

DENTAL TRIBUNE

The World's Dental Newspaper · U.S. Edition

JANUARY 2010

www.dental-tribune.com

VOL. 5, No. 1

IMPLANT TRIBUNE

The World's Implant Newspaper · U.S. Edition

Facing the facts

Dental CBCT vs. medical CT scans.

► page 1B

ENDO TRIBUNE

The World's Endodontic Newspaper · U.S. Edition

Endodontic implant algorithm

Help for the decision-making process.

► page 1C

COSMETIC TRIBUNE

The World's Cosmetic Dentistry Newspaper · U.S. Edition

Immediate restoration

Central incisors with past trauma are common.

► page 1D

'Oral tissue contains a kind of powerful stem cell'

Tissue engineering is based on the concept that the human body, or parts of it, can be regenerated using stem cells. Since the 1980s, several types of tissue and organs have been generated worldwide using cultured living cells.

Dental Tribune Asia Pacific, in cooperation with FDI's Worldental Daily, spoke with Dr. Minoru Ueda from Nagoya University in Japan about key tissue-engineering strategies and their potential for dentistry.

Dr. Ueda, tissue engineering is a relatively new approach in regen-

erative medicine. How did it find its way into dentistry?

The basic concepts and strategies for tissue regeneration are general. To regenerate any tissue, we need stem cells, growth factors and a scaffold.

In the field of dentistry, we have made much scientific progress in terms of materials, which gives us an advantage over other fields of medicine. We began with developing high-quality materials and then expanded to using stem cells.

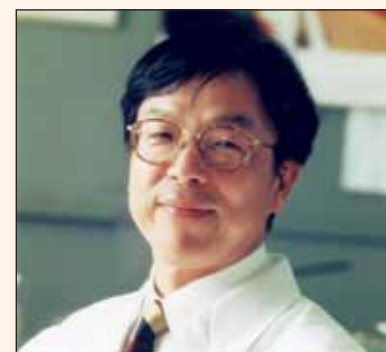
What are the key tissue-engineer-

ing strategies that are currently being developed for dentistry and how do they work?

The most important tissue for dentistry is bone. We are establishing technologies for bone tissue engineering and apply these clinically to implant surgery. Secondly, we are focusing on stem cell science.

Oral tissue contains a kind of powerful stem cell that can be used to treat systemic diseases, such as brain infarction or heart infarction.

The dental pulp stem cell is one of the most important cells derived from oral tissue.



Dr. Minoru Ueda, Japan

Which dental conditions will be the first to be treated or cured by tissue engineering?

Atrophied alveolar bone and severe periodontitis.

→ DT page 2A, 'Oral tissue ...'

Complete maxillary implant prosthodontic rehabilitation with a CAD/CAM-fixed prosthesis

The authors explain the use of high-strength zirconium oxide restorations in the prosthodontic management of an edentulous maxilla with a failing implant.

→ See page 10A



'You've taken implant training; what do you do next?'

By Lynn Mortilla, RDH

Integrating implants into a practice is a job for the whole team as much as it is for the dentist. It is critically important to focus on the "other" skills necessary after clinical competencies are learned. A necessary step is to be sure not only the clinician but the entire team is trained for implant den-

tistry. Everyone in the practice plays an integral role for successful incorporation of systems, strategies and techniques to enhance the success of implant dentistry. These techniques should be built into daily protocols. Standardized forms and tools can also aid the implant-focused practice.

→ DT page 2A, 'You've taken ...'

AD

CURE 4MM IN 10 SEC.

FAST, EASY, DURABLE

X-tra fil

Posterior Multi-Hybrid Composite

- Low shrinkage of 1.7%
- 86% filled for great wear resistance
- Highly radiopaque (330 AI%)

... the perfect amalgam alternative.

More info and **FREE SAMPLE** at www.vocoamerica.com

Call 1-888-658-2584 www.vocoamerica.com info@voco.com

VOCO
THE DENTALISTS

PRSRT STD
U.S. Postage
PAID
Permit # 306
Mechanicsburg, PA

Dental Tribune America
213 West 35th Street
Suite #801
New York, NY 10001

← DT page 1A, 'Oral tissue ...'

'Tissue engineering could provide a new treatment method for diseases that have not been treatable thus far.'

Is it possible to reconstruct complex tissue defects made up of multiple cell types?

Yes, it is. We have succeeded in reconstructing the structures that make up periodontal tissues, which are cementum, bone and periodontal ligament in humans.

There is different legislation around the world regarding stem cell research. Would you please explain how the situation in Japan differs from other parts of the world and its effect on your research?

We can do basic research using animal cells and human stem cells, but research using embryonic stem cells [ES] and induced pluripotent stem cells [iPS] must be performed under the control of the ethical committees of each university.

In order to use ES or iPS, we need special permission from our university and government. Clinical studies based on basic research also require approval from our university and government.

It is actually very difficult to gain approval compared to other countries. So it is easy to conduct basic research, but very difficult to conduct clinical studies in Japan.

Current debate in the field of cos-

metic dentistry centers on whether dentists should be allowed to inject osteogenic cells into patients for non-dental reasons. What is your opinion on this matter?

Dentists should not be allowed to inject any cells by themselves for non-dental reasons.

However, for cosmetic reasons, dentists can inject stem cells into the oral and maxillofacial areas, especially into the face because cosmetic problems such as wrinkles are not a disease.

The surface structures of an implant are very important, but this is not a main factor for enhancing the living cell around the fixture.

What effect will tissue engineering have on dental practice during the next 20 to 25 years?

Tissue engineering could provide a new treatment method for diseases that have not been treatable thus far, such as severe periodontitis and atrophied alveolar ridges.

Also, cosmetic therapy using tissue engineering in the oral and maxillofacial regions will become commonplace in the dental practice. DT

(This interview is published with permission by the FDI World Dental Federation.)

← DT page 1A, 'You've taken ...'

To assist with the next steps as a team, I published "Incorporating Implants Into Your Practice — Team Strategies for Success." The resource guide helps practices learn how to get the most out of implant training and start booking more treatments through staff education, identification of implant candidates, documentation forms, case presentation techniques, patient financial forms and more. The resource guide was printed as a courtesy of ChaseHealthAdvance financing options.

