

The Grant Museum of Zoology at University College London: Reinventing a university museum

JACK ASHBY. Manager, Grant Museum of Zoology, UCL, UK.

BACKGROUND

The Grant Museum was founded in 1828 as the collection of specimens that supported the teaching of zoology and comparative anatomy at University College London (UCL). It houses 68,000 skeletons, skulls and specimens preserved in fluid covering the whole of the animal kingdom, from across the globe. Due to its age the collection contains many extinct and endangered species include some of the rarest specimens on the planet. Through its history it has been added to by its managing curators and professors to fit their own research interests and fill any taxonomic gaps they perceived.

As the teaching of life sciences changed towards the end of the twentieth century to focus more on molecular than organismal biology, many other London universities decided to disband their zoology collections –perceiving them as “old fashioned” remnants of a changing sciences. The majority were absorbed by the Grant Museum. We are now the last university zoology museum in London. We can now perceive that decline in zoological teaching as short-sited. Inevitably the pendulum has swung back, and the realisation that biology students cannot be taught everything about an animal by looking at its DNA has led to the incorporation of a mix of molecular and organismal topics into most syllabuses. This change itself has been influenced by an increased value in object-based learning emanating from university museums like the Grant Museum (see below).

In 1997 the collection was moved from its laboratory space under the rafters of an inaccessible

university building deep in the innards of the UCL campus to the ground floor of a building with street access. The aim was to turn the historic teaching collection into a public museum. Since then the Grant has substantially grown in its profile and it is now one of the leading providers of informal natural history engagement in London.

In recent years an agenda has arisen to embed public engagement activities into the everyday life of universities. This emanated from a need recognised by UK government for academic research to have relevance to the world beyond academia. As a result, major research funders including, the Higher Education Funding Council for England (HEFCE) and Research Councils UK (RCUK), and Wellcome Trust require academics seeking funds to demonstrate how their work will impact on the real world.

Recognising that such thinking would require significant change to the Higher Education sector, HEFCE, RCUK and Wellcome established six Beacons for Public Engagement – partnerships between research intensive universities and public engagement providers. UCL led one of the Beacons, and at the end of the funding period UCL decided to continue financing the initiative themselves.

UCL seeks to lead in this field, employing a Public Engagement Unit tasked to coordinate, improve and evaluate the way that academic research impacts society. This unit is tightly allied to the museums, forming a single department - UCL Museums and Public Engagement.

UCL Museums and Public Engagement – which incorporate the Grant Museum, the UCL Art Museum, the Petrie Museum of Egyptian Archaeology, several teaching and research collections, the Bloomsbury Theatre and the Public Engagement Unit – is committed to positioning itself as experts in public/academic interaction.

In the Grant Museum itself, a team of five core staff (a Manager, Curator, Learning and Access Officer, Visitor Services Assistant and Curatorial Assistant) oversee the delivery of strategies which are run through the Department and link closely with UCL-wide policies and agendas.

By considering the public engagement agenda as critical to its own perceived value at UCL, the Grant Museum developed strategies to become one of the University's major platforms for public engagement. In recognition of our growing profile, and the opportunities that having a successful venue with an established audience can provide a university seeking to work with local people, a bigger and better venue was sought for the Museum.

At the same time that the Museum was demonstrating its need for improved premises through growing programmes, the academic departments we shared the building with urgently needed to grow. The catalyst for the Museum's move was provided by these departments' need to take over our space.

THE RELOCATION PROJECT

The pressures from the academic expansion and the freeing up of a promising location meant that the relocation project was announced soon not long it begun. We were given a few months' notice to vacate our premises. The space that we were moving to – the Edwardian former medical science library across the road – was occupied until after we had to leave our old space. This meant that we would have to move the collection twice – once to store and once to the new home – and also that we would not have access to the new venue in

order to design displays in advance (Ashby, 2011, p.91-92).

Being a former library, the walls of the room are lined with over 100 wooden cabinets that we could fill. Every one of them has a different height, width and depth, so planning the displays for all 137 cases would have been quite an undertaking. Not only that, but without a full list of specimens, we couldn't even plan the theme for each of the cases. As it had been since its inception, because of the way it is used in life sciences teaching, the collection was to be largely taxonomically arranged, with some sub-collections being displayed together. Beyond establishing this structure, how many cases each taxon would fill couldn't be decided until we were unpacking in the venue.

