

Centre of the CellTM

Science comes to Life

A review of the first
five years including
the Centre's close
involvement with
East London schools



Queen Mary
University of London



Centre of the Cell is a unique cell-shaped science centre suspended above a real biomedical research laboratory in the heart of London's East End. This digital interactive public engagement project is based in the Blizzard Institute at the Whitechapel medical and dental campus of Queen Mary University of London, QMUL. Centre of the Cell is one of the few, perhaps the only, science education centres in the world to be situated inside a research lab. Since opening in September 2009, over 100,000 people have participated in Centre of the Cell activities with approximately one million visits to the interactive website www.centreofthecell.org. This brochure describes Centre of the Cell's first five years of operation, the evolution of the project in response to audience demand, the impact of siting a major public engagement project within a research laboratory, and its particular success in working with local schools.

Origins of Centre of the Cell

Ten years ago the Whitechapel science campus of QMUL was rather desolate and disorganised; the development of the Blizzard Institute was intended to reverse many years of low investment. An innovative design from architect Will Alsop resulted in a vast subterranean laboratory floor housing 400 scientists, covered by a rectangular glass box housing offices and 'Pod' meeting rooms. Thanks to the foresight of microbiologist Professor Mike Curtis (who subsequently became the first Director of the Blizzard Institute and has been a major contributor to Centre of the Cell's success) a space for public engagement was part of the original architectural brief. Hence one of the Pods in the glass box took shape as a bright orange cell-shaped structure suspended above the lab benches.

By 2003 the construction of the Blizzard building was underway but £4 million extra was needed for the complex digital fit out of the Centre of the Cell Pod and its website. From a standing start, a fundraising campaign achieved this target with important support from donors including Wellcome Trust, London Development Agency, QMUL, Clore Duffield Foundation, The Mercers Company, Garfield Weston, Jack Petchey, Esme Fairbairn Foundation, Glaxo Smith Kline and the Ingram Trust. In all forty different Trusts, Foundations and individual supporters donated to Centre of the Cell's capital campaign.

The motivation for Centre of the Cell was the local population of the East End, an area of social deprivation and poor health, with a large immigrant population. There was a need to inspire and motivate the local school children into higher education and to site a science centre in an area that would not traditionally be anticipated to draw a large audience. For these reasons, prior to opening in 2009, there was an extensive front-end evaluation of the project plan with the local audience, as described in more detail below.

Centre of the Cell aims

Centre of the Cell has five main aims: to inspire the next generation of scientists and healthcare professionals; stimulate dialogue, interest and excitement about biomedical research; raise aspirations, especially in the local community; widen participation in further and higher education and to help improve health and wellbeing especially in East London.

Top-level Message

Although Centre of the Cell's activities cover a wide range of topics in biomedicine and the life sciences, they all relate to the project's top-level message: *'Your body is made of millions of cells. People here and all around the world are trying to find ways to make cells better. You can help keep your cells healthy'*. This top-level message gives the project both identity and focus.

Engagement with the Local Community

Between 2003 and 2009, Centre of the Cell conducted a comprehensive front-end evaluation of the ideas, learning aims and top-level message of the project with local East London schools and community groups. Not only did this have a strong impact on the evolution of the project but also it engendered a feeling of 'ownership' in our community and built up a post-opening audience.

Case Study

The impact of a local charitable foundation – the Aldgate and Allhallows Foundation

The Aldgate and Allhallows Foundation is an educational charity that exists to benefit young people from Tower Hamlets. Between 2010 and 2013 funding from the Foundation enabled an Outreach Officer at Centre of the Cell to develop strong relationships with local schools. This role was pivotal to Centre of the Cell's success in providing world-class educational resources for school pupils in Tower Hamlets.

Umme Aysha started as **Aldgate and Allhallows Foundation Tower Hamlets Outreach Officer** in March 2010. During her first year in post, 2,371 Tower Hamlets school pupils participated in Centre of the Cell activities, with 43% of Tower Hamlets schools reached by the end of the year. The role grew from strength to strength with 4,216 Tower Hamlets school pupils participating in the second year. By end of first two years, 57% of the 75 primary schools in Tower Hamlets had taken part and 87% of Tower Hamlet's 18 secondary schools participated in Centre of the Cell activities. During the third year that the Aldgate and Allhallows Foundation Tower Hamlets Outreach Officer was in post, 5,168 Tower Hamlets school pupils participated in Centre of the Cell activities.

