# Meeting the Challenge of the Next Century



American Association of Endodontists 56th Annual Session



#### **Table of Contents**

AAE Board of Directors 2
Annual Session Committee 2
General Information3-4
Continuing Education Course 5
Program
Wednesday 6
Thursday6-11
Friday11-19
Saturday19
Board and Committee Meetings 23
AAE Foundation24
American Board of Endodontics 24
AAE Alliance24
Alumni, Affiliates, Other Groups 25
Exhibitors26-27
Award Recipients28
Participants29
Topical Index30-31
Floor Map 32

The statements and opinions expressed at the AAE Annual Session are solely those of the individual speakers. Their statements and opinions do not reflect any endorsement by the American Association of Endodontists.



#### President's Welcome

Welcome to Atlanta as we "Meet the Challenge of the Next Century" together!

This year's power-packed program covers the widest variety of endodontic topics available anywhere under one roof. Whether you're new to endodontics or long experienced, you'll find a plethora of sessions to challenge you.

Ken Spolnik, General Chair, and the Annual Session Committee of Fred Goodman, Terryl Propper, Shep Goldstein, Kirk Coury, Gary Backlund, Van Himel, Hal Goodis and Glenn Paulk developed an enticing educational program for endodontists, staff members and students.

Southern hospitality awaits you in the sprawling metropolis fondly known as "The Big Peach." The Local Arrangements Committee with Tim Grubb as Chair assembled historical, cultural and other tours for those who want to see Atlanta from various vantage points. They created restaurant and sports activity guides for those with varied tastes. Denise Grubb coordinated the AAE Alliance functions. Rikki Bell, Alliance President, Rebecca Funderburk and Carol Cooke will present the Second Annual Silent Auction at the Welcome Reception.

Our wonderful AAE staff deserves our heartfelt thanks. Under the direction of Irma Kudo, they continue to enthusiastically provide coordination and organization to the myriad of events, sessions, exhibits, meals and countless other details that compose our annual session. Bill Masheter always gives us the best in audio and visual effects for our speakers and events.

Enjoy the camaraderie, the education, and the sights and sounds of Atlanta. The greatest endodontic meeting in the world is now underway!

Carl M. Newton, DDS, MSD

President

## AAE Board of Directors



Carl W. Newton President



Harmon R. Katz President-elect



James L. Gutmann Vice President



Samuel O. Dorn Treasurer



Denis E. Simon, III Immed. Past President



Jeffrey W. Hutter Secretary



Henry J. Van Hassel Editor



Irma S. Kudo Executive Director





Roger R. Lacoste 1999



James O. Roahen 2000





Stanley J. Einbender



Marc Balson 2001

District III Directors



John S. Olmsted 2000



Lesley A. West 2001

District IV Directors



A. Eddy Skidmore



Michael B. Lindemann 2001

District V Directors



Jeffrey Hoover



Keith V. Krell 2001

District VI Directors



Mahmoud Torabinejad 1999



Gary S. Yonemoto 2000

#### **Annual Session Committee**



Kenneth J. Spolnik General Chair



Timothy A. Grubb Local Committee Chair



Fredric Goodman Program Chair

#### Program

#### **General Arrangements**

Hospitality. Christopher Glass
Hosts. Alan T, Goodman
Monitors. Les H. Kravitz & Robert J. Michelich
Signs. Richardson M. Odum
Sports. W. Joel Newsom, III
AAE Alliance. Denise M. Grubb



#### General Information

The Atlanta Marriott Marquis Hotel is the Headquarters Hotel for the 56th Annual Session.

#### **AAE Headquarters Office**

#### Consulate Room

AAE Staff manage the office from 7 am - 6 pm, Tuesday through Saturday.

#### Attire

Atlanta offers a mild climate with temperatures ranging from the high to mid-70s and a low of mid-40s. Business attire is recommended for Atlanta. Some restaurants require jackets and ties. The President's Dinner Dance is black tie optional.

#### Badges

Badges must be worn at all official AAE functions.

#### **CE Certificates**

A CE Certificate of Completion and instructions are included in your registration packet. Keep the original AAE CE Certificate of Completion in your file in case of audit or send to your state board if required. The AAE is an ADA CERP recognized provider.



CONTINUING EDUCATION RECOGNITION PROGRAM

#### President's Dinner Dance

Purchase of a voucher does not guarantee seating. To reserve seats for the President's Dinner Dance, exchange your voucher for a banquet ticket at the AAE Dinner Dance Registration Desk before 5 pm, Thursday, April 22. If you wish to have group seating, you must present a voucher for each person in your group; all vouchers must be presented at the same time. Each table seats 10 people, and seats are reserved on a first come, first served basis. No exceptions will be made. There will be tables reserved for singles (without significant others).

#### Registration

#### Imperial Ballroom Foyer

Registration hours:

Tuesday, April 20 Wednesday, April 21 7 am-8 pm Thursday, April 22 7 am-5 pm Friday, April 23 8 am-5 pm

#### **Registration Fees**

Registration fees and categories include the following:

[Note that the AAE Auxiliary has changed its name to the AAE Alliance. The AAE's new membership category for dental staff is Auxiliary.\*]

#### AAE member (excluding Student and

\*Auxiliary members)

Wednesday ....... Welcome Reception Thursday ...... Opening Session Breakfast, all sessions and exhibits Friday ...... Continental Breakfast, Coolidge Luncheon, all sessions and exhibits Saturday ...... Continental Breakfast, Award Luncheon, one voucher to the President's Dinner Dance, all sessions and exhibits

#### AAE Student member

Welcome Reception, all sessions, exhibits and Award Luncheon on Saturday.

Sunday ..... Farewell Breakfast

#### Nonmember professional and nonmember student

Welcome Reception, all sessions and exhibits.

#### Auxiliary member, nonmember dental assistant or nonmember office administrator

All sessions, exhibits and Friday and Saturday breakfasts and luncheons.

#### Spouse/companion

Welcome Reception, all sessions and exhibits. Includes \$35 for AAE Alliance membership dues.

Children (six and up) Welcome Reception

#### Support the Exhibitors

#### International Hall

Please stop by, see the latest in products and services, and say thanks to the exhibitors who help defray part of your annual session costs. The number of presentations has been reduced on Saturday to allow more time for attendees to visit the exhibits. Badges must be worn in the exhibit hall. Complimentary coffee service will be provided on Thursday, Friday and Saturday in the exhibit hall. Exhibit hours:

Thursday, April 22 10 am-6 pm Friday, April 23 8 am-6 pm Saturday, April 24 8 am-1 pm

#### **Atlanta Restaurant and Sports Activity Guide**

A detailed guide to Atlanta including restaurants, nightlife and local sporting events has been prepared by the Local Committee. (Reservations for restaurants are recommended.)

#### **Web Site Demonstration**

AAE Online will be demonstrated in the AAE Information Center in the Exhibit Hall. Stop by to see the new features added since last year or for a full demonstration. General information about going online and using the Internet will also be available.

#### Assistance for the Disabled

If special assistance, dietary requirements or other arrangements are required, please see Patt Moskal at the AAE Headquarters Office in the Consulate Room in the Atlanta Marriott Marquis Hotel.

#### **Smoking Policy**

For the comfort and health of all attendees, smoking is not permitted at AAE functions or exhibits. This includes all scientific, clinical, general interest, staff and LAS sessions, breakfasts, luncheons, Welcome Reception and the President's Dinner Dance.

## General Information

#### **Special Events**

Welcome Reception

Wednesday, April 21, 6:30-8:30 pm

#### Marquis Ballroom

Meet and greet friends, old and new. The reception will be earlier and the fare lighter to give you the opportunity to enjoy an evening out on the town. Refer to the enclosed restaurant guide for excellent dining suggestions. The Alliance will host the Second Annual Silent Auction.

#### Opening Session Breakfast Thursday, April 22, 8-10 am

Marquis Ballroom

AAE President Dr. Carl W. Newton will present the keynote address.

#### Louis I. Grossman Memorial Luncheon Sponsored by the College of Diplomates Thursday, April 22, 12:30-1:45 pm

Imperial Ballroom A

Endodontists that were Board-certified during 1998 will be recognized and awarded a Diplomate pin by the American Board of Endodontics at this luncheon sponsored by the College of Diplomates. Donald A.B. Lindberg, MD, Director of the National Library of Medicine, will give the keynote address on healthcare informatics in the millennium.

#### Edgar D. Coolidge Luncheon Friday, April 23, 12 noon-1:45 pm Imperial Ballroom

The program features the presentation of the Edgar D. Coolidge Award.

## Award Luncheon Saturday, April 24, 12 noon-2 pm Imperial Ballroom

The Edward M. Osetek Educator Award and Honorary Membership will be presented as well as graduate student awards for oral and poster research presentations and table clinics.

#### President's Dinner Dance Saturday, April 24, 7:30 pm-Midnight

Marquis Ballroom

Join friends and colleagues for an elegant evening of fine dining and dancing (black tie optional).

#### Speaker AV Ready Room

Calgary Room

Program presenters are encouraged to review their audiovisual materials in the speaker ready room prior to their presentations to avoid possible equipment problems.

## Teach'em, Inc. Tape Recording Marquis Ballroom Foyer

Teach'em, Inc. will record many of the sessions presented. The audio tapes are available for purchase in the registration area of the Atlanta Marriott Marquis Hotel. Other audio taping is allowed only with the permission of the speaker.

#### Treloar & Heisel, Inc. Insurance Questions Imperial Ballroom Foyer

Treloar & Heisel has been the endorsed administrator of insurance programs for the AAE for more than 20 years. Stop by their booth in the registration area for answers to your insurance questions.

Future Meeting Dates 57th Annual Session Honolulu, Hawaii March 29-April 2, 2000

**58th Annual Session New Orleans, Louisiana**March 28-April 1, 2001

**59th Annual Session Chicago, Illinois** April 10-14, 2002

AAE Career Opportunities Exchange

(Registration Area)

#### **Silent Auction**

The AAE Alliance will be sponsoring a silent auction to benefit the AAE Foundation at the Welcome Reception Wednesday night.

#### **Commemorative Tote Bags**

You may be one of five lucky winners of free registration for the 2000 Annual Session in Hawaii! You will receive a voucher for a free tote bag commemorating the AAE's 56th Annual Session with your registration packet. Bring your voucher to the AAE Information Center in International Hall (Exhibit Hall) to receive your complimentary tote bag and see if you're a winner.



The American Association of Endodontists does not endorse any product or service exhibited at the Annual Session except MBNA America, issuer of the AAE affinity credit card; Lippincott Williams & Wilkins, publisher of the *Journal of Endodontics*; Treloar & Heisel, Inc. for AAE-sponsored insurance programs; and Direct Vision Software, Inc. for  $Endo-Vision^{TM}$  practice management software.

### Continuing Education Course

Marquis Ballroom II, III and IV

#### Differential diagnosis of nonodontogenic toothache









Charles R. Carlson, PhD, Lexington, KY Henry A. Gremillion, DDS, Gainesville, FL Kenneth M. Hargreaves, DDS, PhD San Antonio, TX Jeffrey P. Okeson, DMD, Lexington, KY

Moderator: Shepard S. Goldstein, DMD Framingham, MA

Differential diagnosis of orofacial pain is an extremely challenging aspect of the dental practice. The complexity of the neural network involving the cranio cervical region establishes an environment for much diagnostic confusion. Many conditions exist that may mimic odontogenic or masticatory pain. Appropriate treatment and/or referral is predicated upon accurate identification of these diseases, syndromes and clinical conditions. This presentation will provide a review of current basic concepts of pain mechanisms, pathways and referral patterns in the head and neck. Clinical presentations of conditions that commonly create diagnostic confusion will be discussed. A protocol for systematic evaluation, diagnostic testing, including diagnostic anesthesia, will be suggested.

At conclusion, each participant should be able to:

- · Understand common neuropathways and neurotransmitters that are responsible for orofacial pain.
- · Recognize and differentiate common orofacial pain disorders that may clinically present as a toothache.
- · Understand the mechanisms responsible for pain referral in the orofacial structures.
- · Be able to differentiate pain of nonodontogenic origin from true odontogenic origin.
- · Understand the clinical and psychological considerations of orofacial pain associated with the experience of a chronic toothache.

Program Schedule 7:30 am-Breakfast Imperial Ballroom

8:15 am-Welcome & Introduction. (Goldstein and Okeson)

8:30 am-Neurophysiological considerations of orofacial pain. (Hargreaves)

- · Describe the neurobiology of odontogenic pain.
- · Describe the neuromechanisms responsible for odontogenic pain.
- · Gain a greater understanding of recent research findings related to neurochemistry of pain.

9:50 am-Break

10:20 am-Mechanisms of referred pain and clinical considerations of differential diagnosis. (Okeson)

- · Describe the neuromechanisms responsible for referred pain in the orofacial structures.
- · Understand the importance of differentiating the site of pain from the source of pain.
- · Describe a clinical protocol that will identify the true source of pain.

11:40 am-Lunch Imperial Ballroom

12:45 pm—Orofacial pain disorders that may mimic toothache. (Gremillion)

- · Recognize cervical and masticatory conditions that may mimic toothache.
- · Recognize vascular, neurologic and psychologic factors involved in orofacial pain.
- · Gain greater understanding of dentistry's role in the diagnosis and management of orofacial pain.

2:00 pm-Break

2:30 pm-Psychological considerations for the management of chronic orofacial pain. (Carlson)

- · Briefly discuss the essential foundations for psychological management of chronic facial pain.
- Describe the unique features of chronic facial pain that may influence treatment outcomes.
- Identify the psychological management strategies available to assist in the treatment of chronic facial pain and discuss effective application or referral procedures.

3:45 pm—Panel discussion and case reports. (All)

4:30 pm—Adjournment.

#### Preregistration only

Limited space—No on-site registration.

#### Wednesday, April 21 Schedule

7:30 am	*Breakfast
8:15am	. Introduction
8:30 am	Program
9:50 am	*Break
10:20 am	Program
11:40 am	*Lunch
12:45 pm	Program
2:00 pm	*Break
3:45 pm	Discussion
*Imperial Ballroom	





#### Wednesday, April 21

#### Welcome Reception

6:30-8:30 pm

Marquis Ballroom (by ticket only)

The Welcome Reception will feature a lighter fare at an earlier time to give you the opportunity to enjoy a night on the town. Business casual attire is appropriate. Refer to the enclosed Restaurant and Sports Activity Guide for restaurant and night club suggestions. The Alliance will host the Second Annual Silent Auction, benefitting the AAE Foundation.

#### Thursday, April 22

#### **Opening Session Breakfast**

Marquis Ballroom (by ticket only)



8-10 am
Keynote: Carl W. Newton,
DDS, MSD
President, American Association
of Endodontists

## Exhibits International Hall 10 am-6 pm

## District Caucuses 10-10:45 am

District I\*\*
CT, DC, ME, MA, PA, PR, RI, VT, VA
Yukon Room

**District II** NJ, NY Danube Room

#### District III\*\*

FL, GA, NC, SC, Public Health, Air Force, Army, Navy, Veterans Administration Rio Grande Room

District IV\*\* IL, IN, KY, MI, OH, TN, WV, WI McKenzie Room

District V AL, AZ, AR, CO, IA, KS, LA, MN, MO, MT, NE, NM, OK, TX, UT Thames Room

District VI\*\* AK, CA, HI, OR, WA Cabinet Room

"These districts will nominate their candidates to the Board of Directors for a three-year term beginning April 2000.

