# THE GRAND OPENING OF YOUR MIND



Dr Michael Dixon Director, Natural History Museum

For more than 200 years, scientists at the **Natural History** Museum have been exploring and studying the natural world, using our incredible internationally important collection of over 70 million specimens to address the big questions of our time, such as tracing the origins of our solar system or monitoring and assessing the impact of climate change. Until now, most of this work has happened behind the scenes without many people knowing that we are more than a beautiful building with historical specimens on display.

## THE SCIENCE OF NATURE

Our science, taxonomy and systematics, underpins all of the natural sciences and is a vital part of the nation's science capability. We also work on more applied science, such as the control of parasitic diseases, sustainable mineral extraction and forensic entomology. We are supporting the development of innovative technologies in emerging areas such as the use of nanoparticles.

Our science is firmly rooted in the collections themselves. We are focused on six main lines of enquiry:

- assembling the Tree of Life
- the relationship between genetic diversity and environment and evolution
- how large-scale geological processes have influenced evolution
- what determines biological diversity
- the relationship between biodiversity and ecosystem functioning
- the interactions between hosts and parasites and their impact on disease.

We have active research programmes that look at providing answers to contemporary issues, for example:

 we study Madagascar's tree ferns to find out how climate change impacts the world's precious rainforests

- we explore the deep sea to understand how environmental changes affect this important ecosystem
- we study mosquitoes to help prevent such diseases as malaria and Dengue fever
- we study nanoparticles to support safe use of this revolutionary technology
- we study comet dust to trace the origins of the solar system
- we are working with the first Indian space mission to reveal the geological history of the Moon.

Next year, the Museum and our science will be centre-stage as we, with support from Defra, will run the 2010 International Year of Biodiversity UK Partnership that aims to promote wider understanding of our impacts on our planet.

#### THE DARWIN CENTRE

Today we are facing a largescale biodiversity crisis and potential environmental catastrophe. It has never been more important to understand our planet and to engage as many people as possible with appreciating and protecting the natural world. This is why we opened our state-of-the-art Darwin Centre on 14 September, named after Charles Darwin to mark his bicentenary and celebrate his work that continues by the Museum as we look from the origin to the future of species.

Darwin Centre is a hub of world-class scientific research, allowing visitors to marvel at the amazing diversity of life on our planet, to view our science in action, understand the extent and research use of our collections and to explore the natural world for themselves.

The visitor experience in this new London landmark will begin in the spacious atrium, where people can orientate themselves while admiring the views into the wildlife garden and the enormous cocoon towering above. The climate change wall





is an interactive collage of screens displaying films, specimens and images to allow users to explore the reality of climate change in their lives. Visitors can also collect a free NaturePlus card, which uses new barcoding technology to enable them to save video clips, images and weblinks throughout their journey through the Darwin Centre and access them on line back home or in the classroom.

#### THE COCOON

At the heart of the new Darwin Centre is a 65-metre-long, eight-storey-high cocoon that safeguards many of the Museum's treasures, including from our Entomology and Botany collections — 17 million insects and 3 million plant



specimens. More than 200 scientists will be working in the Cocoon and the adjoining multidisciplinary facilities, carrying out their research in the molecular and imaging labs or specimen preparation areas. Through viewing decks, video and intercom, visitors will be able to see and interact with some of our staff - opening up the hidden world of scientific research. There is no other museum in the world that brings the public and scientists together in this way or on this scale.

## THE ATTENBOROUGH STUDIO

Based on the research and collections of the Museum and the legacy of Sir David Attenborough's filmmaking, the new Attenborough Studio will

# THE ANGELA MARMONT CENTRE FOR UK BIODIVERSITY

Housed on the lower ground floor of the Darwin Centre, the Angela Marmont Centre for UK Biodiversity will become the leading national venue for the collaborative study of UK natural history. The Museum receives around 30,000 public enquiries each year and visitors will be encouraged to bring their finds to the new centre, where dedicated staff will guide them through the reference material and collections. Much of the Museum's UK collections will be available for amateur naturalists to study, including 4,200 drawers of butterflies and 6,200 drawers of flowers. This access will offer new opportunities for the UK's many wildlife groups and

role to play in assisting the generation of and distribution of vital knowledge.

Since free admission was reintroduced in 2001, we have welcomed over 25 million visitors to the Museum and expect that with the opening of the Darwin Centre we will receive a record 4 million visitors this year.

The Darwin Centre is a bold statement about our ambitions and a demonstration of our ability to deliver large, complex projects. It is also an excellent example of using public funding to leverage wider support for public benefit.

We would like to express thanks for the invaluable support and contributions we have received from many



combine scientific expertise, public dialogue, film and interactive media in a venue specially built to create a truly accessible environment. Pioneering technology will allow visitors to engage in real time link-ups with Museum researchers around the world, or influence projected 3D images in our interactive film Who do you think you are? A free, daily programme of screenings, discussions and events will include films specially created by the BBC Natural History Unit to celebrate wildlife filmmaking.

societies and will nurture, inspire and excite naturalists of all ages.

#### THE FUTURE

Excellence in applied science depends on support for pure science, like taxonomy and systematics. We believe that with an informed and engaged public, science can fully play its crucial role in boosting competitiveness, enhancing our quality of life and ensuring a sustainable future. In a time when humanity is facing massive environmental challenges, like climate change, we and our peer institutions have an even more important

organisations and individuals, including: the Department for Culture, Media and Sport, the Heritage Lottery Fund, the Wellcome Trust, the Weston Foundation, the Cadogan family, Professor and Mrs Anthony Marmont, GlaxoSmithKline, and the Rufford Maurice Laing Foundation.

The Darwin Centre will change perceptions of what museums of natural history can be and I hope you are able to visit us in the near future, so you can personally explore this magnificent addition to the Museum.