Umme Aysha was a great success in the role, and with the support of Aldgate and Allhallows Foundation by end of the three years 81% of Tower Hamlets primary schools had taken part and 100% of Tower Hamlets secondary schools.

The Aldgate and Allhallows Foundation generously extended their funding for another year towards our Youth Membership Scheme (more details of the scheme can be seen later on in the brochure).

This funding contributed towards:

- One-week or two-week work experience placements for 25 young people aged 14–18
- 8 Revision and Mentoring sessions for 43 young people
- 23 Careers workshops for 416 young people aged 11–18
- Volunteering opportunities for 20 young people

We are very grateful to the Foundation for their support. It has enabled Centre of the Cell to become embedded within our local communities and provided innovative educational opportunities for young people in Tower Hamlets. One example of how Centre of the Cell activities can have a positive widening participation effect is illustrated by the benefits experienced by a local school student, Nobith.



Nobith started volunteering with Centre of the Cell in Summer 2009, immediately after completing his GCSEs. During his time volunteering, Nobith found the advice and support he received from the team invaluable – such as advice on university life, help with A level choices and interview practice. This led to him to consider applying to universities outside London, such as Cambridge University. Nobith started studying Medicine at Cambridge in 2011, with the generous support of an Aldgate and Allhallows Foundation scholarship, which was obtained with the assistance of Centre of the Cell staff. In 2014 he moved to Barts and The London to complete his clinical years, and he plans to start volunteering with Centre of the Cell again in Summer 2015. As Nobith said in a recent meeting with us:

"Without Centre of the Cell, I wouldn't have applied for Cambridge."

"Centre of the Cell has been there for me – I won't forget how they have supported me throughout."

The Aldgate and Allhallows Foundation has been very pleased to support the Centre of the Cell in its formative years. The Centre's outreach work engages school students and their teachers, university researchers and clinicians, medical and related undergraduate students. The numerical reach alone of the Aldgate and Allhallows Foundation Tower Hamlets Outreach Officer's work described in this document is remarkable.

But numbers are not all. While focusing on cell biology and biochemistry and medical advances the Centre of the Cell also shows school students and their parents and friends the excitement and wider career possibilities associated with science, technology, engineering and mathematics (the 'STEM' subjects). All this is done with great care in planning (eg relating the Pod experiences to school syllabuses), delivery and subsequent improvement through evaluation. We congratulate everyone involved and look forward to experiencing the Centre's future innovations.

John Hall (Chairman), **David Mash** (past Chairman) and **Richard Foley** (Chief Executive)
Aldgate and Allhallows Foundation, April 2014





Day to day activities – The Pod Show

The Pod is at the heart of all Centre of the Cell activities. The design of the Blizard building allows visitors to see scientists at work while safely entering the Pod without disrupting the research environment. The major target audience is young people aged 8–18 and their families. Each Pod show, for 30–40 visitors, is an immersive theatrical experience lasting approximately 60 minutes which uses sound, lighting, film, digital interactive games and objects to educate, inform and engage with cell biology and biomedical research. Website content (e.g. digital interactive games and lesson plans) can be used pre- and post-visit to enhance the learning experience.

From Sept 2009 to Sept 2013, Centre of the Cell was able to offer the Pod show to schools free of charge. This was as a result of funding received from Queen Mary University of London and Trusts and Foundations including The Aldgate and All Hallows Foundation, The Mercers' Charitable Foundation and Leathersellers' Charitable Trust.



Day to day activities – Science Shows, Workshops and Lectures

From the outset, the Pod shows were very popular with schools during term time and with family groups in school holidays, often booked at full capacity of three Pod shows each day, but it soon became apparent that the audiences wanted more. Hence, we have devised a number of science shows, workshops and public lectures in collaborations between the local community groups, QMUL scientists and the Learning Team at Centre of the Cell. There are now eight science shows each lasting about 45 minutes with many opportunities for audience participation (with titles such as 'Snot, Sick and Scabs' and 'Teethtastic') and five workshops which also last for 45 minutes but have multiple activities or 'stations' for the audience to engage with (for example, 'Microbe Detectives'). Twelve Big Question lectures have been delivered by leading experts at a general teenage audience with titles such as 'Should you be allowed to genetically design your own baby?' and 'Will there ever be a cure for cancer?'