I was working as a surgical assistant and dental hygienist in a practice that was starting to become involved in implant dentistry almost 20 years ago. I had no idea of how the procedures were done or how to educate patients about implants. Through some research, I found the ADIA (Association of Dental Implant Auxiliaries) and attended a symposium. The ADIA is an integral part of the ICOI (International Congress of Oral Implantologists), the world's largest professional implant society. The ADIA enhanced my overall knowledge of implant dentistry, and in 1996 I accepted the responsibility of becoming the executive director of the ADIA.

It is goal of the ADIA to educate each member of the team in the clinical techniques and communication skills necessary to provide excellence in patient care and to also educate the team as a whole to enhance the practice and each team member's career. We focus on the coordination and management responsibilities related to implant dentistry.

As the number of implant practices in the world grows and develops, there is a need for auxiliaries to do the same. Our society is dedicated solely to the purpose of educating dental team members about implants and associated procedures. The ADIA's main purpose is to establish educational criteria and training for certification and provide an organized vehicle for auxiliaries to contribute to the field of oral implantology/implant dentistry.

Implant dentistry can be a dynamic and productive part of your practice. If you have completed clinical implant training, how are you going to continue to evolve with current trends, techniques and technology in implant dentistry? Have you developed the systems, strategies and techniques to incorporate implants successfully into your practice? Have you included educating your team in your professional development? The ADIA is committed to constant development of our programs to keep current with the evolving realm of implant dentistry.

I encourage you and your team to look into membership with the ADIA and ICOI at www.ICOI.org and www.adiaonline.org. I hope the resource guide will give you tips and tools to simplify incorporating implant dentistry into practices for the entire team.

→ continued

DENTAL TRIBUNE

The World's Dental Newspaper • US Edition

Publisher & Chairman

Torsten Oemus
t.oemus@dental-tribune.com

Vice President Global Sales

Peter Witteczek
p.witteczek@dental-tribune.com

Chief Operating Officer

Eric Seid
e.seid@dental-tribune.com

Group Editor & Designer

Robin Goodman
r.goodman@dental-tribune.com

Editor in Chief Dental Tribune

Dr. David L. Hoexter
d.hoexter@dental-tribune.com

Managing Editor/Designer

Implant Tribune & Endo Tribune
Sierra Rendon
s.rendon@dental-tribune.com

Managing Editor/Designer

Ortho Tribune & Show Dailies
Kristine Colker
k.colker@dental-tribune.com

Online Editor

Fred Michmershuizen
f.michmershuizen@dental-tribune.com

Product & Account Manager

Mark Eisen
m.eisen@dental-tribune.com

Marketing Manager

Anna Wlodarczyk
a.wlodarczyk@dental-tribune.com

Sales & Marketing Assistant

Lorrie Young
l.young@dental-tribune.com

C.E. Manager

Julia E. Wehkamp
j.wehkamp@dental-tribune.com

Dental Tribune America, LLC
215 West 35th Street, Suite 801
New York, NY 10001
Tel.: (212) 244-7181
Fax: (212) 244-7185

Published by Dental Tribune America
© 2010 Dental Tribune America, LLC
All rights reserved.

Dental Tribune strives to maintain the utmost accuracy in its news and clinical reports. If you find a factual error or content that requires clarification, please contact Group Editor Robin Goodman at r.goodman@dental-tribune.com.

Dental Tribune cannot assume responsibility for the validity of product claims or for typographical errors. The publisher also does not assume responsibility for product names or statements made by advertisers. Opinions expressed by authors are their own and may not reflect those of Dental Tribune America.

Editorial Board

Dr. Joel Berg
Dr. L. Stephen Buchanan
Dr. Arnaldo Castellucci
Dr. Gordon Christensen
Dr. Rella Christensen
Dr. William Dickerson
Hugh Doherty
Dr. James Doundoulakis
Dr. David Garber
Dr. Fay Goldstep
Dr. Howard Glazer
Dr. Harold Heymann
Dr. Karl Leinfelder
Dr. Roger Levin
Dr. Carl E. Misch
Dr. Dan Nathanson
Dr. Chester Redhead
Dr. Irwin Smigel
Dr. Jon Suzuki
Dr. Dennis Tartakow
Dr. Dan Ward

Tell us what you think!

Do you have general comments or criticism you would like to share? Is there a particular topic you would like to see more articles about? Let us know by e-mailing us at feedback@dental-tribune.com. If you would like to make any change to your subscription (name, address or to opt out) please send us an e-mail at database@dental-tribune.com and be sure to include which publication you are referring to. Also, please note that subscription changes can take up to 6 weeks to process.

AD



BUY 2, GET FREE TIPS*

Luxatemp® Fluorescence
the ultimate esthetic provisional material

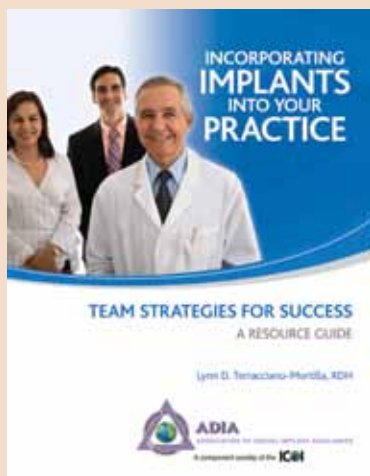
***SPECIAL OFFER:** Buy 2 any Luxatemp® Automix, get 1 bag of Tips FREE (a \$44.25 value)!

To order, contact your authorized dental supply dealer.

To receive **FREE** goods, fax dealer invoice to **201-894-0213**. All orders billed and shipped through dealer. For more information, call 800-662-6381. Offer valid through 3/31/10. Promotion cannot be combined with any other offers and may be changed or discontinued at any time without notice. Limit 5 offers per dental office. All offers must be redeemed within 30 days of purchase. Offer code: DTRIBLTF10

DMG AMERICA

← continued



Lynn Mortilla published the resource guide shown above, "Incorporating Implants into Your Practice — Team Strategies for Success."

The guide helps practices learn how to get the most out of implant training and start booking more treatments through staff education, identification of implant candidates, case presentation techniques, patient financial forms and more.

