MUSEUM *of the* HISTORY *of* SCIENCE

1 August 2005 – 31 July 2006

ANNUAL REPORT

Developments in the Museum

Review

The University appointed a review committee for the Museum of the History of Science as part of the regular programme of departmental reviews. The members were: the Master of St Cross (in the chair), Dr Silke Ackermann (Curator, British Museum), Dr Tim Boon (Head of Collections, Science Museum), Professor John Brooke (Professor of Science and Religion), Professor Roger Davies (Professor of Astrophysics), Dr Christopher Haigh (Lecturer in Modern History). The review took place in December, when meetings were held with members of the Museum staff. The committee submitted its report and recommendations, which were considered by the Visitors, who submitted a response. Both documents are under consideration by the University.

Gifts

Two substantial gifts were made to the Museum during the year. The Museum received a benefaction from the estate of the late Mr John Richard Millburn, which included a substantial sum of money and a collection of books and archives. Mr Millburn's will expressed 'the desire but without creating any binding trust that this sum should be used for purposes in connection with the Museum's library or publications by the Museum'. Books not wanted for the Library may be sold to raise funds for the benefit of the Museum.

A generous gift was made by Mr Howard Dawes and it was agreed that it should be used to help maintain an organisation of supporters or 'friends' of the museum.

Research Projects

The DCF-funded 'Universal Geometry' project on the Museum's collection of astrolabes came to a successful completion, with a major exhibition, a substantial web catalogue and other on-line resources, and a programme of public events. The DCF has now agreed to support a project of comparable size, entitled 'Small Worlds', on the collection of microscopes and microscope specimens. This will bring funding for two full-time research officers, a photographer and a collaborating artist. An exhibition and an on-line catalogue will again be among the outcomes.

Other developments

A fire alarm system was installed in the Museum store.

A gallery audioguide was introduced, supported by a grant from the DCMS/Wolfson Fund. Although there is a charge, it has been popular with visitors.

The Museum has re-occupied its space in the Clarendon Building. What were formerly two rooms have been converted into a single space, refurbished and much improved.

A good deal of planning and preparation has been done for two major projects for 2006-7: the acquisition and implementation of a new collections database and a major improvement in the accommodataion and management of collections in store. These objectives are in line with the shift in attention to the reserve collection, now that the gallery refurbishment, redisplay, and exhibition and other public programmes are in place.

Staff

The new post of IT Assistant (half-time) has been filled by Spiro Vranjes. Rachel Mellor resigned as Collections Manager and was replaced by Lucy Blaxland. Samantha Van Gerbig resigned as Photographer/Designer and was replaced by Keiko Ikeuchi. Three members of staff began maternity leave during the year.

Teaching

The Museum's M.Sc. course did not run in 2005-6, as no students were admitted. It is hoped that this is temporary dip and the course will be offered again in the next year.

Dr Bennett supervised two DPhil students. Three of Dr Johnston's doctoral students successfully submitted theses this year; Dr Johnston has one continuing DPhil student. Dr Bennett was examiner for 2 DPhil theses and for one transfer to DPhil student status.

Dr Johnston organised and taught most of the first-year history course, 'Gunpowder, Compass and Printing-Press'; Dr Bennett was examiner for the course, setting the examination and marking the scripts. For the first time the Museum was represented at the thesis fair for history undergraduates. Undergraduates and masters students in History of Art visited the Museum for a tour of the collections and Dr Bennett and Dr Johnston both offered tutorials on objects in the collection.

Collections Management and Conservation

Collections

The Documentation Plan was completed, establishing and codifying procedures for processing accessions and for providing the documentation essential for the proper management of the collection.

The 'Universal Geometry' research project involved re-cataloguing all the astrolabes in the Museum's collection, the largest and finest in the world. Each side of every part of all the astrolabes was photographed, and high-resolution images (some 1500) have been included in the resulting on-line catalogue.

The newly-acquired Marconi Collection (655 objects) has been catalogued and photographed.