Centre of the Cell's Outreach programme, delivering science shows, workshops and lectures, has been a big success and continues to grow from strength to strength. The science shows and workshops have been developed as a result of funding received from Queen Mary University of London and Trusts and Foundations including the Heritage Lottery Fund, Heart Research UK, British Heart Foundation and The Mercers Charitable Foundation.



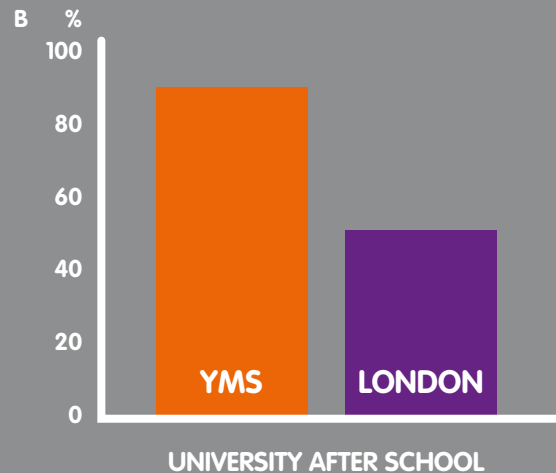
Day to day activities – Widening Participation and the Youth Membership Scheme

After two years of operation, some of the local teenagers who were especially interested in medicine and the life sciences asked for more intense interaction with Centre of the Cell. Hence, Centre of the Cell's Youth Membership Scheme, YMS, began. Centre of the Cell is a teenager-friendly portal to the science world – young people often find out about us through school trips and this seems to make us approachable.

The YMS scheme is open to young people aged 14–19 and offers work experience, volunteering and hospital placement opportunities, careers advice, the chance to meet scientists and healthcare professionals as well as mentoring and revision sessions with scientists, medical and dental students and Centre of the Cell staff.

There is also a Youth Forum who are engaged in the front-evaluation of all new content ideas, and have opportunities to take part in special projects. For instance, during 2013/14, the Heritage Lottery Fund funded a group of 14–18 year olds to research the East End's medical history. Their aim was to understand and translate key changes in practice and knowledge into a science show that they would then share with family audiences at Centre of the Cell. The group committed to weekly workshops with additional school holiday sessions and museum visits over the course of a year, working with the Royal London Hospital Museum and Archives. With help from Centre of the Cell's Learning Team, they developed the skills, knowledge and understanding of how to design and lead sessions for family audiences, working as a team to create scripts, costumes and props. The resulting show, *'Spores, Sores and Sickly Bugs'*, was a great hit with young people and their families. The youth team then completed their project by training the next generation of Youth Members to deliver the show to future audiences.

It is too soon to properly evaluate the impact of the YMS but there are some encouraging initial data. Of 130 youth members who have now left school that we have been able to contact, 91% are in education or training compared to 62% of 2013 Key stage 5 leavers in London, 88% are at university compared to 48% in higher education of 2013 Key Stage 5 leavers in London. [<http://www.london.gov.uk/sites/default/files/Education-Report-2014.pdf>] 79% of these past YMS members are studying STEM subjects in higher education and 20% are studying at QMUL or its medical school. The generous funding from The Aldgate and All Hallows Foundation and The Allan & Nesta Ferguson Charitable Trust has enabled Centre of the Cell to deliver the YMS scheme with plans to expand the scheme further over the longer term.



Summer Holiday Workshops, Ages 7+
Tuesday 5 & 12 August
Thursday 7 & 14 August
12-1pm & 2-3pm, Admission Free
Booking essential

Book your place here:
<http://centrofthecell.eventbrite.co.uk/>

Parents/guardians are expected to stay for the duration of the workshops with their children. Contact Ros Croker with any queries 020 7882 2564

The workshops are part of a Young Roots project run by Centre of the Cell and funded by the Heritage Lottery Fund
www.centrofthecell.org

Centre of the Cell
Blizard Institute
4 Newark Street
Whitechapel
London E1 2AT

Uncover 100 years of miraculous medical history in the East End, with hands-on activities, gory games and intriguing investigations...