#### Affiliate Leadership Conference

Amsterdam Room

10:45 am-12 noon

AAE Affiliate officers and AAE committee chairs are invited to attend this briefing on current AAE issues and activities.

#### Clinical Session 1

Marquis Ballroom IV

Moderator: Kevin T. King, DDS

Chicago

Changing the practice of endodontics crown-down and nickel-titanium



11 am-12:30 pm \*James B. Roane, DDS, MS Oklahoma City

Each participant should be able to describe the advantages of a crown-down cleaning and shaping technique and understand that nickel-titanium affords a more biological approach during routine endodontic care. At conclusion, each participant should be able to:

- Describe the procedure for shaping a canal system from the access to the apex.
- Describe the advantages of shaping before progressing to the apex.
- Describe how crown-down may be used with nickel-titanium instruments to reduce the risk and consequences of separated instruments.
- Describe how incremental shaping can efficiently produce a tapering conical canal shape and facilitate fitting of the gutta-percha obturation points.

\*Speaker serves as a consultant and/or has a commercial interest in subject matter.

#### Wednesday/Thursday

#### Clinical Session 2

Imperial Ballroom, Salon B Moderator: H. Robert Steiman, DDS

Detroit, MI

The nuts and bolts of the surgical operating microscope

11 am-12:30 pm





Kim

Rubinstei

Syngcuk Kim, DDS, PhD, Philadelphia Richard A. Rubinstein, DDS, MS Farmington Hills, MI

This program is designed for the endodontist who has yet to enter the world of microscopic endodontics. Course participants should come prepared with candid questions for both panelists. At conclusion, each participant should be able to:

- Understand how the surgical operating microscope works in surgical and nonsurgical endodontics.
- Be familiar with the various figurations, components and accessories provided on the microscopes which are available for the practice of microscopic endodontics.
- Be familiar with the similarities and differences of the various brands of microscopes available to endodontists.
- Understand the importance of and what to look for when considering a microscopic training program.

#### General Interest 1

Copenhagen/Stockholm Room Moderator: Neil W. Bryant, DMD

Seattle, WA

Computer basics: Taking the mystery out of computers



11 am-12:30 pm

Sharon S. Jablon, MS New York

Each participant should gain an understanding of basic computer components and terminology and an awareness of what is presented on the Windows computer screen. At conclusion, each participant should be able to:

- Understand computer buzzwords.
- Describe the function of hardware and software components.



- Understand how to initiate a program.
- Be ready to take the next step—a computer class.
- Be comfortable investigating computer software for the dental office.

#### Limited Attendance Sessions

Limited seating. NO standing permitted.

LAS 1—Trinidad/Madrid Room Endodontics on rare and endangered wild animals

11 am-12:30 pm

James C. McGraw, DDS, Medina, WA William D. Powell, DDS, MS, Knoxville, TN

This presentation will advise and inform endodontists and staff of the role that the specialty of endodontics plays in assisting zoo veterinary medical teams in saving rare and endangered wild animals in the zoo environment. It will also describe the equipment and instruments necessary for exotic animal dentistry and will highlight a variety of interesting cases. Attendees will be encouraged to volunteer their efforts at zoos, wildlife parks and sanctuaries where there is a need. At conclusion, each participant should be able to:

- Understand that zoos play a crucial role in saving wild animals worldwide.
- Demonstrate the spectrum/range of exotic animal dentistry.
- Serve on zoo veterinary medical teams to provide crucial care that helps save endangered species, a significant role in wildlife conservation.
- Realize that dental trauma and pulpal pathology are common problems for captive zoo animals.
- Stimulate interest in conservation of rare and endangered species.

LAS 2—Bonn Room
Endodontic flare-ups
11 am-12:30 pm

David C. Brown, BDS, MDS, MSD San Francisco

This presentation will cover the clinical diagnosis, treatment and prevention of endodontic flare-ups. Current clinical concepts and relevant classical and recent literature will be presented. At conclusion, each participant should be able to:

 List the causes of flare-ups and predict the clinical cases in which a flare-up is a distinct possibility.

- Understand the treatment of flare-ups.
- Evaluate appropriate treatment regimens to reduce the likelihood of flare-ups.

LAS 3—London/Zurich Room Complications in periradicular surgery

11 am-12:30 pm

Lowell R. Graves, DDS, MDS Silverthorne, CO

The objective of this presentation is the comprehension of some complications associated with periradicular surgery and their prevention. At conclusion, each participant should be able to:

- Understand the more common complications found in periradicular surgery.
- Know some uncommon but severe complications and how to prevent them.

LAS 4—Savoy/Rhine Room
Apical control—mastering our
domain

11 am-12:30 pm

David B. Rosenberg, DDS, Vero Beach, FL

The ability to achieve consistent apical control is one characteristic that differentiates endodontics on the specialist level from the general dentist level. This seminar will describe techniques that allow for maximum apical control. At conclusion, each participant should be able to:

- Understand cleaning, shaping and irrigation techniques needed for apical preparation in various anatomical situations.
- Understand techniques used for regaining apical control in previously treated teeth or when procedural errors have occurred.
- Understand custom fitting and placement of "master cones" for mastery in complex cases.

This session will not be taped.

#### Oral Research Presentations I

Graduate Student Section
Tigris Room
Moderator: Timothy A. Svec, DDS
Houston

#### il am

Effect of chlorhexidine on IL-6 induction by LPS Keith M. Aibel, DMD (presenter) R. Stevens, Temple Univ.

#### 11:15 am

Effect of cryogenic treatment on wear resistance of endodontic stainless steel files Dina Anooshiravani, DMD (presenter) K. White, T. Svec & J. Powers Univ. of Texas at Houston

#### 11:30 am

Effectiveness of gutta percha tracing sinus tracts as a diagnostic aid in endodontics Lynne A. Baldassari-Cruz, DDS (presenter) R. E. Walton, Univ. of Iowa

#### 11:45 am

Use of vital stains in evaluation of bacterial viability in infected dentin David C. Beachler, DDS (presenter) W. Cook & K. Safavi, Univ. of Connecticut

#### 12 noon

Evaluation of diamond coated ultrasonic instruments for root-end preparation
Paul D. Brent, DDS (presenter)
L.A. Morgan, J.G. Marshall &
J.C. Baumgartner, Oregon Health
Sciences Univ.

#### 12:15 pm

Porphyromanas endodontalis and symptoms from teeth with endodontic infections Sandra R. Makkar, DDS (presenter) R.Nissan, D. Wilkinson, M.Sela & R. Stevens, Temple Univ.

#### **Dinner Dance Voucher Exchange**

Gather your friends and exchange your seating vouchers for dinner tickets to the President's Dinner Dance no later than 5 pm, Thursday, April 22. This year, each table seats 10 people, so make arrangements early to enjoy this enchanting evening of sumptuous food, dancing and splendor.



#### Louis I. Grossman Memorial Luncheon

Imperial Ballroom, Salon A (by ticket only) Sponsored by the College of Diplomates

Moderator: M. Lamar Hicks, DDS, MS

Jenkintown, PA

#### Healthcare informatics: A millennialist's view



12:30-1:45 pm Keynote: Donald A.B. Lindberg, MD Director, National Library of Medicine

As a pioneer in the field of healthcare informatics, Dr. Lindberg will address information technology, the future of that discipline, and what contribution it will make across the panoply of healthcare in the millennium.

#### Scientific Session 1

Trinidad/Madrid Room

Moderator: Stanley M. Baer, DMD

West Orange, NJ

## Magic shadows—Digital diagnosis for endodontists

2-5 pm



Analoui



Miles

\*Mostafa Analoui, PhD, Indianapolis Dale A. Miles, DDS, MS, Indianapolis

This presentation will cover the fundamentals of digital radiography including recent developments and their applications in endodontics. Learn the principles of digital imaging and image processing and dental applications for digital images to improve diagnosis. At conclusion, each participant should be able to:

- Know the fundamentals, advantages and disadvantages of digital radiography.
- Understand the effective use of imaging technology and image processing.
- Comprehend the applications of digital radiography in endodontics.
- · Describe current digital x-ray systems.
- Explain the difference between a CCD and a PSP digital imaging system.

- Describe important electronic image processing tools and how they might be employed to improve disease detection.
- Describe the application of image processing tools to improve periapical radiographic changes associated with pulpally-involved teeth.

#### Clinical Session 3

Marquis Ballroom II

Moderator: Van T. Himel, DDS

Memphis, TN

#### New technologies vs. new science 2-5 pm



Camp



Himel



Maggi



McSpadden



Schwartz



Senia

Joe H. Camp, DDS, MSD, Charlotte, NC \*Van T. Himel, DDS, Memphis, TN \*Joseph D. Maggio, DDS, Oak Brook, IL John T. McSpadden, DDS, Chattanooga, TN \*Stephen F. Schwartz, DDS, MS, Houston \*E. Steve Senia, DDS, MS, San Antonio, TX

How do we learn about new technologies that are introduced to endodontics? Each aspect of endodontics, including private practice, education, organized endodontics, ethics, marketing and manufacturing, should be able to approach, control and utilize changes in technology in an effective and scientific manner. Learn how to incorporate new endodontic technology into the practice and what to do with outdated technology. At conclusion, each participant should be able to:

- Reassess the impact of technology on the practice of endodontics.
- Discuss the practitioner's role in incorporating new technology into his/her practice.
- Redefine technology as it relates to science.
- Regain some control over the direction of technology.

\*Speaker serves as a consultant and/or has a commercial interest in subject matter.

#### Clinical Session 4

Marquis Ballroom IV

Moderator: Joel L. Dunsky, DDS

Boston, MA

## Perceptions vs. science: One-step endodontics



2-5 pm

Martin Trope, BDS, DMD Chapel Hill, NC

Each participant should recognize the requirements for successful endodontic treatment. He/she should recognize the biological and bacteriological differences between teeth with or without apical periodontitis in terms of meeting these treatment requirements. The dentist should understand evidence-based strategies for treatment success. One-step treatment has many potential advantages. It is less expensive, very well accepted by patients and in fact has been shown to result in a lower flare-up rate. The perception is that this treatment approach offers the same or even better long-term success than multivisit treatments. Do the scientific facts back up this perception? At conclusion, each participant should be able to:

- Differentiate the canal status between teeth with or without apical periodontitis.
- Understand the requirements for predictable endodontic success.
- Understand how each step in endodontic treatment contributes to achieving the requirements for success.
- Differentiate between perception and fact for the successful treatment of teeth with or without apical periodontitis.

#### Visit the Exhibits

Be sure to stop by International Hall to see the latest in products and services and to thank the exhibitors who help defray part of your annual session cost.

#### Need a Break?

Complimentary coffee will be provided in the exhibit hall on Thursday and Friday at 10:30 am and 2:30 pm and on Saturday at 10:30 am.



#### Clinical Session 5

Imperial Ballroom, Salon B Moderator: Irving Fried, DDS, MA New York

#### Molar and atypical endodontic microsurgery

2-5 pm





Syngcuk Kim, DDS, PhD, Philadelphia Richard A. Rubinstein, DDS, MS Farmington Hills, MI

This program is designed to illustrate the importance of the surgical operating microscope and related armamentarium and microsurgical technique in the management of molar and atypical endodontic microsurgery. At conclusion, each participant should be able to:

- · Describe the associative armamentarium and microsurgical technique used in endodontic surgery.
- · Understand the microsurgical management of the maxillary sinus and the mental foramen.
- · Understand the benefits of barrier techniques including calcium sulfate, ceramics and polylactic acid in treating endo-perio defects and large bony lesions.
- Understand the new protocol of tooth replantation when microsurgery is not possible due to anatomical or health reasons.
- · Be familiar with important basic and clinical research findings in regard to molar microsurgery.

#### Clinical Session 6

Copenhagen/Stockholm Room Moderator: Paul M. Vanek, DDS, MS Toronto, Canada

Restorative management of endodontically treated teeth



Gluskin





Southard

Strassler

Alan H. Gluskin, DDS, San Francisco Denny W. Southard, DDS, MSD, Tulsa, OK \*Howard E. Strassler, DMD, Baltimore

This session will concern itself with current restorative management in endodontic rehabilitation. At conclusion, each participant should be able to:

- · Recognize the importance of the dentin-root complex and the science of restoration strategies in success and failure of post systems.
- · Appreciate the sound biologic relationships between apical and coronal seals in endodontic rehabilitation and the value of immediate cores as an extension of the endodontic seal.
- Understand new techniques and new generation materials in the restoration of non-vital teeth.
- Appreciate the role of radicular bonding in new systems usage.
- · Better utilize available new technologies in root and crown as well as the structurally weakened tooth with transilluminating posts, reinforcing fabrics and high technology ceramics.

This session will not be taped.

#### **General Interest 2**

Marquis Ballroom I

Moderator: Andre K. Mickel, DDS, MSD

Beachwood, OH

#### Stress management



2-5 pm

Stephen F. Goodman, DDS New York

Each participant should be able to describe the principles in examining, treating or referring a patient who presents with signs of stress exhibited in the oral mucosa. At conclusion, each participant should be able

- · Understand the current concepts of physical, emotional and hormonal stress on the oral tissues.
- · Evaluate various clinical parameters and utility for determining periodontal
- · Provide appropriate treatment or referral.



Henry Solomon, MD New York

Each participant should be able to understand the many kinds of stress that affect each of us and the measures available to reduce and manage that stress. At conclusion, each participant should be able to:

- · Understand that stress has many "faces" that can interact in a negative way.
- · Comprehend that oxidative stress, hemodynamic stress and neurohormonal stress all contribute to cardiovascular stress.
- · Know that each kind of stress is manageable and that overall risk can be maintained.



Valerie Werter, MS, RD, LD Mamaroneck, NY

Each participant should understand the relationship between food and stress. At conclusion, each participant should be able to:

- · Understand basic principles of good nutrition and good eating behaviors.
- · Identify stress-induced eating behaviors and understand how to change those behaviors.
- · Identify appropriate substitute behaviors instead of eating.

#### **Dinner Dance**

Gather your friends and exchange your seating vouchers for dinner tickets to the President's Dinner Dance no later than 5 pm, Thursday, April 22. This year, each table seats 10 people, so make arrangements early to enjoy this enchanting evening of sumptuous food, dancing and splendor.

#### **Badges**

Badges must be worn at all official AAE functions.

#### Taping

Audio and video taping are allowed only with permission of the speaker.



#### Limited Attendance Sessions

Limited seating. NO standing permitted.

