



## Spring Scientific Session Held in Anaheim

**T**he CDA Spring Scientific Session has it all. Held Thursday, April 15 through Sunday, April 18 at the Anaheim Convention Center, the 2004 event features a wide range of continuing education programs, networking opportunities and exhibits.

Twenty-five scientific workshops will be held during the four-day Session. Topics range from infection control, gold restorations and

forensic dentistry to California law, veneers and periodontics.

The event kicks off 8 a.m. Friday, April 16 at the Anaheim Hotel with Opening Session and breakfast honoring the dental team. Former schoolteacher Erin Gruwell will talk about the power of determination and how it helped many of her students, who had been written off by the education system, succeed.

Her work with students has been pub-



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lished in *Freedom Writers' Diary — How a Teacher and 150 Teens Used Writing to Change Themselves and the World Around Them* — and will be made into a major movie with filming starting later this year.

Gruwell, awarded the Teacher of the Year Award by the California

Commission on Teacher Credentialing, is founder and president of the Tolerance Education Foundation, a non-profit organization dedicated to teaching tolerance and funding college scholarships to underprivileged students.

Admission is free to members and paid registrants. Seating is limited to first-come, first-served.

On Saturday, April 17, The Bacon Brothers will perform at the House of Blues Anaheim, located in the Downtown Disney District. Actor Kevin Bacon and his brother Michael have emerged as one of the hottest bands in the country. Their music is a mix of soul, rock, folk and country. The show starts at 7:30 p.m. Tickets are \$40 and include appetizers, one drink and an all-day pass on the Anaheim Resort Transit.

This year's special events feature a hands-on gourmet cooking course and a painting workshop for adults.

The cooking class is from 10 a.m. to noon Friday, April 16 at Mr. Stox Restaurant. Lunch follows noon to 2 p.m. Cost is \$130 and includes recipes, personalized chef hats, menus and transportation.

The "You Can Paint" workshop is held from 9 a.m. to noon for adults and 2 to 4 p.m. for children. The course, taught by husband and wife artists, helps participants discover the joy of oil painting. Cost is \$70 for adults and \$30 for children. Price includes paint supplies, lesson plan and specially designed box to transport the painting.

(The deadline to register for these events was March 3. If openings are still available, the activities are subject to on-site registration fees.)

Throughout Spring Session, the CDA Foundation will host a silent auction and raffle. Items ranging from sports memorabilia to travel-related gift certificates and wine will be on display in Exhibit Hall D. Members are encouraged to view the items while visiting the exhibits. Proceeds from the auction and raffle help benefit Foundation programs including scholarships, improving access to care and health policy research.

## Oral Problems More Prevalent with the Elderly

U.S. Surgeon General Richard Carmona, MD, recently told the Senate Special Committee on Aging that the elderly face far more oral health issues than other age group.

"Seniors by the very nature of their life span are more prone to chronic, disabling diseases and conditions; are more apt to be on regimens of daily medications; and have a greater likelihood to be low-income than other adults," Carmona said. "These factors and others have a profound effect on their oral health."

Among the health problems Carmona said the elderly face: higher rates of oral and pharyngeal cancers, with those over the age of 65 seven times more apt to be diagnosed with oral cancer than their younger counterparts; an estimated 30 percent of seniors over the age of 65 have lost all their teeth; an increased occurrence of periodontal infections; and more frequent incidences of xerostomia and dental decay as a result of medications that have a side effect of reducing salivary flow.

Additionally, more older Americans pay out of pocket since employment-based dental coverage ends when they stop working, and Medicare, except in very few cases, does not include dental care service. And since a majority of seniors live on a limited income, the elderly are more likely to forgo dental visits. Finally, studies have shown potential links between oral infections and systemic diseases such as respiratory infections, diabetes and heart disease.



## Organization Seeks Public Comment on Plan for Underserved Communities

The National Institutes of Health is accepting input from the public on its health disparities research agenda.

"Despite tremendous medical advances and improved public health in America in recent decades, African Americans, Hispanics, American Indians, Alaska Natives, Asian and Pacific Islanders, and other medically underserved communities continue to suffer an unequal burden of illness, premature death and disability," said Elias A. Zerhouni, MD, National Institutes of Health director. "In developing and updating the Strategic Plan to eradicate these health disparities, the NIH affirms its ongoing commitment to biomedical research discovery that will ensure improved health for all Americans."

The National Center on Minority and Health Disparities (NCMHD) developed the plan with the NIH Office of the Director, other NIH institutes and centers, and the National Advisory Council on Minority Health and Health Disparities.