**Sores,
Spores
& Sickly
Bugs**

 **Centre
of the Cell™**

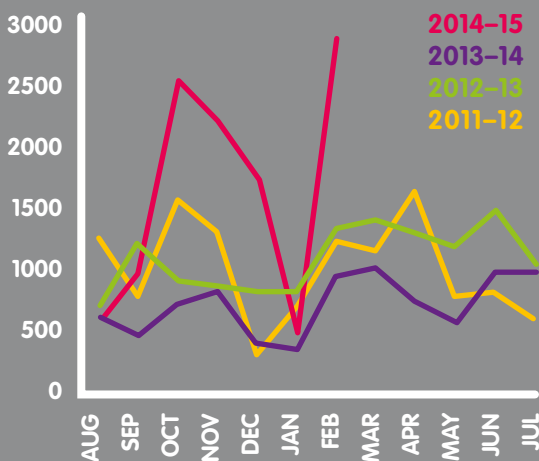
 **Queen Mary**
University of London

 **LOTTERY FUNDED**

Participant statistics

The graph below shows monthly numbers of participants for on site and off site activities in the past three years and the current year to date. While numbers were relatively constant 2009–2014, it is interesting that the large increase in visitor numbers in the first part of 2014–15 is due to an increasing demand for our science shows and workshops both on and off site. Approximately 50% of all participants are at schools within a ten-mile radius of Centre of the Cell but there are visitors from all over London – and beyond, including some from outside the UK.

PARTICIPANTS



Staff structure

A senior research scientist (Fran Balkwill) directs the project, as well as leading a cancer research centre within QMUL at the Barts Cancer Institute. The Learning Team runs day-to-day activities (4 full time members of staff) supported by the Operations team (two full time members of staff). Approximately 15 medical and dental students work part-time (see also below) to support the core staff and developers of new content work on fixed term contracts.



Evaluation and Impact

The front-end evaluation described above involved target audiences in schools and hospitals, assessing their needs and interests, what they expected to see and do in the exhibition and their knowledge and interest in cell biology and biomedicine. When asked "what is a cell?" the replies ranged from "prison cell", and "cell phone" to "battery cell". We also assessed the needs of visitors with disabilities, and conducted subject-specific evaluation to determine target audiences' knowledge and interest of particular subjects, including diseases, medicine, microscopes and the acceptability of displaying specimens of human organs (the latter evaluation was extremely popular as we took human specimens from our pathology museum into school classes). The website and digital interactive games were also evaluated pre- and during development.

Post-launch, we assess whether the key goal of inspiring and motivating the project participants has been achieved; the effect on career choices and educational aspirations and what we have learned and how we can enhance the learning, mentoring and training experience. The overall response is positive, especially in terms of achieving learning outcomes and accessing higher education. From the evaluation data to date, 76% of the young people stated that they 'enjoyed' or 'really enjoyed' their session. 75% were more interested in science after the session and 71% said they felt they knew more about university.



Development of new public engagement activities

Continued success is dependent on development of new activities and content. Being part of a research university means there is a limitless and ever-changing resource of new science stories and scientific expertise. The original idea for a new activity can come from our scientists and clinicians and/or our community: for instance, a new and exciting science story; a health issue of particular relevance to our local audiences, or to patients and their carers; the need to understand careers in the life sciences, or a request from teachers for help with professional development and communication of cutting-edge science. As our research is so closely interwoven with the needs of the local East London community, Centre of the Cell can also facilitate research projects, especially in terms of recruitment of local volunteers.

Funding for new activities may be embedded in research grant applications – many funding bodies have a public engagement element and QMUL scientists now routinely incorporate funding for Centre of the Cell within their applications. These components may finance workshop or show development and delivery; digital interactive games that can be part of a Pod show, and/or available online and/or as a free standing App; a Big Question Lecture, or new website content. Funding for new activities can also come from outside sources such as Trusts and Foundations, e.g. Wellcome Trust, or from specific grants for public engagement projects.

Once funding is secured, we develop the activity according to a standard operating procedure that begins with definition of the objectives of the project, the desired learning outcomes and front-end evaluation of the activity with the target audience. The iterative development then moves through further defined stages in a three-way collaboration between Centre of the Cell staff, scientists and target audiences.