LAS 5—Bonn Room Retreatment: Clinical review of principles and techniques

#### 2.3:15 pm

Eugene A. Pantera, Jr., DDS, MS Buffalo, NY Hesham M. Tagouri, DMD, MDS Snyder, NY

This program will present a perspective of endodontic retreatment that includes principles, diagnosis and materials used. At conclusion, each participant should be able to:

- Describe the historical concepts of endodontic retreatment.
- Review the materials and instrumentation that have been used and are currently popular for endodontic retreatment.
- Diagnose patients requiring endodontic retreatment and give a relative prognosis.
- Review several technical procedures using clinical cases as examples.

LAS 6—London/Zurich Room How to start a new endodontic practice

2-3:15 pm

James M. Blaney, DDS, MSD Gainesville, FL

Each participant should be able to describe the steps involved in opening a new endodontic practice. At conclusion, each participant should be able to:

- Describe considerations in picking a practice location.
- Describe the steps involved in obtaining financing and equipment.
- Describe the procedures necessary for effective pre-opening marketing.
- · Describe procedures for hiring staff.

LAS 7—Chablis/Picard Room Estate planning

2-4 pm

Steven M. Schanker, Esq., New York

This presentation will explain how you can put more money to work for you and your family. Learn how to minimize taxes, maximize financial security and maybe even help your favorite charity.

LAS 8—Bonn Room
Diagnostic technique to assist
the diagnosis of referred pain

3:30-5 pm

Asgeir Sigurdsson, DDS, MS Chapel Hill, NC

The educational objective of this presentation is to review the neuromechanisms and present the most common referral patterns of referred pain from a tooth with acute, symptomatic pulpitis. In addition, the scientific basis for and clinical procedure of a new diagnostic technique that can assist the location of a tooth with referred pain will be presented. At conclusion, each participant should be able to:

- Describe the main neurological pathways responsible for referred pain from a tooth with symptomatic pulpitis.
- Describe the most common pain referral patterns from teeth with symptomatic pulpitis.
- Perform a new diagnostic test that could be used in a case when more commonly used diagnostic tests fail to reveal the offending tooth.

LAS 9—London/Zurich Room How to start a new endodontic practice (*continued from LAS 6*) 5:30-5 pm

\*Albert C. Goerig, DDS, MS, Olympia, WA

This program is designed for endodontic residents, recent graduates or any endodontist who is starting or has recently purchased an endodontic practice. At conclusion, each participant should be able to:

- Understand the unlimited possibilities of an endodontic practice.
- Develop a vision and philosophy of practice.
- · Understand the business of endodontics.
- Know how to market a new practice.
- · Know the secrets of high net profit.
- Know how to hire and empower an incredible office team.
- Understand what new technology is needed.

\*Speaker serves as a consultant and/or has a commercial interest in subject matter.

#### Oral Research Presentations II

Graduate Student Section Tigris Room

Moderator: Sandra Madison, DDS, MS Asheville, NC

#### 2 pm

Evaluation of regional bond strengths of resin cement to endodontic surfaces Bruce A. Gaston, DDS (presenter) D.H. Pashley, L.A. West & F.R. Liewehr US Army Dental Activity

#### 2:15 pm

Sealing ability of componers vs. traditional apical retrofilling materials
Bill D. Greer, DDS (presenter)
L.A. West, F.R. Liewehr & D.H. Pashley
US Army Dental Activity &
Medical College of Georgia

#### 2:30 pm

Macrophage cytokine production by T cell stimulation—its role in inflammation
Ravi S. Koka, Profilesenter)
T. Petr C. Gound & H. Makkawy.
Univ. of Nebraska

#### 2:45 pm

Effect of endodontic filling materials on fetal bovine bone formation in vitro
Steven J. Muraski, DMD, MS (presenter)
S.W. Whitson, C.J. Nielsen,
D.E. Bowers & J.F. Hatton
St. Louis Univ. & Southern Illinois Univ.

#### 3 pm Break

#### 3:15 pm

Increased density of gutta-percha using a controlled heat instrument with lateral condensation

Edward A. Nelson, DDS (presenter) F. R. Liewehr & L.A. West US Army Dental Activity

#### 3:30 pm

Modulation of replacement root resorption Geoffrey Okada, DDS (presenter) K.R. Wright, M. Torabinejad & L.K. Bakland Loma Linda Univ.

#### 3:45 pm

Comparison of diagnostic accuracy of digital imaging and E-speed film in the detection of periapical bone lesions
Susan B. Paurazas, DDS, MS (presenter)
J.R. Geist, M.P. Hoen, F. E. Pink & H.R. Steiman, Univ. of Detroit Mercy



## **Programs**

#### 4 pm

Measurement of endodontic file lengths: A density profile plot analysis of digital images

Michael E. Piepenbring, DMD, MS (presenter)

B. J. Potter, R.N. Weller & R.J. Loushine Medical College of Georgia

#### Oral Research Presentations III

Endodontist Section
Sydney Room
Moderator: Keith V. Krell, DDS, MS
Des Moines, IA

#### 2 mm

Assessing caries, cracks and leakage in restored teeth
Paul V. Abbott, MDS (presenter)
Univ. of Melbourne, Australia

#### 2:15 pm

Evaluation of the cutting efficiency of St. St. and Ni-Ti files using balanced force and passive step-back techniques
Ismail I. Elsherif, BDS,MSc, PhD (presenter)
T.M. Islam & W.A. Khodier
Elazhar Univ., Egypt

#### 2:30 pm

Cytokine expression in periapical lesions of LPS hyporesponsive and normal mice Ashraf Fouad, DDS, MS (presenter) A.W. Acosta, Univ. of Connecticut

#### 2:45 pm

Efficacy of an experimental sealer assessed in vivo
Shimon Friedman, DMD (presenter)
R. Komorowski, W. Maillet, R. Klimaite
H.Q. Nguyen & C.D. Torneck
Univ. of Toronto & Dalhousie Univ.

#### 3 pm Break

#### 3:15 pm

Anesthesia and heart rate effects of the supplemental IO injection of etidocaine and 3% mepivacaine
Eric Gallatin, DDS, MS (presenter)
P. Stabile, A. Reader, M. Beck & J. Weaver Ohio State Univ.

#### 3:30 pm

Cytotoxicity of six endodontic materials using the <sup>51</sup>Cr release method Mehmet O. Gorduysus, DDS, PhD (presenter) M. Gorduysus, M. Ercan & I. Etikan Hacettepe Univ., Turkey

#### 3:45 pm

Evaluating three Ni-Ti file systems Mohamed M. Khalefa, BDS, MSc, PhD (presenter) I.I. Elsherif, Elazhar Univ., Egypt

#### 4 pm

Changes in root canal geometry after preparation assessed by high resolution computed tomography
Ove Peters, DDS (presenter)
A. Laib, B. Mayer & F. Barbakow, Univ. of Zurich, Switzerland

#### 4:15 pm

Influence of different sterilization procedures on the bending moment of stainless steel and nickel-titanium root canal instruments
Benjamin M. Briseno, DDS (presenter)
B. Willershausen, Johannes Gutenberg Univ., Germany

#### 4:30 pm

Histological evaluation of repair after mechanical furcation perforation in dogs' teeth using a bioresorbable membrane beneath a resin modified glass ionomer Mohamed A. Salman, BDS, MS (presenter) N. Claffey, Ministry of Health, Bahrein & Trinity College, Dublin

#### **Open Forum**

Marquis Ballroom III

Moderator: Philip W. Cohen, DDS, MS
Livonia, MI (Committee Chair)

#### Ad Hoc Committee on Endodontic Software 2-4 pm

The committee will meet to discuss endodontic office software issues, including the AAE-endorsed practice management software,  $Endo-Vision98^{TM}$ . AAE members and their staff are encouraged to attend and provide input on these important matters for the specialty.

If currently available dental office software products are not meeting all your needs, the committee would like to hear your thoughts. Suggestions from members and their staff on improvements to  $Endo-Vision98^{TM}$  will also be welcomed.

This session will not be taped.

\*Speaker serves as a consultant and/or has a commercial interest in subject matter.

#### **College of Diplomates**

Savoy/Rhine Room

Moderator: M. Lamar Hicks, DDS, MS Jenkintown, PA

## Mentoring Workshop and Annual Business Meeting 2-5 pm

Leif K. Bakland, DDS, Loma Linda, CA Stuart B. Fountain, DDS, MS, Greensboro, NC M. Lamar Hicks, DDS, MS, Jenkintown, PA Thomas O. Mork, DDS, Oconomowoc, WI Martha E. Proctor, DDS, MS, Chicago Eric M. Rivera, DDS, MS, Iowa City, IA Louis E. Rossman, DMD, Philadelphia Edward J. Strittmatter, Jr., DDS, Centreville, VA

#### Friday, April 23

#### **Continental Breakfast**

Imperial Ballroom (by ticket only)
8-8:45 am

#### **Exhibits**

International Hall

8 am·6 pm

#### Clinical Session 7

Marquis Ballroom I Moderator: Kirk A. Coury, DDS, MS Amarillo, TX

Medical emergencies in the endodontic office



9 am-12 noon

\*Robert C. Bosack, DDS Oak Lawn, IL

Each participant should be able to easily remember and implement guidelines for the prevention, diagnosis and treatment of medical emergencies in the office. At conclusion, each participant should be able to:

- Anticipate and possibly avert emergencies through the use of several core questions to gain insight into medical history.
- Describe the pathophysiology and simple treatment protocols (without IV access) for syncope, angina, asthma, allergy, diabetes, seizures and stroke.
- Discuss the management of accidental aspiration/ingestion of foreign materials.





#### Clinical Session 8

Marquis Ballroom II Moderator: James L. Gutmann, DDS

Dallas

#### Management of apical third 9 am-12 noon







\*L. Stephen Buchanan, DDS, Santa Barbara, CA Richard E. Walton, DMD, MS, Iowa City, IA

Each participant should be able to understand the anatomy, physiology and histology of the apical third and related periradicular tissues and how these interrelate and are impacted by preparation and obturation. Participants should be able to:

From Dr. Buchanan's presentation:

· Understand the importance of treating to full apical and lateral extents and short/long term ramifications of procedures extended to and beyond root canal systems and understand clinical problems attendant to short treatment of root canal systems, vital or necrotic.

From Dr. Walton's presentation:

· Understand why, biologically, instruments and materials should be confined to the canal space; describe consequences of over-preparation and overfill as to prognosis and post-treatment sequelae; and discuss techniques to confine materials to canal space.

#### Clinical Session 9

Copenhagen/Stockholm Room Moderator: Jeffery Linden, DMD New York

#### The endodontist's role in dental trauma



9 am-12 noon

Leif K. Bakland, DDS Loma Linda, CA

In this presentation, the participant will learn methods for retaining traumatized teeth, understand the importance of maintaining pulp vitality in immature teeth and learn how to apply a multidisciplinary team approach effectively to the management of trauma patients. Each participant should be able:

- · Fit the management of dental trauma patients into a busy practice.
- · Recognize short and long-term effects of trauma to teeth.
- Determine optimal treatment approaches for dental injuries.
- · Identify types of root resorptions and select appropriate treatment for each.
- · Predict expected outcomes for dental traumatic injuries.
- · Recommend for patients the best preventive measures.

#### General Interest 3

Marquis Ballroom IV

Moderator: Maureen L. Swift, DDS, MSD Seattle

Using software and digital radiography to create the paperless and filmless office

9 am-12 noon



Khademi



\*John A. Khademi, DDS, MS San Leandro, CA

\*Lester J. Quan, DDS, San Francisco

With new computer software and hardware, the pieces are in place to eliminate paper records and film-based radiographs. This presentation will walk through a patient encounter, highlighting the computer software and hardware used in recording the referral call, registering the patient, scanning film radiographs, cataloging patient signs and symptoms, documenting treatment performed and generating a large format case report with high quality images. At conclusion, each participant should be able to:

- · Identify the elements of the state-ofthe-art digital operatory (and office).
- Answer the six key questions before incorporating high technology.
- Select the ideal clinical peripherals for optimal ergonomics.
- · Identify key features for a reliable extensible and fault tolerant system.
- Quickly and easily have office staff assemble high quality, large format case reports.
- · Address the "special challenges" of computers in the operatory.

#### General Interest 4

Trinidad/Madrid Room

Moderator: Bruce C. Smith, DMD, MS Oak Harbor, WA

#### **Practice transitions**



9 am-12 noon

\*Gary Wiser, DMD, MS, MBA Perrineville, NJ

Each participant will learn the necessary steps for a transition when an associate joins a practice, a partnership is formed or practices are merged, acquired or sold. At conclusion, each participant should be able

- · Describe the essential contents of an associate's employment agreement, a partnership agreement and a practice purchase agreement.
- · Describe the various options available to the dentist when considering an associate or a partner.
- · Describe the steps necessary for a successful practice sale.

#### Staff Session 1

Marquis Ballroom III Moderator: Gary M. Shetler, DDS Baton Rouge, LA

Strategic team building: Decrease the stress and increase the fun and profits in your endodontic practice

9 am-12 noon



Dumas



Christine Dumas, DDS, Marina del Ray, CA William A. van Dyk, DDS, San Francisco

This course will allow dentists and staff to analyze the management philosophy, strategies and techniques of America's most successful Fortune 500 corporations, as well as America's most successful dental practices. At conclusion, each participant should be able to:

- Learn hands-on techniques and tools to help your team members become enthusiastic "ambassadors" for your dental practice.
- Understand how to develop and emphasize the value of traditions and rituals to provide team members with feelings of dedication and commitment.



- Learn how to communicate a pracice image that becomes a point of pride for your team members and a business asset to you.
- Comprehend recruitment and interviewing strategies to identify superior performers.
- Learn new ways to balance ongoing training for clinical skills and training for interpersonal skills.

#### Limited Attendance Sessions

Limited seating. NO standing permitted.

#### LAS 10—London/Zurich Room Noninstrumentation technique for cleansing root canals

9-10:15 am

John C. Mills, DMD, MA, Birmingham, AL

Each participant should be able to understand noninstrumentation technology for cleansing root canals *in vivo* and *in vitro*. At conclusion, each participant should be able to:

- · Understand the technology involved.
- Appreciate the potential benefits of noninstrumentation cleansing.
- Understand its potential application in endodontics.

## LAS 11—Chablis/Picard Room The pulp, the radical, the crown and the space they used to occupy: Endodontic management of severe coronal-radicular breakdown

9-10:30 am

\*C. John Munce, DDS, Santa Barbara, CA

Each participant will understand the concept of canal projection and its implementation in unique new techniques for management of severe coronal breakdown, internal irregularities, canal obstructions and other complexities. At conclusion, each participant should be able to:

- Describe the clinical steps involved in the pre-endodontic canal projection process as it applies to the management of severe coronal breakdown and gross internal irregularities.
- Describe new methods for bypass and/or removal of canal obstructions by way of additive techniques and/or by way of variably-sized dead-soft adhesive tubular techniques.

- Describe a method of reducing the risk of coronal fracture in endodontically treated teeth between visits and following endodontic therapy.
- Describe a more predictable method of sealing secondary portals of exit, particularly furcal and peri-orifice POEs by facilitating elongated waves of condensation.

