



Dan Hubig

Fossil Find May Be Linked to New Ancient Ape Species

BY PATTY REYES, CDE

The back bone is connected to the shoulder bone.

The shoulder bone is connected to the neck bone.

The neck bone is connected to the head bone.

Dem bones are gonna rise!

Is it possible that a new species of ape that roamed the earth the same time as the last common ancestor of humans and gorillas is connected to a 10-million-year-old jawbone and 11 teeth, unearthed in Kenya? You bet your bananas.

Discovered in deposits of volcanic mud flow in the Nakali region of Kenya in 2005 and later christened *Nakalipithecus nakayamai*, the new species substantiates the notion that the ancestors of great apes and humans evolved exclusively in Africa, researchers said. The name is a hybrid from the genus assigned after the area it was found in; the species is named after Japanese geologist Katsuhiko Nakayama

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A Pricey Faux Pas

One dentist has 1,200 reasons to never, ever, leave unmarked boxes near an exit door.

Recounted by an insurance expert, Susan Roberts, in her practice management column published in the October issue of *Ontario Dentist*, Roberts told of numerous ways disaster can strike a practice. Workers in one dental office left unmarked cardboard boxes near an exit door. Believing the boxes contained trash, staff put them in the garbage can, which was then emptied that night. The dental supplies (worth \$1,200) the boxes contained were written off as a loss.

“Ensure that all of your practice supplies are always kept secure in a storage area,” Roberts advised. Further, it is never a good idea to keep valuable items in unmarked boxes. “When appropriate, clearly indicate on all boxes that they are not to be thrown out.”



Honors

Nader Nadershahi, DDS, MBA, San Anselmo, Calif., associate professor and chair of the department of dental practice at University of the Pacific, Arthur A. Dugoni School of Dentistry, has been named a fellow of the Academy of Dentistry International and the American College of Dentists.

Nava Fathi, DDS, Los Gatos, Calif., assistant professor at University of the Pacific, Arthur A. Dugoni School of Dentistry, has been named a fellow of the Academy of Dentistry International.



Nader Nadershahi, DDS, MBA



Nava Fathi, DDS

UPCOMING MEETINGS

2008

May 1-4 CDA Spring Scientific Session, Anaheim, 800-CDA-SMILE (232-7645), cda.org.

May 2-3 Evidence-based Dentistry Champion Conference, ADA headquarters, Chicago, ada.org/goto/ebdconf.

May 4 International Conference on Evidence-based Dentistry, ADA headquarters, Chicago, ada.org/goto/ebdconf.

May 6-9 Conference for Oral Health in the Americas, Lima, Peru, http://www.fdiworldental.org/public_health/3_conferences.html.

Sept. 12-14 CDA Fall Scientific Session, San Francisco, 800-CDA-SMILE (232-7645), cda.org.

Oct. 16-19 American Dental Association 149th Annual Session, San Antonio, Texas, ada.org.

Oct. 25-29 American Public Health Association Oral Health Section's annual meeting and exposition, San Diego, www.apha.org/meetings.

2009

May 14-17 CDA Spring Scientific Session, Anaheim, 800-CDA-SMILE (232-7645), cda.org.

Sept. 11-13 CDA Fall Scientific Session, San Francisco, 800-CDA-SMILE (232-7645), cda.org.

Oct. 1-4 American Dental Association 150th Annual Session, Honolulu, Hawaii, ada.org.

To have an event included on this list of nonprofit association continuing education meetings, please send the information to Upcoming Meetings, CDA Journal, 1201 K St., 16th Floor, Sacramento, CA 95814 or fax the information to 916-554-5962.

Inflammatory Diseases May Be Treated With New Molecule

Resolvins, recently discovered compounds, may hold relief for people suffering recurrent inflammation from periodontal disease, heart disease, and arthritis.

According to research at Boston University Goldman School of Dental Medicine, data suggests the key to controlling inflammation isn't eliminating infection-causing bacteria, as long thought, but resolvins.

What's more, if developed into a remedy, resolvins can offer a safer option over other drugs since these compounds are produced naturally by the body.

Resolvins set off a drastic reduction in inflammation and regeneration of bone and tissue destroyed by periodontitis in rabbits with the disease, researchers discovered.

Hatice Hasturk, Alpdogan Kantarci, Emilie Goguet-Surmenian, Amanda Blackwood, Chris Andry, Charles N. Serhan, and Thomas E. Van Dyke authored the study, "Resolvin E1 Regulates Inflammation at the Cellular and Tissue Level and Restores Tissue Homeostasis In Vivo." It appeared online in the November issue of the *Journal of Immunology*.

Preparing for a Crisis

Free CD copies of a new emergency dental action plan, courtesy of The Dental Record, is now available. Prepared by the Wisconsin Dental Association, the CD was created to assist dental offices in handling crisis situations.