One example of our recent work is a Medical Research Council-funded project on the impact of air pollution on London's children. Working with a team of paediatricians led by Professor Jonathan Grigg, Centre of the Cell devised a three-hour workshop, *'Something in the Air'*. The learning aims are fourfold: What is air pollution? How does air pollution affect people? How can we measure air pollution? What can I do to avoid air pollution? The event, which is delivered in schools, also has six workstations where young people can explore the science behind the research. However, this is more than just a public engagement/science communication exercise. Those children whose parents have given informed consent are recruited into the research study during the workshop. The paediatrics team obtain sputum, urine and DNA samples from them, and conduct lung function and skin-prick allergy tests. Once recruitment is complete in Spring/Summer 2015, the team will return to the schools to update them on the findings of the research, and evaluate the impact of the project on their understanding of air pollution and the work of scientists.

Advantages to university staff and students

The presence of a science education and public engagement project within a working research laboratory has a number of positive impacts on QMUL's biomedical and life sciences research and its researchers. Stimulating a climate of enthusiasm for public engagement amongst staff, Centre of the Cell also allows researchers to effectively engage with the public to a high standard because they can combine their knowledge and expertise with that of professionals who have experience and training in public engagement with the life sciences. Centre of the Cell staff can also use their training to run lectures on science communication for undergraduate and postgraduate students.

There are other benefits for undergraduates. A scheme funded by St Bartholomew's Medical College Trust supports medical and dental students to work part time for Centre of the Cell. This gives Centre of the Cell a motivated, informed and flexible work force and has also been of great benefit to the participating students, especially in enhancing their communication skills, as well as improving their finances. As many of the students live locally, they are excellent role models for Centre of the Cell's younger visitors from East London. Postgraduate students, postdoctoral fellows and more senior academics train as STEM ambassadors and then volunteer to help with Pod shows, often giving impromptu talks about their own research. For instance, in 2013–14 71% of all Pod shows from schools had a volunteer member of QMUL staff in attendance. Finally, Pod shows are a useful addition to university recruitment and open days and part of a campus tour for VIPs.

Support from the host institution

All this would not be possible without the wider and sustained support of QMUL and its medical and dental school. Starting with its 19th century 'People's Palace', QMUL has a strong history of public engagement that remains a key area of strategic importance in the 21st century. The university has a Centre for Public Engagement as well as a Vice-Principal for Public Engagement and Student Enterprise. These structures enable staff to engage with the public, ensuring they are appropriately recognized and rewarded, and are given support through advice, training and help with accessing funding streams.

Sustainability

During the past five years Centre of the Cell has received major financial support from QMUL, with specific projects funded by a wide range of charitable trusts and foundations such as the Mercers' Company, The Leathersellers' Charitable Trust, Heart Research UK, The Aldgate & Allhallows Foundation, and The Equitable Charitable Trust. Now that much of the new content is funded by a proportion of research grants obtained by our scientists, the aim is to achieve financial security by a combination of earned income from shows and workshops, as well as sponsorship for activities such as the YMS, with a decreasing contribution from the medical school and QMUL. Workshop and science show charging has been in place since 2012 and we began to charge for Pod shows in September 2013.

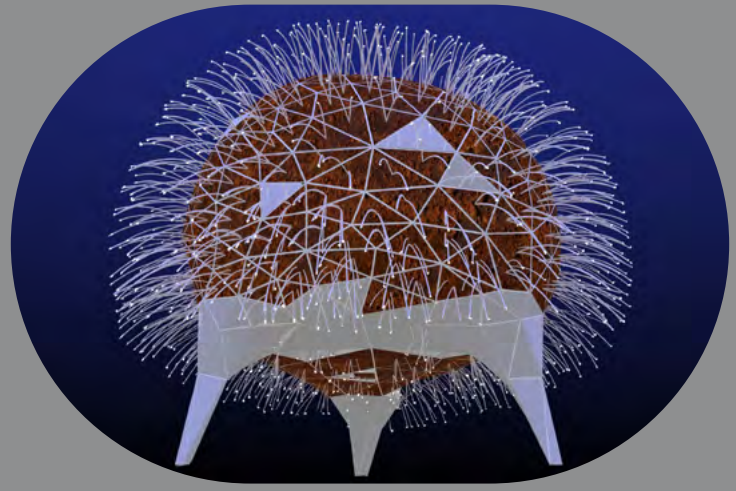
What have we learnt so far?