## LAS 12—Savoy/Rhine Room On target with electronic canal length

9-10:15 am

Stephen M. Weeks, DDS, Chicago

Each participant should be able to more confidently incorporate electronic canal length determination into the daily practice of endodontics. Achieve a better understanding of the operating principles, strengths and weaknesses and devices currently available. At conclusion, each participant should be able to:

- Discuss the pitfalls of historical length determination methods.
- Describe the basic theory of electronic length-determining devices, the three "generations" of this technology and their relative merits.
- Better evaluate and compare manufacturers' claims.
- Describe applications other than simple length determination, as well as some newer devices integrating length determination and canal preparation.

#### LAS 13—London/Zurich Room Mandibular anesthesia and the intraosseous injection 10:30-11:45 am

10.50-11.45 am

Al Reader, DDS, MS, Columbus, OH

Each participant will identify the factors involved with failure of the inferior alveolar nerve block and describe how to overcome this failure by using intraosseous anesthesia. At conclusion, each participant should be able to:

- Identify the factors involved with clinical failure of the inferior alveolar nerve block.
- Describe the steps and procedures for obtaining profound pulpal anesthesia by using intraosseous anesthesia.

## LAS 14—Savoy/Rhine Room Anatomy of a perfect root-end surgery—Don't focus too closely 10:50-11:45 am

Julian Moiseiwitsch, BDS, PhD Chapel Hill, NC

Anatomy of the craniofacial structures should only rarely be a factor in the decision of whether or not to perform a root-end surgery. With careful planning and good surgical technique, normal anatomical variation should not influence the treatment options offered to the patient. At conclusion, each participant should be able to:

- Be familiar with the neurovascular supply to the orofacial structures.
- Be familiar with the proximity of the root apices to the nasal cavity and paranasal sinuses.
- Demonstrate the importance of planning the surgical approach in advance.
- Demonstrate alternative flap designs to improve visualization of surgical site while reducing the risk of injury to associated structures.
- Be familiar with the importance of individual patient variability.

#### LAS 15—Chablis/Picard Room What is new or unchanged in shaping the pulp cavity? 10:45 am-12 noon

Yoshiro Shoji, DDS, DDSc, Tokyo

This presentation will cover the important steps to prepare access cavity and root canals in endodontics, from the ergonomic viewpoint of the interrelated forms of pulp cavities to dentists' treatment and instruments used. At conclusion, each participant should be able to:

- Recognize that all crown surfaces of teeth have the landmarks correlating with the pulp cavities. These landmarks are useful in providing a quick and accurate approach to pulp cavities.
- Understand what kinds of concepts, procedures and instruments should be combined to prepare the root canals from the viewpoint of ergonomics.

\*Speaker serves as a consultant and/or has a commercial interest in subject matter.





LAS 16—Amsterdam Room Nickel-titanium rotary instrumentation in everyday practice 11 am-12:30 pm

Gianluca Gambarini, DDS, Rome, Italy

Each participant should understand how endodontic instruments interact with the tooth during the shaping process, in order to improve quality, efficiency and predictability of root canal preparation. At conclusion, each participant should be able to:

- Understand the advantages and limitations of nickel-titanium rotary instrumentation.
- Select the most appropriate preparation technique to minimize iatrogenic errors.
- Select the most appropriate irrigation technique for nickel-titanium rotary instrumentation.

#### Oral Research Presentations IV

Graduate Student Section
Tigris Room
Moderator: William A. Walker, III, DDS
San Antonio, TX

#### 9 am

Characterization of neural changes in the diabetic rat
David C. Gruber, DDS (presenter)
D.E. Witherspoon & J.L. Gutmann
Baylor College of Dentistry

#### 9:15 am

Effectiveness of chlorhexidine in the prevention of root canal reinfection Seung Soo Jung, DDS (presenter)
K. Safavi & L. Spangberg
Univ. of Connecticut

#### 9:30 am

Anesthetic efficacy of 0.5% ropivacine in maxillary infiltration injections
Michelle A. Kennedy, DDS, MS (presenter)
A. Reader, M. Beck, J. Weaver & E. Gallatin
Ohio State Univ.

#### 9:45 am

Colonization of E. faecalis in root canal bovine dentin treated with different chlorhexidine formulations Bradley J. Lenet, DDS (presenter) R. Komorowski, H.P. Lawrence & S. Friedman, Univ. of Toronto

#### 10 am

Pain reduction in symptomatic, necrotic teeth using an intraosseous injection of Depro-Medrol Eric M. Bramy, DDS, MS (presenter) A. Reader, E. Gallatin, R. Nist,

M. Beck & J. Weaver, Ohio State Univ.

#### 10:15 am

Effects of calcium hydroxide inhibition on LPS induced release of IL-1β from human monocytes in whole blood Meryl H. Olsen, DDS (presenter) P. DiFiore, S. N. Dixit & A. Veis Northwestern Univ.

#### 10:30 am

Resistance of a novel root canal sealer to bacterial ingress in vitro Natanya Padachey, DDS (presenter) J. P. Santerre, V. Patel, D. Cvitkowitch, H.P. Lawrence & S. Friedman Univ. of Toronto

#### 10:45 am Break

#### 11 am

DNA analysis of bacteria in symptomatic endodontically treated teeth Nader M. Vafaie, DMD (presenter) J.M. Dobeck, M.L. Warbington, S. Dibart, M. Harris & Z. Skobe Harvard School of Dental Medicine & Forsyth Dental Center

#### 11:15 am

Localization of bacteria in periradicular lesions
Tevyah J. Dines, DMD (presenter)
J.M. Dobeck, R.R. White & Z. Skobe
Harvard School of Dental Medicine
& Forsyth Dental Center

#### 11:30 am

Effect of systemic penicillin on pain in untreated irreversible pulpitis Douglas J. Nagle, DMD, MS (presenter) A. Reader, M. Beck, J. Weaver & E. Gallatin Ohio State Univ.

#### 11:45 am

cell viability in long shelf-life milk products Thomas J. Marino, DMD (presenter) J.M. Mailhot, J.C. McPherson, T.B. Buxton, R.R. Runner, L. A. West & F.R. Liewehr US Army Dental Activity

Determination of periodontal ligament

#### Oral Research Presentations V

Endodontist Section
Sydney Room
Moderator: Harold E. Goodis, DDS
San Francisco

#### am (

Evaluating chemically created mandibular periapical lesions using conventional and digital radiography Scott R. Makins, DDS (presenter) S.A. Janse, D.A. Johnston & J. Hoover Univ. of Texas at Houston

#### 9:15 am

Scanning electron microscopic study of in vivo ultrasonic root-end preparations
J.Gordon Marshall, DMD (presenter)
L.A. Morgan & J.C. Baumgartner
Oregon Health Sciences Univ.

#### 9:30 am

Quality of root-end preparations using ultrasonic instrumentation in cadavers Christen J. Nielsen, DMD, MS (presenter) G.J. Gray, D.B. Jenkins, J.F. Hatton . & D.J. Holzmann Southern Illinois and St. Louis Univ.

#### 9:45 am

Effect of eugenol-containing endodontic sealer on marginal adaptation in dentin Ove Peters, DDS (presenter) K. Schonenberger & F. Barbakow Univ. of Zurich, Switzerland

#### 10:00 am

Wall morphology and cleanliness of rootend retrograde cavity made by ultrasonic diamond instruments Sung Kyo Kim, DDS, MSD, PhD (presenter) C.H. Lim & T.K. Kwon Kyunpook National Univ., Korea

#### 10:15 am

Influence of glycerin on dissociation of calcium hydroxide in solution
Kamran Safavi, DMD (presenter)
T. Nakayama, Univ. of Connecticut

#### 10:30 am Break

#### 10:45 am

Durability of .04 taper rotary Ni-Ti files after simulated clinical usage Chomquan Tongbaiyai, DDS (presenter) M. Torabinejad, Loma Linda Univ.



#### 11:00 am

Influence of root canal sealers on inflammatory reactions in cell cultures Brita Willershausen, DDS (presenter) B. Briseno, D. Schafer & W. Mann Johannes Gutenberg Univ., Germany

#### 11:15 am

In vitro efficacy of microscope and dye on identifying root canals in root end resection

Shue-Fen Yang, DDS (presenter) J.R. Hsu, S.F. Pai & C.L. Tsai, Taipei

#### 11:30 am-

 $Nocice pter\ morphology\ in\ inflamed\ dental\\pulps$ 

G. Rex Holland, BDS, PhD (presenter) S.M. Al-Hadlaq, M.V.N. Narhi & P. Landry Univ. of Michigan and Univ. of Turku, Finland

#### Poster Research Presentations

Endodontist Section International Hall

9 am-12 noon

#### PR 1

Sealing ability of retrograde filling materials on a serum contaminated and noncontaminated surface: Spectrophotometric study

Mr. Ilya Benjamin, Gainesville, FL

#### PR 2

Post-operative pain after root canal treatment in symptomatic nonvital teeth Carlos E. Bueno, DDS, MS, PhD Sao Paulo, Brazil

#### PR 3

Cellular viability and integrity of P.D.L. collagen fiber of replanted teeth in dogs Ricardo Caicedo, DDS Santafe de Bogota, Colombia

#### PR 4

Variations in the susceptibility of selected microorganisms to endodontic irrigants Brenda P.F.A. Gomes, BDS, MSc, PhD Sao Paulo, Brazil

#### PR 5

Formation of biofilms by microorganisms isolated from infected root canals Masako Hasegawa, DDS, PhD, & Hisashi Takizawa, DMD, PhD Yokohama, Japan

#### PR 6

Comparison of shaping ability using ProFile, GT file, and Flex-R endodontic instruments in simulated canals Gin-Ichiro Hata, DDS, PhD, & Manabu Uemura, DDS, PhD Osaka, Japan

#### PR 7

Post-operative pain after one- and twovisit endodontic treatment in nonvital teeth

Ruy Hizatugu, DDS, Sao Paulo, Brazil

#### PR 8

Effects of b-FGF on the hard tissue formation of the root end Noriyasu Hosoya, DMD, PhD Yokohama, Japan

#### PR 9

Comparison of root canal preparations using Pow-R, Profile and Flex-R files Noboru Imura, DDS, & Augusto S. Kato Sao Paulo, Brazil

#### PR 10

Study on the K-type file having a rectangular cross section
Ichiroh Katsuumi, DDS, PhD, Tokyo

#### PR 11

Morphologic study on root resorption following the tooth re-implantation in rats Ki-Yun Kum, DDS, MSD, PhD Seoul, Korea

#### PR 12

Effect of coronal preparation methods on the apical extrusion of root canal debris Jeong Won Park, DDS, MS, Taegu, Korea

#### PR 13

Success rate of endodontic treatment using hand 0.02 NiTi vs. 0.02 stainless steel K-files Mary T. Pettiette, DDS, Chapel Hill, NC

#### PR 14

Coronal dye penetration of retrograde root filling materials Norihiro Sawada, DDS, PhD, Tokyo

#### PR 15

Nonsurgical root canal retreatment in single or multiple visits Maria E. Sayago, DDS, Sao Paulo, Brazil

#### PR 16

Endodontic or surgical therapy of periapical lesions
Thomas Schwarze, DDS, Hanover, Germany

#### PR 17

Concentrations of ProstaglandinE2, 6-keto-Prostaglandin F1 \alpha and LeukotrieneB4 in pulpal and periapical lesions Won-Jun Shon, DDS, Seoul, Korea

#### PR 18

In vitro assessment of the ability of four barrier materials to prevent coronal microleakage Fabrico B. Teixeira, MS, DDS, & Caio C. R. Ferraz, DDS Sao Paulo, Brazil

#### PR 19

Histomorphometrical evaluation of the healing of the osseous defect with guided bone regeneration following apicoectomy in dogs Gosei Yoshikawa, DDS, Tokyo

#### PR 20

Digital subtraction for longitudinal assessment in transplanted teeth Takatomo Yoshioka, DDS, PhD, & Chihiro Kobayashi, DDS, PhD, Tokyo

#### **Table Clinics**

Endodontist Section International Hall 9 am-12 noon

#### .....

#### TC 1

Orascopy update
James H. Bahcall, DMD, MS, Chicago

#### TC 2

Comparison between clinical examination and computer simulation in the diagnosis of pulpal/periradicular pathosisis Mr. Paul Creer & William T. Johnson, DDS, MS, Univ. of Iowa

#### TC 3

Container-based infection control: What it can do for you! Joseph S. Dovgan, DDS, MS Paradise Valley, AZ

#### TC 4

Combined use of NiTi rotary instruments in root canal preparation Daniel Kherlakian, DDS, Sao Paulo, Brazil



## **Endodontic Educators'** Forum

Bonn Room

Moderator: Ronald R. Lemon, DMD

New Orleans, LA

Educational technology: Financial strategies to play the game







Hargreaves

Eric J. Hovland, DDS, MEd, MBA New Orleans Kenneth M. Hargreaves, DDS, PhD San Antonio, TX

At this information exchange, educators will be exposed to practical information regarding the usefulness and status of educational technology as integrated into teaching curriculums at other institutions. The program will include a discussion of special or innovative funding strategies from the viewpoint of Dean Hovland (Louisiana State University School of Dentistry) who has implemented these strategies and from Department Chair Hargreaves (University of Texas Health Science Center at San Antonio) who has started the process. Preliminary outcome assessments will be presented.

#### AADS Endodontic Section Meeting

Bonn Room

11 am-12 noon

#### Edgar D. Coolidge Luncheon

Imperial Ballroom (by ticket only)

Moderator: Kenneth J. Spolnik, DDS, MSD

Indianapolis, IN



12 noon-1:45 pm John I. Ingle, DDS San Diego, CA

The Coolidge Award is presented to a member who has actively participated in the AAE during his or her professional life, displaying outstanding leadership and exemplary dedication to dentistry and endodontics.

#### Clinical Session 10

Copenhagen/Stockholm Room Moderator: Stuart A. Berman, DDS Smithtown, NY

#### Perio-endo



2-5 pm

Stephen F. Goodman, DDS New York

Overlapping symptoms, similar radiographic findings and common clinical lesions often make it difficult to distinguish between primary lesions of the pulpal and periodontal tissues. This presentation will focus on the recognition and treatment of various perio-endo problems. Periapical lesions and fractured teeth relative to current periodontal therapy and treatment planning will be discussed. At conclusion, each participant should be able to:

- Distinguish the various perio-endo lesions.
- Choose the appropriate sequence of therapy for each.
- Explore and perform tooth sectioning procedures.
- · Evaluate long-term prognosis.

#### Scientific Session 2

Marquis Ballroom I

Moderator: Wallace B. Brown, DDS

Salt Lake City, UT

#### Antibiotics in endodontics

2-5 pm



Walton



Harrison

## Indications, contraindications and nonindications

Richard E. Walton, DMD, MS, Iowa City, IA

Each participant will understand the principles involved in prescribing antibiotics in different situations. The discussion will be based on literature as well as reviewing therapeutic principles of antibiotics. At conclusion, each participant should be able to:

- Describe the conditions in which antibiotics would likely be effective.
- Discuss those conditions which are not amenable to antibiotic therapy.
- Relate why antibiotics are not a substitute for appropriate treatment measures.

