whistle blowing'.

### 3. Openness

Whilst recognising the need for researchers to protect their own research interests and, where appropriate their Intellectual Property Rights (IPR), NMSI encourages researchers to be as open as possible in discussing their work with other researchers and with the public. Disseminating information ties in with NMSI's overarching mission of 'engaging people in a dialogue to create meanings from the past, present and future of human ingenuity'. Bound by the Freedom of Information Act 2000, NMSI is committed to openness and aims to be clear and proactive about the information it makes available. Through its Publication Scheme found on the Internet NMSI informs the public about the type of information available and an easy method, wherever possible, for accessing this information.

Once results have been published, NMSI expects researchers to make available relevant data and materials to other researchers, on request, provided that this is consistent with any ethical approvals and consents, which cover the data and materials, and any Intellectual Property Rights in them.

Sponsors could demand that publication of research results may need to be delayed for a reasonable period pending protection of any Intellectual Property arising from the research. Any such periods of delay in publication should, however, be kept to a minimum.

Researchers should be especially careful when discussing work that is not complete or has not been published. Exchange of potentially commercially confidential information by e-mail is not recommended.

# 4. Professional Guidance and Legislation

Where available, NMSI expects researchers to observe the standards of research practice set out in guidelines published by scientific and learned societies, and other relevant professional bodies binding the museums and individuals, such as Museums Association, Royal Society of Chemistry and AHRC.

All researchers should be aware of the legal requirements, which regulate their work noting particularly health and safety legislation and data protection. Please refer to the Health and Safety Advisor for more information, as well as Collections Documentation Unit at the Science Museum for details on issues such as written and computer records.

# 5. Leadership and Co-operation

Heads of institutions and their senior colleagues should ensure that a research climate of mutual co-operation is created in which all members of a research team are encouraged to develop their skills and in which the open exchange of ideas and skills is fostered. It is paramount that PhD students can maintain their autonomy when conducting research. This autonomy should be respected and ensured by their manager who should also give them all the support needed.

# 6. Support and Training

NMSI ensures that its staff involved in research have the relevant skills, appropriate research and training objectives, and that their training needs are provided for.

The staff are also expected to keep up to date with academic developments in their appropriate disciplines, and NMSI expects them to attend seminars and conferences regularly. For more information see the policy document 'Internal Research Policy'.

# 7. Primary Data/Samples

There should be clarity at the outset of the research programme as to the ownership and use of, where relevant:

- Data and samples used or created in the course of the research
- The results of the research

The responsibilities and procedures for the storage and disposal of data and samples should be made clear at the commencement of any project. Any research collaboration agreement relating to the research should contain clauses describing any necessary arrangements.

In keeping with the MA Code of Ethics, NMSI expects its staff to demonstrate proper research practice, by keeping clear and accurate records of the procedures followed and of any approvals granted during the research process, including records of the interim results obtained as well as of the final research outcomes. This is necessary not only as a means of demonstrating proper research practice, but also in case questions are subsequently asked about either the conduct of the research or the results obtained.

Data generated in the course of research should be kept securely in paper or electronic format, as appropriate. Back-up records should always be kept for data stored on a computer.

For more information see the 'Internal Research Policy' document.

# 8. Intellectual Property

See the NMSI policy on Intellectual Property Rights (IPR) on the Intranet. The policy allows NMSI to deal with requests consistently, clearly and fairly across the organisation. It also clarifies the responsibilities of both staff and managers. NMSI reserves rights to hold Intellectual Property Rights on research conducted on museums' time and on museums' premises. PhD students retain moral and intellectual property rights over their research.

#### 9. Publication of Results

NMSI encourages its researchers to conduct research with the intention of making information publicly accessible, as is advised in MA Code of Ethics. The publication of and dissemination of results should be done responsibly and with an awareness of the consequences of any such dissemination in the wider media.

Researchers should take into account the following guidance when publishing or disseminating their research or research findings including any plans they may have to publish or publicise research at conferences or on web sites.

- Research should be conducted in such a way as to meet the requirements of peer review.
- All funding sources must be acknowledged in any publication or publicity.
- Anyone listed as an author on a paper should accept responsibility for ensuring that
  he or she is familiar with the contents of the paper and can identify his or her
  contribution to it. The practice of honorary authorship is unacceptable.
- The contributions of formal collaborators and all others who directly assist or indirectly support the research should be both specified and properly acknowledged.

### 10. Ethical Practice in Research

## 10.1 Research involving human participants

NMSI occasionally conducts research on human participants, particularly in relation to audience research. NMSI always puts the interests of the visitor first in all its audience research projects, and follows the specific Ethical Policy devised for this purpose. Scientific research involving humans is always ethically approved by the universities whose researchers are concerned. This approval should always be sought and such experimentation should never be carried out by museum staff.

NMSI recognises the humanity of all people, and accepts the responsibility for ensuring that the research conducted is ethically sound and it fulfils any legal requirements such as those of the Data Protection Act 1998 (see Section 4 above).

See the separate NMSI Policy on Research Involving Human Participants.