A science education centre inside a laboratory building can be inspirational both for visitors and research staff. To anyone considering a similar project, the key recommendations are to conduct detailed 'front-end' evaluation with target audiences before the project begins, exploit fully the unique resource of the science stories being generated in the laboratory that houses the science centre, think about sustainability from the start of the project – and remember to provide adequate toilets and space for visitors to eat their lunch. Apart from that, although it is certainly hard work and can be very challenging, our experience is that it is very rewarding and – importantly – great fun.

Centre of the Cell's future

Our major priority is the successful completion of a capital fundraising campaign for a second Pod, Neuron Pod. With 60% of funding promised from donors including Wellcome Trust, Wolfson Foundation and Barts and the London Charity, Garfield Weston Foundation and the Hobson Charity, Neuron Pod is central to the project's sustainable future. This second Will Alsop building, to be positioned in the Blizzard Mews and accessed by the same bridge as the existing Pod, has potential to double visitor numbers and dwell time on site, providing a dedicated space for all science shows, workshops, youth member activities as well as providing opportunities for new adult initiatives and at the weekend. All this will take place in the context of further redevelopment of Whitechapel to build a major Biomedical and Life Sciences campus that will focus on population health, especially in relation to East London, and place a high priority on public engagement.

The project must also reflect the fast moving pace of life sciences and biomedical research with new content and activities added on an annual basis and existing content refreshed. The digital nature of the fixed exhibition in the Pod means that this can readily be changed, and also can be tiered to different age groups and abilities. Amongst new projects for 2015 there are two digital interactive games for the Pod nucleus. One will feature genomics for a Wellcome Trust funded Strategic Grant, East London Genes for Health, the other will build a tumour microenvironment and then attempt to destroy it with the latest immune therapies. The latter interactive is part of an ERC-funded project – CANBUILD – [<http://bioengineer.org/building-3d-model-ovarian-cancer/>] – to build a human tumour and the interactive will be updated from time-to-time in line with research findings. Keeping our digital Pod at the cutting edge of IT, we will fundraise for more display objects that we will bring to life with Augmented Reality technology.



Advantages of siting a science centre in a research laboratory

- Engenders a climate of enthusiasm for public engagement with research
- Improves science communication and public engagement skills of staff and students
- Venue to aid recruitment of new students and staff
- Allows high quality and wide-ranging public engagement with research
- Allows unique public engagement projects to be incorporated into research grant applications
- Aids recruitment of volunteers to population health research projects
- Increases research impact

Staff



Professor Frances Balkwill
OBE FMedSci,
Director of
Centre of the Cell

Fran Balkwill has been Director of Centre of the

Cell since the beginning of the project and an author of science books for children. She also leads the Centre for Cancer and Inflammation at Barts Cancer Institute. Her scientific interests include translating knowledge of cancer biology into new biological treatments for cancer, and novel methods of modelling the human tumour microenvironment.



Alexandra Jenkin
Learning
& Outreach
Officer

Alex has been a Learning and Outreach Officer at Centre of the

Cell for two years. After studying Natural Sciences she completed an MSc in Science Communication and started working in education. As well as presenting Centre of the Cell's shows and workshops Alex has been working with a group of deaf and hearing-impaired young people to help them develop their own science demonstrations. She is looking forward to working on new content for Centre of the Cell in the near future.



Gioia Mosler
Learning
& Outreach
Officer

Gioia is the Learning & Outreach Officer working both as part

of the Centre of the Cell team, as well as with the Centre for Genomics and Child Health at the Blizard Institute. Gioia has recently finished her PhD in environmental epidemiology at Imperial College London, which focused on air pollution and health effects. Throughout her work in science she has volunteered to work as a science communicator. In her current role she facilitates the collaboration between schools and health research for the 'School-Based Asthma Project'. As part of the project she is furthermore developing a range of interactive games on asthma for a school-based intervention.