Further improvements have been made in the store, in preparation for a major programme of improvement in 2006-7.

Conservation

Conservation of 32 objects has been completed. Special stands were made for 49 objects in the Tradescant Collection, while conservation work was occasioned by 15 loan requests. The standard programme of cleaning for objects on display was maintained, and a survey undertaken of our displayed objects at the Science Museum, London.

One very major project was completed during the year. This was the conservation of the large silver microscope belonging to George III, one of the best-known objects in the collection. The painstaking work of dismantling and cleaning has extended over a year. The microscope has now been returned to the permanent display.

Accessions

Accessions during the year included:

Flexible Drawing Curve, by F. W. Davenport, Providence, USA, c. 1885, transfer from Ashmolean Museum, previously used in the Drawing Office of the Department of Antiquities.

Pocket Aneroid Barometer, by E. Lennie, Edinburgh, late 19th or early 20th century, presented by Mr. M.W. Stringfellow.

Transfer from Department of Earth Sciences, University of Oxford :
Alidade, by E. R. Watts & Son Ltd., London, 1946
Microptic Theodolite, by E. R. Watts & Son Ltd., London, 1944
Theodolite, by W. F. Stanley & Co. Ltd., 20th century
Theodolite, by E. R. Watts & Son Ltd., London, 1940
Level, by W. F. Stanley & Co. Ltd., 20th century
Theodolite, by E. R. Watts & Son Ltd., London, 1945
Magnifying Stereoscope, by Fairchild Aviation Corporation, New York, 20th century
Theodolite, Cooke Tavistock, by Vickers Instruments, late 20th century
Level, by Cooke, Troughton and Simms Ltd., York, 20th century
Theodolite, by Hilger & Watts Ltd, London, late 20th century
Level, by Wild Heerbrugg, 20th century
Electronic Distance Measuring Device, by Microfix Instruments Ltd, 1983

Geocentric Orrery, by John R. Millburn, British, 1960s, bequest by Millburn Estate

Presented by Frank Manasek:
Speculum Metal Mirror, by Frank Manasek, Vermont, 2004
Speculum Metal Blank, by Frank Manasek, Vermont, 2004

Slide Rule, French, 19th Century, purchase
Architectonic Sector, by George Adams, London, c. 1760, purchase
Sculptor's Proportional Dividers, by Roberson, London, 19th Century, purchase

Loans

The loan of the Jevon's Logic Machine to the Powerhouse Museum in Sydney, Australia, was extended, at their request, for a second year, to November 2006.

A Replica of the Hooke-Boyle Air Pump was lent to the Fundacao Calouste Gulbenkian, Lisbon, Portugal, for the exhibition 'A Luz De Einstein 1905-2005', 3 October 2005 – 15 January 2006

T.E. Lawrence's Archaeological Folding Plate Camera and Kit were lent to the Imperial War Museum, London for the exhibition 'Lawrence of Arabia', 14 October 2005 – 17 April 2006

Ten items (Astrolabe quadrant, Celestial globe, Sinecal quadrant, Horary disc and quadrant, two Qibla indicators, Compass, North African astrolabe, Turkish astrolabe, Lahore astrolabe) were lent to the Insitut du Monde Arabe, Paris, for the exhibition 'L'age d'or des sciences Arabes', 15 October 2005 – 19 March 2006

A Persian astrolabe, c.1650 and Qibla indicator and sundial, 18th century was lent to the Ashmolean Museum for the exhibition 'Pilgrimage – The Sacred Journey', 10 January – 2 April 2006

Brunel's surveying sextant and box sextant was lent to the SS Great Britain, Bristol for their exhibition, 'Nine Lives of I.K. Brunel', 29 March 2006 – 5 November 2006

Research

Significant research access to the collection was arranged for:
Professor Sarma, Indian origin objects
Brian Greig, telescopes
Giles Hudson, Miss Acland camera & lenses
Philip Boyle, telegraphic equipment
Simon Packard, items for Museum Collections website
Richard Talbert, Roman disc dial
Tom Milnes, Russell pastel & Bell's phonograph foil
Simone Overrend, research for BBC4 programme
Elizabeth Bruton, Marconi items
Annette Peach & Ludmilla Jordanova, Ramsay portrait

Library and Archives

In the course of the year, the retrospective cataloguing of the library's books and modern periodicals onto OLIS was completed. Our holdings number ca. 11,000 and include all of our antiquarian material, catalogued to the fullest DCRB standard; about 4,000 books are unique in Oxford. Work has begun on the pamphlet collection.

