The Science Museum helps fuel young people’s fascination with science, and this has never been more so than in recent years. Now more than ever, young people are being inspired to get involved and to get their hands dirty!

The Science Museum helped young people experience the thrill of science through its exhibitions and events. The app, published by Touch Press, enjoyed 250,000 downloads in its first six months. Photograph by Drew Gardner.

In space loved spinning around like tops within the tiny Apollo 10 command module. With the app, you can emulate them, just like astronauts. You can also see the original NASA footage from Apollo 10 orbit. Apollo 10 is on loan to the Science Museum from Washington's Smithsonian Institution and we cannot touch it, even with gloved hands. So we chose a boom to suspend a camera inside to capture an astronaut’s eye view – taking you behind the glass! The app, published by Touch Press, enjoyed 250,000 downloads in its first six months. Photograph by Drew Gardner.
One of the key things we are trying to challenge is the idea that science, engineering, and design are all part of Britain’s great industrial past, not our future.

**SMG INFLUENCE AROUND THE GLOBE 2013–14**

- **Los Angeles** and organisations in Brazil
- **The Science Museum** continued to be loaned to the National Railway Museum
- **BRAZIL**
- **Two Yorkshire-built A4 locomotives** were lent to the National Railway Museum
- **USA AND CANADA**
- **The National Media Museum** collaborated with organisations in Argentina
- **ARGENTINA**
- **New York Hall of Science**, which acted as consultants to the Maltese Museum’s Outreach team
- **MALTA**
- **Sierra Leone Railway** archival records relating to the museum
- **SIERRA LEONE**
- **CERN** collaborated enthusiastically with 1000 other museum programmes run in partnership
- **SWITZERLAND**
- **SmG York** loaned to Armagh Planetarium
- **A Blue Streak rocket engine** was loaned to the Science Museum in Manchester
- **SM’s adult Lates programme** generated discussion when Scott McKenzie-Cook, SM’s Curator of Time, Navigation, and Conservation, presented talks at the BIG Conference in Glasgow
- **SMG Shildon**

**SMG REACH WITHIN THE UK 2013–14**

- **This year proved the power of authenticity**, big projects anchored in real science. Tangible objects matter enormously to people.
- **Ian Blatchford**, Director of the Science Museum, said: ‘These objects tell a story that has been carefully preserved for us. They can take us back through time, across the Pacific Ocean, to the 1947 expedition of explorer Thor Heyerdahl in his Kon Tiki, whose albumen portrait is displayed right. We can reflect on the historical context in which they were used, and gain an understanding of the scientific principles behind them. The Kon Tiki is a tangible reminder of our shared human experience.

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**At a Glance**

Project Partnerships in & around the UK:

- **NRM – National Railway Museum, York and Shildon**
- **MOSI – Museum of Science & Industry, Manchester**
- **Wolverhampton Art Gallery**
- **From Darkroom to Digital**
- **‘The International’ Lancaster A2 Class Locomotive**

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**Conservation-Restoration of Clocks at West Dean College**

- **David Rooney**, SM’s Curator of Time, Navigation, and Conservation, took part in a conservation-restoration of clocks at West Dean College. The work included the collection of clock mechanisms and the restoration of a Victorian clock, shown right. The project was supported by the Arts Council England and the national lottery through the Heritage Lottery Fund.

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**Greater Manchester Science Festival, an 11-day celebration of science and engineering**

- **Smithsonian South East**
- **Science Museum’s Learning and Programme Development Team** worked with 1000 other museum programmes run in partnership

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**Science Museum’s Outreach team**

- **A BAC Jet Provost T4 RAF training aircraft** was loaned to the Science Museum
- **A Blue Streak rocket engine** was loaned to Armagh Planetarium
- **The vintage steam locomotive** toured from SMG York
- **NRM Shildon**

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**NMeM – National Media Museum**

- **Photographs such as the portrait of ‘Clementina Maude’ by Helena侯毅** and the ivory anatomical figures, shown right, were lent to the Dick Institute, an important cultural venue in Scotland
- **Castle Museum**, included loans from SM such as a folding-stand camera

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**NHM – Natural History Museum**

- **The ‘Pleasures of Knowing’ touring exhibition**
- **The ‘British Camera’ exhibition**
- **‘All That is Solid Melts into Air’ exhibition**

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**The Imperial War Museum**

- **‘From Hell’ exhibition**
- **‘34-gig’ Energy Show** played in Exeter

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**The Science Museum’s Mystery Science**

- **The BAC Jet Provost T4 RAF training aircraft**
- **A Blue Streak rocket engine**

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**The Museum of Science & Industry**

- **MOSI’s Park Green Mill clock**
- **‘1000 most influential Londoners for 2013’**
- **All That is Solid Melts into Air exhibition**

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**Science Museum’s Learning and Programme Development Team**

- **At the Ecsite (European Network of Science Centres and Museums) conference in Sweden**
- **At the BIG Conference in Glasgow**

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**Ian Blatchford, Director of the Science Museum**

- **‘The International’ Lancaster A2 Class Locomotive**
- **‘All That is Solid Melts into Air exhibition’**

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**Science Museum Group**

- **Science Museum Group’s Learning and Programme Development Team**
- **Science Museum Group’s Mystery Science**

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**The Science Museum**

- **The Kon Tiki, 1810**
- **Clementina Maude portrait**
- **Portrait of ‘Clementina Maude’ by Helena侯毅**
- **Folding-stand camera**

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**SMG MANCHESTER**

- **Energy Show** played a 34-gig

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**The Science Museum**

- **The Kon Tiki, 1810**
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**SMG MANCHESTER**

- **Energy Show** played a 34-gig
A MIGHTY BIG BANG FROM YOUR BUCK

Dr Douglas Gurr, Chairman of the Science Museum Group, celebrates another outstanding year of impact, influence and achievement

Four years ago, when I took over as Chairman of this wonderful institution, we set ourselves three challenges: to become financially self-sustaining in what looked like a difficult funding climate, to grow our relevance and audience reach, and to materially improve the quality of everything we do. As I prepare to stand down, let’s reflect on how we have done.

On money, the Group has found efficiencies to absorb a 30% real-terms reduction in Government funding whilst continuing to maintain our operations. At the same time, we have raised more than £50 million in new private capital to support key initiatives, created the Science Museum Foundation, which is beginning to build an endowment for the future. In addition, we welcomed the Museum of Science & Industry in Manchester into the Group.

This last year was our busiest ever with more than 5.7 million physical visits, 26.5 million web visits, and 600,000 booked education visits. We welcomed more children on educational visits than any other UK institution by far, placing us well into the top ten most visited families of museums in the world.

On quality, just reflect on a few highlights: Codebreakers, the winner of the Great Exhibitions Prize from the British Society for the History of Science; Media Space, which showcases the remarkable National Photography Collection; the reunion of Mallard and the A4 locomotives; and Collider, which opened to rave reviews and spectacular audiences. Looking forward, later this year we will see Cosmonauts and Information Age; work begin on a new research centre; and in 2016 two amazing new galleries on maths and medicine.

In short, we have sought to do more with less and we are succeeding. We have made the Group a central player in the science base to inspire the next generation of scientists, mathematicians and engineers who will drive the economy in years to come. We showcase the best of British research for the public and we help them understand its complexities.

All this, of course, is made possible by: a great team led by Ian and encouraged by a strong and committed Board of Trustees; and powerful backing – both financial and otherwise – from you, our cherished friends and supporters.

I hope that you agree that you are indeed getting a mighty big bang from your buck.
The prowess of the nation’s historic achievements in science and technology is displayed for all to see in the Science Museum – a cathedral to the history of science where visitors can share in the celebration.

LORD REES
ASTRONOMER ROYAL AND CHAIR OF THE LONGITUDE PRIZE 2014 COMMITTEE

The bio-revolution Lates event was a wonderful opportunity to let people see how exciting our institute’s discovery research will be. I’m delighted that so many people came along.

SIR PAUL NURSE
DIRECTOR OF THE FRANCIS CRICK INSTITUTE AND PRESIDENT OF THE ROYAL SOCIETY

CONTENTS

The prowess of the nation’s historic achievements in science and technology is displayed for all to see in the Science Museum – a cathedral to the history of science where visitors can share in the celebration.

LORD REES
ASTRONOMER ROYAL AND CHAIR OF THE LONGITUDE PRIZE 2014 COMMITTEE

8, 58

12

32

51

SMG ANNUAL REVIEW 2013–14

SMG is the place to be

On other pages

6 SMG is the place to be
10 Cash boost for Manchester
11 Our benchmark among apps
30 Lovelock unlocked
31 Shock view of psychology
32 A fine cross-cultural smorgasbord
34 Live wires creating sparks
44 The science behind giving
46 Focus on the media industries
58 A new dawn for photography
60 Enterprises are F-A-B
62 Landmarks in ingenuity
76 Tribute to Heather Mayfield

Appendix

Our five museums in profile

SMG Annual Review 2013–14

8, 58

12

32

51

60

62
OUR FORTE: DOING THE FORMIDABLE

Ian Blatchford, Director and Chief Executive of the Science Museum Group, signals our new ambitions: to reach a more sophisticated adult audience without sacrificing authenticity, and to reinforce the international stature of our Museum collections around the country.

My scientific colleagues are often amazed when I tell them that the Science Museum Group must be attuned to the zeitgeist. It may sound like pretentious artspeak, but all I mean is that science and technology provoke a potent mixture of excitement, inspiration, puzzlement and anxiety in all our audiences, and, if we stimulate all of these prospects then our work will have greater impact. And there can be few more eloquent testimonies to how science, technology and engineering are powerful forces acting on today’s culture than the launch of Collider, our exhibition about the grandest experiment of our time.

The challenges of doing so were formidable, both in conveying the epic scale of the experiment and visualising the subatomic world. That experiment is taking place at CERN’s Large Hadron Collider near Geneva, where an army of 10,000 scientists and engineers has built and run a particle accelerator the size of London’s Circle Line.

Collider’s success rests on giving voice to individual scientists and engineers. The Museum was delighted that Peter Higgs, recently the winner of a Nobel Prize, came to speak at its opening and receive an honorary fellowship of the Museum. Peter was so generous with his time, also attending an exhibition launch in parliament, a question-and-answer session for hundreds of eager teenagers, and the most packed press preview I have ever seen. Stephen Hawking, Nima Arkani-Hamed, Rolf-Dieter Heuer and Ian McEwan took part in launch events. And in another sign of the importance of this project, George Osborne — the UK’s ‘science chancellor’ — officially opened the exhibition.

Collider signals several new ambitions for the Group. One is to reach a more sophisticated, adult audience. I have always resisted prevailing pressures to ‘dumb down’ museum presentation. It may sound like pretentious artspeak, but all I mean is that science, technology and engineering provoke a potent mixture of excitement, inspiration, puzzlement and anxiety in all our audiences, and, if we stimulate all of these prospects then our work will have greater impact. And there can be few more eloquent testimonies to how science, technology and engineering are powerful forces acting on today’s culture than the launch of Collider, our exhibition about the grandest experiment of our time.

This has to be the most ambitious special exhibition by any science museum anywhere. From early timid ideas about a small cased display, we soon realised that ‘finding the Higgs’ was a special cultural as well as scientific event, and that a great museum should respond with appropriate scale and ambition. It was the right response to the zeitgeist.

The Science Museum has certainly been a part of my life, as a child and as a parent, and as a government we recognise the importance of investing in science.

The Museum is now ready to launch its Your Life initiative, designed to encourage more student involvement in STEM research centre in South Kensington. At the National Railway Museum we have launched our online open-access SMG Journal and plans for a world tour is the Museum of Science & Industry in Manchester.

Investment in the programme and galleries in Manchester are all part of our cunning plan to move the Group’s centre of gravity northwards. Throughout 2013 there was much political debate about the dominance of London in the cultural landscape. The Group has long been ahead in its thinking, because our Museums in Manchester, York, Shildon and Bradford have strong personalities, proud of their regional heritage but of international stature too. They are not mere branches of London. So we were pleased when the Chancellor tweeted about how his children loved our sister museum in Manchester and delighted when the event ended with the Treasury making a large capital grant towards the creation there of a new £3 million exhibition centre. Our ambitions are matched by other key players, and it was tremendous that our excellent partners at the Welcome Collection worked so hard to bring the Brains exhibition to Manchester, where it proved a huge hit.

Across the Group there have been many more extraordinary stories in the past year: On the academic front we have launched our online open-access SMG Journal and plans for a research centre in South Kensington. At the National Railway Museum the reunion of Mallard with her sister locomotives from the 1930s generated unprecedented publicity and massive crowds too, notably at Shildon. And the National Media Museum launched Only in England, which has been critically acclaimed and marked the first fruits of the Media Space gallery, a long-awaited partnership between our teams in Bradford and London.

All of this ambition needs money, and increasingly that has to come from philanthropy and entrepreneurial flair. I would draw your attention to page 66 and the article by our Chief Operating Officer, Jonathan Newby, which shows how we are making great progress in our strategy to deliver a sustainable future for the Group by adopting a more businesslike approach.