The resource guide was printed as a courtesy of ChaseHealthAdvance and you can receive a complimentary copy by calling ChaseHealthAdvance at (888) 388-7633 or visit www.advancewithchase.com.

About the author



Lynn D. Mortilla, RDH, is executive director of the Association of Dental Implant Auxiliaries (ADIA), a fellow of the ADIA and a member of the ICOI's Board of Directors.

She is also an adjunct clinical instructor at Temple University, Department of Periodontics and Implants and is on the faculty for the implant preceptorship at the University of Texas Health Science Center, San Antonio.

Mortilla is a contributing author to "Dental Implants: The Art and Science" (Babbush; Saunders) and to "Contemporary Implant Dentistry 3rd Edition" (Misch; Mosby).

'Your Spitting Image' Web site

Interactive program explores forensics, saliva and bioengineering through dentistry

Did you know that a person could be identified from the DNA in saliva left behind on a postage stamp? Or that the average person creates enough saliva each day to fill a soft-drink bottle? That teeth can survive fires reaching 2102 degrees Fahrenheit?

"Your Spitting Image," (www.dentalmuseum.org/ysi) a new educational Web site from the National Museum of Dentistry, reveals what your mouth says about you.

Find out how forensic dentists use dental records and DNA analysis to solve real missing person cases, discover the telling secrets revealed by saliva and find out how your mouth is a window to health for your body.

This interactive Web site features an in-depth exploration of forensics, saliva and bioengineering as it relates to science, dentistry and oral health.

Key scientific topics include DNA, genetics, the mouth/body connection and stem cells.

Parents and middle and high school teachers looking for engaging topics in scientific exploration for use at home or in the classroom will find plenty of lessons to choose from on this site.

The lessons can also be used in conjunction with a field trip to see the Your Spitting Image companion exhibit at the National Museum of Dentistry in Baltimore or at one of the venues across the country hosting the traveling version of the exhibit (currently on view at the Impression 5 Science Center in Lansing, Mich.).

The Web site features three sections that explore the science of dentistry and oral health. In "Forensics: Solving Mysteries," learn how forensic dentists help law enforcement identify missing persons using X-rays, bite marks and DNA testing.

Learn how saliva protects our teeth and how our mouth is connected to the health of the rest of our body in "Saliva: A Remarkable Fluid." The section "Bioengineering: Making a New You" explores how stem cells and genes are being used to grow replacement teeth and cure disease.

Interactive activities include:

- An exploration into how a few drops of saliva can be used to determine genetic makeup, diagnose infections and identify illegal drug use.
- A step-by-step illustration of how forensic dentists can extract DNA from a tooth to learn the identity of an unknown victim.
- An animated cartoon that shows how brushing, flossing and rinsing lead to a healthy mouth.
- A visual timeline of the various ways humankind has sought to replace missing teeth for thousands



The educational Web site 'Your Spitting Image' is a part of the National Museum of Dentistry's online offerings.

of years, from the ancient Egyptians to the future of tooth replacement.

Teacher guides included on the Web site provide easy-to-understand, illustrated, age-appropriate lessons for middle and high school students that can be used in the classroom.

All materials are designed to meet the National Science Education Standards developed by the National Committee on Science Education Standards and Assessment and the National Research Council.

The Web site also provides detailed information about the Your Spitting Image traveling exhibit and how it can be brought to communities nationwide.

The Your Spitting Image Web site was made possible by a generous grant from the Patterson Dental Foundation.

The National Museum of Dentistry

The Dr. Samuel D. Harris National Museum of Dentistry, an affiliate of the Smithsonian Institution, is a lively national center where visitors discover the power of a healthy smile and the rich history of dentistry.

Designated by Congress as the official museum of the dental profession in the United States, the museum's collection of 40,000 objects tells the story of dentistry through changing and traveling exhibits, school tours and family days.

Highlights include George Washington's lower denture, Queen Victoria's personal dental instruments and an extraordinary collection of toothbrushes ranging from the 1800s to the present.

The National Museum of Dentistry is located at 31 S. Greene St. in Baltimore. Admission is \$7 for adults, \$5 for seniors and students with ID, \$3 for children ages 3-19; and free for age 2 and under.

Open Wednesday to Saturday 10 a.m. to 4 p.m. and Sunday 1-4 p.m. Closed Mondays, Tuesdays and major holidays. Call (410) 706-0600 or visit www.smile-experience.org for more information. **DT**

ADS



Universal and scanable registration material, that's it!

R-SI-LINE® METAL-BITE™

- High final hardness - Shore-D 40
- Setting time about 60 s
- Scanable for **powderless** 3D-data registration of antagonists (CAD/CAM)
- Perfect physical parameters
- 2 Cartridges + 12 Mixing cannulas

Available at

PATTERSON DENTAL
pattersondental.com

R-dental
Dentalerzeugnisse GmbH
E-mail: info@r-dental.com
r-dental.com

Bis zur Perfektion

NYU shares \$1.63 million NIH award

Although the destructive effects of oral bacteria in producing dental caries (cavities), periodontal disease and other infectious conditions are well known, the identities of many of the microbes responsible for these conditions, as well as their physical characteristics and ability to grow and sustain themselves, remain a mystery. In fact, only half of the bacteria residing in the human oral cavity have been identified.

Now, a NYU College of Dentistry (NYUCD) microbiologist and an engineer at Sandia National Laboratories, part of the U.S. Department of Energy, are partnering to develop a technology that will facilitate bacterial identification. Their study was recently funded with a three-year, \$1.63 million grant from the National Institute of Dental and Craniofacial Research (NIDCR) of the NIH.

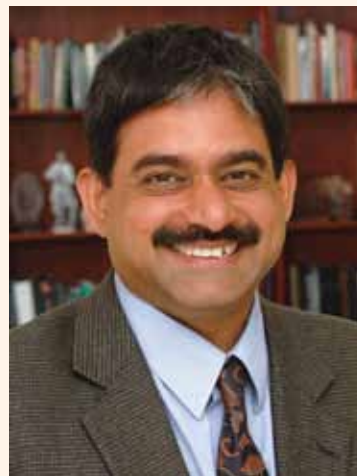
The study's principal investigator, Dr. Anup Singh, director of biosynthesis research at Sandia, uses a method for spotting unknown microbes in saliva dubbed "FISH n' CHIPS" because it combines fluorescent in situ hybridization (FISH) with a glass chip less than four centimeters wide.