"The Strategic Plan defines a broad framework for future efforts of research partners throughout the country to advance scientific knowledge that will improve diagnostic, treatment, and prevention strategies for reducing and eliminating the health disparities afflicting racial and ethnic minority populations and other health disparities populations across the nation," said John Ruffin, PhD, minority and health disparities director.

Ruffin also noted "the genesis of health disparities is multifactorial and requires a coordinated interdisciplinary effort. The Strategic Plan reflects the ongoing commitment of a strong research alliance that is necessary to eliminate health disparities. At the heart of this coalition of NIH Institutes and Centers are our constituencies. Their input is essential to our success in identifying innovative and diverse approaches to eliminate health

disparities."

The NCMHD will lead, support, assess and coordinate the effort to decrease and eliminate health disparities. The organization conducts basic social, behavioral and clinical research; supports research training and infrastructure; as

well as promotes emerging programs and distributes health information.

The Strategic Plan's three main goals are:

Research — to investigate the development and progression of diseases and disabilities causing disparities in the health of minorities and other populations;

Research Infrastructure — to boost minority health and health disparities career development, research training, and institutional capacity; and

Public Health and Community Outreach — to guarantee the research, healthcare professionals and public communities are educated about the advances in health disparities research.

The "NIH Strategic Research Plan and Budget to Reduce and Ultimately Eliminate Health Disparities, Fiscal Years 2002-2006" currently is on the NCMHD Web site, <http://www.ncmhd.nih.gov>. Comments also can be sent to the Strategic Plan Review Group, NCMHD, 6707 Democracy Blvd., Suite 800, Bethesda, Md., 20892-5465, or e-mailed to [NIHHealthDisparitiesPlan@mail.nih.gov](mailto:NIHHealthDisparitiesPlan@mail.nih.gov). NCMHD is a component of the National Institutes of Health within the Department of Health and Human Services.



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ELIAS A. ZERHOUNI, MD  
National Institutes of Health director

## Evidence-Based Dentistry, Part II



**Note:** In 2002, the CDA House of Delegates ratified a resolution establishing an evidence-based dentistry (EBD) action plan that included the formation of a task force to recommend to the Board of Trustees and then implement programs related to evidence-based dentistry. The task force — made up of a membership of James Freed, DDS; Emilio Garcia, Jr., DDS; Raymond Pedersen, DDS; Michael Perry, DDS; and chaired by Richard Kao, DDS, PhD — met last fall to establish a definition of evidence-based dentistry for CDA, establish recommendations to monitor EBD efforts within the Association, and to suggest elements of a communication effort on EBD among CDA's membership. This article, the second in an occasional series, is a conversation with Dr. Kao on the nature and significance of the evidence-based dentistry definition adopted by the task force.

**Q. In some discussions about evidence-based dentistry, there's an impression that it will ultimately provide a "cookbook" approach to the practice of dentistry. Is this necessarily the case?**

A. Many research designs and reviews by various groups like the Cochrane Group are looking for a "yes" or "no" approach to a specific question about treatment. Unfortunately, clinical dentistry requires a bit of "fuzzy logic," where clinical experience and patient preferences fine-tune the path that might be suggested by sound evidence. In an evidence-based practice, it is the responsibility of the practitioner to maintain a reasonable appreciation and awareness of the body of scientific literature, and to appreciate the informed patient's preferences. In terms of reasonable appreciation and awareness of the literature, the focus should be on thorough and balanced reviews. In regard to the scientific literature, the EBD task force members recognize, for example, that it is common to find 10 different studies citing 10 different "best practice" approaches in regard to a particular treatment path. Where there is a diversity of conclusions in the literature, the individual dentist must exercise his or her professional experience and judgment to decide which approach would be most appropriate. Given the fact that individual dentists have varying professional experiences, and patients may have varying preferences, it is unlikely a rigid "cookbook" approach can be taken toward treatment and called "evidence-based dentistry." Given the dynamic of how scientific evidence is interpreted and presented, the experience of the clinician, and the individual patient's preference, the evidence-based approach will result in a treatment answer that is not absolute, but has "shades of gray." In this case and it is the clinician's job to choose the best treatment approach.