Finally, I want to thank Doug Gurr for all his support, wise counsel and sheer hard work as Chairman.
The UK boasts the world’s greatest alliance of science museums in the Science Museum Group. We present a formidable platform for showcasing new ideas to 5.7 million visitors a year. Roger Highfield, Director of External Affairs, says: ‘Anybody with an initiative to promote in science and engineering would be foolish to ignore the clout we wield. Look at the calibre of people who come to stage their events at our five Museums, from the parliamentary select committee on climate change meeting in the Science Museum’s Atmosphere gallery, to Children in Need basing its Yorkshire appeal at Bradford’s National Media Museum – not forgetting generous visits by five famous astronauts during the past year.’ [More on page 47]
Martin Parr says: ‘Tony Ray-Jones’s pictures were about England. They had that contrast, that seedy eccentricity, but they showed it in a very subtle way. They have an ambiguity, a visual anarchy. They showed me what was possible.’

What better baptism for a whopping new London gallery of 600 square metres for staging world-class exhibitions? This prestige space is the more surprising for sitting in the Science Museum. With its own licensed café attached. As well as a 300-square-metre Virgin Media Studio for experimental performances. All was made possible by the Principal Founding Sponsor Virgin Media, the collectors Michael and Jane Wilson, and the Dana and Albert R Broccoli Foundation (cue James Bond).

The £4.5 million Media Space was inaugurated with Only in England, a double bill of photography by Tony Ray-Jones, adopted mentor to Martin Parr who selected unseen works from 2700 contact sheets in the National Collection and made new prints – and showed his own early work titled The Non-Conformists. Everyone from Sir Richard Branson to the Wilsons and Ray-Jones’s widow Anna turned up for the launch. The reviews were superb, reminding us that London has long lagged behind Paris and New York in terms of public spaces for photography. Even more encouraging were the 44,000 paying visitors who turned up, 27% of them new to the Museum, almost all being those culture-loving ‘engaged adults’ every gallery aspires to attract.

Curator Greg Hobson was thrilled to honour Ray-Jones, who died aged only 30 yet influenced successive generations by having departed from the arch styles of ‘post-pictorialist’ photography prevailing in 1960s Britain. The show ran for six months in London before its tour via the National Media Museum and overseas. Bond producer and SMG cheerleader Michael G Wilson was finally vindicated for his five-year campaign to secure donations and create Media Space with the dual aims of showcasing Bradford’s superb collections in London and boosting awareness of other gems in Yorkshire.

Alongside the exhibition, Sir Richard had formally declared the Virgin Media Studio space open and stepped into 1000 Hands, an interactive audiovisual installation by the design collective Universal Everything, which invited visitor participation through a specially created smartphone app.

Science Museum Director Ian Blatchford concluded: ‘Media Space is a huge breakthrough – the gallery’s completion unleashes expectations to display more of our collection. It is a point of departure, not of arrival.’

Clockwise: Ian Blatchford, Richard Branson and Michael Wilson at the Media Space launch... The Universal Everything and You installation in Virgin Media Studio... People-watchers Sean O’Hagan and Kate Fox discuss English social ritual with Martin Parr in the IMAX... The Only in England photography exhibition at Media Space... Anna, widow of Tony Ray-Jones, Martin Parr and curator Greg Hobson tour the exhibition...

We chose Tony Ray-Jones’s pictures because they were about England – they have a visual anarchy

MARTIN PARR PHOTOGRAPHER SHOWING AT ONLY IN ENGLAND
The Museum’s mission is to explore where science met industry and the modern world began. As the focus of our heritage site, Liverpool Road Station’s historical importance is universally recognised. Major interventions are planned on every one of the Station Building’s three levels. In practical terms, the Network Rail plan to sever the Museum’s mainline access is forcing us to plan fresh ways to maximise our attractions.

In March Chancellor George Osborne kick-started fundraising for a new world-class exhibition space at the Museum of Science & Industry, Manchester’s leading visitor attraction and site of the world’s first inter-city railway station. During Osborne’s visit, he announced £600,000 for the Museum and a further £4 million for the University of Manchester, in addition to the National Graphene Institute. He saw the cash boost ‘brining more balanced growth across the UK and building a more resilient economy’.

This spring the transfer of Collider from London to Manchester required the exhibition to be adapted to available space. Under the new ten-year Masterplan, the creation of a bespoke gallery in the Grade I listed 1830 Warehouse will accelerate a cutting-edge science exhibition programme and improve capacity. Jean Franczyk, Director of the Museum, commented: ‘This financial support by the Government could not be offered at a more important time. Enabling the Museum to host world-class exhibitions will have a huge cultural impact on Manchester and the region.’

Here’s a privileged step into an astonishing digital realm. Our new iPad app, Journeys of Invention, is the first deep narrative from a science museum collection – and making it took as much work as we’d put into a sizable new gallery in terms of research, writing, conservation and photography. Once on board, you explore key ideas in the history of science through 14 interactive stories that are cunningly interlinked. You can study, rotate and even operate 84 of the Science Museum’s most iconic objects. Take a 360-degree look inside Apollo 10’s command module... examine a flea with Robert Hooke’s 17th-century microscope... write messages and encode them with a working model of a Second World War Enigma machine, then share them with friends to decipher.

The app has been called ‘a magnificent reputational project’. Andrew Nahum, Senior Keeper at the Science Museum and one of the co-authors of Journeys, says it’s like having a curator take you on a guided tour of the Museum, only without all the walking. The curated tours run from the ‘new science’ of the 17th century, through to molecular biology and the new electronics. The multimedia journeys make profuse use of film, images and much seldom-seen art from our own collection.

What’s breathtaking is the high-resolution photography which takes you behind the glass of a museum display case and up close. Selina Pang project managed this, Richard Horton led conservation, Boris Jardine co-authored the stories and the project was developed with award-winning app publisher Touch Press.

The app costs £6.99 – see sciencemuseum.org.uk/journeys

Clockwise: Photographer Nick Mann producing 360-degree images of Science Museum objects for the Journeys of Invention app... Andrew Nahum, Principal Curator of Technology and Engineering, launches the app... illustration of a flea from Micrographia, 1665, produced by Robert Hooke by viewing through his compound microscope, formerly in the George III collection.
COLLIDER: MAKING THE INVISIBLE VISIBLE

How the Science Museum turned particle physics into pure theatre – and created a new language for staging serious exhibitions

I particularly like the fresh, theatrical approach the museum is taking to bringing the drama and excitement of cutting-edge science to the public.

ROLF-DIETER HEUER, CERN DIRECTOR GENERAL
The Science Museum Group is determined to ‘dumb up’ science—and nothing sums this up better than Collider, the ambitious exhibition that aims to take visitors inside the world’s largest experiment, the Large Hadron Collider in Switzerland.

Director Ian Blatchford wanted this radical exhibition to tackle the staggering endeavour of 10,000 scientists and engineers to build and run the 27 km LHC to explore invisible subatomic worlds and provide new insights into the nature of the universe.

The creative team behind the exhibition was in itself remarkable, including curators Alison Boyle and Harry Cliff (who, at Cambridge University, works on the LHC); lead designer Pippa Nissen; Olivier Award-winning playwright Michael Wynne; and video artist Finn Ross, another Olivier winner.

After visiting CERN (the European Organization for Nuclear Research, where the LHC is based), they quickly realised that the true star of the show was neither the collider’s quest to seek the Higgs particle, which is responsible for mass; nor Peter Higgs, who first postulated the existence of the particle in the 1960s; nor the standard model, the theory of all particles and forces (save gravity) which the Higgs would complete. It was the mighty particle-smashing machine itself, with its cathedral-sized detectors and endless supply of superlatives – biggest, hottest, coldest and so on.

The creative team wanted to put the scientists at the heart of the story by blending theatre, science and of course objects from the Museum’s collections and from CERN, ranging from magnets to a top engineer’s bicycle.

In the end 54,000 people visited the ticketed exhibition, which was hailed by the Independent as being ‘better than the real thing’ and Radio 4 as ‘refreshingly grown up’. The Economist added: ‘The museum pulled off the even harder trick of depicting CERN’s character.’

Sponsored by the Science and Technology Facilities Council and Winton Capital Management, the ‘achingly glamorous’ high-calibre launch events involved Stephen Hawking, Peter Higgs (fresh from winning his Nobel Prize), theoretician Nima Arkani-Hamed, writer Ian McEwan, broadcaster Martha Kearney and CERN DG Rolf-Dieter Heuer. Chancellor George Osborne and the London Philharmonia added chutzpah. There was also an exclusive reception for Lords and MPs, hosted by the Parliamentary Office of Science and Technology.

Later events saw Lisa Jardine and fellow historian Jon Agar delve into big science, and a special screening of the award-winning documentary film Particle Fever, with its director Mark Levinson and star Monica Dunford.

The exhibition’s first stop on its UK and international tour is the Museum of Science & Industry in Manchester, where it was launched with the help of broadcaster Richard Bacon, Manchester University physicist Jeff Forshaw and his colleague TV star Professor Brian Cox, who also makes a cameo appearance in Collider – fetching the coffee.
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A masterplan sets out a framework from which other great ideas emerge, says Karen Livingstone, SMG Director of Masterplan and Estate. All the Museums in the Group and the storage site at Wroughton have been developing their plans during the past year. We can define our Masterplans against the key themes of the decade to entice diverse new audiences. We can express them through subtle shifts in the programming of contemporary science.

More immediately, though, visible improvements can transform the total visitor experience: new galleries and cafés have arrived at our Museums. Livingstone says: ‘Out go dingy dated spaces from another era, and in comes daylight – literally, in the case of the Science Museum’s lofty foyer, where for years the massive windows were covered.’ Commissioning award-winning furniture for our entrance lobby and installing a wondrous airborne velodrome – and making it visible from the street – amounts to a statement of intent.

‘These differences influence people’s behaviour, they start to shift perceptions of the organisation,’ Livingstone says. Making a priority of the quality of architecture and gallery design has been a step change for this Group, whereas it’s the norm in most modern galleries. Ben Kelly’s designs for the new £4.5 million Media Space and its Virgin Media Studio specifically integrate a new café with the Science Museum’s first significant gallery in a decade, both to showcase contemporary media and announce an international destination.

Having established our Museums’ ambitions, the necessary funds must be raised. In the Science Museum’s case a new library and research centre for 2015 are fully funded and RIBA award-winning firms queued up for the contract. Livingstone adds: ‘This project places fundamentals such as scholarship and collections at the heart of our Masterplan.’

A second new gallery, Information Age, by Universal Design Studios, which opens in autumn 2014, has raised awareness of many parallel projects for the next five years. The National Railway Museum is re-curating the Great Hall and developing its vast outside space to chime with the city’s plans for York Central. In Manchester our six listed structures encourage open-air landscaping of this industrial museum, while also receiving important touring exhibitions such as Collider. In Bradford the Media Museum has a menu of radical plans for emphasising its position as a national museum.

‘It is our business as museums to keep developing,’ Livingstone insists. ‘It’s a way of staying in control of our destiny, to be driving our own vision and transforming our Museums, rather than reacting to the next financial scenario.’
television, animation and new media. The anniversary aimed to refocus
energies on our core expertise.

Our 30th Birthday Collection Favourites exhibition reinterpreted key objects
from national collections selected by the
public, schools and community groups.
They included the earliest surviving
photographic negative and Lee and
Turner’s first colour movie footage.
A newly designed Mediatheque suite
opened to offer on-demand viewing
of 2500 titles from the BFI National
Collection of Film and TV, the Yorkshire
Film Archive and the Museum’s TV
Heaven collection. The crowd puller in
the autumn was Doctor Who and Me,
an exhibition marking 50 years since the
first broadcast, displaying the personal
collections of Whovian ‘super-fans’ plus
hands-on events for children and parents
to learn how to make electrical circuits.

Mediatheque gives
the people of Yorkshire
free access to hours and
hours of well-loved treasures
from our cinematic heritage

AMANDA NEVILL
CEO, BRITISH FILM INSTITUTE

Twentieth anniversaries were also
celebrated by the Bradford International
Film Festival (BIFF) and Bradford
Animation Festival (BAF). The first
featured the work of British director
Sally Potter (Ginger & Rosa, Orlando)
and the scientific films of Charles
Urban, while Widescreen Weekend
saw Professor Sir Christopher Frayling
exploring the aesthetics of Sergio
Leone. BAF provided animation
masterclasses and screen talks
embracing the craft of hit games titles
such as Dishonored and Tomb Raider.
The lifetime award for Ian Mackinnon
and Peter Saunders was accompanied
by filmed congratulations from Tim
Burton, who called them ‘great artists’.

Last year’s concerns over the
Museum’s future have been addressed
with a Masterplan to reconfigure
the site as a more recognisable
national museum. SMG Chief Executive
Ian Blatchford says: ‘One of the
key things we need is a wonderful
temporary exhibition space in order
to receive high-quality exhibitions
generated by the Science Museum
and internationally’. 

The Museum is home to 3.5 million items of historical
significance, many in unrivalled world-
class collections. Traditional and
interactive galleries located across
eight floors of the Museum investigate
and celebrate film, photography,
and the lives and times of the
people who made them. The
Museum has always been
successful in creating
exhibitions that
arouse the
interest of
great
numbers
of people.
In 1983, when
the National
Moviemuseum
was
celebrating
its 25th birthday,
there were 1.5
million
visitors.
In 1992, the
25th birthday
celebrations
attracted a
massive
2.8 million
visitors.