NYUCD, a subcontractor on the grant, received a \$264,000 award

to acquire saliva samples from NYUCD's patient population, prepare the samples for Dr. Singh, and analyze Dr. Singh's findings. Dr. Deepak Saxena, an assistant professor of basic science and craniofacial biology, is leading the NYUCD study in collaboration with Dr. Daniel Malamud, a professor of basic science and craniofacial biology and director of NYUCD's HIV/AIDS Research Program.

In their study, Saxena and Singh take advantage of recent advances in gene sequencing that enable microbial analysis without lab cultivation. Using probes composed of small, incomplete oral bacteria nucleic acid sequences, the researchers will locate, or "fish out," bacterial cells with matching DNA sequences from dozens of saliva samples that have been arrayed on a glass chip. Probes that bind to complementary sequences will be marked with a fluorescent dye so that investigators can examine them under a microscope to confirm that they have been properly matched.

The researchers plan to locate cells from a dozen unknown oral bacterial species and establish a bank of cells that can be manipulated in subsequent sequencing studies



Dr. Deepak Saxena, assistant professor of Basic Science and Craniofacial Biology at New York University

designed to fully decode a microbe's genome.

"I anticipate that our 'FISH n' CHIPS' model will ultimately also be used to locate unknown bacteria in the gastrointestinal and nasal tracts and in other part of the body," said Saxena. "This will help in the development of genetic tests to identify those at risk for a variety of infectious diseases." **DT**

(Source: New York University)

Long-term cavity protection from tooth-binding micelles?

A new study suggests that tooth-binding micelles (or particles) may provide long-term cavity protection by adhering to tooth surfaces and gradually releasing encapsulated antimicrobials.

Formulation of a mouthwash-based delivery system is anticipated, ultimately simplifying application and increasing at-home patient compliance.

The researchers, from the University of Nebraska Medical Center, Omaha, and the University of Florida, Gainesville, reported their findings in the November 2009 issue of the journal *Antimicrobial Agents and Chemotherapy*.

One of the main contributing factors to dental cavities is overpopulation of acid-producing bacteria in the oral cavity that causes localized

destruction of compromised dental hard tissue.

Due to the episodic nature of cavities, long-term benefits of periodic treatments administered during routine office visits are minimal. Other delivery systems developed to maintain drug concentrations, including bioadhesive tablets, patches, films and gels, aren't very effective on the tooth surface and often cause irritation resulting in poor patient compliance.

Emphasis on the need for therapeutic strategies that target the bacterial aspect of the disease and a delivery platform that would maintain the drug concentration on the tooth surface is warranted.

In the study, tooth-binding micelles (molecular particles) were developed and encapsulated with farnesol, an antimicrobial recently found to be effective against the cavity causing bacterium *Strepto-*

→ continued

UPCOMING WEBINARS

Dental Tribune
DT STUDY CLUB

ADAC-E-R-P
Continuing Education Recognition Program

DENTAL TRIBUNE AMERICA IS AN ADA CERP RECOGNIZED PROVIDER

21 JAN.
7 p.m. EST

IMPROVING PERIODONTAL HEALTH THROUGH ORTHODONTIC TREATMENT
Dr. Robert Boyd

A review of oral-health products for ortho patients evaluated in light of FDA and ADA approvals for claims will be presented.

Or 1h FREE
Made available by: Procter & Gamble

REGISTER ON WWW.DTSTUDYCLUB.COM

09 MAR.
7 p.m.

DT STUDY CLUB C.E. SYMPOSIA AT AEEDC, DUBAI
Various Speakers

This C.E. three-day event offers an ambitious schedule of continuing education lectures in various dental disciplines.

6h 9h FREE
Made available by: AMD Lasers

REGISTER ON WWW.DTSTUDYCLUB.COM

30 MAR.
7 p.m. EST

ORAL CARE: TOPIC TBA
Dr. Fontinos Panagakos

Colgate-Palmolive will host this Webinar on oral care. For more detailed information, visit www.dtstudyclub.com.

6h 1h FREE
Made available by: Colgate-Palmolive

REGISTER ON WWW.DTSTUDYCLUB.COM

16 APRIL
7 a.m.

DENTAL TRIBUNE STUDY CLUB C.E. SYMPOSIA AT IDEM, SINGAPORE
Various Speakers

This C.E. four-day event offers an ambitious schedule of continuing education lectures in various dental disciplines.

6h 12h FREE
Made available by: AMD Lasers

REGISTER ON WWW.DTSTUDYCLUB.COM

26 APRIL
7 a.m.

RUSSIAN DTSC — C.E. FESTIVAL AT DENTAL SALON MOSCOW
Various Speakers

The Russian DTSC will be launched through four days of focused lectures in various areas of dentistry. Each day will feature a variety of presentations led by experts.

6h 12h FREE
Made available by: Sirona, AMD Lasers

REGISTER ON WWW.DTSTUDYCLUB.COM

07 MAY
7 a.m.

DENTAL TRIBUNE STUDY CLUB C.E. SYMPOSIA AT WID, AUSTRIA
Various Speakers

This C.E. four-day event offers an ambitious schedule of continuing education lectures in various dental disciplines.

6h 16h FREE

REGISTER ON WWW.DTSTUDYCLUB.COM

BECOME A FREE MEMBER
WWW.DTSTUDYCLUB.COM

AD

Dental Collab BETA

FINALLY A SOLUTION FOR MENTORING WITH EXPERTS & PEERS.

WWW.DENTALCOLLAB.COM

FIRST MONTH FREE
CODE: DTDC09

IT'S NEW

Cosmetic dentist holds video contest

By Fred Michmershuizen,
Online Editor

A cosmetic dentist in Austin, Texas, has thought of an interesting idea to drum up interest in his practice, Austin Dental Spa.

Dr. Mark Sweeney is conducting a contest inviting participants to describe — on video — why they think they are “the most interesting dental patient in the world.”