Three exhibitions of library material were mounted: '**The Great Retailer of the Science**', consisting of works by Benjamin Martin and commemorating the tercentenary of his birth; '**StarBooks**', made up of celestial atlases, and tying in with the 10/10 day; and '**The Art of Shadows**', a display of early gnomonical books from Lewis Evans's library.

The Librarian undertook a full course of training in Virtua, the library management system that the University will be implementing in late 2006.

The Museum was the fortunate recipient of a generous bequest from J.R. Millburn of books (including many scare volumes), papers, and notes, as well as a sum whose uses should include the benefit of the Library and the Museum's publications.

For much of the year the researchers for the Universal Geometry Project were based in the Library.

Improvements to the drainage outside the library in the course of the year have largely solved the periodic flooding problems we have been encountering.

During the year, 131 items were accessioned, the majority of which were donated to the Library. 150 items were added to the Library's on-line catalogue. Loans to the Museum's staff and students numbered 79, a fall on the previous year owing to the lack of students in the Museum's M.Sc. programme. About 6,000 photocopies were made. Students in a wide range of disciplines have used the library, and enquiries continue to arrive from across the world.

Archival work has included the sorting and cataloguing of two small collections of manuscripts: papers of the physicist Allan Ferguson and a small group of papers of C. H. Josten. There was also a complete revision of the general index of manuscripts.

Scholars who came to use manuscripts or photographs included:
Thad Parsons (Sherwood Taylor MSS)
Anita McConnell (Radcliffe Observatory & Duke of Marlborough MSS)
Giles Hudson (Acland & other photographs)
Penny McCarthy (fake Copernicus letter)
Budd LaRue (Crisp MSS)
Jeanne M. Haffner (Jervis-Smith MSS)
Michael Rayner (University Observatory & astronomical MSS)
Bill Sheehan (Mars stereo photographs)
John Jones (Dyson Perrins Lab. MSS)
Jane Garnett (Bowen MS and Acland photographs)

Exhibitions

The exhibition '**Bye-bye blackboard ... from Einstein and others**' (mentioned in the previous annual report) closed on 18 September. 'Astrolabes of Africa' (mentioned in the previous annual report) closed on 23 October.

'**The Astrolabe, East and West**' ran from 29 October until 12 March. It was divided into five themes: Cosmos, Destiny, Faith, Possession and Imagination, while a chronological display running in parallel with these themes demonstrated the continuation of astrolabe making for a millennium – from the 9th to the 19th century. The exhibition was one outcome of the research project 'Universal Geometry', which included an appointment of an outreach officer, working principally with Muslim communities in East Oxford.

'**Wireless World: Marconi and the making of radio**' opened on 25 April. It was a collaboration with the Bodleian Library to mark the acquisition of the Marconi Collection by the University of Oxford, and displayed both objects and archives. The objects included some of the most famous items from the beginning of radio communication, while the documents included Marconi's original patents and Marconigrams from the Titanic disaster. The opening of the exhibition on 24 April was attended by the Chancellor, Lord Patten, and his wife, and Marconi's daughter, Princess Elettra Marconi, and her son. The Chancellor, Princess Elettra and the Director spoke at the opening; Bodley's Librarian and the Director spoke at a dinner for invited guests in the Divinity School.

A substantial section of the **Tradescant Collection**, originally displayed in the Museum building in the 17th century, has returned on loan to its first Oxford gallery, during the redevelopment of the Ashmolean Museum.