The year
2012
brought
new
opportunities
for the
Museum.
A
Masterplan
was
announced,
aimed at
transforming
the
Museum
into
a
visually
exciting
national
museum.

The
Museum
is
an
important
educational
resource
for
the
Yorkshire
region
and
beyond.

Huge public support for the
National Media Museum has
recognised its economic and
social impact in Bradford

The National Media Museum
celebrated its 30th birthday in its
Bradford home with a weekend
of activities attended by almost 4600
people, while the annual visit total of
479,000 showed a significant increase
among those who visit primarily for our
galleries and exhibitions. The Museum
is home to 3.5 million items of historical
significance, many in unrivalled world-
class collections. Traditional and
interactive galleries located across
eight floors of the Museum investigate
and celebrate film, photography,
and the lives and times of the
people who made them.
What a way to celebrate our 30th anniversary on the Castlefield site with its six listed structures. Not only has the Museum of Science & Industry triggered a daring ten-year Masterplan to magnify its heritage as home to the Industrial Revolution, but we were also rewarded with an important injection of Treasury cash to kickstart fundraising for a much-needed new temporary exhibition space. Museum Director Jean Franczyk says: ‘We have become a fundamentally different organisation since joining the SMG and have been on a very fast-paced trajectory to establish our international standing.’

A lively programme of exhibitions boosted total visit numbers to 669,000, first prize going to the Wellcome Collection exhibition Brains: The Mind as Matter, which doubled target expectations by attracting 100,000 visits. On transferring from their debut in London, displays were supplemented by half as many more from local collections. Franczyk says: ‘Such a serious-minded exhibition was a departure for the Museum, but Manchester with its many universities has an appetite for high-quality, challenging approaches to science aimed at independent adult audiences.’

A broader strategy to share projects across SMG secured for 2014 the cutting-edge Collider exhibition from the Science Museum, and 3D: printing the future follows. Endorsing the Museum’s importance to contemporary science debate, the Government Chief Scientific Adviser, Sir Mark Walport, chose us to launch his lecture series on climate change and Minister for Energy, Michael Fallon MP, chaired a roundtable discussion here with the region’s energy providers.

This year’s vibrant cultural programme showed off the refurbished Station Waiting Rooms adjacent to exhibitions recognising local industry, Creating the Illusion: Animation in the North-West, and objects from our own handling collection in Everyday Relics. The Manchester Science Festival continues under Siemens’ sponsorship as the Museum’s annual flagship event [see page 5].

A new schools programme launched in January and STEM-related festivals of contemporary science included All Aboard, Made in Manchester, Steam, Sweat and Sewers and the Manchester mini maker faire. The magnificent daily demonstrations of working steam engines and original mill machinery remain at the core of our ongoing public programme.

30 YEARS OF MANCHESTER PROGRESS

Our Museum in Castlefield has begun capitalising on its historic site along with challenging exhibitions

The science museum in Manchester makes a huge contribution to the cultural vibrancy of our city and its visitor economy

SIR RICHARD LEESE
LEADER, MANCHESTER CITY COUNCIL
Our Contemporary Science team makes its own headlines by mounting live ‘meet the scientists’ events.

STAYING ABREAST OF TODAY’S NEWS

The Antenna gallery is the home of contemporary science, exploring the latest news in science, technology, medicine, the environment and innovation from every angle. It is the perfect place to position our supporters as thought leaders. Our feature exhibition at the Science Museum – 3D: printing the future – created a continuing debate by displaying 600 3D printed objects showing the explosion of creativity from 3D printing, cutting through the hype to highlight real innovations. The exhibition included advanced aerospace and car parts, medical implants and devices.

Major collaborations included our weekend festival for the Medical Research Council’s centenary, where 11 research groups became part of an immersive theatre experience called The Life Game. Marking International Women’s Day, the Beyond Earth festival hosted talks and workshops with women such as space technologist Marie-Claire Perkinson who develop the latest technology to explore space.

The Robot Safari festival in partnership with EUNIC brought together 13 biomimetic robots.

Breaking news generated media coverage even before the opening and the Contemporary Science team went to great pains to obtain a 3D printed gun to display in the Antenna news gallery. Its design was by a non-profit digital organisation and placed, open source, on their website for anyone to download. Antenna’s online poll asking if we should have access to 3D-printed plans for guns divided respondents almost exactly down the middle, suggesting that law-makers face a challenge in ensuring public safety. Among the year’s ten news exhibits, a bioMASON brick, grown from bacteria, also prompted visitors to share their views via social media.

Her team also provide regular updates in the Who am I? gallery and daily Antenna science news reports online. Seven ‘meet the scientists’ Antenna Live events attracted 28,000 people in all. In the Live Science programme five groups of researchers came to the Museum to show visitors the process of science at first hand and to use the data collected from visitors to further their research.

The Dana Centre’s discussion programme complemented the 3D: printing the future, Mind Maps, Who am I? and Atmosphere exhibitions and galleries as well as broader issues in contemporary science themes.

To celebrate our 100th birthday the Museum came up with the Life Game, an original and brilliant event from across Europe and drew 6500 visitors. Katrina Nilsson, Head of Contemporary Science, said: ‘The robots represented quality research technologies and by curating the festival in a jungle setting [we] demonstrated the impact of contemporary science at its best.’

PROFESSOR SIR JOHN SAVILL, CHIEF EXECUTIVE, MEDICAL RESEARCH COUNCIL

PROFESSOR SIR JOHN SAVILL, CHIEF EXECUTIVE, MEDICAL RESEARCH COUNCIL
THE GREATEST OF GATHERINGS

Six world-renowned locomotives proved to be record-breaking crowd-pullers to celebrate the 75th anniversary of Mallard’s unbeaten world steam speed record.
The audience pulling power of these glamorously streamlined engines exceeded all expectations, giving the National Railway Museums in Shildon and York their best ever year, with 1.2 million visits.

On 3 July 1938, the Mallard A4 Class steam locomotive set a world record by reaching 126 mph. That record still stands and in the past year we celebrated the 75th anniversary of this historic achievement by bringing together at Mallard’s home in York five surviving sisters: Union of South Africa, Dominion of Canada, Bittern, Sir Nigel Gresley and Dwight D Eisenhower.

Thanks to the efforts of 70 volunteers during the summer’s Great Gathering, 44,000 people saw the footplate of an A4 and had the excellence of its engineering explained. All were built in Doncaster to the design of Sir Nigel Gresley, Chief Mechanical Engineer of the London and North Eastern Railway.

For the York Great Gatherings a quarter of a million visitors flocked to the Museum and the tourism body Visit York has credited Mallard 75 for a city-wide visitor surge. After some winter touring duties, all six locomotives gathered again in February at Shildon for the Great Goodbye which welcomed 120,000 visitors over nine days. The annual visit numbers for NRM York reached 926,000, up more than 25% on 2012–13 and well ahead of estimates.

The reunions of the six A4s attracted more than 364,000 visits. The commercial turnover during York’s Great Gatherings exceeded £1 million, providing a return to the Science Museum Group of nearly £500,000. In addition, visitors to these events generously gave a total of £140,000 in donations plus Gift Aid and the Museum brought in a further £50,000 with its ticketed photography and dining events. Simon Smallay at NRM Shildon said he had ‘never had queues like it’ in the gift shop.

The transcontinental move of those mighty machines, Dwight D Eisenhower and Dominion of Canada, was made possible thanks to £260,000 and £240,000 promised as in-kind support from the Museum’s project partners including haulage company Moveright International, shipping company ACL, Peel Ports in the UK and Ceres and Canadian National Railways in Canada.

Project Manager Tobias Lumb and volunteer Tony Oldfield can take much credit for marshalling the star locos and the associated celebrations. Paul Kirkman, Director of the NRM, said that it had been an ‘amazing year owing to the staggering success of the Mallard 75 series of events of which HRH The Prince of Wales is Patron.’

To cap it all, Prince Charles steamed in aboard Bittern to unveil a plaque declaring York’s Station Hall officially refurbished, and to be doubly delighted by visiting Queen Mary’s saloon, familiar from his childhood. The prince was overheard fondly reliving his memories.

He could have guessed that six sleek 1930s steam locomotives would break more records than they did in their heyday? The audience pulling power of these glamorously streamlined engines exceeded all expectations, giving the National Railway Museums in Shildon and York their best ever year, with 1.2 million visits.
Where better to show off the ephemera of the visionary and inventor James Lovelock than the museum that inspired him in the first place? As well as charting a remarkable 70-year career that stretches from colds to burns, via freezing tissues, to the chemistry of atmospheres, both terrestrial and Martian, and even the creation of virtual worlds, the free exhibition – Unlocking Lovelock: Scientist, Inventor, Maverick – provides an opportunity to celebrate where he became enthralled with science at the age of six. He says: ‘I learned the science that has kept me busy not by being taught it, but by going to places like the Science Museum.’

The Museum’s big steam engines, push buttons and a description of the use of explosives in mining launched him on an unusual career trajectory, including 40 years working alone in his own lab. Within 84 boxes of material from Lovelock’s lab, all acquired by the Science Museum in 2012 for £300,000, Alexandra Johnson and her team had everything from his school reports to James Bond-style stories, hand-painted Christmas cards laden with worm-like creatures he dubbed ‘Luvles’, notebooks, charts, manuscripts and materials on his 50 or so patents. Of the 90 items put on show, the most revealing of all is Lovelock’s electron capture detector. This underwhelming-looking device helped to change the face of environmental science by detecting pesticides, CFCs and other key pollutants to show how humankind is changing the planet.

His dawning realisation that ‘pollution was global, not local’ also helped shape his biggest brainwave: Gaia, the idea of Earth as a self-regulating system that maintains favourable conditions for terrestrial life.

Lovelock passionately believes that lone scientists work more like artists and can be more original. ‘I am delighted that the Science Museum has chosen to display this collection – I hope that it will show the next generation how it is possible to do scientific research as a lone inventor and scientist.’

Our world-class medical collections provide a remarkable opportunity to tell stories from the past 250 years of the efforts to reveal the hidden processes of our minds. Divided into four episodes between 1780 and 2014, Mind Maps: Stories from Psychology ranges from mesmerism to cognitive behavioural therapy to recent advances in brain scanning. Mental wellbeing is as pressing an issue today as ever before, according to Curator of Psychology Phil Loring, of the British Psychological Society which supported the exhibition.

Beyond an opening film by the broadcaster Samira Ahmed, the extraordinary objects in this free exhibition are anchored in the physical: perhaps most dramatic of all is the Italian table where a human nervous system has been dissected and varnished onto its surface.

The pioneering use of electricity in the 1780s to understand nerve activity is exemplified by the elegant table-top workbench of the Italian doctor Luigi Galvani, which has not been on public display for a century, and by a ‘frog pistol’ which made a frog’s leg twitch when fired. We also discover the origins of the word ‘battery’.

Neurologist Charles Sherrington was fascinated by the way cats keep their balance and visitors can see the model that helped the Nobel Prize-winner illustrate their poise. Other more recent items include the first depth recording of brain waves made in the UK in 1958 and a first-generation PET (positron emission tomography) scanner. The Lancet said Mind Maps ‘documents this rich history brilliantly’.

On show at the Mind Maps exhibition: Luigi Galvani’s elegant workbench of 1780 with its static electricity generator at left and Leyden jar for storing the charge at right – unseen in public for a century… The saddle coil for transcranial magnetic stimulation (TMS), made in Wales in 2006… 1980s geodesic EEG sensor net with head mount… Wooden cat, believed to have been made by British neurologist Sir Charles Sherrington to demonstrate the role of nervous reflexes.
With the Science Museum’s IMAX auditorium now converted to receive live theatre performances, there’s seldom a week without music and drama. Most eye-opening for his frank insights was performance artist Mat Fraser in his journey through the history of disability titled *Cabinet of Curiosities*. No less enlightening was *Going Dark*, an astonishing evocation of going blind, with the audience in a blacked-out studio. Other live performances included *X&Y*, *Centrally Heated Knickers* and *Kraftwerk Uncovered* by the German band Icebreaker, while SMG’s new production, *Science Museum Live: The Energy Show*, clocked 34 venues during a nationwide tour.

In the Virgin Media Studio, *Unknown Empires* was a multimedia performance exploring hidden subcultures of dance among older people. Another event there saw Universal Everything ‘engaging in romantic explorations of computer code’, according to founder Matt Pyke.

Almost 20 years ago, the Science Museum Arts Programme committed us to working with contemporary artists on every major capital project. Alongside commissions for new artworks, Hannah Redler, Head of Media Space and Arts Programme, this year commissioned a new work of fiction, *Shackleton’s Man Goes South* by Tony White.

The National Railway Museum mounted several Gallery shows – *It’s Quicker By Rail: Speed and Railway Advertising* evoked speed through posters; the photography exhibition *Lines in the Landscape* showed us exactly that; while NRM Shildon hosted *Rail Art 2013* by the Guild of Railway Artists. York’s annual event Locos in a Different Light invited art students to illuminate the iconic A4 locomotives, and Shildon closed the Mallard 75 celebrations with a performance of *Steamsong*, a new multimedia opera by John Kefala-Kerr.