The winner will be chosen by an online vote and will be treated to a smile makeover worth up to \$15,000, including a variety of treatments designed to fix dental issues and improve the appearance of his or her teeth.

Contestants are asked to create a video that shows why they are the most interesting dental patient and why they deserve a smile makeover.

Submissions will be judged by staff members of Austin Dental Spa for creativity and entertainment value, and the top three finalists will be uploaded to the practice's Facebook and YouTube pages.

Anyone can view the videos and vote on the contestant he or she believes best represents the most interesting dental patient in the world.



Although only the winning submission will earn the smile makeover prize, Sweeney says everyone who submits a video will receive from the practice a teeth whitening treatment valued up to \$600.

Sweeney is asking contestants to keep video submissions shorter than five minutes — and also G-rated.

Contestants aiming for a smile makeover, which can include teeth whitening, dental crowns, porcelain dental veneers and dental implants in Austin, are encouraged to check out the contest rules and details on Austin Dental Spa's Web site, located at www.austindentalspa.com.

Videos were submitted through Dec. 31. Online voting began Jan. 6 and ends on Jan. 22. The winner will be announced Jan. 27. **DT**

Dentists honor Mingledorff

By Fred Michmershuizen, Online Editor

Fort Washington, Pa., prosthodontist Dr. Tom Balshi and his wife, Joanne, recently gathered dental specialists born of Philadelphia's only graduate program in prosthodontics to honor its renowned former chair, mentor and Bryn Mawr resident Ernest Beckwith Mingledorff.

Beloved by all for his wisdom, genteel southern manner and flowing good humor, “Ernie” drew a crowd of 80 professionals from the greater Philadelphia and New York area.

In a late summer poolside setting with the vibrant music of live steel drums keeping beat, dental collegiality was at its best graced by the presence of Temple University President Ann Weaver Hart and newly appointed Dean Amid Ismail of Temple's Kornberg School of Dentistry.

Both Hart and Ismail spoke of their commit-



Temple University pride was abundant when Dr. Ernest ‘Ernie’ Beckwith Mingledorff, second from right, was recently honored. Also pictured are Amid Ismail, left, Ann Weaver Hart and Dr. Tom Balshi.

ment to reinvigorate prosthodontic education in the Philadelphia area.

Balshi was the first graduate of the Temple Dental School program in prosthodontics to become certified as a Diplomat of the American Board of Prosthodontists. His Fort Washington, Pa., practice boasts a 100 percent success rate in prosthodontic restorations on dental implants. **DT**

← continued

coccus mutans UA159. When tested on a model tooth surface, the micelles were able to swiftly bind and gradually release the encapsulated farnesol.

Additionally, biofilm inhibition studies of the farnesol-containing tooth-binding micelles demonstrated that they were able to inhibit *S. mutans* UA159 at much higher levels than untreated blank control micelles.

“A tooth-binding micelle delivery platform for the prevention and treatment of dental caries has been designed and prepared in this study,” the researchers said.

“It is anticipated that the tooth-binding micelles have the potential to be formulated into mouth rinses that may have the merits of simple application, cultural acceptance and improved patient compliance.”

If you would like to download a copy of the journal article, please visit www.asm.org. **DT**

(F. Chen, X.M. Liu, K.C. Rice, X. Li, F. Yu, R.A. Reinhardt, K.W. Bayles, D. Wang. 2009. Tooth-binding micelles for dental caries prevention. *Antimicrobial Agents and Chemotherapy*, 53; 11: 4898–4902.)

(Source: American Society for Microbiology)

“Changing the Payments Industry”



One Flat Rate.

It's that simple.

- ONE Flat Rate
- Eliminates ALL other Rates and Fees
- Reconcile Your Statement in Minutes
- QuickBooks Integrated Solution
- Save Time and Money
- PCI Compliant Solutions

Contact us today and find out what your Flat Rate would be.

Singular Payments is “Changing the Payments Industry”.

Call 877-829-5705 and choose option 3 or visit us at www.SingularPayments.com/dentaltribune



www.SingularPayments.com
Sales_Info@SingularPayments.com

Singular Payments, LLC is a registered ISO/MSP of Wells Fargo Bank, N.A., Walnut Creek, CA. American Express requires separate approval.

Weak economy increases employee theft

By Sally McKenzie, CMC

The stories read like popular fiction. Unfortunately, they are true. The outwardly stable, unquestionably loyal employee commits a crime that no one would have expected, least of all her/his employer. More puzzling is the fact that often this member of the staff doesn't have a criminal record.

In fact, according to the 2008 report of the Association of Certified Fraud Examiners (ACFE), only 7 percent of those committing fraud have prior convictions and a mere 12 percent have been fired by a former employer as a result of fraud related conduct.

However, what is perhaps most disconcerting is that many of the characteristics that make up this person's profile would also be the sketch for your "ideal" team member. "Dedicated, takes very little time off, first in the office and last to leave, will even take work home, is very particular about how things get done."

Some may say she/he is controlling while others contend it's a commitment to doing a job well. Working her/his fingers to the bone, this devoted employee is quietly slipping thousands of dollars under the table and into her/his pocket.

According to the ACFE's most recent report, U.S. businesses lose an estimated \$994 billion in annual revenues to fraud despite increased emphasis on anti-fraud controls and recent legislation to combat it.

If that weren't troubling enough, the U.S. Chamber of Commerce estimates that 75 percent of all employees steal at least once, and that half of these steal repeatedly.

Who are the thieves?

Fraudsters are represented by all occupations — CEOs, bank tellers, firefighters, payroll clerks, senators, even Catholic priests. And, in some cases, they are shamelessly brazen.

One reported case involved an employee who routinely crossed out the employer's name on checks written from customers and inserted his own. No Wite-Out®, no fancy chemical concoction to erase the ink, he just struck through the name on the check and made it payable to himself.



And you probably thought the bank would catch something so blatant, right? However, banks process literally tens of thousands of checks per minute so they cannot catch every suspicious-looking one.

In the case of a parish priest, he embezzled more than \$1 million from two churches. The crime wasn't exposed until a donor requested a receipt for tax purposes from the church dioceses, which had no record of the donation. However, the contributor had his canceled check. This led to the arrest and conviction of the priest.