Smaller exhibitions included a collection of stars by the sculptor **Andrew Logan**, a selection of the **Museum's calendars**, '**The Great Retailer of the Science**' (consisting of works by Benjamin Martin and commemorating the tercentenary of his birth), '**Science and Islam**' (linked to our schools education programme), '**StarBooks**' (celestial atlases) and '**The Art of Shadows**' (early gnomonical books from Lewis Evans's library).

Education Service

This year's education programme has continued to develop and is attracting a steadily increasing number of visits from school groups from both primary and secondary sectors as well as FE and university student groups.

Within the Primary schools' programme, the first session on '**Tudor Ships**' has attracted a great deal of interest amongst local primary schools, and a new session, '**The Measurers**', has recently been developed and piloted. A new and improved version of the latter has been developed, based on the four pilot trials, and will be offered in the coming year. We have experimented with the provision of workshops for home education groups, a move that other museums have tended to avoid because of the challenges of dealing with a mixed age range. The Museum has also contributed to training sessions for specialist primary science teachers through the Oxfordshire County Council's Advisory Service Inset days, and to the introduction of Brookes University PGCE students undergoing teacher training to museums as a resource for education.

Over the second year of the Secondary schools' programme, there has been a steady increase in the number of secondary school visits, including repeat visits of several school groups with the same teachers. These were mainly science teachers, but there was some uptake from history teachers for the GCSE Schools' History Project syllabus.

In co-ordination with the 'Universal Geometry' project and the special exhibition of astrolabes, a new workshop was developed involving modelling astrolabes and learning about problem solving. This has been run several times and has been particularly successful with groups identified under the 'Gifted and Talented' initiative in schools. It has also been offered as a session in the University's admissions department's 'Access' scheme to attract able GCSE students from a wider range of backgrounds. The resources for the astrolabe workshop became a central part of the 'Learning Links' project funded by a grant from SEMLAC (now MLA South East), which involved a partnership between the Museum and a link school, Reading Grammar School. This project led to the development of resources and lesson plans covering topics in science, mathematics and art. A section of the Museum's website is currently being developed in order to make these resources directly available to teachers along with information about relevant objects from the Museum's collection. These objects were featured in a small exhibition on 'Science and Islam', which was on display in the entrance gallery from May to July 2006.

In addition to regular work with school groups, a third sixth-form 'study day', on the subject of 'Imaging' in science, was organised and delivered in July using facilities at the Medical Sciences Teaching Centre for a series of lectures in the morning followed by workshops in the afternoon. This attracted over 120 students from schools in Oxfordshire and the surrounding counties and involved contributions from members of the academic staff of several others of the University's departments.

Further co-ordination of visits by school groups is taking place across all the Oxford University museums. The Joint Museums' Education team has, for the second year running, delivered a training course for volunteers which is now accredited by the University's Department of Continuing Education.

Other ongoing projects include the development of a loan box for use in primary and secondary schools, contributions to Renaissance hub projects including the 'Schools4museums' website, and work with EFL groups co-ordinated by the University Museums' Community and Outreach officer.

In a meeting with one of the education officers at the Pitt Rivers museum, Menaka Rambukwella, a trail at the Pitt Rivers which complements the Tudor Ships session has been discussed and will shortly begin development. The goal of this trail is to encourage links between to the two museums, to encourage schools to consider visiting both museums, and to provide a unified theme for visits to both museums.

A workshop for teachers was given at the Cricket Road Centre (Oxford County Council), which was an introduction to sundials. Further to this workshop, Susan Cooper, the Science consultant at Cricket Road, visited the museum in order to be able to encourage her teachers to use the museum in their teaching, and to consult about possible new sessions relating more specifically to the science curriculum.

Programme of public events

Four quarterly programme leaflets were printed and distributed; two further leaflets announced events linked to special exhibitions. In addition to more unusual events, a programme of frequent gallery talks, exhibition talks and 'table talks' was offered throughout the year.

