

Surviving

A LIGHTNING ROD

BY JANET MONGE
AND ALAN MANN

ON APRIL 19, 2008, the Penn Museum will open the doors on an innovative traveling exhibit illustrating the theory of evolution—an idea that somehow manages to be both 150 years old and yet remains timely. This powerful theory, which appears in the news virtually every week because of the controversy surrounding it, has

vast implications that affect every aspect of our lives. As the explanatory tool of all the related fields in the biological sciences, nothing makes sense except in the light of evolutionary process. Our new exhibit makes this point during Penn's "Year of Darwin," which celebrates Charles Darwin's 200th birthday.

This exhibit has been in preparation for over four years, drawing on the resources and expertise of nearly every department within the Museum, for it takes an entire museum to make such an ambitious exhibit! Meeting at least once a week, team members parceled out sub-projects, expanded the fiscal base upon which the exhibit depends, renovated the third floor exhibition gallery, produced education and marketing tools, and confronted a large host of issues. In particular, a series of eight 2-day workshops engendered thought-provoking discussions that knitted together the theme, aims, and key messages of the exhibit, and produced a crisp, clear, and entertaining text to accompany its unique design.

So how is the vast topic of evolution treated in the Museum's unique contribution to knowledge? As aptly put by Gillian Wakely, the Museum's Merle-Smith Associate Director for Programs, "The exhibit is about YOU—the visitor."

Why are human births so complicated? Why did we develop bigger brains during our evolutionary history? Will our brains get larger in the future? What other complications would this create?

"The exhibition promises to break new ground as the first of its kind to address aspects of human evolution in the broad context of mammals, and will be thought-provoking and insightful. It offers the framework and materials to address misconceptions. The [Museum] has the collections and intellectual resources to develop the exhibit. Although consciously avoiding 'intelligent design' in the exhibit, the 'future visions' section creates a forum for addressing controversial themes (cloning). The exhibit could become a lightning rod for anti-evolutionists . . ."

(National Science Foundation, Review Panel Summary, November 13, 2003)



"Ms. Big" is the 3-times life-size model of a woman that illustrates many aspects of functional and evolutionary anatomy. This part of the exhibit takes up half of the gallery's floor space.

The genesis of the idea came from Alan Mann's realization that students seemed to understand the broad impact of evolutionary process if they could witness it for themselves in their own bodies and minds. In order to evoke this response in the context of the exhibit, we challenge visitors to try to understand and define what it means to be human—to revel in the experience of humanness. We ask them to witness the evolutionary process and to contextualize the human experience. This part of the exhibit is peppered with over 200 touchable casts of both modern and extinct mammals and primates, including many of our human ancestors, our chimp relatives, and even comparisons to horses and whales.

The visitor is now ready to see evolutionary history in their own bodies. Using multimedia devices surrounding a massive model of a woman's body, they see themselves not as

the exhibition team: designers / audio-visual / fabrication

- Reich & Petch International, Toronto (www.reich-petch.com), working with Jack Murray, Penn Museum
- BlueSkyDesigns, Toronto. Exhibit interpretation (Ruth Freeman, lead)
- Chedd Angier Lewis, Boston (www.chedd-angier.com)
- House of Kevin, Toronto (www.houseofkevin.com)

exhibit aims and objectives

The evolutionary process and its outcomes have a profound impact on every aspect of our daily lives. With that theme in mind the exhibit aims to shift our thinking about humans and evolution, to dispel some of our most commonly held misconceptions about evolution and its significance (e.g. that the process of evolution is complete and that humans are an ideal product of evolution), to show how humans are neither finished nor perfect products, but rather how we are limited as a natural result of the evolutionary process, and to portray the reality that evolution is an ongoing process of change, not improvement.

If the exhibit succeeds, our visitors will leave knowing that humans are part of the natural world—one species among the many mammals and primates all descended from a common ancestor—and that we are the product of the process of evolution, which has made us functional through a series of compromises, but not perfect as can be seen in certain human ailments that may be the consequence of our evolution. Our visitors will appreciate the many ways in which our evolutionary past defines our bodies, our minds, our culture, and our destiny. They will understand that human societies and cultures have developed in different ways in response to specific environments around the world, but also in similar ways in response to the same basic human needs. They will have seen that scientists are constantly searching for, finding, and interpreting evidence of the evolutionary process, and they will begin to imagine the impact of future medical and biological developments on human evolution as they join us in exploring our shared history and potential future as human animals.

perfect or perfectible beings, but as animals dealing with the various medical dilemmas that characterize the shared human experience—bad backs, difficult childbirths, teeth that do not fit in our jaws, as well as many other maladies that are best understood from an evolutionary perspective.

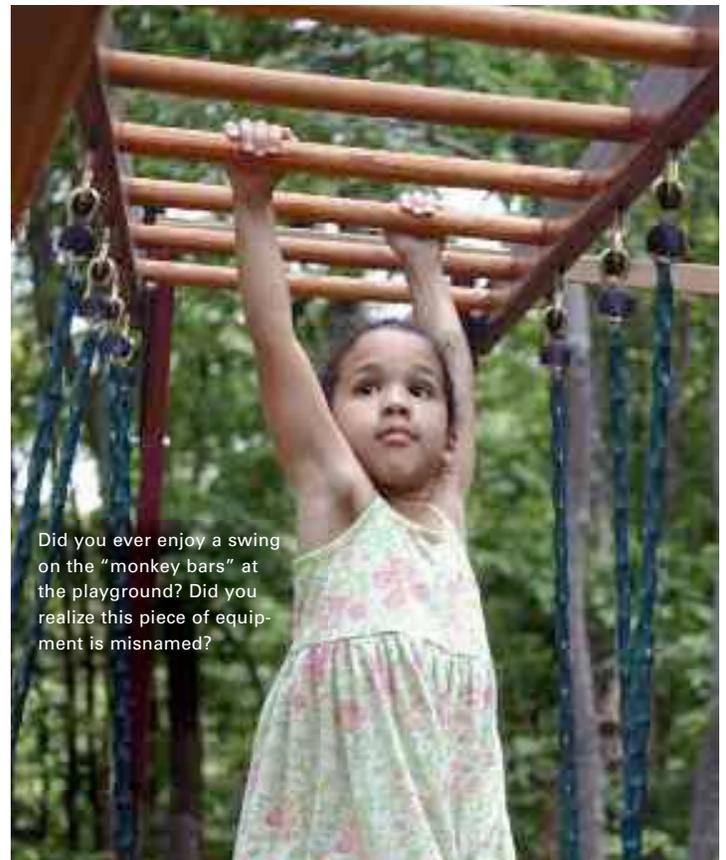
Finally, we challenge everyone to think about humans past and present and even the humans of the future. What implications do changing patterns in diet have on human health and disease? How will human-based environmental change influ-

ence human biology and culture in the future? Our exhibit ends with the unknown and the healthy scientific speculation that is part of the fuller understanding of evolution—it is not progress and it is not predictable. 

JANET MONGE and ALAN MANN are the Co-Curators of *Surviving: The Body of Evidence*. Janet Monge, the Acting-Curator-in-Charge and Keeper of the Museum's Physical Anthropology Section, is also an Adjunct Associate Professor in Penn's Department of Anthropology. Alan Mann, Professor of Anthropology at Princeton University, was Professor of Anthropology at the University of Pennsylvania from 1969 to 2001.

Acknowledgments

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Did you ever enjoy a swing on the "monkey bars" at the playground? Did you realize this piece of equipment is misnamed?



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