We closed on 1 July 2010. Over the course of three months specialist museum movers packed 727 crates and boxes of material to be stored offsite until the new space became available and then refurbished as a museum (Carnall and McEnroe, 2011, p123-144).

Unpacking the Museum in the new space took around three months. Although the six main vertebrate cases remained largely the same as in the previous Museum, all 131 other cases were to be designed from scratch. The time spent unpacking the 727 crates was exhausting but genuinely exciting. Without detailed designs, we would take each crate in turn unpack it, cross the crate off the list, measure the specimen, find a case it would fit in, and document the new location.

All the while the layout of the museum constantly evolved to ensure that all the major animal taxa were included, that they were sensibly arranged with respect to each other; that the museums' not taxonomic stories were included, and that flexibility was built in to allow for temporary changes to the displays for exhibitions and installations (see below) which would not result in entire animal lineages or important themes being left out.

The whole move, from closing through packing,

storing, delivering, unpacking, remounting, installing, interpreting, marketing and reopening, took just over eight months. It was certainly a chaotic rush, and not standard for a relocation or redisplay project, but the end result has been overwhelmingly positively received. Visitor figures are more than six times higher than the old Museum (and continue to rise year on year) and the Museum was awarded the inaugural *Guardian Cultural Pros Award* at the 2013 Museums + Heritage Awards – a search for the UK’s most inspiring museum, decided by public vote.

REASSESSMENT – WHAT IS A UNIVERSITY MUSEUM FOR?

As mentioned, prior to the move the Grant Museum had been working to establish itself as an entrance point to the university for the public – both physically by drawing people onto campus, and academically by lowering barriers to access UCL research. The new location allowed this concept to be developed significantly and furthermore to question exactly what it means to be a university museum. This is something we thought essential for us to survive in quite different times from when most university museums were founded – before UK universities were run as businesses.

Far less so than today, in the nineteenth and early twentieth centuries a museum was seen as an essential teaching resource for disciplines ranging from archaeology to zoology – including the Grant Museum. Fortunately, despite periods in our history when there were no senior advocates at UCL, our museum is an example of a university museum which has been well maintained. There are other university collections however, which cannot say the same thing – uncurated and unused, unvisited, degrading in forgotten cupboards and, and occasionally permanently discarded. Poor advocacy of their role within their parent institution (or beyond) is one reason for the lack of funding (University Museums Group UK, 2004; Biology Curator’s Group 1997). Pressure on space is another. Universities do not do have to

try hard in order to justify prioritising income-generating research facilities and student amenities ahead of museums.

Operating between two sectors – for higher education and for museums – experiencing massive financial changes, university museums must again reconnect with research and teaching and open their doors to the public (MacDonald and Ashby, 2011, p.164–165). They need to work hard to demonstrate their value to their parent institutions. This is exactly what the Grant Museum sought to do in its new home.

Like all museums, university museums must satisfy the objectives of their funders. The aims and aspirations of a university may not completely overlap with those of a traditional, non-university museum. All institutions operating strategically will be regularly questioning why they undertake certain activities – do they contribute to achieving their goals? A museum asking itself “why do we run activities for school groups?” or “why do we develop temporary exhibitions?” is likely to give different answers depending on whether or not it is a university museum. At the Grant Museum we are constantly measuring our activities against the standard “did UCL sufficiently benefit to justify this programme?”

The *reasons* for a set of activities should influence the *methods* for those activities – the way we do something is influenced by why we do it. At the end of the day a university museum is *for* its university. If the museum isn’t helping its host institution to achieve objectives in teaching, research, public engagement, the student experience or income generation, for example, it’s hard for the university to justify supporting it.

All the while wondering what we can do for our university, we also explored what being at a university meant to us. Universities are places of ideas, filled with academic minds that can be tapped to develop creative projects and projects. Universities are places of experimentation and where simply testing whether something works is acceptable –

where the risks of innovation are more welcome. We sought to model ourselves around these philosophies. We would become an experimental space for new ideas. We would work with academic colleagues to develop cutting-edge visitor offers that served both communities. We would examine everything we did through the eyes of a university.