Akmol Hussain
Head of
Operations

Akmol joined Centre of the Cell in June 2013 and leads on all operational and financial

management at the Centre. Having worked on the London 2012 Olympic project for the Mayor's Office and qualified to APM level, Akmol brings with him a wealth of experience and knowledge in project management and delivery as well as large scale budget management. Akmol is also responsible for the strategic and long term sustainability of Centre of the Cell.



Rebecca Knowlson
Learning
& Outreach
Officer

Rebecca has been a Learning and Outreach Officer at Centre

of the Cell since November 2014. After studying Human Biology she completed an MSc in Science Communication and shortly afterwards joined Centre of the Cell as an Explainer. As well as presenting Centre of the Cell's shows and workshops, Rebecca developed an A-Level Immunology workshop called 'Invasion! Infection and Immunity' and is currently working on developing a new interactive on the Tumour Microenvironment for the Centre of the Cell Pod and website.



Ros Croker
Young Roots
Project Manager

Ros Croker manages the HLF-Funded youth project Wartime

Medicine and Innovation part-time working in partnership with the Science Museum and Royal London Hospital Museum and Archives. She has broad experience of developing and managing formal and informal learning programmes across heritage, visual arts and architecture sectors for different organisations including National Maritime Museum, RIBA and English Heritage. She has worked freelance as a tutor for V&A youth programme, evaluating education programmes for Flow Associates and in partnership with Office Sian Architects delivering workshops at the ICA.



Katie Chambers
Head of
Learning

Katie leads the Learning Team at Centre of the Cell. After completing a degree in

Biological Sciences, Katie gained her MSc in Communicative Science and worked in the science centres Technquest and At-Bristol. Katie first joined Centre of the Cell in 2005 as the Audience and Content Researcher. She left in 2008 to complete a PGCE and worked in schools in London and Bangkok before returning as Head of Learning in 2012.



Mohammed Rofik
Finance
& Administrative
Officer

Rofik is the Finance and Admin officer at the Centre of

the cell. He is the first point of contact for any enquiries for bookings as well as general queries. Rofik joined Centre of the Cell in February 2015 having gained qualifications in Business Management/Administration and also working in the education sector for 10 years, in various roles such as an instructor and Pastoral manager.



Carla Brown
Content
Developer

Carla is one of the newest members of the Centre of Cell team. Although only here for

several months, she will be designing and creating a new game for the Pod on the fun and gory details of bowel health! Carla is just finishing her PhD in gut microbiology and is also designing a second microbiology game with a Dundee based game design company.



Liz Danner
Learning
& Access
Manager

Liz supports STEM Ambassadors and coordinates the Youth

Membership Scheme, providing activities and events for local young people. She applied her MSc in Forensic Anthropology identifying museum collections and engaging the public with history at University College London and The Roman Baths. After completing the HLF Skills for the Future Education and Outreach Traineeship with the University of Oxford Museums and Collections, she joined Centre of the Cell as Learning and Access Manager maternity cover in 2014.



Ameerah Khan
Learning
& Outreach
Officer

Ameerah joined Centre of the Cell in December 2012 and is a

Learning and Outreach Officer. After completing her BSc in Psychology, she worked within the recruitment industry for a professional services company. Ameerah now works as part of two teams and also sits within the Centre for Paediatrics. She has been leading the 'Something in the Air' project developing and delivering workshops on air pollution and coordinates the engagement of schools in a medical research project looking at airway cells and air pollution.