The Museum held its third '10/10 Day' on 3 December, with a programme of activities under the title '**10/10 Star**', to link with the astrolabe exhibition. The speakers were:
Dr Jim Bennett, 'Galileo's Starry Messenger'
Justin Bronder, 'Supernovae: exploding stars and the accelerating universe'
Spiro Vranjes, 'The Silver Screen – the first 50 years'
Kevin Walsh, 'Shooting stars'
Dr Jonathan Price, 'Cycles of madness: the concept of lunacy'
Katrin Thier, 'Meanings and associations of Star'
Dr Steven Gunn, 'The Court of Star Chamber'
Dr Sophie Page, 'The pentagram in medieval magic'
Christopher Taylor, 'Seeing stars: astronomy for observers'
Dr Stephen Justham, 'Stars and the nearest known black holes'
Dr Allan Chapman, 'The Star of Bethlehem'.
There were special displays, activities for families, films, music and tours from 10 am till 10 pm.

Public lectures linked to special exhibitions were as follows:
Dr Robert Anderson, '**What makes an object famous?**', 15 September
Dr Vittoria Feola, '**New Light on Elias Ashmole**', 7 February
Dr Stephen Johnston, '**The Astrolabe, East and West**', 23 February
Michael Barton, '**Marconi and the BBC**', 6 June.

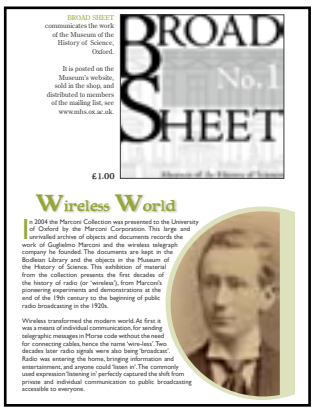
Other public lectures were:
Ian Pears, '**Between the Lines**' lecture on his book *An Instance of the Fingerpost*, 26 January
Dr Nancy Greenspan and Professor Gustave Born in conversation on **Max Born**, 9 February
Professor Robert Fox, '**A Century of Oxford Physics**', 9 May.

Every Sunday afternoon during the '**Universal Geometry**' exhibition Dr Johnston or Dr Bennett took a different astrolabe from the exhibition and gave an individual account of it in a special series of '**table talks**'. There were 18 of these talks in all.

A Radio Marconi Day on 27 May offered tours, talks (including one by the artist Jem Finer), storytelling, family activities and live music from the 1920s and 30s.

At the beginning of the Marconi exhibition the Oxford and District Amateur Radio Society operated a radio station, call sign **GB4MHS**, at the Museum for 5 days, 25-29 April, with large aerials mounted on the roof.

A special evening on '**1920: the Birth of Broadcasting**' was held on the European '**Night of Museums**', 20 May: sounds, images, film and fashion from the pioneering days of radio.



A new publication series, **BROADSHEET**, was launched with an issue covering the Wireless World exhibition.

There were two performances of costumed readings of extracts from Benjamin Martin's Young Gentleman and Lady's Philosophy (1759) on 10 September, under the title '**Dear Euphrosyne**'.