"We all hope there never comes a day when an emergency action plan has to be put into place; however, most offices want a level of preparedness," said Lee Johnston, The Dental Record president. "Because WDA was responsible for its development, you know it was prepared with the needs of dental offices in mind."

The multifaceted plan, available only on CD, provides examples of various forms used to detail needed supplier and employee contact information. It assists dentists and staff prepare for, through information-gathering and sharing, handling community and office emergencies. Being prepared for a crisis can reduce or even eliminate the negative outcomes affecting a dental office, staff and patients, and the community, according to a press release.

For more information or to obtain a free CD, call (800) 243-4675.



"We all hope there never comes a day when an emergency action plan has to be put into place; however, most offices want a level of preparedness."

LEE JOHNSTON



GORILLAS, CONTINUED FROM 93

who died while working on the project.

It is believed *N. nakayamai* existed around 9.9 million to 9.8 million years ago, its dental features resembling those of *Ouranopithecus macedoniensis*, an ape that lived in what is present-day Greece between 9.6 million and 8.7 million years ago, a stretch of time in which some scientists consider the last known common ancestor to African great apes and humans.

In comparisons of teeth size, it appears *N. nakayamai* was similar to a modern female orangutan and a female gorilla. While it bears a resemblance to *O. macedoniensis*, several characteristics of the dentition point to a less specialized diet than *Ouranopithecus*, putting the *Nakalipithecus* in a genus of its own, according to a November 2007 article in Primateology.net.

Since *O. macedoniensis* and *N. nakayamai* are only known from teeth and jawbone fragments, scientists are not able to say more about their behaviors or the way they looked other than they potentially only consumed hard foods.

"Imagine that you are given some human teeth and asked to tell what the person with those teeth looked like," said study team member Yutaka Kunimatsu of Kyoto University in Japan in a previously published article. "Is the skin of the person black or white or intermediate in color? Is the person tall or short? Fat or slim? Did they have blue eyes or black eyes?"

A competing hypothesis, however, opines that the last common ancestor of both *O. macedoniensis* and *N. nakayamai* came from a repatriated hominid that departed Africa around 16.5 million years ago for Asia or Europe, and subsequently returned approximately 9.5 million years ago.

A New York University anthropologist who was not involved in the recent discovery, called the new fossil a "great find," but said it is too inconclusive from which to draw major conclusions. "It could well be a Eurasian immigrant," said Todd Disotell in an interview with LiveScience. The new fossil is detailed in the November 2007 issue of *Proceedings of the National Academy of Sciences*.

Another anthropologist who was not

involved in the study said that while the *N. nakayamai* is a "very interesting and important discovery," it doesn't budge his position that the ancestors of African great apes and humans spent some of their time evolving outside of Africa.

"Both these researchers and I agree that the last common ancestor of African great apes and humans came from Africa," said David Begun, an anthropologist at the University of Toronto.

The early ancestors of African apes and humans initially left Africa for Europe in search of more seasonal fruits, but some 7 million years later their descendants returned, according to Begun's hypothesis. Back in Africa, the hominids continued their evolution, where they eventually gave rise to gorillas, chimpanzees, and humans.

"But the events that led to the divergence of Asian and African ape lineages happened in Europe at least 2 million years before the (*N. nakayamai*) came into existence," said Begun.



Finding Your Footing in Financial Matters

Successful financial planning needn't be viewed as insurmountable, but adapting a mountain climbing mentality may help.

In a recent issue of the *Dental Tribune*, Robert Graham, CFP, commented that "Experienced and successful climbers plan to live another day," adding, "Mountain climbing has similarities to retirement, tax and estate planning."

According to Graham, the financial planning strategies in step with mountain climbing are:

- Write down your vision. Where do you think you should be devoting your time and resources? Write these thoughts on paper and work from there.
- Write down your goals. Establishing milestone goals — determining where you should be at a certain time — are important in mountain climbing, and are just as necessary in financial planning.

- Work with a top-level adviser. An expert can help you devise the strategies needed to meet your milestone goals.

- Outline the right tactics. In mountaineering, it is important to know the tactics and procedures necessary to proceed. Similarly, financial tactics are necessary to fulfill your strategic needs.

- Choose the proper tools. You wouldn't climb a mountain in flip-flops (comfortably), and you shouldn't set out to meet your financial vision without knowing the right investment tools to use.

- Create a timeline for the execution of your plan. A great plan is worthless if you haven't determined the best timeline for execution.

Experienced mountaineers are well aware of the perils of climbing in the "death zone," an elevation where tragedy can occur. Adhering the rules outlined, Graham said, will help one avoid the financial "death zone."

'Bad Guy' Gene Discovered

Researchers at Boston University Goldman School of Dental Medicine have named CTRC a susceptibility gene for three common forms of chronic pancreatitis, including alcoholic pancreatitis, which accounts for the majority of all cases in the United States and Europe; tropical pancreatitis, a common form found in India; and idiopathic pancreatitis, in which the cause is unknown.

