



## **NEWS**

February 18, 2011

**The study “A Draft Sequence of the Neandertal Genome” Wins the 2010 AAAS Newcomb Cleveland Prize**

**The above publication by researchers led by Svante Pääbo of the Max Planck Institute for Evolutionary Anthropology in Leipzig (Germany) now wins the Newcomb Cleveland Prize of the American Association for the Advancement of Science (AAAS). The Prize will be awarded in Washington D.C. on Saturday, February 19 at 6:00 p.m.**



**Image 1:** Pääbo’s Neandertal research group from left to right: Adrian Briggs, Hernán Burbano, Matthias Meyer, Anja Buchholz, Jesse Dabney, Kay Prüfer, Svante Pääbo, Janet Kelso, Tomislav Maričić, Qiaomei Fu, Udo Stenzel, Johannes Krause and Martin Kircher. (Photo credit: Max Planck Institute for Evolutionary Anthropology)

Composed of more than 4 billion nucleotides, a draft sequence of the Neandertal genome won the 2010 Newcomb Cleveland Prize of the American Association for the Advancement of Science (AAAS). The Association’s oldest prize, the Newcomb Cleveland Prize annually recognizes the author or authors of an outstanding paper published in the Research Articles or Reports sections of the journal *Science*. A *Science* paper by Richard E. Green, David Reich, Svante Pääbo, and colleagues will receive the AAAS prize for 2010. It was originally published online on May 7, 2010.

The Neandertals are the closest evolutionary relatives of present-day humans. They first appeared in European fossil records about 400,000 years

ago and they lived in Europe and Western Asia, traveling as far east as Southern Siberia, and as far south as the Middle East. Neandertals first came into contact with modern humans about 80,000 years ago in the Middle East before later encounters in Europe and Asia. Progressively more distinctive Neandertal forms evolved over time before they disappeared about 30,000 years ago.

A 38,000 year-old bone fragment was used to obtain intact genomic material and put together the draft sequence presented in the paper. The Neandertal genome sequence was compared to the genomes of five present-day humans from different parts of the world. It indicates that Neandertals shared more genetic variants with present-day humans from Eurasia than with present-day humans from sub-Saharan Africa. This finding suggests that gene flow from Neandertals into the ancestors of non-Africans occurred before Eurasian groups diverged from each other.

"The draft Neandertal genome sequence marks an incredible step forward in our perceptions of our closest hominid cousins," *Science* Editor-in-Chief Bruce Alberts said. "This remarkable paper is a fundamental intellectual contribution as well as a stunning technical achievement and it will continue to be referenced and studied for years to come."

The Green, Reich, and Paabo paper, "A Draft Sequence of the Neandertal Genome" can be found online at <http://bit.ly/eP8Ju5>. (Please note that the article is freely accessible, but initial registration may be required.)

The Newcomb Cleveland Prize will be awarded in Washington D.C. in the Grand Ballroom North, Washington Renaissance Downtown, on Saturday, 19 February at 6:00 p.m.

[AAAS, SJ]

Contact:

For Svante Pääbo:

Sandra Jacob, Press and Public Relations  
Max Planck Institute for Evolutionary Anthropology, Leipzig  
Tel.: +49 (0)341 3550-122  
Email: [jacob@eva.mpg.de](mailto:jacob@eva.mpg.de)

For Richard E. Green:

Tim Stephens, Press and Public Relations  
University of California- Santa Cruz  
Tel.: +1 (831) 459-4352  
E-Mail: [stephens@ucsc.edu](mailto:stephens@ucsc.edu)

For David Reich:

David Cameron, Press and Public Relations

Harvard Medical School  
Tel.: +1 (617) 432-0441  
E-Mail: [david\\_cameron@hms.harvard.edu](mailto:david_cameron@hms.harvard.edu)

For general information on the AAAS Awards ceremony or other background:  
Kat Zambon, Senior Communications Officer  
American Association for the Advancement of Science  
Tel.: +1 (202) 326-6434  
E-Mail: [kzambon@aaas.org](mailto:kzambon@aaas.org)