HOW MUSEUMS CAN SUPPORT HIGHER EDUCATION

Here I aim to explain a selection of the strategies and programmes that we at the Grant Museum have put in place to try and meet the needs of our institution, UCL, with a hope of being considered a key part in delivering the University's varied agendas. Elsewhere there are many examples of how university museums can contribute to academic and public engagement missions of universities (University Museums Group, 2013)

While we are a university museum, the agendas that we are working towards could be met by non-university museums. The lessons learned at UCL are applicable to non-university museums wishing to capitalise on opportunities to work with universities. As much these strategies have been developed by questioning what UCL needs that the Grant Museum can deliver, the same results would come from interrogating what universities need that museums can deliver. Where necessary, I will try to explain exactly why a museum might want to help universities to deliver their strategies, if the overlap with museum agendas isn't obvious. At UCL we are also partners in an Arts Council England-funded project to link specialist museums with academic partners to enable each to benefit from complementary skills called Share Academy¹.

In considering what museums can do for universities, it is critical to consider museums in terms beyond what can be done with collections and spaces, and look to their staff. The professional expertise of museum staff is normally very different to

the expertise of potential partners. For example, museum staff are experts in how to run events, develop audiences, design exhibitions, and teach with objects, as well as curation, which can be all highly valued by modern universities.

EXCELLENCE IN TEACHING

UCL Museums have been gathering data which show what university students get out of learning with objects. By advocating strongly for the value of object-based learning, and researching the outcomes of this pedagogy, we have been able to increase our use by the university in teaching. What's more we have become embedded in the new flagship Bachelor of Arts and Sciences degree at UCL, with an entire module being developed and taught by museum staff with objects.

Object-based learning has been shown to assist greatly in enabling students to overcome "troublesome knowledge" and "threshold concepts" – those complicated ideas that, once grasped, allow a topic to be fully explored and comprehended (Meyer and Land, 2005). Key findings from a UCL survey have been that 61% of students think object-based learning is a more effective way of learning than listening to a lecture or talk. Students emphasised the way object based learning improved their understanding of subject-specific knowledge; was interactive, hands-on and visual; and was an engaging and inspiring way of learning.

Real value is to be had in looking beyond the obvious academic links – for example teaching zoologists with zoology collections or archaeologists in archaeology collections. "Key Skills" or "Transferable Skills" are a big part of the modern university agenda, in equipping graduates for a life in employment after university, and object-based learning is an excellent way of delivering them. Communication, observation and team-working skills were consistently identified as having been developed through object based learning.

1. <http://www.londonmuseumsgroup.org/share-academy/>

In the Grant Museum, as well as teaching biologists and geologists we look well beyond these obvious links and have considered which other disciplines could make use of our collections, expertise and spaces. We have built strong links with art schools in London and large proportions of our Higher Education classes are in art. We work closely with academics in History to discuss the scientific concepts around topics they are studying, or investigating the role of explorers and collectors that have influenced our collections and disciplines. We tackle the History of Art through histories psychologies of collecting and the history of museum cultures. For Science and Technology Studies the history of figures and specimens associated with our collection are of great value, particularly as an historic university museum where we can explore how the *teaching* of biology has changed through the centuries. Formats for visitor engagement and museologies of participation and interpretation are critical to our museum studies, digital humanities and architecture students. The key message is don't be restricted to science lecturers when thinking about how to generate teaching bookings.

We have also started experimenting how we can make use our public programmes in supporting teaching – what could a museum offer that would be a valuable teaching experience for UCL students (see also volunteering below). Over the summer of 2013 we invited undergraduates studying sculpture at UCL's Slade School of Fine Art to take over the Museum for *Sculpture Season*. They were invited (and paid) to develop sculptures inspired by the museum's collection, history or practices, and design them to be integrated into our displays – among or inside specimens, occupying entire cabinets or any surface or void.

As well as having the chance to display their works in a popular public museum, the students gained the experience of working with a museum, understanding how exhibitions are put together, their first taste of working to commission for a customer, and the many other aspects of museum-working. For the Museum it was not a risk-

free process. There was a proposal stage for us to select which works we could commission based on the quality of the concept as well as the practicalities; these students were untried and we didn't know exactly what we were going to get; we would be working with people who would be inexperienced of the demands that museums put on co-curators. In the end it provided a fantastic addition to the Museum's programme.