The Museum of Science & Industry launched a schools programme with specially devised science shows such as *Forces and Flight*, Pablo Fanque’s *Circus of Dreams* and *Inventors Wanted*, all performed in a beautiful new show space, Warehouse for the World. The National Media Museum created interactive science shows, one of which – *Science of Winter* – ran for five days to sell-out audiences. Its photography programme hosted *Copper Horses*, a show of work produced by Chris Harrison as Bradford Fellow in Photography.
LIVE WIRES CREATING SPARKS

Our Museums inevitably rely on teamwork throughout the 1000-strong workforce. But here’s what colleagues have said about this cross section of two dozen live wires — among many more live wires all across the Group.

Job titles relate to roles in 2013–14. Some of these talented people have since been promoted.

Dave Bentley
SM Workshops Technician
‘30 years’ service, beautiful craftsmanship’

Toni Booth
SM Associate Curator
‘Exceeded expectations with Doctor Who and Mr.

Ben Lheureux,
SM Event Operations Manager
‘Always smiling, boundless energy’

Katie Dabin
SM Curator of Medicine
‘Her lively curiosity is leading the way’

Seina Pang
SM Project and Production Manager
‘Committed to the Journeys app’

Pan Pierri
NRM Student Events Officer
‘A go-getter, he gives off a vibe’

Emma Thom
NMeM Comm. and Audience Engagement Coordinator
‘Learned during a crisis, stayed on an even keel’

Shea Taylor
SM Explorer Developer
‘She’s in charge, she knows everything’

Emma Tham
NMeM Comm. and Audience Engagement Coordinator
‘Her social media reach tops the charts’

Cristina Henao
SM Visitor Experience Duty Manager
‘She’s in charge, she knows everything’

Cristina Henao
SM Visitor Experience Duty Manager
‘Leading the way with Citizen Science’

Shea Taylor
MOSI Explainer Developer
‘Live on stage, an absolute star’

Simon Braithwaite
NMeM Collections Information Officer
‘Quiet, diligent, classic unsung hero’

Kate Charfield
MOSI Exhibitions Interpretation Manager
‘Her eye for detail, introducing change’

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The Science Museum Group’s world-renowned Learning team serves up a wondrous mix of fun, ingenuity and inspiration. But nobody should be in doubt about the serious contribution we’re making to the nation’s future prosperity by enthraling record numbers of young people – nearly 1.8 million in the past year – with the infinite possibilities of a career in science, engineering and technology.
sixth-form physics students; 13,000 Prize-winner Peter Higgs and 400 included: a Q&A involving Nobel Highlights of the Museum year any other UK museum.

Outreach programme, more than for trips or benefited from the Museum’s 450,000 people visited on educational in the past year, a record-breaking mathematics (STEM). Of the 1 million science, technology, engineering and launched Your Life, a major campaign to boost the numbers of young T

she fascination with physics began. It is where Stephen Hawking says and inventor of the 20th century. It is T

academic research partners at King’s impact. Today, Dr Alex Burch, SMG in partnership with the Prince’s programme aimed at 2000 teachers for children with an autistic spectrum

to a select committee inquiry into Pathologists; hosted and contributed forums for film and television. The Gruffalo

The Museum has worked with many

without the Science Museum’s support. He describes it as simply

Our multidisciplinary SMG Learning

form of school visits to the ship. An

with 83 schools and four partner

three-year Climate Science Outreach

educational app developed in this

of school visits to the ship. An

programme to increase the number

working in Bristol with SS

Great

partnership,

from disadvantaged backgrounds

and workshops tailored to teenagers

in Malta and China.

partners overseas, notably

public understanding of climate

to a select committee inquiry into

Society and the Royal College of

talks delivered by colleges of Wales to deliver talks

The Gruffalo

Books. Opened in July by

the National Centre for Children’s

Science and Engineering Week. The

enthusiastic participant in National

National Railway Museum in education

with live shows, workshops and more.

Science programme, partnering

over five years, part of the Enterprising

programme aimed at 2000 teachers

with King’s College, London, and

Science and Outreach teams trained up-

Our multidisciplinary SMG Learning

potential STEM teachers wouldn’t have been able to

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Without the Science

engage with the new pool of

... A Building Bridges workshop explores

: The live show From Rocket to Bullet

structures in engineering at NRM... Primary school
demonstrates physical forces at the National

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The Enterprising Science launch at the Science Museum

team of Malta’s first interactive science centre...

First Castle Museum and Hull

Museums

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W

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outreach team perform the bilingual show

children in Hong Kong watch the Science Museum

... At the National Media Museum

Moving Stories

books in

outreach team perform the bilingual show

the National Media Museum, with

using animations in a partnership led

to tell the story of the railways

Science Festival and notably in a

form in

The Museum has devised new educational

activities for holidays, such as a

Bollywood-themed half-term festival. The

Museum has worked with many

the National Centre for Children’s

Moving Stories: Children’s Books

activities

extensions

FORMING PARTNERSHIPS

: A Building Bridges workshop explores

Below

Devised in

Moving Stories

Moving Stories

Building Bridges project family weekend... STEM panel

Families taking part in the Cockroach Tour, part of the

sessions for children with autistic spectrum disorder...

SMG LEARNING: One wide-reaching team

SMG LEARNING: Spreading the word

we are now leading the field.'

academic research partners at King’s

in the past it has been criticised for

relationships with schools, families and

Philanthropist will.i.am.

in partnership with the Prince’s

Science programme, partnering

with King’s College, London, and

SMG Director Ian Blatchford, computing guru Louis

with BP’s Peter Mather, Education Minister Liz Truss,

The Energy Show

; a TeachFirst

the National Media Museum in education

Bradford Museums and Galleries,

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Prize-winner Peter Higgs and included: a Q&A involving Nobel any other UK museum. The Science Museum is also where his fascination with physics was fuelled. It is where Stephen Hawking says and inventor of the 20th century. It is the most influential independent scientist most influential independent scientist pursue a career that made him the T
Lovelock was inspired in 1925 to College London and Sheffield Hallam academic research partners at King's Our teams' efforts are built on relationships with schools, families and adults. The informal learning sector is key to the UK's future economy, though back by BP; a three-year effort with King's College, London, and-coming climate scientists from disadvantaged backgrounds literacy in five key London areas; funded by BG Group to raise science Backing from philanthropist will.i.am.

Richard Dawkins.

Our multidisciplinary SMG Learning teams of Malta's first interactive science centre… Left to right from top: festival which attracted 6500 Girl Guides event at the Science Museum as part of a weekend groups and the Museum was an National Railway Museum in education year, while NRM York has helped to visits to the Museum in booked collection. In total there were 26,000 for teenagers inspired by the Museum's Science Festival and notably in a local partners, such as Bradford Bradford Museums and Galleries, with the National Media Museum, with... branched trains piled high. The National Railway Museum extends far beyond London. It has museums and science centres. In Bradford, the National Media Museum has already been joined activities for holidays, such as a Bollywood-themed half-term festival. The Museum's summer blockbuster books for film and television. The Gruffalo Books. 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The Museum of Science & Industry in Manchester is a hub for learning in the north. In the past year, the Museum has welcomed 54,000 visitors in education groups, including 37,000 from schools, and has launched a new explainer team and primary schools programme. During National Science and Engineering Week Key Stage 3 students explored cutting-edge digital technologies. The Museum manages STEMNET, the Science, Technology, Engineering and Mathematics Network, for Greater Manchester. We coordinate 1200 STEM Ambassador volunteers across the region, and this year brought networking opportunities to teachers at the Museum’s first Raspberry Jam for Raspberry Pi enthusiasts.

In the past year 45,000 people attended Lates, the Science Museum’s monthly evening for adults only. Most were younger than 35. A record-breaking audience of 7000 turned up to one ‘bio-revolution’ Lates, organised with the Francis Crick Institute. Sir Paul Nurse, Director, and President of the Royal Society, said he was delighted with what was the Crick’s biggest public event to date, where crowds could create and drink a DNA cocktail, knit a blood vessel and meet twins taking part in epigenetics research. The Lates programme also saw Radio 4 recording The Infinite Monkey Cage with astrophysicist Neil deGrasse Tyson; and a discussion of the science of cooperation with actress-activist Lily Cole. One dedicated Lates session was organised specially for 1150 Girl Guides.

Our partnership with MOSI has allowed Siemens to inform the public about the incredible innovations being delivered in our region today

JUERGEN MAIER MD, SIEMENS UK INDUSTRY SECTOR

Clockwise: At the Museum of Science & Industry, Inventors Wanted is an interactive storytelling experience... Pablo Fanque’s Circus of Dreams celebrates a British working-class hero... Our keen new team of Explainers, seen on a helter-skelter at the Museum’s Steam, Sweat and Sewers festival... Participation at our adults-only Lates events: Engineers from CERN engage Lates visitors with objects and stories from the LHC... At the bio-revolution event partnered with the Francis Crick Institute some visitors knit a giant blood vessel while others explore genetics...
Within the Science Museum Group a virtuous circle is now driven by culture, enterprise and philanthropy to boost our profile, extend our influence and help raise funds. Perhaps the pivotal event is the Director’s Annual Dinner held in the Science Museum, attended by a dazzling array of talent including Marcus du Sautoy; Anthony Geffen of Atlantic Productions; Daisy Goodwin, television producer; Deborah Bull, Executive Director, King’s Cultural Institute; Simon Singh, author; and Astronomer Royal Lord Rees, who in recognition of his many contributions to science was accorded a Fellowship of the Science Museum.

Of course, the Group still depends on Government support for its central role as custodian of 7.3 million objects of historic importance and in helping to inspire and educate the next generation of scientists, engineers and mathematicians. Director Ian Blatchford announced plans for a major maths gallery. Appropriately, the guest of honour and keynote speaker at the dinner was Cédric Villani, Director of the Institut Henri Poincaré and winner of the most prestigious prize in mathematics, the Fields Medal. His lecture deftly intertwined economics and geometry and he referred to the curse of the mathematician who, as in the legend of the Lady of Shalott, is condemned ‘to look at this world only through its reflection’.

In November, Nima Arkani-Hamed joined the launch events around Collider, our pioneering exhibition about particle physics, along with luminaries such as Chancellor George Osborne, Russian Deputy Prime Minister for Social Affairs Olga Golodets, Stephen Hawking, Ralf Heuer, Ian McEwan, Dara O’ Briain and the newly minted Nobel laureate Peter Higgs. The glittering range of patrons and supporters included the Science and Technology Facilities Council (STFC), Winton Capital Management, Embassy of Switzerland, Advanced Oncotherapy, National Instruments and The Open Trust.

Another notable opening marked a joint venture between the National Media Museum in Bradford and the Science Museum. Our new £4.5 million gallery, Media Space, was opened by Sir Richard Branson and Michael G Wilson, and supplies of Bollinger celebrated the support of Virgin Media, along with Michael and Jane Wilson, the Wilson Centre for Photography, the Broccoli Foundation and Hyundai. Unlocking Lovelock, our celebration of the maverick James Lovelock, was supported by Siemens and the Museum’s Founders Circle members, Accenture, Barclays and Bayer. Media Space and Antenna in London and Collider’s transfer to Manchester were supported by People’s Postcode Lottery and the STFC. The Group also met the £16 million target for London’s upcoming Information Age gallery.

The Development department held 45 events and welcomed 3000 people to the Museum this year. Our great achievements were made possible by our generous financial supporters listed on pages 68–69.
FOCUS ON THE MEDIA INDUSTRIES

This year the National Media Museum continued to focus on the science and technology of its collections, including new workshops developed during the Bradford Science Festival. The Museum won a 2013 Bradford Council Community Award for Commitment to Family Learning, with STEM activities this year including two new interactive science shows: Lights! Camera! Action! looking at the science of light and photography, and Real to Real, telling the story of the Museum’s unique collections of film, photography and television. A half-term week was given to exploring the technology behind the Skylanders Swap Force game, and last summer saw 330 Explainer-led workshops.

In January the Museum hosted the national launch of Open for Business, a powerful project funded by Arts Council England to create a contemporary image archive of British manufacturing and industry. The Museum worked with Multistory and the Magnum agency to commission nine world-renowned Magnum photographers to document manufacturing industries in nine British cities including Bradford. Five of the photographers gave education workshops and gallery tours to discuss their techniques. The exhibition is touring to eight other venues, including each SMG Museum.

As part of the city-wide celebration of Indian cinema the Museum mounted the exhibition Bollywood Icons: 100 Years of Indian Cinema. Outreach activities examined the impact of Bollywood on newly arrived South Asian communities in Bradford during the 1950s; while a civic reception and on-stage interview with Bollywood star Jackie Shroff were partnered by Asian Express newspaper and BBC Asian Network. Shroff dubbed the rise of Bollywood a ‘global sensation’.

As a Government we will do what we can with strategic support but it also requires support from everyone in Bradford

ED VAIZEY CULTURE MINISTER

ASTRONAUTS SPLASH DOWN IN LONDON

The space collections at the Science Museum are an irresistible draw for some of the best-known astronauts on the planet, from the first Briton into space to the last man on the Moon. Gene Cernan, commander of Apollo 17 in December 1972, the last Moon mission, came in to see the Apollo 10 command module, in which he was sent into lunar orbit in May 1969. That was a dry run for the next mission, which put the first man on the Moon’s surface.