No organization or business is immune to employee theft, and health care businesses, such as dental offices, are among the top three businesses to be victimized by dishonest employees.

With the average loss per fraud case among small businesses at \$200,000, that kind of financial hit can be huge for small dental practices, many of which operate very close to the margin.

In this economy, any increase in expenses or reduction in revenue could be catastrophic. Even more problematic is the fact that lenders

are less likely to extend additional credit these days to cover such a shortfall.

How do they steal?

Dishonest employees are fraudulently writing company checks, skimming revenue and engaging in fraudulent billing. In small operations such as dental practices, internal controls tend to be lax and accountability slim, thus providing the ideal environment for employee theft.

Checks, in particular, present a veritable smorgasbord of opportunities for the small business embezzler. As another thief discovered, it was a relatively simple exercise to write company checks to herself and then destroy the canceled checks.

Countless fraudsters have discovered the ease of ordering new checks in the business' name and making them out to themselves. They can steal insurance checks or sign checks using a signature stamp.

In a multitude of other cases, the trusted employee accepts payment from the patient or customer, deletes the transaction on the computer and keeps the payment. Many patients no longer get their canceled checks, let alone actually look at them.

Then there are the fraudulent billing schemes. These take a bit more effort than your typical check fraud.

One small employer was building a new office only to discover by accident that a trusted employee, who just happens to be in charge of paying the bills, had set up a fictitious painting business and was billing the employer for work never done.

Motivation to steal

What is it that makes the other-

wise stellar employee turn to crime? Research indicates that there are several inducements that can influence someone's decision to embezzle, but three factors must be present. It's known as the "fraud triangle." The employee must have the incentive, the opportunity and the rationalization.

Incentive may be a gambling problem, alcohol or drug addiction, or a shopping addiction. It can also be motivated by financial struggles through an economic downturn such as we are experiencing now.

The person may be disgruntled or is stretched beyond his or her financial means. The employee may be experiencing a personal crisis such as a divorce, serious illness or a death in the family. The employee becomes desperate, angry and disillusioned, all of which provide incentive to commit the crime.

The opportunity typically comes in the form of lax internal controls. One person has total control of practice revenues. There are few, if any, checks and balances and an almost total lack of supervision over that highly trusted employee who seemingly can do no wrong.

Then there's rationalization. The employee tells herself/himself that she or he will just take a little loan and will pay it back. Then the employee takes a little more the next time. Or the employee hasn't received a raise and contends she/he works harder than anyone, so she/he deserves the money.

Alternatively, perhaps an addiction is taking over his/her life; medical bills have skyrocketed; the spouse lost his/her job. "The dentist makes so much money, she/he will never notice." Whatever form the rationalization takes, often, in the employee's mind, she/he is simply correcting a perceived wrong.

Who's most likely to be pilfering from your practice? Fraud experts refer to it as the 10-10-80 rule: 10 percent of people will never steal, another 10 percent will steal at any opportunity, and the other 80 percent will go either way depending on how they rationalize a particular opportunity.

The good news is that for those in the 80 percent category, if they believe they will be caught, they won't take the chance.

Don't be an easy target

Small businesses such as dental practices are prime targets for fraud and embezzlement. Why? Practice owners can be very naïve and far too trusting, giving almost total financial control to an employee. In some cases, dentists don't even know how or where to access their financial reports.

In addition, there is often a close relationship between clinicians/owners and employees. They

AD

"I finally found a practical and convenient way to learn from the best dentists from around the world" - *Dr. Ty Vardanian, CA*

"The most advanced, up-to-date and digitally incorporated higher learning program that I have experienced." - *Raj Kumar, DDS from London, UK*

www.gIDEdental.com



Clinical Video Downloads

Lecture-on-Demand

DVD and iPOD Education

Video Interviews

1-Year Master Program

Hands-on-Training

Get CE Credits Online

World Renowned Experts! Unparalleled Academic Quality!

Dr. Pascal Magne, Dr. Ed McLaren, Dr. Brian LeSage, Dr. Sascha Jovanovic, Dr. Massimo Simion, Dr. Frank Celenza, Dr. Bernard Touati, Dr. Joseph Kan, Dr. Todd Scheyer, Dr. Sam Strong, Dr. Galip Gurel, Dr. Ron Jackson, Dr. John McSpadden, Dr. Peter Wöhrle, Dr. Ken Malament and many more

esthetic dentistry | implant dentistry | periodontics | endodontics | prosthodontics and more...

← DT page 6A

become trusted friends, and this, sadly, encourages dishonest employees to take advantage of their "dentist friends."

As the ACFE reports, the most common small business scheme is check tampering. It frequently occurs when one individual has access to the company's checkbook and also has responsibility for recording payments and/or reconciling the company bank statement.

Therefore, the first order of business in protecting practice finances is to divvy up the financial duties.

The practitioner may only want to do the dentistry, but this attitude is inviting disaster.

As one Wisconsin dentist discovered not long ago, his trusted employee of 28 years who had "total run of the practice's financial operations" was accused of stealing at least \$41,000, and that was believed to be just the tip of the iceberg.

Separating billing, collections and delinquent account responsibilities is critical. The employee making the bank deposit should not be the same employee responsible for checking the deposit slip that is returned from the bank.

Consider rotating the responsibility for making bank deposits among employees, and monitor deposits for

unexplained increases or decreases.

Look at the reports daily. In particular, examine the day sheet and the deposit. Investigate any adjustments made on the day sheet.

Pay close attention to increases in refunds or write-offs, large adjustments or missing documents.

Print and review daily an audit trail report. It reflects every transaction that has transpired in the office since the last printed audit trail.

In addition, generate a monthly report listing all patients that have had changes made to their accounts. This helps to identify a recurring problem or detect a discrepancy. Routinely conduct random checks of different accounts.

In practices with small staffs, the dentist must take a much more active role in monitoring the financials. Ideally, the clinician should write all the checks and do her/his own payables.

She or he should reconcile the bank statement monthly, and canceled checks should be sent, along with the bank statement, to the clinician's home.

In addition, monthly credit card statements should be received unopened and compared with original receipts of purchases. These steps enable the practitioner to know exactly where the money is going.