IMPACT AND PUBLIC ENGAGEMENT

In the UK at least, when academics bid to research councils to fund their research, they have to demonstrate that their work has some will have an impact beyond academia. This may include an anticipated number of lives improved for those researching new jobs or engineers developing water recycling technology. Others may influence industry and result in reducing costs for a particular sector or generate income from patents or licences. One pathway to impact which museums can support is "cultural enrichment, including improved public engagement with science and research" (National Co-ordinating Centre for Public Engagement, 2009).

This means that there are thousands of academics at higher education institutions wishing to engage the public with their work, and often with a limited idea of how to do so. If museums locate these academics they can provide a way for their visitors to experience cutting-edge research, potentially play a role in shaping it, and get content for free for exhibitions and events.

Museums are already successful at drawing people in. Everyday visitors, event participants and schools can be shared with colleagues across our universities. Given that public engagement and the impact agenda are of such a high priority today, actual guaranteed access to an established audience is genuinely valuable to academic partners. This is a real area of demand at universities that museum staff have expertise in. Museums can provide this expertise and access to academic colleagues.

The Grant Museum runs one of the largest programmes of informal natural history events for adults in London. Twice a month we run panel games, classic film nights, traditional lecture-style presentations, panel discussions, pub quizzes, balloon debates, treasure hunts, and object-based workshops. All of these events rely on academics coming in as speakers or panellists. There is genuine value for people to engage with active and top-level research scientists, providing our audiences with cutting edge content from the source. Such opportunities give a realistic insight into what academic life is like, what *real* scientists are like (regularly dispelling stereotypes) and gives the public a chance to see where the science they hear on the news or elsewhere comes from. These are all objectives that modern universities would hope for.

For the researchers, they are trained by us in engagement and they get access to our audiences for their impact requirements. They don't generally expect to be paid.

Aside from events, the main area where we aim to support the University's impact agenda is through exhibitions. All of our temporary exhibitions are co-curated by university academics aiming to deliver impact. The model we developed ahead of the Museum's reopening in 2011 was to ensure financial sustainability for research-related projects. In reality it has not developed in the way we had hoped.

Where we wanted to be at this stage – nearly three years after opening – is that the costs of staging an exhibition are covered by the academics' research grants. Applications to funding councils are allowed to include costs incurred by engaging non-academics with the research. We want academics to approach us about a potential exhibition (or any other impact-related project with the Museum) while they are writing the funding application. We could then tell them how much their project would cost – covering materials, mounting, interpretation, marketing, and staff time (not at a profit), in the same way that

they would include other costs associated with the research.

Unfortunately this strategy is yet to work – academics approach us at or near the end of their projects asking for collaboration on an exhibition, without having included the costs of dissemination and impact in their original proposals. When this happens we have to find alternative sources of funding to enable the exhibitions.

Despite these drawbacks we have enjoyed great successes from limiting our exhibitions programme to university-based research (and teaching projects such as *Sculpture Season*, discussed above). In spring 2012 *Art by Animals* was an installation of paintings by gorillas, chimps, orangs and elephants, co-curated with art academics, which doubled our visitor figures. What the university gets out of it is a platform for its academics to engage with an established public audience, and a reputation for high quality accessible events, managed and marketed by experts in event programming and science communication.

To make the events and exhibitions a success we must ensure high attendance, and this is done by ensuring themes have a wide appeal – not just biologically-minded people. Whilst all of our themes have their basis in the life sciences, particularly natural history, we tackle the topics from many angles, bringing in academics from across the disciplines, including the history of science, engineering, astrophysics, geography and the arts. We will continue to experiment with strategies for getting impact activities funded by the academics' research grants. It is likely that such a way of thinking will take time to be embedded in the higher education sector – that more communication is required.

INNOVATION – EXCELLENCE IN RESEARCH

The intention here is to look beyond traditional specimen-based research for how museums can assist universities in supporting academic research.

Instead of considering the objects to be the asset in use, we consider the museum venue and its visitors as something to sell to academics.