Later last year, Captain Jim Lovell, the astronaut who led the crew of Apollo 13 to safety after their spacecraft was crippled by an explosion, held an impromptu question-and-answer session for visitors next to Apollo 10. Safely back on Earth after living aboard the International Space Station, the tweeting and guitar-playing Canadian astronaut Chris Hadfield came to the IMAX to share some of the stories from his new book. And it was in the same venue that the world’s media learned that Major Tim Peake had been selected by the European Space Agency as its first official British astronaut. Major Peake delivered his own dose of inspiration to school children gathered specially at the Museum, joining them via an internet video link from Russia to ask for help naming his mission, as part of an ESA competition.

Since the announcement, Major Peake has returned to the Museum to discuss space food with Heston Blumenthal and to launch a competition for schools.

Helen Sharman, a regular visitor, has the distinction of being the first Briton to go into space in 1991. On display in the Museum is her spacesuit, which she stood beside as she told leading figures in British drama and theatre about her experiences in the Soviet-era Mir space station.
DIGITAL LEAPS FORWARD

The age of connectivity and the web expresses itself throughout the Group

Nothing sums up the increasingly blurred boundaries between the real and the virtual than the dismantling and digitising of the Science Museum’s venerable shipping galleries. They make way for the Information Age gallery, opening this year. However, more than 1000 ghost ships now live on as a unique point-cloud model created in 3D from 2 billion precise measurements. University College London and ScanLAB Projects collaborated in a first for the UK museums sector by laser-scanning the entire gallery, which yielded a breathtaking fly-through video. Now high-spec data from this digital replica are being made more widely available.

SMG continued to expand its digital audience with our websites receiving 26.5 million visits over the year. A newly developed ‘Visit us’ section transformed the Science Museum site for almost half our audience using portable devices. And the Great Gathering of Mallard and the other A4s gave the NRM’s website its busiest day ever on the anniversary of her world record run.

Our increased use of social media, which included Twitter, Facebook and Tumblr, led one independent study to give the National Media Museum and Science Museum second and third places out of 50 national visitor attractions. The Group is developing the role of digital apps, our flagship being Journeys of Invention, which explores our own unique collections (see page 11). Within its first two months, 250,000 people – many in China – went on that tour. Another app was 1000 Hands, which invited the public to populate a Universal Everything multimedia installation in the Science Museum. Online games continue to be popular: the Axon game was created for Brains, the Wellcome Collection exhibition, and another for Hooked on Music! at the Museum of Science & Industry, Manchester, an innovative citizen-science project which investigates the secret of catchy songs, with the University of Amsterdam.

Huge efforts are being invested to digitise important national collections and the National Media Museum this year gave online access to another 25,000 historic images which include many by Julia Margaret Cameron – one such is shown opposite.

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View the shipping galleries video at http://www.sciencemuseum.org.uk/shipsvideo
This magnificent wood, copper and string assembly is the Rugby tuning coil that was test built at Wroughton, the Science Museum’s Wiltshire store, before its early installation in the new Information Age gallery at the Museum. It is one among hundreds of extraordinary large objects in our collections which demand customised storage conditions and conservation. Those demands can be encapsulated in two recent challenges dealt with by the team, who cleared a storage space for the Tornado jet decanted from the Museum of Science & Industry and disassembled it on site; and conserved a PET scanner for exhibition in the Science Museum’s Mind Maps.

At NRM York Conservator Stathis Tsolis is especially pleased with a unique new technology called Eyemat – a floor covering being laid in restored railway carriages to protect existing floors from wear by visitors. The vinyl surface carries a photographic image of the original fabric beneath it. Elsewhere at York the Borough Junction signal box has been fully restored.

Among its more curious conservation tasks, our Blythe House team needed to make safe hazardous objects such as a Second World War self detonating fire extinguisher. An unusual Conservation challenge came when the Collider exhibition required contractor assistance to cut away a section of casing on a major object loaned from CERN. This enabled visitors to see inside the device for bunching a proton beam.

Outdoors at Blythe, last summer saw the first testing of the Denman Horn after painstaking reconstruction of the 27-foot loudspeaker by the Workshops team at the Science Museum, where it went on display in an art installation.

The highlight of the Museum of Science & Industry’s cultural programme is the Manchester Science Festival, which in its seventh year consisted of 150 events across the city to inspire all ages, from flashbang demonstrations to simulated brain surgery.

Hooked on Music, an ambitious Citizen Science project to explore what makes music catchy, launched a programme of festival events, directed by Dr Marieke Navin. It’s the largest mass-participation experiment of its kind, launched by a poll and 700 festival goers revealed that ‘I Can’t Get You Out of My Head’ by Kylie Minogue was the catchiest tune of all – a finding that earned a tweet from the pop diva herself.

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The Group’s extraordinary and diverse collection of 7.3 million objects is an open invitation for serious scholarship and, with that in mind, we now publish a peer-reviewed e-journal. Enthusiastically backed by the distinguished historian and Trustee Ludmilla Jordanova, published biannually and edited by Kate Steiner, the Science Museum Group Journal publishes research linked with our collections and concerns in the history and communication of science, and its role in museums.

In the spirit of openness that comes with the best scholarship, the content of the digital Journal is freely available. Director Ian Blatchford said the Journal demonstrates the Group’s determination to engage the academic community with our distinguished collections. ‘Research is on the rise within the Science Museum Group. At a time when scholarship seems under threat, we are strengthening our commitment to a deeper understanding of our world-class collections, conservation challenges and the most successful ways of engaging the wider public with the history of science and the technological and scientific challenges facing modern society.

The inaugural issue included new research on William Bally’s set of phrenological heads by Dr Alice Cliff, Curator of Science and Technology at the Museum of Science & Industry, Manchester, and on the historical significance of James Watt’s workshop by Science Museum curator Ben Russell. At the Yale Center for British Art, Connecticut, Dr Florence Grant took a detailed look at the use of printed books by 18th-century instrument-makers.

As a music history event connecting with Science Museum collections, Kraftwerk Uncovered (played by the band Icebreaker) offered insights into the electronic band’s contribution to music, alongside talks by David Toop and Richard Wotts on music, technology and culture.

The National Railways Museum’s research collaboration with the National Archives included a joint conference, Railways Change Lives; and a seminar on the history of ambulance trains as a flagship event for the national Explore Your Archives campaign. The NRM’s precious Robert Stephenson Archives were awarded United Nations status in the Memory of the World Register as the unique documentary record of how the UK gave railways to the world from 1823. Funds from the British Library supported our Tracking the Past project to preserve the remaining archives of Sierra Leone’s railways, which played a controversial role in the development of that nation.

http://journal.sciencemuseum.org.uk

Opposite: Ludmilla Jordanova and Kate Steiner explore the new Science Museum Group Journal at its launch... Canterbury Locomotion Engine, 1830; part of the National Railway Museum’s newly honoured Robert Stephenson Archives... James Watt’s workshop displayed at the Science Museum, and the subject of a Journal article by Ben Russell.

Below: Kraftwerk Uncovered, a music history event by Icebreaker... The Sierra Leone endangered archive which the NRM has helped preserve...
The Science Museum is to create a new research centre at its South Kensington site to provide an international environment for academic research and forge a more intimate connection between the Museum’s objects and its library and archive collections. The centre was the logical next step after the establishment of the Research and Public History department, led by Tim Boon, and underlines the long-term commitment on the part of the Group to foster serious research.

The research centre, which replaces the library on the Imperial College London campus, opens in the autumn of 2015 to offer a contemporary and light-filled environment with a quiet reading area, open shelving for printed material and research offices.

The Group’s renewed focus on research has already seen the appointment of 16 collaborative doctoral students supported by the AHRC and several funded research projects into the history of science and technology. The study topics are diverse, from the mapping of Africa, to the use of theatrical techniques in museums, to the history of Liverpool Road Station on the architecturally important site of our Museum in Manchester. Many projects depend on collaborations, such as the National Media Museum’s with the Getty Research Institute in Los Angeles, while an Art Fund grant facilitates research into pioneering British colour photography.

Visitors to the research centre will have access to a curated core collection of heavily used academic and popular books and journals. This will be constantly refreshed with material from the Museum’s collections in Wroughton. A new digital library management system will give visitors access to the catalogues, the library’s e-books, e-journals, databases and web pages as well as to the Museum’s collections and image databases and other valuable resources, such as the recently digitised Babbage Archive.

The new centre will also provide a natural home for seminars, such as Return of Biography: Reassessing Life Stories, held at the Science Museum in July 2013 and attended by distinguished figures such as Georgina Ferry, author of Dorothy Hodgkin: A Life (1998); Andrew Nahum, Senior Keeper at the Science Museum and author of Frank Whittle: Invention of the Jet (2005); and Janet Vertesi of Princeton University, author of a study on the Mars rover exploration missions.

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This year, the Science Museum’s team swelled to reach 200, with notable growth at Blythe House in the photo studio. In London the typical volunteer may be a student living away from home, juggling the competing social priorities of the young. Contrast this with the National Railway Museum where many of the 440 volunteers at York and Shildon are retired railway personnel who wish to tap into a lifetime of skills and generally have more time to give. Some serve for 20 to 30 years and indeed this year Robert Tibbits, who volunteered at NRM on the day it was opened by Prince Philip in 1975, was awarded the British Empire Medal for his services.

It was an exceptional year for NRM. Over the summer, 100 of its 360-strong team in York provided 5000 hours of support at the Mallard ’75 event. Cab access for 44,000 people was made possible by 70 volunteers during the busiest fortnight in the Museum’s history.

The Museum of Science & Industry is delivering the HLF-funded If: Volunteering for Wellbeing, a three-year volunteer training and placement programme which targets socially isolated Manchester residents. The Museum also has 136 volunteers who support key programmes such as conservation, train rides and the Manchester Science Festival. At the National Media Museum Mandy Tennant manages 56 registered volunteers, involved mainly in either cataloguing important collections, or stewarding at Bradford’s film festivals.

York’s Volunteer Officer Matthew Hick has provided much insight on this subject and edits the magazine Volunteer News on the NRM website. He has placed a value on the Group’s 823 volunteers. If they were paid the UK minimum wage, their 95,000 hours’ effort would be worth £600,000!

A Group-wide strategy has rolled out a Volunteer Managers training course to raise standards of recruitment and to clarify the motives that attract volunteers at different life stages to the many varied tasks our Museums can offer. In these challenging economic times with reductions in our public funding, this support will continue to be critical. Volunteers can choose from supporting discussion events, printing, cataloguing, customer service, cleaning and conservation of vehicles in the collection, opening up locomotive cabs for visitors, running the green-screen photo studio and all kinds of stewarding. Our volunteers, clockwise from top: NRM veteran Robert Tibbits... Cataloguing in the Gandolfi Room at the National Media Museum... Stephen Wetherill on orientation duty at our Museum in Manchester... Christina Kamposiori in the Collections Information archive and Christian Dollimore as tour guide at the Science Museum. Opposite: Delroy Joseph, who won a London Volunteers in Museums Award, with Sally Munday-Webb, Volunteer Co-ordinator.
Known to the world as a producer of James Bond films, Michael G Wilson is also an impassioned champion of photography as a technology that has brought unique cultural change. He has put SMG Museums in the vanguard of a greater acceptance of the medium among British collectors and curators. Without his energetic fundraising, the new Media Space gallery would not have opened as the London showcase for the National Media Museum. Every Museum in the Group has benefited from his great personal qualities, and for this reason he has been elected a Fellow of the Science Museum.

Along with writing and printing, Wilson regards the earliest photographs as ‘revolutionary to human thought because they changed the way we look at the world’. All the more shocking, he thinks, is the British tradition – since John Ruskin – to dismiss photography as a serious art form. ‘Considering Britain is where photography was born in 1839, you’d have thought there’d be keener interest among curators and collectors but there isn’t. Until recently the UK has had few spaces offering the necessary conditions to display photographs.’

Yet in the past decade two leading British museums have appointed curators of photography, so what has forced attitudes to change? ‘The world and a few people like me harping on at the directors of museums!’ he says unabashed. ‘Following Tony Ray-Jones, Britain spawned a fantastic group of photographers and some very good dealers. We just don’t have very many collectors. We need to build up our community of serious collectors because it takes hundreds to make a difference.’

As for enhancing the pioneering collection at Bradford, where acquiring the Royal Photographic Society archive elevated our collection to being one of the most important in the world, Wilson says: ‘It is nearly impossible to build a contemporary photography collection without any money. At Bradford we have been acquiring estates and bodies of work from ageing photographers, giving them royalties and preserving the work. Cultivating collectors and persuading them to donate requires entrepreneurial curators, who are rare in Britain. But things are changing.’

Left: Michael G Wilson, benefactor and newly elected Fellow.

Stars of this year’s photographic events across the Group, clockwise from top: ‘The Princess Royal and Princess Alice’, a 19th-century image by Roger Fenton (Royal Photographic Society Collection)… ‘Caught in a Web of Iron’ by David Cation from the Lines in the Landscape competition at NRM York, sponsored by Network Rail… Magnum photographers David Hurn, Jonas Bendiksen, Mark Power and Stuart Franklin giving a masterclass in the vault at the National Media Museum… ‘Nerve fibres in a healthy adult human brain’ by Zeynep M Saygin in the exhibition, Wellcome Image Awards 2014, partnered with the Museum of Science & Industry… Circular snapshot of market girls commemorating 125th anniversary of the commercial Kodak No 1 camera...
Necessity is indeed the mother of invention: the Group’s commercial wing has reported impressive profits to help offset the relentless decline in Government funding. ‘This has been the all-time record year for Enterprises,’ said Sam Mason, Commercial Director. ‘We were £500,000 up on expectations and saw a significant growth in turnover.’