## The beginning of the end of the antibiotic era? Abuse of the miracle drugs!

John W. Harrison, DMD, MS, Dallas

Each participant should be aware of the past and present abuse of antibiotics and the current problem posed by bacterial antibiotic resistance. At conclusion, each participant should be able to:

- Describe the amazingly ubiquitous nature of antibiotics in the human ecosystem.
- Describe the misuse and abuse of antibiotics in current dental and medical practice.
- Understand the full potential of the danger posed by bacterial antibiotic resistance to the entire world.

#### **Clinical Session 11**

Savoy/Rhine Room

Moderator: Ronald I. Deblinger, DMD

Clifton, NJ

## No more herodontics (implants)



Meyers



O'Leary



Radm

John P. Meyers, DDS, Dallas Le Yen Thi O'Leary, DDS, Dallas W. Paul Radman, DDS, Dallas

This lecture is designed to show the role and integration of implants in an endodontic practice. At conclusion, each participant should be able to:

- Explain basic terminology and components of implant dentistry.
- · Make diagnostic evaluations.
- Demonstrate the indications and uses of implants in endodontic practice.
- Explain some of the common complications of implants.

#### **Taping**

Audio and video taping are allowed only with permission of the speaker.



#### General Interest 5

Marquis Ballroom II

Moderator: Don H. Pratten, DMD

Issaquah, WA

Training your mate to be your fantasy date and other outrageous ideas for improving relationships



2-5 pm Joy Millis, CSP, Charlotte, NC

Each participant should have a unique and different view of current and future relationships, skills for communicating more effectively and dealing with challenges as they arise. At conclusion, each participant should be able to:

- · Realize that training begins before one makes a commitment.
- · Understand that everyone has a different view of relationships.
- · Acknowledge that communication can make or break a relationship.
- · Make the right choices in relationships.
- · Understand that one's responsibility is key to one's success.
- · Realize that a sense of humor is more important than sex.

#### General Interest 6

Marquis Ballroom IV Moderator: James C. McGraw, DDS

Medina, WA

#### Office design: Integrating new technologies

2-5 pm



Carr





Levin

Ludwig

Gary B. Carr, DDS, San Diego \*Martin D. Levin, DMD, Chevy Chase, MD \*Garrett B. Ludwig, Hartford, CT

Each attendee should be able to create a strategic technology plan to incorporate computer and imaging systems into existing and planned clinical facilities. At conclusion, each participant should be able to:

- · Understand the importance of creating a positive patient and referring doctor perception of your technological sophistication while continuing to emphasize quality patient care.
- · Describe design parameters of the reception, clinical and administrative areas of an endodontic office.
- · Create a basic technology plan to secure training and stage purchase of equipment.

#### General Interest 7

Amsterdam Room

Moderator: Linda K. Bascom, DDS

Kennewick, WA

Financial planning: Solving critical financial issues with effective strategies



2-5 pm Joel M. Blau, CFP Chicago

Each participant should gain an understanding of financial planning basicsinvestment, retirement and estate tax planning-so that they are not destined to rely solely on advice from individuals who may or may not be competent or have their best interests in mind. At conclusion, each participant should be able to:

- · Understand modern portfolio theory.
- · Identify key points for successful retirement.
- · Minimize estate taxation by using available tax credits and trust documents.

#### **General Interest 8**

Trinidad/Madrid Room

Moderator: Michael W. Huey, DMD

Bremerton, WA

How to avoid a shark's bite



2-5 pm Lawrence L. Longfelder, JD Seattle, WA

Dentists will learn the intricacies of a dental malpractice case. The course will provide useful information to avoid malpractice claims and how to deal with a claim once it is presented. The presentation will also discuss types and frequency of malpractice claims as well as practice

methods to avoid creating situations leading to these claims. At conclusion, each participant should be able to:

- · Understand the legal process and its interaction with the dental profession.
- · Comprehend practice pointers to avoid malpractice claims.
- · Understand how to deal with the malpractice claims and/or suits.

#### **General Interest 9**

Chablis/Picard Room

Moderator: Dennis L. Meidinger, DDS,MS

Auburn, WA

The impending Year 2000 problem-not a myth



2-3:30 pm Sharon S. Jablon, MS New York

Each participant should be able to understand the Year 2000 problem, how it evolved, why we are faced with it now, how it will affect all businesses and its potential effect on our personal lives. At conclusion, each participant should be able

- · Explain why we have a Year 2000 problem.
- · Describe the potential problems faced on January 1, 2000.
- · Understand how his or her practice might be affected and learn preventive steps to take.

The statements and opinions expressed at the Annual Session are solely those of the individual speakers. Their statements and opinions do not reflect any endorsement by the American Association of Endodontists.

<sup>\*</sup>Speaker serves as a consultant and/or has a commercial interest in subject matter.



#### **Staff Session 2**

Marquis Ballroom III

Moderator: Albert M. Jowid, DDS

Dallas

**Endodontists are from Jupiter,** patients are from Pluto

2-5 pm





Dumas

van Dyk

Christine Dumas, DDS, Marina del Ray, CA William A. van Dyk, DDS, San Francisco

Learn seven secrets for attracting and keeping your doctor's patients in the competitive marketplace of the new millennium, including influences affecting patient choices in this era of the "vigilante consumer" and the media. Most successful companies base decisions on their understanding of clients. At conclusion, each participant should be able to:

- Help doctors build and maintain a successful endodontic practice.
- Evaluate trends in the general market place.
- Discuss the impact of "high-tech" dental advances.
- Implement simple changes to achieve the patient-oriented endodontic office.

Stay after this session for networking and light refreshments.

#### Limited Attendance Sessions

Limited seating. NO standing permitted.

LAS 17—London/Zurich Room

Bonding agents in endodontics

2-3:15 pm

David E. Witherspoon, BDS, MS, Dallas

This presentation will explore the role of bonding agents in the restoration of teeth, both nonendodontically and endodontically treated. At conclusion, each participant should be able to:

- Discuss contemporary concepts of dentin and enamel-bonding agents.
- Discuss the impact of dentin and enamel-bonding agents on pulpal tissues.
- Discuss the use of dentin and enamelbonding agents in the restoration of endodontically treated teeth.

- Discuss the role of dentin-bonding agents in the use of resin root-end filling materials.
- Discuss the future applications of dentin and enamel-bonding agents in endodontics.

LAS 18—London/Zurich Room Calcium hydroxide The magic vs. reality 3:30-5 pm

Zvi Fuss, DMD, Tel Aviv, Israel

Each participant should be able to describe the rationale of using calcium hydroxide in different applications in dentistry and to look for alternatives when necessary. At conclusion, each participant should be able to:

- Describe the rationale of using calcium hydroxide as an intracanal medicament in repair of root resorption, root perforation, large periradicular lesions and in cases of large apical foramen.
- Determine when calcium hydroxide is the drug of choice in endodontic treatment for repair and when alternatives are better.

#### Oral Research Presentations VI

Graduate Student Section Tigris Room

Moderator: Robert J. Frank, DDS Glendora, CA

#### 2 pm

Comparison of varying the depth of heat application on the adaptability of guttapercha during warm vertical compaction Richard S. Smith, DDS (presenter) R.N. Weller, R.J. Loushine & W.F. Kimbrough Medical College of Georgia

#### 2:15 pm

Accuracy of two clinical techniques to determine the size of the apical foramen Jeffrey A. Levin, DMD (presenter) D.T. Liu & Y.T. Jou, Univ. of Pennsýlvania

#### 2:30 pm

In vitro evaluation of the cytotoxicity of dentin bonding systems and synthetic collagen matrices
Ronald S. Wright, Jr., DDS (presenter)
N.J. McDonald & T.F. Meiller
Univ. of Maryland

#### 2:45 pm

Longitudinal microleakage evaluation of Super EBA as a root-end sealing material John M. Yaccino, DDS (presenter) W. A. Walker III, D.L. Carnes Jr. & W.G. Schindler, Wilford Hall Medical Center & Univ. of Texas at San Antonio

#### 3 pm

Effect of root canal obturation and/or coronal seal on the success of root canal therapy

Douglas H. Snider, DDS (presenter) M. Torabinejad, H.M. Tang & L.K. Bakland Loma Linda Univ.

#### 3/15 pm Break

#### 3:30 pm

Comparative efficacy of various rotary instrumentation systems for removing gutta-percha
Mark V. Nearing, DDS (presenter)
G.N. Glickman, Univ. of Michigan & Univ. of Texas at Houston

#### 3:45 pm

Evaluation of apical seal in straight canals after obturation using the Lightspeed sectional method Maria D. Santos, DDS (presenter) W. A. Walker III & D.L. Carnes Jr. Wilford Hall Medical Center & Univ. of Texas at San Antonio

#### 4 pm

Adhesion of glass ionomer cement sealers to bovine dentin conditioned with intracanal medicaments
H. Anthony Chung, DDS (presenter)
K. Titley, C.D. Torneck, H.P. Lawrence & S. Friedman, Univ. of Toronto

#### Oral Research Presentations VII

Endodontist Section
Sydney Room
Moderator: Jeffrey Hoover, DMD
Houston

#### 2 pm

Tissue cooling reduces BK/PGE<sub>2</sub> release of iCGRP in rat dental pulp
Harold E Goodis, DDS (presenter)
W.R. Bowles & K.M. Hargreaves,
Univ. of California, Univ. of Minnesota &
Univ. of Texas at Houston



#### 2:15 pm

Comparative study of the compressive apical forces applied with Flex-R and Onix-R nickel titanium files used in the balanced force technique
Franklin Pineda, DDS (presenter)
S. Kuttler & G. Kaplan
Univ. Tecnologica de Mexico

#### 2:30 pm

Adhesion of human osteoblasts to enamel matrix derivatives Qiang Zhu, DDS, PhD (presenter) K.E. Safavi & L.S.W. Spangberg Univ. of Connecticut

#### 2:45 pm

Torsional properties of a new rotary NiTi file, HERO 642 Paul L. Calas, DDS (presenter) C. Comtesse & E. Deveaux Univ. of Toulouse & Univ. of Lille, France

#### 3:00 pm

Detection of Candida albicans in infected root canals using PCR
J. Craig Baumgartner, DDS, PhD (presenter)
C.M. Watts & T. Xia
Oregon Health Sciences Univ.

#### 3:15 pm Break

#### 3:30 pm

Quantitative analysis of immunoreactive calcitonin gene-related peptide in human periapical lesions

Aqeel M. Al-Mosawi, BDS, MS (presenter)

K.M. Hargreaves & M. El Deeb

Univ. of Minnesota

#### 3:45 pm

Effects of ultrasonics and NaOC1 on smear layer and debris on root canal walls Fred Barbakow, BDS, MSc (presenter) O. Peters & B. Leu Univ. of Zurich, Switzerland

#### 4 pm

Pathogenesis of the internal resorption in rat molars
Chihiro Kondo, DDS (presenter)
T. Aoba & I. Katsuumi
Nippon Dental Univ., Tokyo

#### 4:15 pm

Are electronic apex locators reliable? An in vitro study
Benjamin M. Briseno, DDS (presenter)
R.L. Garcia Aranda, H. Guerrero &
B. Willershausen
National Autonomous Univ. of Mexico &
Johannes Gutenberg Univ., Germany

#### 4:30 pm

Analysis of internal bleaching of 255 teeth Paul V. Abbott, MDS (presenter) Univ. of Melbourne, Australia

#### 4:45 pm

Chemical and radiographic evaluation of healing in teeth obturated with Thermafil or lateral condensation Donald J. Kleier, DMD (presenter) K. Shibilski, B.W. Jeffers, R. Chavez, & R.E. Averbach, Univ. of Colorado

## American Board of Endodontics

Bonn Room

Moderator: William T. Johnson, DDS, MS
Iowa City, IA

#### 2.5 pm

#### The Board Walk: Becoming a Diplomate Paul J. Ashkenaz, DDS, MS, Chicago

Charles J. Cunningham, DDS
Gainesville, FL
Gerald N. Glickman, DDS, MS, Houston
Gary R. Hartwell, DDS, Richmond, VA
Billie G. Jeansonne, DDS, PhD, New Orleans
William T. Johnson, DDS, MS, Iowa City, IA
Marshall D. Peikoff, DMD, MSD
Winnipeg, MB
Martin Trope, BDS, DMD, Chapel Hill, NC

The Directors of the American Board of Endodontics will discuss the process required for Board certification. Changes in the sequencing of the examination will be outlined. Each phase of the examination process (written examination, case history portfolio and oral examination) will be discussed and suggestions provided for preparation and successful completion of each portion of the certification process. The program is designed to provide interested individuals with the opportunity to interact with the Directors and to voice concerns regarding the certification process.

#### Saturday, April 24

#### **Continental Breakfast**

Imperial Ballroom (by ticket only) 7:50-8:45 am

#### **Exhibits**

International Hall
8 am-1 pm

#### Poster Research Presentations

Graduate Student Section International Hall

8:30-11:30 am

#### PR 2

Evaluation of instrument performance and canal preparation using Rotary GT and Profile .04 ISO files in curved canals Todd Barrett, DMD, & James Hiatt, DDS Univ. of Maryland

#### PR 22

Odontoblast express TGF-beta and IL-1 beta mRNA in response to IFN-gamma exposure in vitro Athanasia Bletsa, DDS Univ. of North Carolina

#### PR 23

Human pulpal or gingival fibroblasts attached to polyglycolic acid scaffolds survive and function in vivo Brian J. Buurma, DDS, Univ. of Michigan

#### PR 24

Growth inhibition of Streptococcus milleri and Staphylococcus aureus in human serum and dental pulp after single oral dose of clindamycin hydrochloride Eugene H. Choi, DDS Case Western Reserve Univ.

#### PR 25

In vitro evaluation of five materials as chamber floor sealants in endodontically treated teeth
Sami Chogle, DDS
Case Western Reserve Univ.

#### PR 26

Mononuclear cell recruitment and development of lesions of endodontic origin Christopher J. Douville, DDS Boston Univ.





#### PR 27

Scanning electron microscope evaluation of abrasives used in conjunction with ultrasonics for cleaning of root canals Nivine El-Refai, DDS Case Western Reserve Univ.

#### PR 28

Comparison of radiation exposure rates necessary to produce computerized digital images and conventional radiographs Kamran Foroughi, DDS, & Nick Mastromihalis, DDS State Univ. of New York at Stony Brook

#### PR 29

Periradicular pathosis and the maxillary sinus: Histologic, anatomic, and radiographic evaluation Heath A. Grote, DMD, Univ. of Iowa

#### PR 30

Accuracy of Root ZX apex locator in the presence of gutta-percha solvents
Armen A. Hartoonian, DMD
Case Western Reserve Univ.

#### PR 31

Technique estimating apical constricture with K-files and NT Lightspeed rotary instruments Donald T. Liu, DMD, Univ. of Pennsylvania

#### PR 32

Effect of root canal sealers and irrigation agents on retention of preformed posts luted with a resin cement
Jack T. Mayhew, DMD, Univ. of Louisville

#### PR 33

In vitro microleakage comparison of the sealing ability of amalgam alloy and Geristore when used as an incomplete vertical root fracture filling material Alex K. Mihailoff, DDS Case Western Reserve Univ.