Elise Althorps-Mullis
Content
Developer

Elise is a Content Developer at Centre of the Cell. After completing a degree in

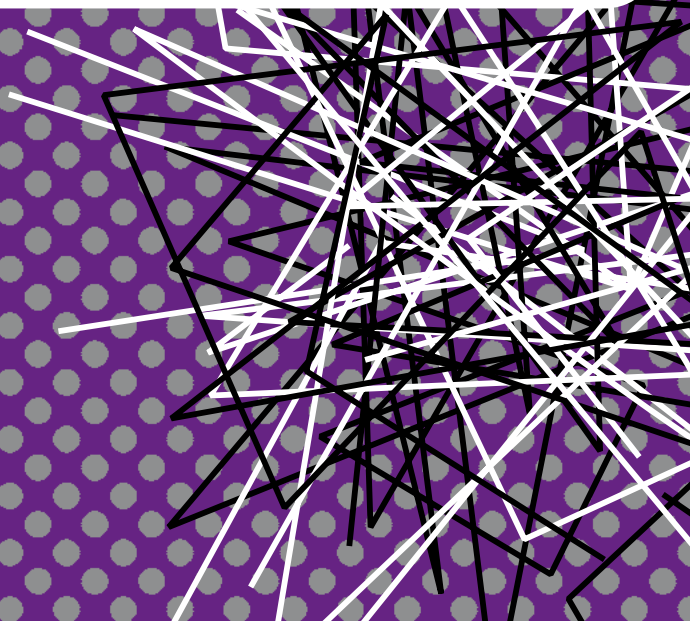
Astrophysics Elise worked at Science Centres, museums and festivals creating interactive exhibitions and events exploring everything from advanced prosthetics to 3D printing. Elise joined the Centre of the Cell team in 2015, and although only here for several months, will be developing a new game about genetics. This game will be a fun new addition to the pod, and will be made into an app that scientists can take on the road to inspire the community about genetic research.

Funders

We are grateful to all our funders over the past 10 years and especially to Queen Mary University of London.

Queen Mary University of London
Wellcome Trust
The Garfield Weston Foundation
The Clore Duffield Foundation
London Development Agency
The Medical College of Saint Bartholomew's Hospital Trust
The Aldgate & Allhallows Foundation
The Hobson Charity Limited
The Drapers' Company
Barts Charity
The James Dyson Foundation
The Wolfson Foundation
GlaxoSmithKline
Nesta
Barts Health NHS Trust
Cancer Research UK
Heritage Lottery Fund
The Mercers' Company
City Educational Trust Fund
Clothworkers Foundation
The Foyle Foundation
The City of London
Man Group Plc Charitable Trust
Deutsche Bank
Dr Mortimer and Theresa Sackler Foundation
The Lehman Brothers Foundation
BBC Children in Need
Wingate Foundation
The Leathersellers' Company
Barclays Capital
The Goldsmiths' Company
Esmée Fairbairn Foundation
East London Business Alliance
London Borough of Tower Hamlets
The Schroder Foundation
Pfizer

Jack Petchey Foundation
The Allan & Nesta Ferguson Charitable Trust
The Ingram Trust
UK Clinical Research Collaboration
National Lottery
The Equitable Charitable Trust
The Society for General Microbiology
St Katharine and Shadwell Trust
The Wessex Youth Trust
Department for Children Schools & Families
Innovation Ltd
Merk, Sharp and Dohme
The Gosling Foundation
The Salters' Company
MRC Laboratory of Molecular Biology
London Science Challenge
Heart Research UK
The Armourers & Brasiers' Gauntlet Trust
Merchant Taylor's Company
Sandra Charitable Trust
29th May 1961 Charitable Trust
Engage Awards
London Excellence Hub
The Hadley trust
Tom Ap Rhys Pryce Memorial Trust
Harold Hyam Wingate Foundation
Allen & Overy
Celltech
UCB Pharma
EU Reseachers Night
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The Grocers' Charity
Sir James Roll Charitable Trust
Tesco Charity Trust
The Hedley Foundation
The Thomas Wall Trust
Emerton Christie Charitable Trust
British Heart Foundation
A F Trust Company
Coutts & Co Charitable Trust
Oliver Bird
Arbitrator's Company
Chartered Accountants' Company
The Austin and Hope Pilkington Trust
The Company of Actuaries Charitable Trust
The Kohn Foundation
The Roger Brooke Charitable Trust
The Girdlers' Company
Buzzacott Stuart Defries Memorial Fund
The Reuben Brothers Foundation
Wilkinson Family Charitable Trust
The London Oil & Colour Paint Chemist Association



Centre of the Cell
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020 7882 2562
☎ Whitechapel

info@centrefofthecell.org
www.centrefofthecell.org

The Aldgate and Allhallows Foundation has been supporting the education of young people in the area of the City of London and Tower Hamlets for over three centuries. It assists local primary and secondary schools and the organisations that work with them to develop learning beyond normal classroom experiences. It also funds scholarships to support individual students in need at Queen Mary University of London. During the period 2009 to 2013 its grants to the Centre of the Cell have been approximately £100,000. The Foundation is pleased to contribute to the production costs of this review.