**Q. There's a fear that "evidence-based" treatment options will be used by third-party payers to ration treatment or to restrict payments on traditional and common dental treatments — to use EBD as a means of cutting costs.**

**Is this a legitimate fear, and how does the CDA task force's definition of EBD address this fear?**

A. As previously mentioned, one concern is the misuse of EBD. It is possible for selective filtering of the scientific evidence by third-party payers as a mean of defining benefit policies. This abuse is also possible in the marketing of dental products, as I've mentioned. But this approach to, or use of, evidence is contradictory to the concept of EBD. In terms of scientific evidence, there is often a variety of evidence justifying a variety of approaches. Complicating our appreciation of the body of evidence is the fact that we have very little information in regard to long-term outcomes of a procedure, technique, or materials (e.g., how long will a particular restoration last?), and the extent of patient satisfaction with various treatment approaches. Until we have more studies that fulfill these criteria, and have reviews that are more balanced, scientific evidence should be viewed as important, but that its interpretation may at times be inaccurate. Even more important is the fact that these abuses ignore the definition of EBD in that there is a tendency to discount or ignore the patient's desire and the clinician's expertise. In the definition of EBD put forward by CDA's task force and by the ADA, only the clinician is in a position to design a treatment plan that incorporates years of clinical experience, the findings of credible research, and the preference of the patient. Third-party payers may structure benefit designs around "research," but only the dentist can practice "evidence-based dentistry."

**Q. In practice, how should a dentist proceed if the treatment direction indicated by one element conflicts with the other two, or if all three elements conflict?**

A. A dentist should never design a treatment plan that contradicts the consensus findings of "good science" and research. Again, however, in the real world, there will often not be one obvious treatment course. There may be a number of different treatment approaches, different techniques, or different materials that will achieve the objective of proper care for the patient's condition, and the body of credible research may

support a variety of approaches, techniques, and/or materials. It is then the dentist's role to decide what the best approach is, as long as the patient agrees with the dentist's recommendation. Of course, if the clinical experience of the dentist and the consensus of research agree on a particular treatment path, and the patient disagrees, then it falls upon the dentist to educate the patient about the advisability or wisdom of their preference. If a patient will not yield to sound evidence and the judgment of their dentist, the issue then becomes one of ethics: Should a dentist proceed with a treatment plan that has not been agreed to by the patient? The dentist may have to release the patient from his or her care. Or it may simply mean that the dentist refer the patient to a specialist who may take a different approach to whatever condition needs treatment. But according to our definition of "evidence-based dentistry," where there is no consensus when factoring together treatment experience, the body of research literature, and the wishes of the patient, the professional judgment of the dentist must then weigh more significantly in the equation —

within the bounds of what is ethical in terms of the patient's desires.

***Q. What will CDA do to promote the concept of EBD?***

A. CDA's EBD Task Force has with this article, initiated a series to educate members about the nature, uses, benefits, and potential abuses of evidence-based dentistry. The objective of this series will be to promote CDA's definition of evidence-based dentistry within the profession, the payer industry, academia, and among the public; and to educate members to create a sense of comfort about the positive aspects and application of EBD to their practices.

The EBD Task Force will also be considering future recommendations of educational programs on evidence-based dentistry provided by CDA, or in cooperation with California's dental schools.

*Dr. Richard Kao is a practicing periodontist in Cupertino, Calif., and is chair of the Council on Dental Research and Developments. Dr. Kao acknowledges Drs. James Freed, Emilio Garcia, and Raymond Pedersen, and CDA staff Teresa Pichay and Greg Alterton for their assistance.*

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## **No Link in Dental Amalgam-Disease Claim**

A recent review confirmed there is "no connection" between neurodegenerative diseases and mercury in dental amalgam.

In the New England Journal of Medicine, world-renowned mercury toxicology experts wrote in their October 2003 review article that there is "no clear evidence supporting the removal of amalgams."

According to authors, there are three main causes of mercury exposure to the general population: dental amalgam fillings, fish consumption, and thimerosal-containing vaccines. Thimerosal is a mercury-based preservative.

Urinary mercury concentrations in patients with amalgams are estimated at two to four micrograms per liter "well below" the 20- to 50-microgram level found in individuals with occupational exposure. But even at elevated levels associated with occupational exposure, symptoms are mild and cases may be reversible.

While claims have fueled public speculation and concern that long-term exposure to low concentrations of mercury vapor from amalgams can cause or worsen neurodegenerative illnesses such as Parkinson's and Alzheimer's, and amyotrophic lateral sclerosis, epidemiological investigations have not provided proof that amalgam has a role in these diseases.

However, "Cyanide and carbon monoxide are continuously synthesized in the body, proving that even the most toxic compounds have a limit below which they are not toxic," said Lazlo Magos, MD, review co-author.