#### PR 34

In vitro evaluation of three materials in the repair of artificially induced cracks in roots of teeth Jayesh S. Patel, BDS Case Western Reserve Univ.

#### PR 35

Scanning electron microscopic evaluation of human dentinal tubules and its relationship to dentin hypersensitivity Bijan Pourjamasb, DDS Case Western Reserve Univ.

#### PR 36

Frequency of fourth canals in maxillary molars located when using an operating microscope: A clinical study Helen N. Sempira, DDS Virginia Commonwealth Univ.

#### PR 37

Reduction of intracanal bacteria using NiTi rotary instrumentation and various medicaments

George B. Shuping, DDS Univ. of North Carolina

#### PR 38

Effect of the surgical operating microscope to repair furcation perforations using two types of barriers under a resin ionomer

Ronald C. Taylor, DDS Case Western Reserve Univ.

#### PR 39

Diagnosis of pulpal vitality via the Pulse Oximeter documented with histopathology Kulwant S. Verraich, DDS Univ. of Pittsburgh

#### PR 40

Mineral trioxide vs. Portland Cement two biocompatible filling materials Anne L. Wucherpfennig, DDS, Tufts Univ.

#### **Table Clinics**

Graduate Student Section International Hall 8:50 am-11:30 am

#### TC 5

Computer software system to help teaching institutions track clinical results of treatment techniques, materials and instruments
Antoine L. Bluth, DMD
Univ. of Pennsylvania

#### TC 6

Fibromyalgia patient: A contemporary endodontic challenge Tod T. Bruchmiller, DDS, & Sigrid S. Parry, DDS Univ. of Texas at Houston

#### TC 7

New options in NSAID therapy Ricardo M. Garza Jr., DDS, & R. Chris Campbell, DDS, Univ. of Texas at Houston

#### TC 8

Current techniques in perforation repair Mark A. Holman, DDS, & Lisa M. Anderson, DDS, Univ. of Maryland

#### TC 9

Hybrid rotary instrumentation technique Roderick M. MacIntyre, DMD, & Guido E. Costa, DMD Naval Dental School

#### TC 10

Contemporary and creative management of the open apex Anthony G. McNaught, BDS, & Karla A. Ham, DDS Baylor College of Dentistry

#### TC 11

Effectiveness of prophylactic etodolac on post-endodontic pain Eric R. Menke, DDS, West Virginia Univ.

#### TC 12

Variations in MTA material preparation for clinical applications Rita F. Ne, DDS, & Debora F. Levine, DDS Baylor College of Dentistry

#### TC 13

Optimal endodontic irrigation Shannon M. Neary, DMD, & Jean H. Kang, DDS Univ. of Pennsylvania

#### TC 14

Ultrasonic tips and tricks Joseph F. Palermo, DMD Naval Dental School

Baylor College of Dentistry

#### TC 15

Evidence-based approach to the differential diagnosis of craniofacial pain based on anatomy
Jill Peterson, DDS, MPH, & Mercedes S.
Dominguez, DDS

#### TC 16

Developmental anomalies of teeth and endodontic considerations Chootima Ratisoontorn, DDS Univ. of Pennsylvania

#### TC 17

Introduction to the use of mechanical lateral condensation for the obturation of root canals Richard J. Riehm, DDS Univ. of Nebraska

20



#### **Programs**

#### TC 18

Diagnostic tests for the "heat sensitive tooth" Ronald A. Sabins, DDS, &

Adam P. Strimer, DMD Naval Dental School

#### TC 19

Optimal placement of calcium hydroxide Rick M. Simcock, DDS Albert Einstein Medical Center

#### TC 20

Challenges of tooth transplantation Glenn A. Trautmann, DMD, & Faisal A. Amir, DDS Baylor College of Dentistry

#### TC 21

New method for maintaining visibility in the access cavity during lateral condensation Helmut Walsch, DMD Univ. of Pennsylvania

#### TC 22

Avoiding misdiagnosis of lesions of nonendodontic origin associated with the roots of teeth

W. Christopher Ward, DMD Albert Einstein Medical Center

#### TC 23

Comparing gutta-percha compacted with a finger spreader and a D11T spreader Brian D. Watkins, DDS, & Carol D. Weber, DDS, Naval Dental School

#### **Scientific Session 3**

Marquis Ballroom IV

Moderator: Keith V. Krell, DDS, MS, MA

West Des Moines, IA

## Patient-specific pain management and dental drug interactions



9 am-12 noon

Karen A. Baker, MS, Pharm Iowa City, IA

Each participant should be able to prescribe narcotic or non narcotic pain therapy based on patient-specific selection criteria. Each attendee should be able to identify and avoid potentially harmful drugdrug interactions with dental medications. At conclusion, each participant should be able to:

- Discuss the relative potency of common oral narcotic combination drugs.
- Describe strategies to maximize the effectiveness of NSAIDs.
- List the drug or disease contraindications for elective dentistry.
- Discuss dental office strategies for ensuring that drug-drug interactions will be recognized and avoided.

#### Scientific Session 4

Copenhagen/Stockholm Room

Moderator: J. Craig Baumgartner, DDS,

MS, PhD

Portland, OR

#### Acute endodontic pain: Mechanisms and management

9 am-12 noon



Goodis



Hargreave:

Harold E. Goodis, DDS, San Francisco Kenneth M. Hargreaves, DDS, PhD, San Antonio, TX

Each attendee should be able to describe the mechanisms involved in pulpal pain and the emergency and post-procedure management of patients in acute endodontic pain. At conclusion, each participant should be able to:

 Describe the mechanisms of neurogenic inflammation and peripheral and central pulpal sensory pathways.

- Understand the emergency procedures necessary to relieve acute endodontic pain.
- Understand post-procedure pain control methods, including pharmacology of pain control.

#### **Scientific Session 5**

Trinidad/Madrid Room

Moderator: Charles S. Solomon, DDS

New York

## The use of calcium sulfate in endodontics

9 am-12 noon



Pecora



DeLeonardis



Ricc

\*Gabriele Pecora, DDS, Rome Dario DeLeonardis, DDS, Rome John L. Ricci, PhD, Newark, NJ

Attendees should learn the biologic properties of medical grade calcium sulfate, potential clinical applications and indications, as well as an easy technique for predictable results. At conclusion, each participant should be able to:

- Describe the biological properties of medical grade calcium sulfate as a bone repair material and its peculiarities compared to other bone substitutes.
- Describe the process of calcium sulfate replacement by bone.
- Describe appropriate clinical indications for the use of calcium sulfate.
- Describe the suggested technique for an easy procedure and predictable results.

\*Speaker serves as a consultant and/or has a commercial interest in subject matter.

#### **Badges**

Badges must be worn at all official AAE functions

Treloar and Heisel has been the endorsed administrator of insurance programs for the AAE for more than 18 years. Stop by their booth on the Convention level near the AAE registration area.

**Insurance Questions?** 



#### **Clinical Session 12**

Marquis Ballroom III

Moderator: Kenneth N. Namerow, DDS

Ridgewood, NJ

The endoscope:
The future is here now
9 am-12 noon





Kahn

Shulman

Frederick H. Kahn, DDS, New York Barnet B. Shulman, DDS, New York

Each participant should be able to change his/her approach to all types of endodontic treatment procedures using the endoscope, a new, versatile, user-friendly light and magnification system. At conclusion, each participant should be able to:

- Use the endoscope for conventional endodontic treatment modalities.
- Use the endoscope to identify and locate calcified canal orifices and aid in the removal of separated instruments, silver cones and separated posts.
- Use the endoscope in all types of endodontic surgical procedures including those involving the maxillary sinus.
- Use the evolving potential of this technology in the future of endodontic therapy.

#### **General Interest 10**

Marquis Ballroom II

Moderator: John D. West, DDS, MSD

Tacoma, WA

Evolution and revolution within dentistry



9-11 am

David M. Reznik, DDS

Atlanta

Participants will understand the dynamics of external and internal forces affecting the dental profession. These forces include technology, finance (Wall Street) and the marketplace purchasers. At conclusion, each participant should be able to:

- Know where we are today, how we got there and where these forces are most likely to take us.
- Make rational business decisions to position the practice for delivery of exceptional patient care, practice stability and financial prosperity.
- Take advantage of current trends and become an agent of change rather than a victim of emotions.

#### Staff Session 3

Marquis Ballroom I

Moderator: Charles V. Tatosian, DDS, MS

Mission Viejo, CA

How to work in dentistry without killing each other!



9 am-12 noon
Joy Millis, CSP
Charlotte, NC

Each staff member should have better skills for understanding and communicating with doctors, patients and each other. They will learn a formula for solving problems and develop a method for getting to know others better in order to improve the quality of relationships. At conclusion, each participant should be able to:

- Understand the essential quality for success at any level of responsibility in the dental practice.
- Identify seven essential practice goals.
- Describe skills and solutions for working with difficult patients.
- Regain the passion for the profession of dentistry.

#### **Award Luncheon**

Imperial Ballroom (by ticket only)

Moderator: Fredric Goodman, DDS

New York

12:30-2 pm



Edward M. Osetek Educator Award David E. Witherspoon, BDS, MS Dallas

This award is given to an Active AAE Member with less than six years teaching experience for earning esteem and respect from students and faculty associates and for the impact on endodontics that former/current students have made.



Honorary Membership Award Margaret R. Byers, PhD Seattle, WA

Honorary membership is presented to individuals who have made significant contributions that have furthered the advancement of endodontics.

#### Graduate student awards

Awards for oral research presentations, poster research presentations and table clinics will also be presented.

#### **General Assembly**

Copenhagen/Stockholm Room

2:30-4 pm

#### **Pre-Dinner Dance Reception**

Marquis Ballroom Foyer
Preceding the President's Dinner Dance,
this annual reception will offer a cash bar.

6:30-7:30 pm

#### President's Dinner Dance

Marquis Ballroom

7:30 pm-12 midnight



## Sunday, April 25th

#### Farewell Breakfast

Imperial Ballroom, Salon A (by ticket only)

7:30-9 am

#### **Faculty Development** Seminar

Marquis Ballroom I (by invitation only) Changes in technology in endodontics

8 am-3 pm

Gerald N. Glickman, DDS, MS, Houston Ronald R. Lemon, DMD, New Orleans

The statements and opinions expressed at the Annual Session are solely those of the individual speakers. Their statements and opinions do not reflect any endorsement by the American Association of Endodontists.

Friday, April 23

## **Board and Committee Meetings**

Monday, April 19	
AAE Board of Directors	
8 am-5 pm	Bonr
ABE Board of Directors	
8 am-6 pm	Thames
Tuesday, April 20	
AAE Foundation Board of Trustees	
8 am-5 pm	Sydney
Endodontic Software Committee	
9 am-4 pm	Bordeaux
Continuing Education Committee	
12 noon-3 pm	Chablis
Educational Affairs Committee	
2-6 pm	Burgundy
Dental Benefits Committee	
3-5 pm	Picard
Wednesday, April 21	
Honors and Awards Committee	

Membership Insurance Committee
7-8:45 am
Clinical Practice Committee
7:30-8:45 am Rio Grand
Editorial Board
7:30-8:45 am Cabine
Governmental Affairs Committee
7:30-8:45 amYuko
Membership Services Committee
7:30-8:45 am Thame
Professional Standards, Peer Review and Ethics Committee
7:30-8:45 am
Public and Professional Affairs Committee
7:30-8:45 am
Saturday, April 24
Past Presidents' Breakfast
7:45-8:45 amPicare
Sunday, April 25
AAE Board of Directors
8 am-5 pm Trinidad

## **AAE Foundation**



#### 1999

H. Groves Cooke III, Vice President Ronald I. Deblinger, Treasurer Cindy R. Rauschenberger, Secretary Mr. Martin Fernholz

#### 2000

Robert L. Reames Herbert Schilder John D. West

#### 2001

Wayne G. Bemis Noah Chivian Gerald C. Dietz, Sr., President

#### **AAE Officers Serving as Trustees**

Carl W. Newton, AAE President Harmon R. Katz, AAE President-elect Jeffrey W. Hutter, AAE Secretary Denis E. Simon III, AAE Immed. Past Pres. Irma S. Kudo, Executive Director (ex officio)

#### Campaign Chair

Mahmoud Torabinejad

#### Thank You

The Foundation Trustees extend their deepest appreciation to the generous individuals who have contributed to the Endowment for Endodontic Excellence Campaign.

#### **American Board of Endodontics**



#### 1999

Paul J. Ashkenaz Charles J. Cunningham Martin Trope

#### 2000

Gerald N. Glickman Billie G. Jeansonne William T. Johnson

#### 2001

Gary R. Hartwell Marshall D. Peikoff H. Robert Steiman

#### Alliance of the AAE (AAAE)

#### President

Enriquita "Rikki" Bell (Craig)

#### **President - Elect Program**

Dorothy Nitta (Lawrence)

#### Vice President - Registration

Debra Howard (James)

#### Secretary - Tribute

Cecile Shetler (Gary)

#### Treasurer - Membership/Roster

Beverly Paulk (Glenn)

#### Parliamentarian - Bylaws

Bonnie Nielson (Dennis)

#### **Local Arrangements**

Denise Grubb (Tim)

#### Tuesday

3-8 pm

Registration

#### Wednesday

7 am-8 pm

Registration

Welcome Reception and Silent Auction

#### Thursday

7 am-5 pm

Registration

Executive Board meeting

Continental Breakfast-Chardonnay Room

Networking in Atlanta program

Lillian Pear Reception

General Membership Business Meeting

Networking in Atlanta program

#### Friday

1999-2000 Executive Board Meeting

#### 8 am-5 pm

Registration

Continental Breakfast-Chardonnay Room

Networking in Atlanta program

#### 11:30 am-1:30 pm

Lunch at Pittypat's Porch Restaurant

#### Saturday

Continental Breakfast-Chardonnay Room

#### 10 am-12 noon

Networking in Atlanta program

All events will be held in the AAE Alliance Hospitality Room (Chardonnay Room) with the exception of: Silent Auction (Marquis Ballroom)

Friday Lunch (Pittypat's Porch Restaurant)