"Up to this point, researchers only studied trypsin as the bad guy of chronic pancreatitis," said Miklos Sahin-Toth, MD, an associate professor. "Now we can look at chymotrypsin C activity to help us treat the disease."

CTRC is the first susceptibility gene for chronic pancreatitis discovered since 2000 and only the fourth overall. Sahin-Toth's team was the first to suggest in early 2007 that the product of the CTRC gene, the digestive enzyme chymotrypsin C, plays an important role in the cause of chronic pancreatitis.

Doctors will now be able to screen patients to learn if alterations in the CTRC gene cause their patients' cases of pancreatitis.

Sahin-Toth and researchers from the University of Leipzig and Charité University Hospital in Germany found mutations in the CTRC gene prevent the proper regulation of trypsin levels, leaving more trypsin in the pancreas. High levels of trypsin are known to lead to pancreatitis.



APHA Calls for Abstracts

The American Public Health Association Oral Health Section is seeking abstracts for its annual meeting and exposition set for Oct. 25-29 in San Diego. The theme of the meeting is "Public Health Without Borders."

All abstracts must be submitted online. The link to the abstract submission form is on the APHA Web site www.apha.org/meetings or <http://apha.confex.com/apha/136am/oasys.epl>. The deadline is Feb. 8.

The APHA's annual event addresses emerging health science, practice issues and policy as a way to promote health and prevent disease.

Abstracts from all areas of public oral health and abstracts that focus on the annual meeting theme are welcomed. Some suggested abstracts include:

- Effective preventive programs and

oral health promotion

- Innovative delivery and financing mechanisms
- Epidemiology of oral diseases
- Oral health disparities
- Oral health literacy
- Oral health policy and programs
- Special needs populations
- Workforce issues
- Migrant/border oral health

Authors must provide complete and accurate contact information. Abstracts will be selected through a rated review process according to significance, timeliness, and overall quality. Presenters of accepted abstracts must become individual members of APHA and register for the annual meeting.

For more information, go to www.apha-oh.org or contact Woosung Sohn, DDS, PhD, DrPH, chair, Program Planning Committee, at woosung@umich.edu.

Dental Waste Handling Recommendations Updated

The best management practices for the disposal of dental amalgam waste has been updated by the American Dental Association.

These practices include the use of separators, collection devices installed in dental office plumbing to capture and remove at least 95 percent of solid waste particles before they enter the sewer system. The use of separators will allow greater recycling and reduce the amount of amalgam entering wastewater treatment plants.

"Dentists across the country have enthusiastically embraced ADA best management practices since we introduced them in 2003, which clearly demonstrates that voluntary programs work," said ADA President Mark J. Feldman, DMD. "Since then, we have gained a lot of experience with separator technology, and even assisted the ISO in developing standards for the devices. We have learned that

the systems work well, and we now feel comfortable including them in our best management practice recommendations."

Now surpassed in popularity by tooth-colored composites, amalgam was once the most commonly used filling material. Amalgam, nevertheless, remains a safe and valued treatment option for some patients, particularly those who have special needs or large fillings in back teeth.

Dental offices using ADA best management practices already capture about 80 percent of waste amalgam. Adding separators to that procedure would increase the amount of captured amalgam to at least 95 percent. The additional amalgam captured by the separator would otherwise have been captured downstream by the municipal wastewater treatment plant. However, treatment plant waste is often incinerated; amalgam captured by separators can be recycled.

"Like most people, dentists are committed to protecting the environment," said Jim Bramson, DDS, ADA executive director.



"By adding separators to their best management practices, dentists have much greater control in their efforts to ensure a healthier environment for everyone."

JIM BRAMSON, DDS



UCLA Researcher Awarded Prestigious Grant

The Oral Cancer Foundation announced recently that David Wong, DMD, DMSc, a researcher in the area of early cancer detection, is one of three of the foundation's first grant recipients.

"We are supporting research that moves our early discovery agenda forward," said Brian Hill, the foundation's executive director. "Early detection is our first front in reducing the death rate from oral cancer, and we believe these research programs all will have a huge impact on how and when people are diagnosed with the disease. Early detection and staging is directly correlated to better long-term outcomes for patients."

The grants were made as an ongoing commitment to each researcher.

Wong, director of the University of California, Los Angeles, Dental Research Institute, is a nationally recognized expert in the emerging field of salivary diagnostics. Wong's work will yield an accurate, noninvasive test for very early detection of oral cancer, and likely other high-impact systemic diseases within a few years, according to the foundation. It is the first viable option for conducting mass public screenings for oral cancer using only a small amount of saliva and a computer chip which looks for specific biomarkers. Given the shift in etiology of oral cancer cases away from the obvious potential patient identifiers, like smoking to the less easily detectable virus, Wong's research will be instrumental in identifying those most at-risk for the disease.