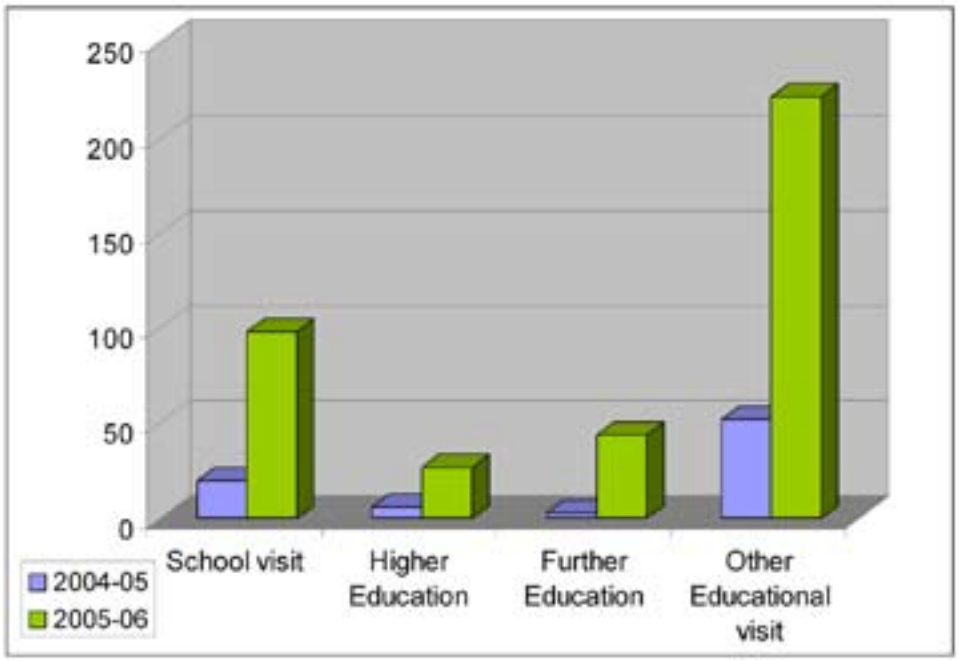
An **audioguide** to the permanent galleries was written and made available to visitors.

The programme of '**family friendly**' activities, introduced last year, was successfully expanded, with some 35 events, including relief carving, model orreries, poetry, planispheres, astrolabes, sundials, armillary spheres, star signs, signals and semaphores, electric telegraph and radio. Three days of activities were arranged for the annual '**Big Draw**' festival in October.

A '**Victorian Welcome**' day, with appropriate scientific amusements, was organised in collaboration with the other Oxford museums, on 29 April, to mark the beginning of Museums and Galleries Month.

A poetry afternoon, entitled '**Wild Fusion**', with words and music, was held on 25 September.

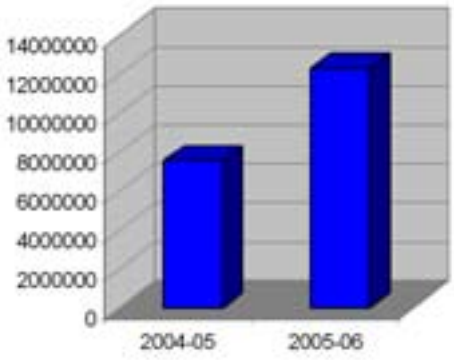
All caregories of group visits increased very significantly this year; school visits were up from 20 to 98, higher education from 6 to 27, further education from 3 to 44, and the total number of educational visits (including adult groups) increased from 52 to 222. These increases are so striking that they must be in part due to more careful and thorough recording.



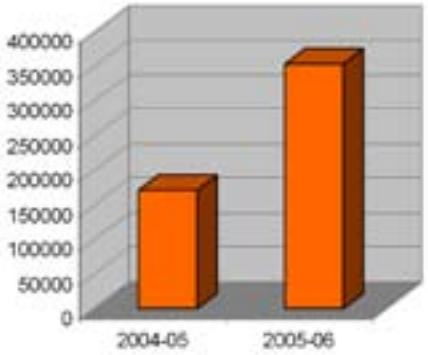
Electronic access

There have been several very significant additions to the Museum's website in 2005-6 and the statistics for use reflect this: the number of website 'hits' was up from 7,560,681 in the previous year to 12,264,300, while in the same period the number of unique users accessing the website rose from 171,301 to 353,830.

Number of Hits



Number of Users



A major, image-rich, on-line database of the Museum's outstanding collection of astrolabes was one outcome of the '**Universal Geometr**y' research project.

The catalogue of the entire **Marconi Collection**, with images, was placed on line.

The Epact database, first mounted on the Museum's website in 2001, was re-coded and re-launched in February.