## Alumni, Affiliates & Other Groups

Wednesday, April 21
Alpha Omega International Dental Fraternity Dinner,
8 pm
5-6 pm Cabinet Room
U.S. Army Association of Endodontists Business Meeting, 4:30-6 pm
1 march - 1 mar
Thursday, April 22
Christian Endodontic Society Reception,
5-6 pm Nile Room
Endo Standards Subcommittee Meeting,
2-5 pm
Harry J. Healey Endodontic Study Club Reception,
6:30-8 pm
Harvard School of Dental Medicine Reception and Dinner,
7-10 pm Riviera Room International Federation of Endodontic Associations Reception,
6-7:30 pm
MCV/VCU Endodontic Alumni Association,
5-7 pm
Michigan Association of Endodontists Reception,
6:30-8:30 pm
NOVA Southeastern University Reception,
7-9 pm
Tarheel Endodontics Association Meeting,
5-6 pm Picard Room
Tufts University Endodontic Alumni Reception,
6-8 pm McKenzie and Rio Grande Rooms
U.S. Navy Association of Endodontists Reception,
6-7:30 pmSkyline South
University of New York at Buffalo Endodontic Alumni Reception,
5-7 pm
University of Connecticut Endodontic Alumni Reception,
6:30-8 pmTigris Room University of Illinois Endodontic Alumni Dinner,
6-9 pm Shangri La Room
University of Maryland Alumni Reception,
6:30-8:30 pm
University of North Carolina Alumni/Tarheel Reception,
6-7:30 pm Picard Room
University of Pennsylvania Endodontists Reception,
6-7:30 pm Amsterdam Room
University of Pittsburgh Reception,
6-8 pm Danube Room
University of Texas-Houston Endodontic Alumni Reception,
6:30-8 pm Cabinet Room
University of Texas Health Science at San Antonio
Endodontic Alumni Association Reception,
6-7:30 pm
University of Toronto Alumni & Friends Reception,
5:30-7:30 pm
West Virginia University Endodontic Alumni, 5:30-7 pm South Hampton Room
5.50-7 pitt South Hampton Room

Friday, April 23	
Albert Einstein Endodontic Alumni Society Reception,	
6:30-8 pm	om
Boston University Alumni Reception & Dinner,	
6-11 pm Imperial Ballroom	i, B
Florida Association of Endodontists Business Meeting,	
5-6 pm McKenzie Ro	om
Iowa Endodontic Group Reception,	
6-8 pm Danube Ro	om
Louisana State University Alumni Reception,	BEC.
6:30-8:30 pm	om
New York University Endodontic Alumni Association Reception,	
6-8 pm Thames Ro	
Oklahoma Association of Endodontists Breakfast,	OIII
7-8:45 am Danube Ro	om
	OIII
University of Alabama Endodontic Alumni Reception,	
6-8 pm	uin
University of Southern California Endodontic Alumni,	
7-8:45 am Champaş	gne
University of Washington Alumni Reception,	
6:30-8:30 pmRio Grande Ro	om
Saturday, April 24	
Boston University Alumni Breakfast,	
7-8:45 am	ms
Endodontic Section of Triple O,	
7-8:45 am	om
Michigan Endodontic Alumni Association Breakfast,	
7-8:45 am	om
U.S. Air Force Endodontists Breakfast,	9-16
7-8:45 amTigris Ro	om
U.S. Navy Association of Endodontists Breakfast,	
7-8:45 amSydney Ro	om
University of Detroit Mercy Alumni Breakfast,	OIII
	0.000
7-8:45 amRio Grande Ro	OIII
Sunday, April 25	
Society for Apical Excellence Business Meeting,	
7:30-8:45 am Bordeaux Ro-	om

## Exhibitors

- 433 Analytic Endodontics 1717 W. Collins Avenue Orange, CA 92867
- 154 Aseptico, Inc. P.O. Box 3209 Kirkland, WA 98083
- 853 ASI Medical, Inc. 14550 Easter Avenue Suite 700 Englewood, CO 80112
- 758 Astra Pharmaceuticals, LP 50 Otis Street Westboro, MA 01581-4500
- 344 Becker-Parkin Dental Supply Company, Inc. 450 West 33rd Street New York, NY 10001
- 109 Block Drug Company 257 Cornelison Avenue Jersey City, NJ 07302
- 544 Brasseler USA 800 King George Blvd. Savannah, GA 31419
- 649 Carl Zeiss, Inc. One Zeiss Drive Thornwood, NY 10594
- 157 Centrix, Inc. 770 River Road Shelton, CT 06484
- 338 Chige, R., Inc. 4531 N. Dixie Highway Boca Raton, FL 33431
- 236 Dentsply Gendex 4379 South Howell Avenue Milwaukee, WI 53207
- 236 Dentsply/ MPL 9400 King Street Franklin Park, IL 60131-2116
- 236 Dentsply Maillefer 5001 East 68th Street #500 Tulsa, OK 74136
- 236 Dentsply MidWest 901 West Oakton Street Des Plaines, IL 60018
- 236 Dentsply New Image 2283 Cosmos Court Carlsbad, CA 92009

- 236 Dentsply Preventive Care 1301 Smile Way York, PA 17404
- 236 Dentsply Rinn 1212 Abbott Drive Elgin, IL 60123-1819
- 236 Dentsply SoftDent 7939 Honeygo Blvd., Ste. 212 Baltimore, MD 21236
- 236 Dentsply Tulsa 5001 E. 68th Street, Ste. 500 Tulsa, OK 74136
- 215 Designs For Vision, Inc. 760 Koehler Avenue Ronkonkoma, NY 11779
- 337 Dexis Digital X-Ray 4117 El Camino Real Palo Alto, CA 94306
- 255 DiaDent 11-3871 N. Fraser Way Burnaby, BC V5J 5G6
- Direct Vision Software, Inc.1208 VFW Parkway, Ste. 200Boston, MA 02132
- EagleSoft, a Patterson Company
  2202 Althoff Drive
  P. O. Box 1267
  Effingham, IL 62401
- 543 Endoco, Inc. 5180 Park Avenue Memphis, TN 38119
- 106 Essential Dental Systems, Inc.89 Leuning StreetSouth Hackensack, NJ 07606
- 345 F.M.C. 524 Watford Way, Mill Hill London, England NW7 4SY
- 849 FiberDent Corp. 3753 Varsity Drive Ann Arbor, MI 48108
- 155 FILHOL Dental 1219-B Greenwood Road Baltimore, MD 21208
- 851 Garfield Dental Products/Refining Company 810 East Cayuga Street Philadelphia, PA 19124

- 351 Global Surgical Corporation 3610 Tree Court Industrial Blvd. St. Louis, MO 63122
- 657 Hartzell & Son, G. 2372 Stanwell Circle P.O. Box 5988 Concord, CA 94520
- 259 HealthFirst Corporation 22316 70th Avenue W, Unit A Mountlake Terrace, WA 98043
- 749 Heraeus Kulzer, Inc. 4315 S. Lafayette Blvd. South Bend, IN 46614
- 354 High Q Dental 6302 E. Aster Drive Scottsdale, AZ 85254
- 445 Hu-Friedy Mfg. Co. Inc. 3232 N. Rockwell Street Chicago, IL 60618
- 757 Hygenic Coltene/Whaledent 750 Corporate Drive Mahwah, NJ 07430
- 347 J. Morita USA, Inc. 9 Mason Irvine, CA 92618
- 146 JEDMED INSTRUMENT COMPANY 5416 JEDMED Court St. Louis, MO 63129-2217
- 537 Karl Storz Endoscopy-America 600 Corporate Pointe Culver City, CA 90230
- 144 Kerr Corporation 1717 W. Collins Avenue Orange, CA 92867
- 258 Kilgore International, Inc. 36 W. Pearl Street Coldwater, MI 49036
- 151 Knoll Pharmaceutical Company 3000 Continental Drive North Mount Olive, NJ 07828-1234
- 206 Leica Micro Systems, Inc. P. O. Box 123 Buffalo, NY 14240
- 650 Lightspeed Technology, Inc. 15600 San Pedro, Ste. 304 San Antonio, TX 78232



-	
358	Lippincott Williams & Wilkins 227 East Washington Square Philadelphia, PA 19106-3780
117	Medidenta International, Inc. 39-23 62nd Street Woodside, NY 11377
443	MedPro/Frontier Healthcare Two Depot Plaza Bedford Hills, NY 10507
256	Metalift Crown and Bridge Removal System 7855 Jefferson Highway, Suite C Baton Rouge, LA 70817
212	Moller Microsurgical 5500 Courseview Drive Mason, OH 45040
350	Moyco Union Broach/Thompson 200 Commerce Drive Montgomeryville, PA 18936
852	Nephron Dental Supply 321 E. 25th Street Tacoma, WA 98421
207	Obtura Corp/Spartan Marketing Group 1663 Fenton Business Park Court Fenton, MO 63026
108	Orascoptic Research 5225-3 Verona Road Madison, WI 53711
156	Osada, Inc. 8436 W. Third Street, Ste. 695 Los Angeles, CA 90048
847	Osteohealth Company One Luitpold Drive Shirley, NY 11967
549	Patterson Dental Supply, Inc. 1031 Mendota Hts. Road St. Paul, MN 55120
147	Premier Dental Products Company 3600 Horizon Drive King of Prussia, PA 19406
254	ProBusiness Systems, Inc. 9300 Jollyville Road., Ste. 100 Austin, TX 78759
158	Professional Results, Inc Tooth Slooth 17 Phaedra Laguna Niguel, CA 92677

756	Quality Aspirators	539
	P.O. Box 382120	
	Duncanville, TX 75138	
848	Quintessence Publishing Co., Inc.	342
	551 N. Kimberly Drive	
	Carol Stream, IL 60188	
751	RGP Dental	446
	22 Burnside Street	
	Bristol, RI 02809	
850	Ribbond, Inc.	
	1402 3rd Avenue, Ste. 1030	210
	Seattle, WA 98101	
533	ROEKO USA	
	825 S. Primrose Avenue, Ste. E	Regi
	Monrovia, CA 91016	
535	Roydent Dental Products, Inc.	
	1010 W. Hamlin Road	
	Rochester Hills, MI 48309	
		648
551	SATELEC - AMADENT	
	1236 Brace Road, Bldg. B	
	Cherry Hill, NJ 08034	
		257
542	ScanRite Systems	
	4368 Enterprise Street	
	Fremont, CA 94538	
		444
113	Schick Technologies, Inc.	
138	31-00 47th Avenue	
	Long Island City, NY 11101	
		759
159	Schwed Company	
	124-02 Metropolitan Avenue	
	Kew Gardens, NY 11415-2712	

See the latest in products and services and say thanks to the exhibitors who help defray part of your annual session costs. Fewer presentations are scheduled on Saturday to allow more time to visit the exhibits.

Badges must be worn in the exhibit hall. Complimentary coffee service will be provided on Thursday and Friday at 10:30 am and 2:30 pm and on Saturday at 10:30 am.

AAE Information Center
AAE Online
Colleagues for Excellence Program
57th Annual Session in Hawaii
Tote bags and Hawaii mugs
American Board of Endodontics
AAE Foundation

- 539 Seiler Instrument Company 170 E. Kirkham Avenue St. Louis, MO 63119
- 342 Septodont, Inc. 245C Quigley Blvd. New Castle, DE 19720
- SurgiTel/General Scientific
   Corporation
   77 Enterprise Drive
   Ann Arbor, MI 48103
- 210 TEL-A-PATIENT, Inc. 125 E. Baker, Ste. 140 Costa Mesa, CA 92626

Registration Area Treloar & Heisel, Inc. 3132 Wilmington Road P. O. Box 5168 New Castle, PA 16105

- 648 Trident Dental, Inc. Route 2, Box 251-A Hendersonville, NC 28792
- 257 Ultradent Products, Inc. 505 West 10200 South South Jordan, UT 84095
- Velopex International 136 Main Street Catawissa, PA 17820
- 759 White Burs, Inc. (SS) 1145 Towbin Avenue Lakewood, NJ 08701

#### Also in the Exhibit Hall:

Stop by the Poster Research Presentations and Table Clinics while you're in the exhibit halls. The presentation schedule follows:

Poster Research Presentations 1-20 Endodontist Section Friday, April 23, 9am-12 noon

Poster Research Presentations 21-40 Graduate Student Section Saturday, April 24, 8:30-11:30 am

Table Clinics 1-4 Endodontist Section Friday, April 23, 9 am-12 noon

Table Clinics 5-23 Graduate Student Section Saturday, April 24, 8:30-11:30 am

## Award Recipients

#### Edgar D. Coolidge Award

100	
* Edgar D. Coolidge'69	
* Harry B. Johnston'70	
* Henry A. Bartels	
* Bertram L. Wolfsohn	
* Vincent B. Milas	
Worth B. Gregory'78	
Jacob B. Freedland'80	
Alfred L. Frank'81	
George G. Stewart '82	
* F. Darl Ostrander	
* Maynard K. Hine'83	
* George C. Hare '84	
**Irving J. Naidorf	
Harry Blechman'86	
I.B. Bender	
Dudley H. Glick '88	
* Samuel S. Patterson	
Robert A. Uchin'90	
Michael A. Heuer'91	
* Edward M. Osetek	
Harold Gerstein	
Henry J. Van Hassel'93	
Donald E. Arens'94	
* Harold A. Maxmen'94	
Herbert Schilder'95	
Stuart B. Fountain	
Joseph D. Maggio'97	
Gerald C. Dietz Sr	
John I. Ingle '99	

#### Louis I. Grossman Award

*	Louis I. Grossman	73
*	Birger Nygaard-Ostby	'76
	I.B. Bender	
	Samuel Seltzer	'80
	Harold R. Stanley	'81
	Kaare Langeland	'82
	Henry J. Van Hassel	
*	Melvin Goldman	'89
	Syngcuk Kim	'90
	Calvin D. Torneck	
	Henry O. Trowbridge	
	Mahmoud Torabinejad	
	Herbert Schilder	

*	Gordon D. Mattison	'95
	Eric M. Rivera	'96
	Asgeir Sigurdsson	'98
	David E. Witherspoon	

**Edward M. Osetek Educator Award** 

#### **Honorary Members**

President's Award

*	Edgar D. Coolidge	'48
	W. Clyde Davis	
*	Bernhard Gottlieb	'48
*	Edward S. Hatton	'49
*	Walter Hess	'49
*	Hermann Prinz	'49
*	Francisco Pucci	'49
*	Sir E. Wilfred Fish	'56
*	Birger Nygaard-Ostby	'58
	Mary Crowley	'66
*	Ralph F. Sommer	'67
	Harold R, Stanley	
*	Maynard K. Hine	'69
*	Maury Massler	
*	Louis I. Grossman	
*	Oscar A. Maisto	
	Henry O. Trowbridge	'86
	David H. Pashley	'92
	Irma S. Kudo	
	Frank N. Lentine	'94
	Michel Maillefer	
	Margaret R. Byers	.96

Peter A. Paesani ......'97

#### Ralph F. Sommer Award

Calvin D. Torneck	184
Alfred L. Frank	
Mahmoud Torabinejad	'86
John I. Ingle	
Leif Tronstad	
Jens O. Andreasen	'9
I.B. Bender	'9:
Samuel Seltzer	'9
Goran Sundqvist	'94
Gunnar Bergenholtz	'9

\*Deceased

## **Past Presidents**

*	W. Clyde Davis	'43-44
	Ralph F. Sommer	'44-45
	Robert G. Kesel	
*	E.G. Van Valey	
*	Maynard K. Hine	
ole	Louis I. Grossman	
ok		
*		
*		
*	F. Darl Ostrander	
	Laurence A. Lucas	
*	N. Weir Burkman	
*	Harry J. Healey	
*		
*	George C. Hare	
	George G. Stewart	
*	J. Henry Kaiser	
*	Paul P. Sherwood	
*	Glenn R. Brooks	

*	Vincent B. Milas	'62-63
	James H. Sherard Jr	
	Jacob B. Freedland	
*		'65-66
		'66-67
	Edwin C. Van Valey	'67-68
*	Samuel S Patterson	'68-69
*	Warren J. Hedman	'69-70
*	John F. Bucher	'70-71
	Dudley H. Glick	'71-72
	I.B. Bender	'72-73
	Charles A. Scott Jr	'73-74
	Alfred L. Frank	'74-75
	Robert A. Uchin	'75-76
	Frank B. Trice	'76-77
	George A. Zurkow	'77-78
	Harry Blechman	
	Paul E. Zeigler	'79-80
*	그렇게 하는 아이들 가장 그렇게 그렇게 되었다.	