#### 10.2 Risks of research misuse

In progressing their investigations, researchers should actively consider any risks that their research will generate outcomes that could be misused for harmful purposes. Where such risks exist, they should seek advice and take active steps to minimise them.

NMSI represents ideas, personalities, events and communities with sensitivity and respect, and provides advice to researchers to ensure their research falls within these ideals.

#### 10.3 Misconduct in research

'Research misconduct' is defined as:

- Fabrication, falsification, plagiarism or deception in proposing, carrying out or reporting results of research
- Deliberate, dangerous or failure to use accepted practices in carrying out research
- Intentional and unauthorised use, disclosure or removal of, or damage to, researchrelated property of another, including collections, apparatus, materials, writings, data,
  hardware or software or any other substances or devices used in or produced by the
  conduct of research

'Research misconduct' does not include:

- Honest error or honest differences in the design, execution, interpretation or judgement in evaluating research methods or results or misconduct unrelated to the research process
- Poorly conducted research unless it was carried out with the intention to deceive

NMSI undertakes investigation of all allegations of research misconduct made against its staff.

#### 10.4 Whistle blowing

Researchers are expected to understand and apply the following principles:

- Plagiarism, deception, or the fabrication or falsification of results is regarded as serious disciplinary offences
- Researchers are encouraged to report cases of suspected misconduct, and to do so in a responsible and appropriate manner.

NMSI has procedures in place to protect employees who "blow the whistle" about any improper conduct, so that any member of staff raising bona fide concerns can do so confidentially, and without fear of suffering any detriment. Please see 'NMSI Code of Conduct for Museum Staff' section 3 for the treatment of the Public Interest Disclosure Act 1998, the procedures involved and the statement on confidentiality.

## 10.5 Conflict of Interests

Researchers should declare and manage any real or potential conflicts of interest, both financial and professional. A balance of interests and certain 'disinterestedness' should always be maintained.

Areas of potential conflict might include:

- Where researchers and the museums have an existing or potential financial interest in the outcome of the research
- Where there is a financial, private or institutional, benefit significantly dependent upon the outcome of the research

Section 7 in NMSI's Code of Conduct for Museum Staff contains further information on conflicts of interest.

# References

AHRC, www.ahrc.ac.uk

Museum Association Code of Ethics, www.museumsassociation.org/ma/10934

Wellcome Trust Guidelines to Good Research Practice, www.wellcome.ac.uk/doc wtd002753.html

Wellcome Trust Statement on the Handling of Allegations of Research Misconduct, www.wellcome.ac.uk/doc\_wtd002756.html

# Appendix 1

# **MA Code of ethics**

Section 9. Research, share and interpret information related to collections, reflecting diverse views

Museums facilitate and carry out research. They share and interpret information consistent with their purpose and ensure that it is accurate, up to date and based on the highest standards of scholarship and research.

They organise and manage information to make it accessible. Museums interpret information to engage a wide variety of interests and to reflect diverse views. They invite users to question assumptions and distinguish evidence from speculation.

All those who work for or govern museums should ensure that they:

- 9.1 Research and collate information about collections and the subject areas generally within which the museum has expertise. Enable the museum's researchers and others to keep up to date with developments in their field.
- 9.2 Apply the highest possible standards of objectivity to the research undertaken by the museum, and distinguish clearly between evidence and deduction. Maintain, as far as possible, records and material so that the evidence on which research is based can be reexamined and verified independently.
- 9.3 Make information publicly accessible. Conduct research with the intention of making it public. Publish research promptly and make it widely available. (See also section 3, encourage people to explore collections for inspiration, learning and enjoyment.)
- 9.4 Develop mechanisms that encourage people to research collections, develop their own ideas about them and participate in a variety of ways in shaping the interpretations offered by the museum.

Make the museum a forum in which ideas can be discussed and tested. (See also section 3, encourage people to explore collections for inspiration, learning and enjoyment.)

- 9.5 Cultivate a variety of perspectives on the collections to reflect the diversity of the communities served by the museum.
- 9.6 Represent ideas, personalities, events and communities with sensitivity and respect. Recognise the humanity of all people. Develop procedures that allow people to define, and seek recognition of, their own cultural identity. (See also section 7, recognise the interests of people who made, used, owned, collected or gave items in the collections.)

- 9.7 Respect the views of others and their right to express those views, unless illegal to do so or inconsistent with the purpose of museums as socially inclusive institutions. Strive to dispel prejudice and indicate clearly the part played by opinion or conjecture in interpretation.
- 9.8 Reflect differing views striking a balance over time.
- 9.9 Recognise the assumptions on which interpretation is based and that presentational styles may shape perception in unintended ways.

Consider carefully the impact of interpretations that exclude any reference to people associated with the items.

- 9.10 Strive for editorial integrity and remain alert to the pressure that can be exerted by particular interest groups, including lenders and funders (See also 10.12).
- 9.11 Keep records and presentations as accurate and as up to date as possible. Record differences of expert opinion. Correct errors in documentation or presentations without delay, when they are brought to light.