As with impact, many researchers need a public to test things on. We at UCL Museums have built strong links with academics in the fields which tackle with the human interaction with ideas and objects, such as digital humanities. Our partnerships involve the academics conceiving of an innovative method of audience engagement, and they need somewhere to test it as an experiment. We provide the museum expertise and the Petri dish – we put experimental products in our galleries so that academics can test them on our visitors.

To these ends we have embraced a philosophy of being a venue for experimental practices and innovation for universities (MacDonald and Ashby, 2011).

Our most successful example to date of how the Museum has functions as a research venue is called QRator. We have in gallery a ground-breaking method of public engagement that was developed with dual goals. For us – to allow our visitors to contribute their opinions to how museums like ours should practice, and the role of science in society today; for our partners – the UCL Centre for Advanced Spatial Analysis and UCL Centre for Digital Humanities – the chance to run a research programme into how museum visitors engage with digital social interactives and how audiences behave around such technology. Two PhD projects are run behind the initiative.

To these ends, we were only the second museum in my knowledge to employ iPads permanently in displays. Each iPad asks visitors to answer questions to which we want to know their thoughts, such as “Should human and animal remains be treated differently in museums like ours”, “Should scientists shy away from studying differences between the races” and “What makes an animal British”. Visitors can respond on the iPads themselves, on their own smart phones by scanning a QR code, or at home on their computers.

Involvement in such enterprises can raise income from research councils in the same way as Impact-related work, but the benefits go far beyond this. The chief of these include an enhanced experience for visitors and an improved profile and influence in the sector. The New Media Consortium Horizon Report: 2011 Museum Edition (Johnson, Adams and Witchey, 2011) cited QRator as being four to five years ahead of “the adoption horizon” for the sector as a whole, which has generated a great deal of interest for the Museum. QRator won the 2012 Museums + Heritage Award for excellence in Innovation.

Conjoining the visitor offer with innovative research programmes can raise other tensions (aside from if the research doesn’t work). In most museums an initiative which is successful at engaging visitors is maintained until it stops being of value. However with innovation projects like these, when the research money runs out the offer may have to be withdrawn, which can lead to a failure to meet visitor expectations. This is particularly true if the next project produces less successful results.

STUDENT EXPERIENCE

In 2012 new tuition fees in the UK were introduced requiring the majority of students to leading universities to pay £9000 a year tuition fees. As a result of this and other changes to the higher education sector, universities have working very hard to ensure that students are happy and feel they are getting good value for money.

The Grant Museum links to this agenda in many ways. Beyond improving teaching through object-based learning and attracting students to our events, we have worked on our volunteering offer.

Many museums will rely on volunteers to fulfil their needs to some degree. The Grant Museum uses a lot of volunteers in our learning and curatorial work. As the opportunities for offering volunteering placements are limited, we restrict

them to UCL students, so that we can best support UCL's student experience agenda.

If other museums are looking for subject-enthusiasts or keen events volunteers then it is worth contacting the local university volunteering services staff, as they will have great infrastructure in place to provide support. There are drawbacks of working student volunteers – largely their lack of availability in exam and holiday time, but the Grant Museum has benefitted from their work a great deal.

through which to view our activities, to decide what to resource and how to prioritise. We still have room for learning in many areas, particularly how best to achieve long-term funding of temporary exhibitions, but in all our activities in our new home have made it easier for our funders to justify our prolonged existence.

OUTREACH / ACCESS / WIDENING PARTICIPATION

Following on from the increased fees at UK universities, they must put a lot of effort – running into the millions of pounds – into attracting students from non-traditional higher education families. Museums can play a major role in fulfilling this goal. The programmes may include Saturday schools and summer schools for 14 to 17 year olds – an audience that is tricky to get into museums – that will be looking for things to do with their students. The Grant Museum provides workshops for things like this, and there is money available to do so. There is potential growing for museums to tap into this, taking advantage of the universities' growing expertise in recruiting such audiences, and being paid as part of the arrangement.

CONCLUSIONS

The move of the Grant Museum of Zoology was not the end of a process of reinvention and re-examination, but the beginning. In planning, opening and learning to work in the new venue we could examine exactly how we could make ourselves critical to the work of our university funders, and how we could make the most of being in a university environment.

By taking on the University's agendas as our own agendas, we were developed a strategic lens