Toxicity is more of a dose-dependent question, Magos said. "Even essential elements can be toxic when intake (or body burden) exceeds a certain level," he says. "You can kill a person by oversaturating the ambient air with oxygen or forcing large volumes of water in the stomach."

Magos' fellow authors also concluded that "patients who have questions about the potential relation between mercury (dental fillings) and degenerative diseases can be assured that the available evidence shows no connection."



## Blood Test May Correlate to Oral Health

Researchers recently discovered that a blood test often given during a routine medical checkup can point to the status of one's oral health.

"In this study we found that generally if the blood was 'healthy,' the oral health was also healthy. Conversely, if the blood test detected certain 'red flags,' the person also had serious symptoms of periodontal diseases," said Dr. Yuko Takami, Department of Preventative Dentistry and Dental Public Health, School of Dentistry, AichiGakuin University, Japan.

The study was published in the *Journal of Periodontology*.

"We also found that males were reported to have more serious symptoms of periodontal diseases than females of the same age group," Takami said.

Researches examined and measured the oral health of nearly 7,500 women and men, and tested their blood for 37 items used in general blood tests such as diabetes and C-reactive protein (CRP) and cholesterol, which typically is linked to heart disease. The blood test results then were compared to the participants' oral health scores.

"These findings mean that in the future when patients visit their medical doctors for a routine check-up and annual blood work, they may also be referred to a periodontist for a periodontal screening if the blood indicates systemic abnormalities," said Michael P. Rethman, DDS, MS, and president of the American Academy of Periodontology.

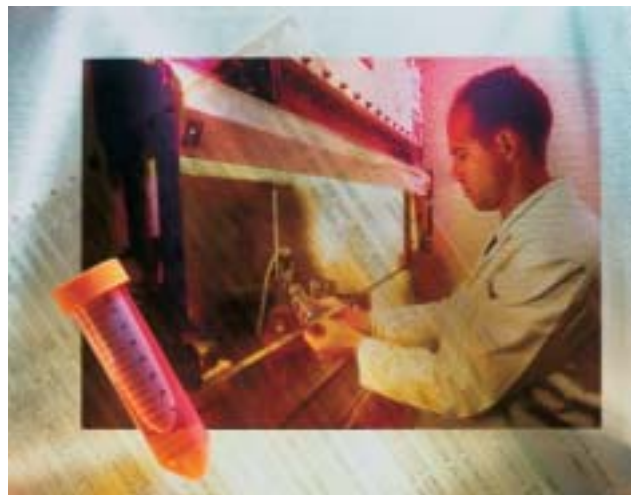
It remains unknown as to why men reported to have more serious symptoms of periodontal disease than women. Additionally, the only item from the test that showed a significant relationship with periodontal diseases in women was CRP. It is speculated that women and men have differing endocrine situations. Endocrine conditions can influence periodontal diseases.

"With each study that looks at

the association between systemic and periodontal diseases, we learn more about the CRP correlation," Rethman said. "Another study in this *JOP* issue reinforces previous studies indicating a relationship between CRP elevation and periodontitis.

Researchers compared the values before and after treatment. What they found was that CRP values dropped considerably following periodontal treatment.

"Since the treatment of periodontitis in this study appears to be effective in reducing levels of CRP, patients at risk for coronary heart disease may want to visit a periodontist to control their periodontitis," Rethman said.



## Upcoming Meetings

### 2004

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|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| April 15-18     | CDA Spring Scientific Session, Anaheim, (866) CDA-MEMBER (232-6362).                                                                                                                        |
| April 27-May 2  | American Academy of Cosmetic Dentistry's 20th annual Scientific Session, Vancouver, British Columbia, <a href="http://www.aacd.com">www.aacd.com</a> .                                      |
| June 24-26      | ADA 18th annual New Dentist Conference, San Diego, (312) 440-2779, <a href="http://www.ada.org/goto/newdentconf">www.ada.org/goto/newdentconf</a>                                           |
| Sept. 8-11      | International Federation of Endodontic Association's sixth Endodontic World Congress, Brisbane, Queensland, Australia, <a href="http://www.ifea2004.im.com.au">www.ifea2004.im.com.au</a> . |
| Sept. 10-12     | CDA Fall Scientific Session, San Francisco, (866) CDA-MEMBER (232-6362).                                                                                                                    |
| Sept. 30-Oct. 3 | ADA Annual Session, Orlando, Fla., (312) 440-2500.                                                                                                                                          |

To have an event included on this list of nonprofit association meetings, please send the information to Upcoming Meetings, *CDA Journal*, P.O. Box 13749, Sacramento, CA 95853 or fax the information to (916) 554-5962.