In addition to these database resources, the following on-line exhibitions were added during the year:
'**Astrolabes of Africa**'
'**The Astrolabe, East and West**'
'**Wireless World: Marconi and the making of radio**.'

With the appointment of a part-time IT assistant, it has been possible to keep the website much more up-to-date with the programme of activities at the Museum, providing very valuable publicity and outreach. There have also been significant developments in the education section of the website, announcing the programmes on offer to schools.

The entire collection of books has now been catalogued to AACR2 standards and added to OLIS, the University's on-line union catalogue.

Dr Johnston continued to administer the ISIN website on behalf of the Scientific Instrument Commission, while also giving support to the Commission's on-line bibliography. The Museum continues to host the websites of the Scientific Instrument Commission, the Scientific Instrument Society, the Society for the History of Medieval Technology and Science, and 'Rittenhouse'.

Other Outreach

Dr Bennett was interviewed for 2 television and 13 radio programmes (including 'the Today Programme' on Radio 4 and 'Nightwaves' on Radio 3). The unusually large number of radio invitations derives from the interest in the Marconi exhibition. One of the television programmes, to which Dr Johnston also contributed, was for the 'People's Museum' series, broadcast on BBC2, which provided good publicity for the Museum as a whole.

Dr Johnston was interviewed for 2 television and 2 radio programmes. The other television programme was on Joseph Wright, made for BBC4.

The Museum hosted an evening on 4 July in the 'Headstart' programme for school pupils interested in applying to Oxford from schools with no such tradition. Dr Johnston gave four sessions 'All about Astrolabes' to 110 Year 5 and 6 pupils, at St Andrew's Primary School during National Science Week. He also spoke on the Museum to the Isis Probus Club. Dr Bennett gave guided tours for people in Oxfordshire working in contact with the public, so as to familiarise them with the Museum; tours were arranged for the police, for tourist office staff and for hotel staff.

The traditional Museum party was held on Ashmole's birthday, 23 May, and included an additional presentation of 'Dear Euphrosyne'.

Contribution to Research, Scholarship and the Discipline

The Museum joined with the Royal Photographic Society to organise a 2-day meeting on the histories of science and photography, 10-11 September.

Once again the Museum organised and hosted a research seminar series in Trinity Term; the speakers were Dr Simon Chaplin (Royal College of Surgeons of England), Professor Roy MacLeod (Leverhulme Visiting Professor in Modern History), Eleanor Sheppard (University of Oxford), Dr Willem Mörzer Bruyns (National Maritime Museum), and Dr Jim Bennett (Museum of the History of Science).

Dr Bennett served on the selection board for the Professor of History of Science, on the Board of Visitors for the Pitt Rivers Museum, and on the ASUC Committee for drafting the University's policy on the Care of Human Remains in Museums.

Dr Bennett served on the Peer Review College of the Arts and Humanities Research Council, on the Trustee Sub-Committee of the Science Museum, on the 'A' Awards Committee of the Royal Astronomical Society, and on the Library Committee of the Royal Society. He served on the international advisory panel for the exhibition in Berlin organised by the Max Planck Institute for the History of Science, 'Albert Einstein: Chief Engineer of the Universe'. He acted as an external reviewer for a proposed new MSc course at Imperial College. He served on the editorial boards of the journals *Nuncius, Journal for the History of Astronomy, Notes and Records of the Royal Society, and Science and Irish Culture*.

Dr Johnston has joined the editorial board of *Scientific Instruments and Collections*, continued on the committee of the Scientific Instrument Society and acted as the local organiser of the Society's annual meeting in July, which included a visit to the Museum.

Dr Johnston attended the New York reunion for Oxford University members in April and presented the Museum's programme of work to a plenary session.

The Museum hosted the 'wandering seminar' of the Max Planck Institute in Berlin for two days in May; this was an international group of post-doctoral historians of science gaining experience of collections and museums throughout Europe. The Museum also hosted a working visit by the project group for the new exhibition centre planned for the Wellcome Building in London. The Society for the History of Medieval Science and Technology continued to use the Education Room for its regular Oxford meetings.