This year the National Railway Museum sites in York and Shildon proved irresistible for 364,000 visitors, drawn to the Great Gathering of beautiful A4 locomotives. Mason said: ‘It was free but the 30% rise in visitor numbers led to a huge surge in spending in our shops and restaurants – which we have refurbished across the Group. This was not just a boost for us but the local economies.’

Locomotion Models, which produces limited editions of iconic locomotives, also yielded £100,000 for reinvestment in NRM Shildon. ‘Overall, it’s a real success story,’ said Director Paul Kirkman.

New simulator rides have been rolled out: Stephen Hawking’s family enjoyed the new Mallard experience in York; in London, unique Typhoon video footage added to our white-knuckle rides; and visitors can play with special effects in the new green-screen photography studio. The IMAX theatre in the Science Museum screened three new 3D films, taking visitors to Mars and beyond. Meanwhile the projectionists have retrained as stage technicians so that the IMAX can receive theatrical productions such as The Energy Show.

Two London ventures aimed at independent adults have helped maximise returns. As the Science Museum’s first major ticketed exhibitions in years, Collider and Only In England encouraged Enterprises to start developing high-end adult gifts. Mason said: ‘We’re also expecting to take £500,000 from the licensed Media Space café. Never underestimate the appetite out there for brain food.’

Reputation by association has put SMG in the UK’s top ten venues for corporate event hire and this year’s 600 bookings yielded £1 million profit. Our Museums offer two IMAX auditoria for AGMs or, for formal dinners, the Flight gallery in London, Revolution Manchester, two magnificent halls in York and many other fascinating gallery spaces.

As well as retailing updated souvenir guides, watches and best-selling Mallard books, the Group boasts an Inventor in Residence, Mark Champkins, to create new products. He challenged young people to overcome a common summer problem. Sophia Laycock, aged 11, designed the Pediclean to remove seaside sand from your feet and won a MakerBot Desktop 3D printer. You can buy one in our shop for £1700.
LANDMARKS IN INGENUITY

Hadrian Ellory-van Dekker, Head of Collections at the Science Museum, on the tricky task of collecting

We museum curators are constantly aware of our predecessors and, more viscerally, those who will follow and, with the comfortable luxury of hindsight, pass informed judgements on the decisions we made. Building a collection is not easy. Developing a national collection of international and lasting significance is even more daunting. On the next four pages, we have made a small selection of items added to our collections this year. Great acquisitions are often the result of serendipity as much as informed judgement. They bear witness to our continued commitment to create the world’s foremost assemblage of the material culture of science and technology – a snapshot capturing the seemingly infinite variety of human ingenuity.

Copper cavity made by CERN in Geneva, Switzerland, 1988–89. Radio-frequency cavity used in the Large Electron Positron accelerator, acquired for the Collider exhibition

eRanger ambulance based on motorbike and sidecar, South Africa, 2000–09. Transported expectant mothers to hospitals in Sierra Leone, Liberia, southern Ethiopia, Kenya, Malawi and Uganda

Kit Yamoyos anti-diarrhoea kits by ColaLife, 2012. Medication, rehydration salts and toiletries taken to remote areas in a charity initiative piggybacking on the Coca-Cola supply chain

Penicillin wooden chest, c. 1939, used by Major Scott Thomson, RAMC. Believed to have transported the vital penicillin supplies to north Africa during the Second World War

Zener cards: ESP cards for testing extrasensory perception, USA, 1937. Named after their inventor, American psychologist Karl Zener

‘First’ smartphone: Simon Mobile Communicator, by IBM with BellSouth, 1995. Ultimately a commercial failure, it was the first device to bring together many key components of the smartphone

Coxon propeller, 2005–06. Prototype self-pitching three-blade carbon-fibre cyclic-pitch propeller, designed and made by John Coxon, Pulborough, West Sussex, England

Automaton writing, 1825–35. Pen-and-ink automatic writing on an oval sheet of paper, by an automaton, the ‘Draughtsman-Writer’ by Henri Maillardet, Europe

Bierrum International Ltd contracts archive, c. 1927–80. A company involved in the design and construction of the majority of chimneys and cooling towers built in the UK

Tandy Radio Shack TRS-80 microcomputer system, made in USA, 1977, by Radio Shack Corporation. One of the first truly successful mass-produced personal computers

Opposite: Hexrotor surveillance drone, 2009, acquired by the Museum of Science & Industry

This page: Copper cavity from CERN and the eRanger ambulance

CONTINUED
MUSEUM OF SCIENCE & INDUSTRY
MANCHESTER

Hexrotor surveillance drone, 2009. Developed by the University of Manchester, representing innovations in aerospace and military and law enforcement technologies. Previously exhibited in Antenna at the Science Museum.


Hosiery sewing machine, c. 1952. Used by an Altrincham woman who successfully combined her home repair business and her family life. Having nylon stockings repaired presents a contrast to today’s throwaway culture.

Props and costumes, c. 2003–13, from the Channel 4 TV series Shameless, filmed in Manchester and exported globally. They represent both the creative industries and popular perceptions of post-industrial society.

Child’s hire bicycle, c. 1996, From the National Cycling Centre (Manchester Velodrome), representing Manchester’s continuing role as the home of British cycling, inspiring future generations of competition cyclists.

LANDMARKS IN INGENUITY: MORE RECENT ACQUISITIONS

NATIONAL RAILWAY MUSEUM
YORK

Railway-inspired child’s bed set made for Christopher Oldham in 1934. Includes a bed in the style of a railway carriage and a steam engine dressing table.

London & South Western Railway dining car no. 72, 1907. Acquired to house the NRM’s First World War exhibition, and to be partially restored as an ambulance carriage.

British Railways poster, 1962, forbidding ‘boys from ‘engine spotting’ at Birmingham New Street station. An early example of trainspotting being banned on safety grounds.

Publicity material from the pressure group Bring Back British Rail, 2013, campaigning for the re-nationalisation of Britain’s railways.

Plate from the London & North Eastern Railway locomotive Hush-Hush, 1928. Saved by an apprentice and probably the only surviving part of the engine’s experimental boiler.

NATIONAL MEDIA MUSEUM
BRADFORD

The fight between James J Corbett and Bob Fitzsimmons, 1897. Strip of widescreen film containing five frames of cinema’s first feature-length documentary.

SABA Jim Nature, 1994. This television receiver was designed by the famous and innovative French designer Philippe Starck with biodegradable and recycled materials.

Video Traveller portable VHS video player, 2002. An early in-car video entertainment system – fitted with mains and car adapters – that often kept little ones occupied on long trips.


‘Talkback in Nicam’ system developed by TV-am, 1993. Live outside broadcasts required a speech channel to convey the director’s talkback from studio to location.

Left: Hosiery sewing machine
Above: L&SW dining car from 1907 and BR poster from 1962
Right: A widescreen cinema first
FINANCIAL OVERVIEW: REASONS TO BE CHEERFUL

Jonathan Newby, right, SMG Chief Operating Officer, assesses a buoyant year for revenues

The gradual and ongoing reduction in the Science Museum Group’s core funding serves only to ignite our imagination and fuel our energy at finding new ways to raise much-needed funds. We have made sure that SCMG Enterprises – our core businesses of shops and cafés – are as effective as possible, whilst at the same time looking for new and different ways of driving value from all our Museums’ endeavours.

Income from commercial trading has increased steadily over the last seven years, with the overall contribution to the Group from our Enterprises businesses standing at a record £3.2 million. Particularly highlights from 2013–14 included a boost to our retail sales in support of the Great Gathering at the National Railway Museum, catering sales at all sites exceeding expectations, and it has been another excellent year from the Events team, who found new ways to offer our five amazing and unique venues for corporate hire.

Proactively asking visitors for a donation on their way into our Museums has proved as successful as it is simple and SMG now leads the sector in this way. Our dedicated Visitor Giving teams raised more than £2 million last year with donations at all sites exceeding expectations. The cumulative effect of this surge of activity has been to lessen SMG’s dependence on Grant in Aid through identifying increasingly innovative ways to drive new income; this has become something of a theme over recent years, embodying the Group’s ethos of being entrepreneurial, extrovert and efficient.

We have also been successful in finding other new sources of funding, one of which is a new DCMS loans programme. This is a pilot scheme whereby the Treasury has made funds available to DCMS for its leading Arm’s-Length Bodies, who have been invited to submit a business case to borrow money for capital projects at very competitive rates. The scheme is designed to provide funding that will allow our Museums to invest in income-generating activity for which fundraising might otherwise prove difficult. SMG has been successful with two applications which together total about £7.8 million.

The cumulative effect of this surge of activity has been to lessen SMG’s dependence on Grant in Aid through identifying increasingly innovative ways to drive new income; this has become something of a theme over recent years, embodying the Group’s ethos of being entrepreneurial, extrovert and efficient.

Expenditure in 2013–14 (£m)

Costs of generating voluntary income
Trading costs
Care for and research into collections
Science education and communication
Visitor services
Governance costs
Capital expenditure including collection additions

<table>
<thead>
<tr>
<th>Expenditure 2013–14 (£m)</th>
<th>0.5</th>
<th>2.3</th>
<th>15.0</th>
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<tbody>
<tr>
<td>Grant in aid</td>
<td>8.5</td>
<td>13.8</td>
<td>17.10</td>
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<tr>
<td>Trading income</td>
<td>5.10</td>
<td>15.0</td>
<td>5.2</td>
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<tr>
<td>Grants, donations and sponsorship</td>
<td>11.0</td>
<td>12.3</td>
<td>2.2</td>
</tr>
<tr>
<td>Rental income</td>
<td>2.2</td>
<td>2.7</td>
<td>21.9</td>
</tr>
<tr>
<td>Other income</td>
<td>13.0</td>
<td>13.8</td>
<td>12.3</td>
</tr>
</tbody>
</table>

To infinity and beyond: Fly Zone’s new green-screen photo studio at the Science Museum

GROUP FINANCIAL SUMMARY 2013–14

The Science Museum Group is more indebted than ever to the generous sponsors, trusts, foundations, individuals and other supporters whose contributions helped our Museums to deliver a wide range of programmes, from major capital projects and innovative contemporary science displays to our work with schools and popular late-night openings.

Income from visitor donations exceeded £2 million – an increase of 29% compared with the previous year. In these difficult economic times this support is more critical than ever. Without it we would struggle to achieve the extraordinary range and depth of activities our Museums continue to deliver.

Our Government grant has again fallen this year – a reduction of 3% compared with 2013–13 – and the years ahead are likely to become ever more challenging.

In order to meet the continuing reductions in our Government grant and fund our ambitions for the future we have planned a strategic focus on income generation. Self-generated income represented 47% of total incoming resources this year, compared with 45% last year – testament to the success of this strategy. Profit from our commercial activities exceeded £3 million, an increase of 8% on the previous year. Furthermore, we generated £500,000 from our ticketed exhibitions (Calder and Only in England, exceeding forecast by 20%).

The Group’s success in generating commercial income together with the generosity of our supporters has enabled us to continue to balance our budgets without compromising on either visitor experience or the care of our collections. However, our public funding continues to fall and this has necessitated a continued focus on cost-reduction strategies across our Museums, including a reduction in staff numbers.

As a Group we continue to become more focused, leaner and more efficient, but if public funding continues to fall and economic uncertainty persists we will have to review the scale and range of our operations. Even in the most difficult of circumstances, however, we will endeavor to ensure as many people as possible can enjoy our remarkable collections.

These figures are extracted from draft financial statements. The full Annual Report and Accounts is available on our website: sciencemuseum.org.uk/group

SMG VISIT NUMBERS 2013–14

<table>
<thead>
<tr>
<th>Total number of visits to the Museums</th>
<th>Science Museum</th>
<th>Museum of Science &amp; Industry</th>
<th>National Railway Museum</th>
<th>NRM Shildon</th>
<th>National Media Museum</th>
<th>All Science Museum Group</th>
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</thead>
<tbody>
<tr>
<td>Outturn 2013–14</td>
<td>3,086,000</td>
<td>462,000</td>
<td>727,000</td>
<td>203,000</td>
<td>693,000</td>
<td>5,149,000</td>
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<tr>
<td>Outturn 2014–15</td>
<td>3,342,000</td>
<td>449,000</td>
<td>926,000</td>
<td>216,000</td>
<td>679,000</td>
<td>5,712,000**</td>
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<tr>
<td>Outturn 2013–14</td>
<td>4,000,000</td>
<td>64,000</td>
<td>60,000</td>
<td>*</td>
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<td>*</td>
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<tr>
<td>Outturn 2014–15</td>
<td>642,000</td>
<td>56,000</td>
<td>39,000</td>
<td>28,000</td>
<td>26,000</td>
<td>590,000**</td>
</tr>
</tbody>
</table>

Information is sourced through both internal and periodic independent visitor surveys. * Methodology in recording visits in education groups was changed to align with the rest of the Group. It is not appropriate to compare year on year. ** Any anomalies in totals are due to rounding.

A YEAR FOR BREAKING RECORDS

A record 5,712,000 visitors came to our Museums over the past year; an increase of almost 11% on the previous year.