Checks received should be immediately stamped on the back with the practice's bank deposit endorsement stamp. Periodically check the account number to ensure it is the practice account. Do not use signature stamps.

All employees should be required to take at least one week's vacation every year, particularly those in charge of practice finances.

And, most importantly, don't let the work pile up. During that time, someone else should carry out the vacationing employee's duties.

Pay attention to key red flags. According to the ACFE report,

"Fraud perpetrators often display behavioral traits that serve as indicators of possible illegal behavior. The most commonly cited behavioral red flags were perpetrators living beyond their apparent means (39 percent of cases) or experiencing financial difficulties at the time of the frauds (34 percent)."

Finally, take complaints seriously. If patients claim that they've paid but didn't receive credit, investigate it. If an employee tips you off that something isn't right, check it out.

If you sense that things just aren't adding up, don't dismiss it. Ignorance could cost you thousands, if not millions, of dollars. DT

About the author



Sally McKenzie is CEO of McKenzie Management, which provides success-proven management solutions to dental practitioners nationwide. She is also editor of The Dentist's Network Newsletter at www.thedentistsnetwork.net; the e-Management Newsletter from www.mckenziegmt.com; and The New Dentist™ magazine, www.thenewdentist.net. She can be reached at (877) 777-6151 or sallymck@mckenziegmt.com.

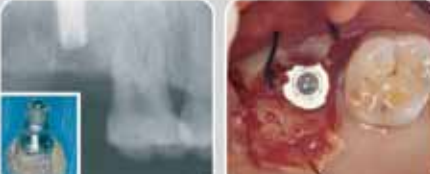
AD

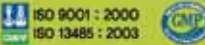


Dental Implant Special Company | www.megagenus.us

Easy way to place Rescue® implant in molar sites

4 major indications of the 'Rescue® implant system'

 Less available bone due to pneumatization of the maxillary sinus. [2 yrs after loading] [7.0(W)X6.0(L)mm]	 Rapless immediate placement of Rescue Internal fixtures for the mandibular first and second molars. [5mns after loading] [6.0(W)X8.5(L)mm / 6.0(W)X10.0(L)mm]
 Safe implant placement with new trephine system for a patient who has deficient ridge height. [1.5 yrs after loading] [6.0(W)X6.0(L)mm / 6.0(W)X5.0(L)mm]	 Replacement of a failed implant [3.7 yrs after loading] [6.5(W)X10.0(L)mm]



[Megagen Implant USA Inc. (NJ)]
120 Sylvan Ave Suite 301 Englewood Cliffs NJ 07632 / Tel: 866-277-5662 / Fax: 201-585-0399 / Email: info@megagenus.com
[Head Office - Megagen Implant Co., Ltd.]
377-2, Kyochon-Ri, Jain-Myun, Gyeongsan, Gyeongbuk, Korea, 712-852 / Tel: 82-53-857-5770 / Fax: 82-53-857-5432 / E-mail: sales@megagen.co.kr



www.megagenus.us

HENRY SCHEIN®

PROFESSIONAL PRACTICE TRANSITIONS

When It's Time to Buy, Sell, or Merge Your Practice You Need A Partner On Your Side

ALABAMA

Birmingham—4 Ops, 2 Hygiene Rooms, GR \$675K #10108
Birmingham Suburb—3 Ops, 3 Hygiene Rooms #10106
CONTACT: Dr. Jim Cole @ 404-513-1573

ARIZONA

Arizona—Doctor seeking to purchase general dental practice. #12110
Shaw Low—2 Ops, 2 Hygiene Rooms, GR in 2007 \$645,995
Phoenix—General Dentist seeking Practice Purchase Opportunity #12108
Phoenix—4 Ops - 3 Equipped, GR \$515K+, 3 Working Days #12113
North Scottsdale—General Dentist Seeking Practice Purchase Opportunity #12109
Urban Tucson—6 Ops - 4 Equipped, 1 Hygiene, GR \$900K #12112
Tucson—1,800 active patients, GR \$850K, Asking \$650K #12116
CONTACT: Tim Kimbel @ 602-516-3219

CALIFORNIA

Alturas—3 Ops, GR \$611K, 3 1/2 day work week #14279
Arcwater—2 Ops, 1,080 sq. ft., GR #177K #14307
Bakersfield—7 Ops, 2,200 sq. ft., GR \$1,916,000 #14290
El Sorbrante—5 Ops - 3 Equipped, 1,300 sq. ft., GR \$350K #14302
Fresno—5 Ops, 1,500 sq. ft., GR \$1,064,500 #14250
Fresno—3 Ops, 1,000 sq. ft., GR \$86K. Same loc 24 yrs #14298
Greater Auburn Area—4 Ops, 1,800 sq. ft., GR \$763K #14304
Madera—7 Ops, GR \$1,921,467 #14283
Modesto—12 Ops, GR \$1,097,000, Same location for 10 years #14289
North California Wine Country—4 Ops, 1,500 sq. ft., GR \$958K. #14296
Porterville—6 Ops, 2,000 sq. ft., GR \$2,289,000 #14291
Red Bluff—8 Ops, 2008 GR \$1,006,096, 10 Days Hygiene #14252
San Francisco—4 Ops, GR 875K, 1500 sq. ft. #14288
San Jose—4 Ops. #14295
South Lake Tahoe—3 Ops, 647 sq. ft., 2007 GR \$534K #14277
Los Gatos & Sunnyvale—4 Ops, 1,150 sq. ft. GR \$1 Mill+ #14285
CONTACT: Dr. Dennis Hoover @ 800-519-3458
Dixon—4 Ops, 1,100 sq. ft., GR \$122K. #14265
Grass Valley—3 Ops, 1,500 sq. ft., GR \$714K #14272
Redding—5 Ops, 2,200 sq. ft., GR \$1 Million #14293
Yuba City—5 Ops, 4 days hyg, 1,800 sq. ft. #14273
CONTACT: Dr. Thomas Wagner @ 916-812-3255
Rancho Margarita—4 Ops, 1,200 sq. ft., Take over lease #14301
CONTACT: Thinh Tran @ 949-533-8308