Dr Bennett gave the following lectures and seminars:

23 September	Deutsche Gesellschaft für Geschichte der Medizin, Naturwissenschaft und Technik, Oldenburg, keynote address, '**Collection, reconstruction and invention: What can museums do for the history of science?**'
24 September	British Society for the History of Mathematics, Oxford, '**Mathematical Frontispieces**'
29 September	Shannon Lecture, University of Ottawa, '**Museums in a Changing Scientific Culture**'
30 September	Canadian Science and Technology Historical Association, Ottawa, '**Collecting and Preserving Science and Technology**'
20 October	Museum Boerhaave, Leiden, '**An Introduction to Instrument Identities**'
22 November	Department of Philosophy, University of Bristol, '**Wind-gun, Air-gun and Popgun: the Fortunes of a Philosophical Instrument**'
7 December	British Library, Public Lecture linked to the Nobel Exhibition, '**Einstein**'
7 January	Gulbenkian Museum, Lisbon, '**Museums for Diversity in Scientific Culture**'
14 February	Italian Society, Oxford, '**Sixteenth-century Florentine Mathematical Culture**'
10 March	Maison Française, Oxford, concluding comments at '**Science and Capitals**' symposium
24 May	MHS seminar series, '**Catadioptrics for gentlemen and tradesmen: Gregorian telescopes and Hadley quadrants**'
7 June	Max-Planck Institute for the History of Science, Berlin, '**Curating the History of Science**'

Dr Johnston gave the following lectures and seminars:

12 September	PHYSTAT 05: Statistical problems in Particle Physics, Astrophysics and Cosmology, Oxford, '**Blast from the past: measurement and morals in the early Transits of Venus**'
3 November	British Society for the History of Mathematics/Gresham College Annual Lecture, '**History from below: mathematics, instruments and archaeology**'
11 January	Cardiff Scientific Society, '**The Astrolabe East and West**'
7 June	Communicating Science in the Making: Techniques and Technologies to Exhibit Science in Practice, King's College London, '**Bye-Bye Blackboard: Displaying Science as Culture**'
9 July	British Society for the History of Science Annual Meeting, University of Kent, Canterbury, '**Astrolabes for all? Creating a new web resource for instruments in the history of science**'

Staff Publications

Jim Bennett, '**Mathematics, Instruments and Navigation, 1600-1800**', in Glen Van Brummelen and Michael Kinyon, *Mathematics and the Historian's Craft: the Kenneth O. May Lectures* (New York, 2005), pp. 43-55

Jim Bennett, '**Museums and the History of Science: Practitioner's Postscript**', *Isis*, 96 (2005), 602-8

Jim Bennett, '**Plates from Royal Society Publications: Illustrating William Roy's Baseline on Hounslow Heath**', *Notes and Records of the Royal Society*, 60 (2006), 225-30

Jim Bennett, '**Instruments and Ingenuity**', in Michael Cooper and Michael Hunter, eds, *Robert Hooke: Tercentennial Studies* (Altershot, 2006), pp. 65-76

Stephen Johnston, '**Like father, like son? John Dee, Thomas Digges and the identity of the mathematician**', in Stephen Clucas (ed.), *John Dee: Interdisciplinary Studies in English Renaissance Thought*, International Archives of the History of Ideas / Archives internationales d'histoire des idées, vol. 193 (Dordrecht: Springer, 2006).

Stephen Johnston, '**Benjamin Martin, from beginning to end**', *Bulletin of the Scientific Instrument Society*, 86 (2005), 12-13.

Tony Simcock, papers in the special '**John Millburn**' issue of the *Bulletin of the Scientific Instrument Society*, 86 (2005)

Tony Simcock, chapters in Robert Fox and Graeme Gooday, eds, *Physics in Oxford, 1839-1939 : laboratories, learning and college life* (Oxford, 2005)