Our digital audience is growing at an even faster rate, with visits to SMG websites up 29% to 36,460,000.

Visits to the Science Museum totalled 3,342,000, which broke all previous records.

Annual visit numbers for the National Railway Museum reached 292,000, up more than 25% on the previous year.

NRM Shildon welcomed 120,000 visitors over the course of only eight days for the Great Gathering.

The Science Museum welcomed a record-breaking 462,000 visitors in education groups, of which 241,000 were school pupils.
OUR GENEROUS SUPPORTERS

With many thanks to all our visitors who kindly made a donation to support the Science Museum Group

SPONSORS AND DONORS

Scientific Instruments
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National Trust
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SITA Trust
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Siemens Transportation Systems Ltd
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Sir Richard Baker
Sir Walter Tull
SKM
SME
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SOLARWORLD
SPAR
STFC (Science & Technology Facilities Council)
TBS (Technology Strategy Board)
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Wm Keir
Worthington Group
Woolwich

FIVE WORLD-BEATING MUSEUMS

The British Museum
The Science Museum
The National Railway Museum
The National Media Museum
The Natural History Museum

WHERE FUNDS COME FROM

Fundraising at the Science Museum Group is based on developing long-term and mutually beneficial relationships with all our funders. We view supporters as investors in our ambitions and values and we hold varied events to grow their interest in our Museums.

Corporate donors play a significant role at SMG. They recognise the importance of inspiring the next generation and the unique role we play in achieving this.

Our Corporate sponsors support us across a range of galleries and exhibitions and in return we offer a bespoke range of tangible benefits to meet their needs.

Grants from private trusts, foundations and Government help SMG to share learning, inspire anti-bullying messages and support arts in education, heritage or wider public engagement and the benefits are usually mutual.

Visitor giving has made a huge difference to our revenue and we are delighted to report that the past year alone we have raised more than £2 million in donations.

HOW YOU CAN SUPPORT US

We are a charity with three Museums and support from our visitors and friends is essential. We are grateful to all our supporters over the past year and every donation has great value to us in funding our work. If you would like to make a donation, to any of the Museums, please phone 100 7942 6081 or e-mail development@sciencemuseum.ac.uk

BECOME A PATRON OF OUR MUSEUMS

Each year we need your help and support in order to inspire the next generation of scientists and engineers, to create ambitious exhibition and learning programmes and to protect our world-class collections. Patrons is a hugely important way of supporting the work of our Museums with an annual gift and we currently have a Patrons programme at both the Science Museum and National Railway Museum. In return for your gift, we offer all of our Patrons a range of tailored benefits to thank you for your support.

Our Patrons enjoy special access to our collections and a programme of exclusive events, including behind-the-scenes tours, invitations to exhibition openings, and talks by renowned experts, our expert curators and industry leaders.

If you are interested in finding out more about becoming a Patron, including the benefits we offer, please do speak with us.

At the Science Museum please contact the Development team on 020 7942 6253 or e-mail development@sciencemuseum.ac.uk

At the National Railway Museum please contact the Development team on 0191 685754 or e-mail development@nrn.org.uk

NATIONAL MUSEUMS

The British Museum
The Science Museum
The National Railway Museum
The National Media Museum
The Natural History Museum

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Science Museum
Eclipse Group
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Airbus Group
Glassmilkine
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Network Rail
The New Goddard Terry Charitable Trust
The National Railway Museum
North Bay Railway
North Yorkshire Moors Railway
NGSER
Christopher Oldham
The Patricia & Donald Shepherd Charitable Trust
Porterhouse
Railway & Canal History Society
Railway Industry Association
Shepherd Group
Siemens Transportation Systems Ltd
Sir James Knott Trust
Francis Townsend
Virgin Trains
Thank you to all those supporters of our rich exhibition and gallery programme, including the Mallard 15 celebration
All those who have supported the NRW through a bequest in their will
All those who wish to remain anonymous

FIVE WORLD-BEATING MUSEUMS

The British Museum
The Science Museum
The National Railway Museum
The National Media Museum
The Natural History Museum

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Science Museum
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SCIENCE MUSEUM FOUNDATION TRUSTEES

Donald R Bryton OBE
The Rt Hon, Lord Rees of Ludlow
Mr Howard Covington
Sir Martin G Smith KBE
Mr Edward Dunn
Michael G Wilson OBE
Michael A Hoffman

NATIONAL MEDIA MUSEUM

The Bons Kariott Charitable Foundation
Bradford College
The British Film Institute
City of Bradford Metropolitan District Council
Creative England
The Dansa Anglo-Japanese Foundation
Dona and Albert B Broccoli Foundation
Embassy of the United States of America
Esmée Fairbairn Collections Fund
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Split Inclusive Trust
Universal Live
University of Bradford
Virgin Media
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With many thanks to all NMM Members
All those who wish to remain anonymous

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Meggitt
Train Data Solutions
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East Coast
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Museum
West Coast Railways
Silver
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Bachmann Industries Europe plc
Bronze
Akello Group
Paxoil
Omnicon Engineering Ltd
Community
Caledonian
Northern Rail
REPTA
T & R Williams Ltd

NATIONAL MUSEUMS

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Fremantle Group
Grahm Holdings
Sophisticated Security Services
Cerf
Avalon
Bradford College
Last Castello Feather
Universal Live

PATRONS

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Michael and Jane Wilson
Galileo Circle
The De Lasalle Foundation
Steve Mobbs and Pauline Thomas
Mr Lawrence Staden
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Dr Karther Laiurni OBE
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Sean Phelan and Audrey Mandela
Cline Richards OBE
Brunel Circle
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Ian Badhite
David Burk
Dr Ann Cress
Mr Andrew Eland
Andr akk Jackson
John and Elaine Ellington
Simon Godwin
Alexander and lka Green
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Andrew Jackson
Bridget and David Jacques
Renato Lula Jacob
Flora Kuma-Brahen
George and Angela Louden
Alan and Virginia Lowell
Dr Peter J Morris
Alexandra Papadakis
Guy Reid
Dr Neil Reid
Mr David Schmering
Ian and Helen Simm
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Gregg Wilson

National Railway Museum
Newton Circle
Scotcam Circle
Ian Macbeth
Mr Henry Medcalf
Neil Millington
William CN Smyth
Francis Townsend
Duchess Circle
M Lord and Lady Aden
Richard Hill
Alan E Moore
Wick Moor
Phil and Caroline
Sawhney
Joe Tonks
Rosemary Wheeler
Raymond Wormald
Ian Robinson
Andrew Staley
Trains
Dean Welbourn

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A RENOWNED FAMILY OF MUSEUMS

SCIENCE MUSEUM GROUP OBJECTIVES

The Science Museum Group (SMG) is devoted to the history and contemporary practice of science, medicine, technology, industry and media throughout which the common bond is human ingenuity. Our collections form an enduring record of scientific, technological and medical change since the 18th century. SMG incorporates the Science Museum, the Science Museum Library and the Wellcome Library for the History of Medicine in South Kensington; the Museum of Science & Industry in Manchester, the National Railway Museum in York and Shildon; and the National Media Museum in Bradford. Our two major collections stores are located at Wrotham in W and Blythe House in West Kensington.

Our strategic objectives across SMG are to aspire to the highest international museum standards in the care and preservation of collections, scholarship, programming, learning and advocacy for our subject areas; strengthen our core narratives and deliver dynamic gallery displays; implement clear audience strategies that focus on providing life-enhancing experiences; extend our reach nationally and internationally; make optimum use of our estate; be an organisation dedicated to the development of great people.

THE CHARITY

The Board of Trustees of the Science Museum is responsible for the whole of the Science Museum Group. The Trustees, who may number between 13 and 20, are appointed by and are responsible to the Prime Minister through DCMS. The Director of SMG, as Chief Executive Officer, is responsible to the Board of Trustees, and an Accounting Officer is accountable to DMS for compliance with the Management Statement and Financial Memorandum.

Chairman: Lord Grade of Yarmouth CBE (Trustee)

Members

Lady Chisholm
Mr Howard Covington
Professor Dame Athene Donald DBE
Mr Simon Linnett
Professor Averil Macdonald
Mr Andreas J Goss
Lord Faulkner of Worcester
Professor Dame Athene Donald DBE
Mr Michael Emmerich
Lord Faulkner of Worcester (Trustee and Observer)
Professor Brian Cantor, from October 2013
Mr Pierre Brahm
Chair: Dr Gill Samuels CBE (Trustee)

New Fellows of the Science Museum (FScM)

Peter Higgins FRS FRS
Lord Rees of Ludlow OM, KBE, FRS
Michael G Wilson OBE

FIVE WORLD-BEATING MUSEUMS

SCIENCE MUSEUM, LONDON

Director: Ian Blatchford
Science Museum Exhibition Road
London SW7 2DD
www.sciencemuseum.org.uk

OBJECTIVES

The Science Museum’s mission is to make sense of the science that shapes our lives. This commitment drives everything we do. Through our world-class collections of historic objects, galleries, interactive experiences and our learning programmes we aim to be the leading international museum championing the understanding, enjoyment and prestige of science in modern society. Last year we set out our Strategic Ambitions for the next decade, including a commitment to focus on the urgent choices faced by society and the fundamental science and technology that underpin them.

AUDIENCES

This year 51% of visitors to the Science Museum came in family groups. A further 13% of our visitors came in education groups, and we remain the UK’s most visited major attraction. The School’s education work has been shortlisted for an award.

ACHIEVEMENTS

This year there were 3.34 million visits to the Museum. This is the highest total since current records began and included the busiest ever February half-term, with nearly 150,000 visits in nine days and almost 20,000 in a single day. The Museum received a number of awards including: three for last year’s Web Lab exhibition, one of which was the People’s Voice Award for Best Visual Design at the Webby Awards; Silver in the Visit England Access for All Awards for work to improve access; Gold for the desks and maps designed to support visitor giving at the DBA Design Effectiveness Awards; and an Innovation award from the Chartered Institute of Building for the Hemcrete store at Wroughton.

FUTURE AMBITIONS

The programme of major exhibitions continues with the opening of Cosmonauts later in 2014. Our ambitions to tour our major exhibitions, both within SMG and internationally, will be realised this year. Collier has already transferred from London to our sister Museum in Manchester, after which it moves on to international venues. Significant development and fundraising work has taken place on Masterplan projects, including the Information Age gallery, and new mathematics and medical galleries. Information Age opens in autumn 2014 with its associated learning programme and digital resources. Our new research centre is planned to open for autumn 2015.

MUSEUM OF SCIENCE & INDUSTRY, MANCHESTER

Director: Jean Franczyk
Museum of Science & Industry
Liverpool Road, Castlefield
Manchester M3 4FP
www.mosi.org.uk

OBJECTIVES
The Museum of Science & Industry tells the story of where science met industry and the modern world began whilst signalling Manchester as a 21st-century city of science. The Museum sits on one of the nation’s most historic industrial heritage sites. Covering 7.5 acres and including six listed structures, this small corner of Manchester is one of the key places in the UK, and therefore in the world, where the Industrial Revolution began. Our ambition is to realise its potential as an internationally significant museum with a strong Manchester personality.

AUDIENCES
This year the Museum welcomed 54,000 visitors in education groups to explore the site, story and collections, with 37,000 visitors from schools – a total of 248,000 visitor learning instances. Independent adults made up 24% of overall visitor numbers, visitors in family groups made up 66% and the remaining 8% of our visitors came in educational groups. Among general admissions visitors, 74% came from Greater Manchester and the Northwest region, with a further 16% from elsewhere in the UK and 10% from overseas.

ACHIEVEMENTS
A major success this year was the Wellcome Collection exhibition Brains: Mind as Matter, which attracted 100,000 visits. Through this exhibition the Museum succeeded in its objective of drawing in new adult audiences. In this 30th birthday year on its current site, there were 669,000 visits to the Museum.

Museum. Manchester Science Festival site, there were 669,000 visits to the Museum in its 30th birthday year on its current site. This year’s festival received nearly 90,000 visits – an increase of 7% on the previous year. Our holiday programming has been particularly successful, with 53,600 visits during our Steam, Sweat and Sewers event over February half term.

FUTURE AMBITIONS
In the coming year, the Museum will roll out its Masterplan. This has six priorities under Phase 1, including the creation of a new temporary exhibition gallery, redevelopment of the public realm and reinterpretation and development of the historic Station Building. This will be followed by projects to deliver major new galleries showcasing modern Manchester and contemporary science, as well as world-class interactive galleries. In partnership with the Science Museum, the Collider exhibition transferred to Manchester as part of a broader strategy to share public programming across SMG, and also specifically to increase our contemporary science programming.

In September 2014 Jean Franczyk leaves Manchester to take up the post of Deputy Director of the Science Museum in London.

NATIONAL RAILWAY MUSEUM, YORK AND SHILDON

Director: Paul Kirkman
National Railway Museum
Leeman Road
York YO26 4JZ
www.nrm.org.uk

OBJECTIVES
The National Railway Museum comprises a main Museum in York and a second Museum in Shildon, County Durham, which opened in 2004. The NRM in Shildon is operated in partnership with Durham County Council and houses some of the National Collection in a new building. Acharismatic 19th-century site features the former workshop of Timothy Hackworth, built for the world’s first passenger railway of 1825. Shildon is known as the ‘cradle of the railways’.