CONNECTICUT

Fairfield Area—General practice doing \$800K #16106
Southburg—2 Ops, GR \$254K #16111
Wallingford—2 Ops, GR \$600K. #16113
CONTACT: Dr. Peter Goldberg @ 617-680-2930

FLORIDA

Miami—5 Ops, Full Lab, GR \$835K #18117
CONTACT: Jim Puckett @ 863-287-8300
Jacksonville—GR \$1.3 Million, 3000 sq. ft., 7 Ops, 8 days hygiene #18118
CONTACT: Deanna Wright @ 800-730-8883

GEORGIA

Atlanta Suburb—3 Ops, 2 Hygiene Rooms, GR \$863K #19125
Atlanta Suburb—2 Ops, 2 Hygiene Rooms, GR \$633K #19128
Atlanta Suburb—3 Ops, 1,270 sq. ft., GR \$438,563 #19131
Atlanta Suburb—Pediatric Office, 1 Op, GR \$426K #19134
Dublin—GR \$1 Mill+, Asking \$825K #19107
Macon—3 Ops, 1,625K sq. ft., State-of-the-art equipment #19103
North Atlanta—5 Ops, 3 Hygiene, GR \$678K+ #19152
Northeast Atlanta—4 Ops, GR \$607K #19129
Northern Georgia—4 Ops, 1 Hygiene, Est. for 43 years #19110
South Georgia—2 Ops, 3 Hygiene Rooms, GR \$722K+ #19133
CONTACT: Dr. Jim Cole @ 404-513-1573

ILLINOIS

Chicago—4 Ops, GR \$709K, Sale Price \$461K #22126
1 Hr SW of Chicago—5 Ops, 2007 GR \$440K, 28 years old #22125
Chicago—3 Ops, GR \$600K, 3-day work week #22119
Western Suburbs—5 Ops, 2-2,000 sq. ft., GR Approx. \$1.5MM #22120
CONTACT: Al Brown @ 630-781-2176

MARYLAND

Southern—11 Ops, 3,500 sq. ft., GR \$1,840,628 #29101
CONTACT: Sharon Mascetti @ 484-788-4071

MASSACHUSETTS

Boston—2 Ops, GR \$252K, Sale \$197K #30122
Boston Southshore—3 Ops, GR \$300K. #30123
North Shore Area (Essex County)—3 Ops, GR \$500K+ #30126
Western Massachusetts—5 Ops, GR \$1 Million, Sale \$514K #30116
CONTACT: Dr. Peter Goldberg @ 617-680-2930
Middle Cape Cod—6 Ops, GR \$900K, Sale price \$677K #30124
Boston—2 Ops, 1 Hygiene, GR \$302K #30125
Middlesex County—7 Ops, GR Mid \$500K #30120
New Bedford Area—8 Ops, \$628K #30119
CONTACT: Alex Litvak @ 617-240-2582

MICHIGAN

Suburban Detroit—2 Ops, 1 Hygiene, GR \$213K #31105
CONTACT: Dr. Jim David @ 586-530-0800

MINNESOTA

Crow Wing County—4 Ops #32104
Fargo/Moorhead Area—1 Op, GR \$185K. #32107
Central Minnesota—Mobile Practice, GR \$730K+, #32108
CONTACT: Mike Minor @ 612-961-2132

MISSISSIPPI

Eastern Central Mississippi—10 Ops, 4,685 sq. ft., GR \$1.9 Million #33101
CONTACT: Deanna Wright @ 800-730-8883

NEVADA

Reno—Free Standing Bldg., 1500 sq. ft., 4 Ops, GR 763K #37106
CONTACT: Dr. Dennis Hoover @ 800-519-3458

NEW JERSEY

Marlboro—Associate positions available #39102
CONTACT: Sharon Mascetti @ 484-788-4071

NEW YORK

Brooklyn—3 Ops (1 Fully equipped), GR \$175K #41113
Woodstock—2 Ops, Building also available for sale, GR \$600K #41112
CONTACT: Dr. Don Cohen @ 845-460-3034

Syracuse—4 Ops, 1,800 sq. ft., GR over \$700K #41107
CONTACT: Marty Hare @ 315-263-1313

New York City—Specialty Practice, 3 Ops, GR \$502K #41109
CONTACT: Richard Zalkin @ 631-831-6924

NORTH CAROLINA

Charlotte—7 Ops - 5 Equipped #42142
Foothills—5 Ops #42122
Near Pinehurst—Dental emerg clinic, 3 Ops, GR in 2007 \$373K #42134
New Hanover Cty—A practice on the coast, Growing Area #42145
Raleigh, Cary, Durham—Doctor looking to purchase #42127
CONTACT: Barbara Hardee Parker @ 919-848-1555

OHIO

Medina—Associate to buy 1/3, rest of practice in future, #44150
CONTACT: Dr. Don Moorhead @ 440-823-8037

PENNSYLVANIA

Northeast of Pittsburgh—3 Ops, Victorian Mansion GR \$1.2+ Million #47140
CONTACT: Dan Slain @ 412-855-0337
Lackawanna County—4 Ops, 1 Hygiene, GR \$515K #47138
Chester County—High End Office, 4 Ops, Digital, FFS + a few PPO's #47141
Philadelphia County (NE)—4 Ops, GR \$500K+, Est 25 years #47142
CONTACT: Sharon Mascetti @ 484-788-4071

RHODE ISLAND

Southern Rhode Island—4 Ops, GR \$750K, Sale \$486K #48102
CONTACT: Dr. Peter Goldberg @ 617-680-2930

SOUTH CAROLINA

HHI—Dentist seeking to purchase a practice producing \$500K a year #49103
CONTACT: Scott Carringer @ 704-814-4796

Columbia—7 Ops, 2200 sq. ft., GR \$678K #49102
CONTACT: Jim Cole @ 404-513-1573

TENNESSEE

Elizabethon—GR \$333K #51107
CONTACT: George Lane @ 865-414-1527

TEXAS

Houston Area—GR \$1.1 Million w/adj. net income over \$500K #52103
CONTACT: Deanna Wright @ 800-730-8883

For a complete listing, visit www.henryschein.com/ppt or call 1-800-730-8883