During the past year a strategic review was carried out and a new vision agreed: ‘The NRM is the prime showcase in the world for the huge impact railways and their technology have had in the past and will have in the future on the people, the economy, the society and the environment of Britain and the wider world.’

This is supported by the following objectives: maintain our collection and increase research and scholarship based on our collection, produce an engaging and informative public programme, according to our five-year plan, which engages new audience segments with our overall narrative of the railways; progress our Masterplan; create an efficient and effective organisation and focus on opportunities to raise additional income.

Paul Kirkman was confirmed as Director of the Museum on 12 July 2013, following a one-year secondment from DCMS.

AUDIENCES
Our Museum in York continues to appeal successfully to family groups, which make up 50% of visitors. Independent adults account for 44% of visitors, whilst 4% come in education groups. The Museum is a particular attraction for railway enthusiasts, who make up 30% of general admissions visitors. Of our general admissions visitors, 51% come from outside the Yorkshire and Humber region, including 8% who are from overseas.

ACHIEVEMENTS
There were 926,000 visits to the Museum in York this year – the highest since current records began; and 294,000 to Shildon – 86,000 more visits than the next busiest year. During the Great Gathering in York 244,000 visited over 32 days, and 120,000 came to the Great Gobdy in Shildon over nine days as part of the Mallard 75 celebrations. The Museum was named winner of the John Coiley Award, as part of the Heritage Railway Association’s Annual Awards 2013. The Museum also received a Good Place to Come award from the Children’s Society following an audit by local young people with disabilities.

FUTURE AMBITIONS
Next year we shall be focusing on interpretation of our collections to tell the stories of the railways, their impact and the passenger and worker experience, supported by a new research strategy, public programme and learning offer. In 2014-15 we shall begin the first stage of our Masterplan with commercial developments in the South Yard.
Director: Jo Quinton-Tulloch
National Media Museum Pictureville
Bradford BD1 1NG
www.nationalmediamuseum.org.uk

AUDIENCES
The Museum has two broad audiences: those who visit primarily for the galleries and exhibitions and those who visit mainly for the full-length film programme. Last year 18% of all visits were for the cinema, 52% were in family groups visiting the galleries, 24% were independent adults visiting the galleries and 5% were educational groups visiting the galleries. The Museum as a whole is an important attraction and resource for communities in Yorkshire and the Humber, with 81% of our general admissions visitors coming from the region.

ACHIEVEMENTS
General visits to the Museum have increased, with 365,000 for the galleries and exhibitions – 26,000 more than last year. The Museum celebrated its 30th birthday in June with a weekend of activities attended by almost 6000 people, including many new visitors. Events included a performance by the Punk Science team in front of thousands of spectators gathered in Bradford’s City Park for the annual Bradford Festival. In November, the Museum was the Yorkshire host for the BBC’s Children in Need broadcast, generating over 2000 visits to the Museum.

FUTURE AMBITIONS
With changes to the National Curriculum later in 2014, the Museum will continue to develop new learning programmes that will include a strong STEM focus. The Museum is also a partner in two doctoral training consortia, the Northern Bridge Doctoral Training Partnership led by the University of Newcastle, and The White Rose College of the Arts & Humanities led by the University of York. Between 2014 and 2019 the Museum will offer a number of placements for doctoral students to support their research and skills development.

In 2014–15 the National Media Museum will also begin working with a new commercial partner to run the cinema operation.

폭사한 이미지

FIVE WORLD-BEATING MUSEUMS

The 545-acre Wroughton site in Wiltshire is a vital resource for the whole Group, a former airfield, this vast site and the functions that operate here underpin and support a whole range of Museum-wide activities, including storage, conservation, exhibitions and loan activities, as well as providing access to researchers. The site is also used to deliver commercial activities and events, and is leading on the generation of sustainable energy.

Wroughton is home to the Science Museum Group’s big-object store and its Library & Archives, with 30,000 objects and 26 km of books and archives housed in ten former aircraft hangars (including an award-winning Hemcrete store). A variety of smaller buildings are used as offices, collection storage areas and conservation laboratories.

The range of collections is extraordinary. Over 4 km of material from the Science Museum Library collection were successfully moved from Imperial College London to stores at Wroughton, the first stage in the project to deliver world-class new library and research facilities for the Science Museum.

Vehicle line-up: three among 30,000 big objects

BLYTHE HOUSE COLLECTIONS STORE, LONDON

Blythe House is the Science Museum Group’s small-object store at Olympia. The Group currently occupies a third of this grand Edwardian Post Office building, shared with the V&A and the British Museum. The bulk of the Science Museum’s collections are stored there, and the operations at Blythe House provide critical behind-the-scenes support for public-facing results.

Activity focuses on the storage and preservation of smaller-scale collections and those with particular environmental requirements, such as photographic images. It also has an object conservation laboratory, photographic studio and the object movement team to support gallery and exhibition work and loans of our objects to other institutions.

A major project for the team based there this year has been the preparation of the 700 objects which will be displayed in the new Information Age gallery opening this autumn.

Vehicle line-up: three among 30,000 big objects

FIVE WORLD-BEATING MUSEUMS

while the building offers a grand façade in a central London location, it is not a sustainable long-term solution for the storage of Science Museum Group collections, and work is under way to establish the feasibility of leaving Blythe House in the longer term.

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It is increasingly rare to find someone who dedicates their entire career to one institution, building incomparable expertise and knowledge. But Heather Mayfield bucks the trend. This year she retires as Deputy Director of the Science Museum after 35 years of service in the Group.

Heather joined the Museum in 1979 as a Museum Assistant cataloguing items in the medical collection. That first temporary role was extended in 1982 when the institution embarked on an ambitious project that led, eventually, to the National Museum of Photography, Film & Television. Never able to resist a challenge, Heather moved to Bradford to join the team responsible for its creation and opening.

Back in London, Heather has been involved in almost every major project in the Science Museum over the past 25 years. She has been instrumental in securing millions of pounds in sponsorship, managing key strategic relationships, ensuring the Museum has always been at the forefront of science engagement. She has received an impressive list of awards.

Throughout her career Heather has tirelessly championed new ways of making museum collections available to the widest number of people. In the 1990s she led the delivery of the first temporary exhibition programme dedicated to contemporary science, Science Box, which tackled challenging and sensitive subjects such as DNA fingerprinting and passive smoking. This ground-breaking programme laid the foundations for the Wellcome Wing and then the Dana Centre – both absolutely ahead of the curve. Who else would have commissioned a project in which visitors dress up as cockroaches and tour the Museum while exploring the impacts of climate change on our world? The Science Museum has always attracted visionaries. But the hardest part of any new way of working is establishing it as the norm. Throughout her career Heather has shaped and delivered projects and practice so that the Museum’s approach to informal learning, interactivity, contemporary science and science communication has become firmly embedded within the DNA of the Museum. Heather is frequently approached by peer organisations for advice and she has sat on numerous boards and committees, including several in the USA.

Her passion for the collections is matched by her unwavering support for her teams. Heather has managed, mentored and inspired countless individuals in the organisation and so many of them have progressed to other roles and other organisations – their careers all benefiting from time spent together. Her humility and warmth resonate alongside her determination and she instils absolute confidence in the teams that work with her. Heather’s retirement is a great loss to the Group, but her legacy will continue to inspire millions of visitors.

Jo Quinton-Tulloch, Director of the National Media Museum, pays tribute to a remarkable woman who leaves a profound legacy within the Group.

35 YEARS A PERSUADER

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Heather Mayfield continues her association with the Museum as Consultant for the Medical Galleries project.
One of the key things we are trying to challenge is the idea that science, engineering, and design are all part of Britain's great industrial past, not our future.

The Science Museum continued to build relationships with key people and organisations including the Country Life magazine, which featured the Museum in its annual list of the 100 most influential Londoners for 2013. SMG developed an extensive schedule of events and exhibitions that engaged with science and technology organisations, working in partnership with the Department for Education, the Economic and Social Research Council, the Engineering and Physical Sciences Research Council, and the British Academy. SMG also collaborated enthusiastically with the European Commission, which has funded a range of projects and initiatives, including the EU's Framework 7 programme.

This year proved the power of authenticity, big projects anchored in real science. Tangible objects matter enormously to people.
AT THE LAUNCH OF THE COLLIDER EXHIBITION
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getting the opportunity to feel that
more young people than ever are
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Peña, Plastiques Photography, Sam Potts, Jonathan
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Andrew Gillett, Peter Heaton, Jorge Herrera, Jennie Hills,
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Toby Cornish, Nathan Dainty (VeryCreative), Benjamin
Kasim Asim, BBGConsulting, British Council (Russia),
Max Alexander/UK Space Agency, Tim Anderson,
With thanks for additional photographs by:
Science Museum Photographic Studio
Science Museum Library & Archives
Science & Society Picture Library
National Railway Museum/Pictorial Collection
National Media Museum
Main photography from Group resources:
Picture researchers, Nick Hedley, Richard Nicholls
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and its many bloggers
with generous input from staff at SMG
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during manufacturing, compared with the production of virgin fibre paper.

ON OUR JOURNEYS OF INVENTION APP FOR I PAD
THE SCIENCE MUSEUM’S DIRECTOR
BUT... WHAT’S YOUR FAVOURITE SCIENCE MUSEUM EXHIBITION?
Nothing better than touching something is there?
250,000 downloads?
That’s 250,000 people who know our collection better than before!

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[Image 285x-1 to 525x795]
AT THE LAUNCH OF THE COLLIDER EXHIBITION

Professor Stephen Hawking

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Jon Challicom, Coffey Architects, Edmund Collier,

Rick Bronks (Satureyes Photography), David Cation,

Max Alexander/UK Space Agency, Tim Anderson,

With thanks for additional photographs by:

Science Museum Photographic Studio

Science Museum Library & Archives

Science & Society Picture Library

National Railway Museum/Pictorial Collection

Museum of Science & Industry

Main photography from Group resources:

Picture researchers, Nick Hedley, Richard Nicholls

Designed by the Science Museum Design Studio

and its many bloggers

Edited by David Johnson

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Process Chlorine Free (PCF) and PAS 2020:2009 Level 3.

FSC recycled certification, NAPM 100% recycled certification, ISO 14001,

during manufacturing, compared with the production of virgin fibre paper.

ON OUR JOURNEYS OF INVENTION APP FOR IPAD

THE SCIENCE MUSEUM'S DIRECTOR

That's 250,000 people

250,000 downloads?

Astronauts floating weightlessly

in space loved spinning around

like tops within the tiny Apollo

you can emulate them,

app,

new Science Museum iPad

Journeys of Invention

THE BIGGEST MUSEUM ALLIANCE IN SCIENCE / SNAPSHOTS OF HUMAN INGENUITY

CASH BOOST FOR MANCHESTER

PHYSICS AS PURE THEATRE

ANNUAL REVIEW 2013–14

S C I E N C E M U S E U M G R O U P

BIG AMBITIONS SERIOUS SCIENCE

STUDENT SCHOLARSHIP CHERISHED ANEW

STEAM LOCOS BREAK RECORDS

NEW SPACES, NEW STORIES

ADVANCED STUDY IN PRINCETON

WHAT WE DO BEST: PAGES 36–43

PAGE 26

PAGE 8 AND 18

PAGE 52

PAGE 12

UNIVERSITY OF MANCHESTER

PROFESSOR BRIAN COX

and will help keep the northwest's

The Museum of Science &

The National Railway

The National Railway

A YEAR FOR BREAKING RECORDS

Total attendances at all 2014 Museums were 15% higher than plan to around 3,115,000. The Science Museum welcomed around 1,200,000 visitors, with an increased number of families and school pupils. The National Media Museum received around 720,000 (and was very nearly over 300,000 people in August alone).

The National Railway Museum enjoyed its busiest year yet with 987,000 visitors (875,000 in 2013), and the National Science Museum welcomed 1,415,000 visitors (1,353,000 in 2013), marking a gradual rise in visitor numbers.

Visitor giving was strong, with £1.2 million now reinvested in the National Science Museum. Sarkif,专属Film Museum, welcomed 87,000 visitors in 2014 and received its largest ever single donation of £800,000.

The Science Museum website (www.sciencemuseum.org.uk) welcomed around 26 million visitors, including 30 million downloads of Journeys of Invention and a greater number of users making use of the馆内 Interactive and Audio Guide (now with over 17,000 websites linking (more than 30,000), an increase of 24%

Comet Swift: a comet which entered the solar system on 30 November 2020. It was discovered by comet hunter Karl B. Combi with a 300mm telescope. The comet was also observed by other amateur astronomers.

Cosmic Crew: a team of 1500 students from schools and universities across the UK, the USA and Canada, who are working on a project to build a space probe to explore the Kuiper Belt. The project is led by King’s College London and is supported by the UK Space Agency and the European Space Agency.

Cover photograph: Comet Swift, image by Karl B. Combi and Amelie Combi, students at the University of Edinburgh, who discovered the comet on 30 November 2020. The image was taken by the William Herschel Telescope on the island of La Palma in the Canary Islands. The comet was observed to have a magnitude of 10.0, making it visible in small telescopes. The image shows the comet’s tail and coma, which are composed of gas and dust particles. The comet’s nucleus is about 3-5 km in diameter. The comet was discovered by comet hunter Karl B. Combi, who first saw it in the sky on 30 November 2020.