Henry J. Van Hassel	'81-82
Noah Chivian	
Donald E. Arens	'83-84
Stephen F. Schwartz	
Herbert Schilder	
Michael A. Heuer	
Charles J. Cunningham	
Joseph D. Maggio	
Gerald C. Dietz Sr	
James C. McGraw	
Joseph I. Tenca	'91-92
Stuart B. Fountain	'92-93
	'93-94
Richard C. Burns	
Philip W. Cohen	
Jerome V. Pisano	'96-97
Denis E. Simon, III	

\* Deceased

## **Participants**

Abbott, Paul V	
Addott, Faul V	11 16
	. 11,12
Aibel, Keith M	1
Aimir, Faisal A	21
Al-Mosawi, Aqeel M	10
Al-Mosawi, Aqeel M	1č
Analoui, Mostafa	8
Anderson, Lisa M	20
Anooshiravani, Dina	7
Anooshiravani, Dina	1
Ashkenaz, Paul J	19
-	
В	
Backlund, Gary A	9
Baer, Stanley M	č
Bahcall, James H	15
Baker, Karen A	
Daket, Ratell IL	11 16
Bakland, Leif K	. 11,12
Baldassari-Cruz, Lynne A	7
Barbakow, Fred	10
Darbakow, Fred	10
Barrett, Todd	18
Bascom, Linda K	17
Baumgartner, J. Craig	10.21
Daurigartilei, J. Graig	10,21
Beachler, David C	/
Benjamin, Ilya	15
Berman, Stuart A	16
Di Tari	IC
Blaney, James M	10
Blau, Joel M	17
Bletsa, Athanasia	10
Dietoa, Autanasia	18
Bluth, Antoine L	20
Bosack, Robert C	11
Bramy, Eric M	1.4
Brent, Paul D	(
Briseno, Benjamin M	. 11,19
Brown, David C	-
Brown, David C	1
Brown, Wallace B	16
Bruchmiller, Tod T	20
Bryant, Neil W	-
Diyant, Nen W	
Buchanan, L. Stephen	12
Bueno, Carlos E	15
Down Direct	10
Buurma, Brian J	18
Byers, Margaret R	22
_	
C	
	15
Caicedo, Ricardo	
Caicedo, Ricardo Calas, Paul L	19
Caicedo, Ricardo Calas, Paul L	19
Caicedo, Ricardo Calas, Paul L Camp, Joe H	19
Caicedo, Ricardo	19 8
Caicedo, Ricardo	19 8 20
Caicedo, Ricardo	19 8 20
Caicedo, Ricardo	19 20 5
Caicedo, Ricardo Calas, Paul L. Camp, Joe H. Campbell, R. Chris Carlson, Charles R. Carr, Gary B. Chogle, Sami	19 20 5 17
Caicedo, Ricardo Calas, Paul L. Camp, Joe H. Campbell, R. Chris Carlson, Charles R. Carr, Gary B. Chogle, Sami Choi, Eugene H.	19 20 5 17 19
Caicedo, Ricardo Calas, Paul L. Camp, Joe H. Campbell, R. Chris Carlson, Charles R. Carr, Gary B. Chogle, Sami Choi, Eugene H.	19 20 5 17 19
Caicedo, Ricardo Calas, Paul L. Camp, Joe H. Campbell, R. Chris Carlson, Charles R. Carr, Gary B. Chogle, Sami Choi, Eugene H. Chung, H. Anthony	19 20 5 17 19 19 18
Caicedo, Ricardo Calas, Paul L. Camp, Joe H. Campbell, R. Chris Carlson, Charles R. Carr, Gary B. Chogle, Sami Choi, Eugene H. Chung, H. Anthony Cohen, Philip W.	19 20 17 19 19 18 18
Caicedo, Ricardo Calas, Paul L. Camp, Joe H. Campbell, R. Chris Carlson, Charles R. Carr, Gary B. Chogle, Sami Choi, Eugene H. Chung, H. Anthony Cohen, Philip W. Costa, Guido E.	19 20 17 19 18 18 18 12
Caicedo, Ricardo Calas, Paul L. Camp, Joe H. Campbell, R. Chris Carlson, Charles R. Carr, Gary B. Chogle, Sami Choi, Eugene H. Chung, H. Anthony Cohen, Philip W. Costa, Guido E.	19 20 17 19 18 18 18 12
Caicedo, Ricardo Calas, Paul L. Camp, Joe H. Campbell, R. Chris Carlson, Charles R. Carr, Gary B. Chogle, Sami Choi, Eugene H. Chung, H. Anthony Cohen, Philip W. Costa, Guido E. Coury, Kirk A.	19 20 17 18 18 18 12 20 21
Caicedo, Ricardo Calas, Paul L. Camp, Joe H. Campbell, R. Chris Carlson, Charles R. Carr, Gary B. Chogle, Sami Choi, Eugene H. Chung, H. Anthony Cohen, Philip W. Costa, Guido E. Coury, Kirk A. Creer, Paul	19 20 17 18 18 18 11 20 2,11 15
Caicedo, Ricardo Calas, Paul L. Camp, Joe H. Campbell, R. Chris Carlson, Charles R. Carr, Gary B. Chogle, Sami Choi, Eugene H. Chung, H. Anthony Cohen, Philip W. Costa, Guido E. Coury, Kirk A.	19 20 17 18 18 18 11 20 2,11 15
Caicedo, Ricardo Calas, Paul L. Camp, Joe H. Campbell, R. Chris Carlson, Charles R. Carr, Gary B. Chogle, Sami Choi, Eugene H. Chung, H. Anthony Cohen, Philip W. Costa, Guido E. Coury, Kirk A. Creer, Paul	19 20 17 18 18 18 11 20 2,11 15
Caicedo, Ricardo Calas, Paul L. Camp, Joe H. Campbell, R. Chris Carlson, Charles R. Carr, Gary B. Chogle, Sami Choi, Eugene H. Chung, H. Anthony Cohen, Philip W. Costa, Guido E. Coury, Kirk A. Creer, Paul Cunningham, Charles J.	19 20 17 18 18 18 11 20 2,11 15
Caicedo, Ricardo Calas, Paul L. Camp, Joe H. Campbell, R. Chris Carlson, Charles R. Carr, Gary B. Chogle, Sami Choi, Eugene H. Chung, H. Anthony Cohen, Philip W. Costa, Guido E. Coury, Kirk A Creer, Paul Cunningham, Charles J.	19 20 17 19 18 11 20 21 15 15
Caicedo, Ricardo Calas, Paul L. Camp, Joe H. Campbell, R. Chris Carlson, Charles R. Carr, Gary B. Chogle, Sami Choi, Eugene H. Chung, H. Anthony Cohen, Philip W. Costa, Guido E. Coury, Kirk A. Creer, Paul Cunningham, Charles J.	19 20 17 19 18 11 20 2,11 15 15
Caicedo, Ricardo Calas, Paul L. Camp, Joe H. Campbell, R. Chris Carlson, Charles R. Carr, Gary B. Chogle, Sami Choi, Eugene H. Chung, H. Anthony Cohen, Philip W. Costa, Guido E. Coury, Kirk A. Creer, Paul Cunningham, Charles J.	19 20 17 19 18 11 20 2,11 15 15
Caicedo, Ricardo Calas, Paul L. Camp, Joe H. Campbell, R. Chris Carlson, Charles R. Carr, Gary B. Chogle, Sami Choi, Eugene H. Chung, H. Anthony Cohen, Philip W. Costa, Guido E. Coury, Kirk A. Creer, Paul Cunningham, Charles J.  Deblinger, Ronald I. DeLeonardis, Dario	18 20 17 18 18 11 20 2,11 15 16 20
Caicedo, Ricardo Calas, Paul L. Camp, Joe H. Campbell, R. Chris Carlson, Charles R. Carr, Gary B. Chogle, Sami Choi, Eugene H. Chung, H. Anthony Cohen, Philip W. Costa, Guido E. Coury, Kirk A. Creer, Paul Cunningham, Charles J.  D Deblinger, Ronald I. DeLeonardis, Dario Dines, Tevyah J.	18 20 17 18 18 18 11 18 11 12 12 14
Caicedo, Ricardo Calas, Paul L. Camp, Joe H. Campbell, R. Chris Carlson, Charles R. Carr, Gary B. Chogle, Sami Choi, Eugene H. Chung, H. Anthony Cohen, Philip W. Costa, Guido E. Coury, Kirk A. Creer, Paul Cunningham, Charles J.  D Deblinger, Ronald I. DeLeonardis, Dario Dines, Tevyah J.	18 20 17 18 18 18 11 18 11 12 12 14
Caicedo, Ricardo Calas, Paul L. Camp, Joe H. Campbell, R. Chris Carlson, Charles R. Carr, Gary B. Choigle, Sami Choi, Eugene H. Chung, H. Anthony Cohen, Philip W. Costa, Guido E. Coury, Kirk A. Creer, Paul Cunningham, Charles J.  D Deblinger, Ronald I. DeLeonardis, Dario Dines, Tevyah J. Dominguez, Mercedes S.	18 20 17 18 18 12 18 11 12 12 14 14 20
Caicedo, Ricardo Calas, Paul L. Camp, Joe H. Campbell, R. Chris Carlson, Charles R. Carr, Gary B. Chogle, Sami Choi, Eugene H. Chung, H. Anthony Cohen, Philip W. Costa, Guido E. Coury, Kirk A. Creer, Paul Cunningham, Charles J.  D Deblinger, Ronald I. DeLeonardis, Dario Dines, Tevyah J. Dominguez, Mercedes S. Douville, Christopher J.	
Caicedo, Ricardo Calas, Paul L. Camp, Joe H. Campbell, R. Chris Carlson, Charles R. Carr, Gary B. Choi, Eugene H. Chung, H. Anthony Cohen, Philip W. Costa, Guido E. Coury, Kirk A. Creer, Paul Cunningham, Charles J.  D  Deblinger, Ronald I. DeLeonardis, Dario Dines, Tevyah J. Dominguez, Mercedes S. Douville, Christopher J. Dovgan, Joseph S.	
Caicedo, Ricardo Calas, Paul L. Camp, Joe H. Campbell, R. Chris Carlson, Charles R. Carr, Gary B. Choi, Eugene H. Chung, H. Anthony Cohen, Philip W. Costa, Guido E. Coury, Kirk A. Creer, Paul Cunningham, Charles J.  D  Deblinger, Ronald I. DeLeonardis, Dario Dines, Tevyah J. Dominguez, Mercedes S. Douville, Christopher J. Dovgan, Joseph S.	
Caicedo, Ricardo Calas, Paul L. Camp, Joe H. Campbell, R. Chris Carlson, Charles R. Carr, Gary B. Choi, Eugene H. Chung, H. Anthony Cohen, Philip W. Costa, Guido E. Coury, Kirk A. Creer, Paul Cunningham, Charles J.  D  Deblinger, Ronald I. DeLeonardis, Dario Dines, Tevyah J. Dominguez, Mercedes S. Douville, Christopher J. Dovgan, Joseph S. Dumas, Christine	
Caicedo, Ricardo Calas, Paul L. Camp, Joe H. Campbell, R. Chris Carlson, Charles R. Carr, Gary B. Choi, Eugene H. Chung, H. Anthony Cohen, Philip W. Costa, Guido E. Coury, Kirk A. Creer, Paul Cunningham, Charles J.  D  Deblinger, Ronald I. DeLeonardis, Dario Dines, Tevyah J. Dominguez, Mercedes S. Douville, Christopher J. Dovgan, Joseph S.	
Caicedo, Ricardo Calas, Paul L. Camp, Joe H. Campbell, R. Chris Carlson, Charles R. Carr, Gary B. Choi, Eugene H. Chung, H. Anthony Cohen, Philip W. Costa, Guido E. Coury, Kirk A. Creer, Paul Cunningham, Charles J.  D  Deblinger, Ronald I. DeLeonardis, Dario Dines, Tevyah J. Dominguez, Mercedes S. Douville, Christopher J. Dovgan, Joseph S. Dumas, Christine	
Caicedo, Ricardo Calas, Paul L. Camp, Joe H. Campbell, R. Chris Carlson, Charles R. Carr, Gary B. Choi, Eugene H. Chung, H. Anthony Cohen, Philip W. Costa, Guido E. Coury, Kirk A. Creer, Paul Cunningham, Charles J.  D  Deblinger, Ronald I. DeLeonardis, Dario Dines, Tevyah J. Dominguez, Mercedes S. Douville, Christopher J. Dovgan, Joseph S. Dumas, Christine Dunsky, Joel L.	18 20 18 18 11 20 21 15 16 14 20 14 15 15 15 16 17
Caicedo, Ricardo Calas, Paul L. Camp, Joe H. Campbell, R. Chris Carlson, Charles R. Carr, Gary B. Chogle, Sami Choi, Eugene H. Chung, H. Anthony Cohen, Philip W. Costa, Guido E. Coury, Kirk A. Creer, Paul Cunningham, Charles J.  D Deblinger, Ronald I. DeLeonardis, Dario Dines, Tevyah J. Dowinguez, Mercedes S. Douville, Christopher J. Dovgan, Joseph S. Dumas, Christine Dunsky, Joel L.	
Caicedo, Ricardo Calas, Paul L. Camp, Joe H. Campbell, R. Chris Carlson, Charles R. Carr, Gary B. Chogle, Sami Choi, Eugene H. Chung, H. Anthony Cohen, Philip W. Costa, Guido E. Coury, Kirk A. Creer, Paul Cunningham, Charles J.  D Deblinger, Ronald I. DeLeonardis, Dario Dines, Tevyah J. Dominguez, Mercedes S. Douville, Christopher J. Dovgan, Joseph S. Dumas, Christine Dunsky, Joel L.  E El-Refai, Nivine	
Caicedo, Ricardo Calas, Paul L. Camp, Joe H. Campbell, R. Chris Carlson, Charles R. Carr, Gary B. Chogle, Sami Choi, Eugene H. Chung, H. Anthony Cohen, Philip W. Costa, Guido E. Coury, Kirk A. Creer, Paul Cunningham, Charles J.  D Deblinger, Ronald I. DeLeonardis, Dario Dines, Tevyah J. Dominguez, Mercedes S. Douville, Christopher J. Dovgan, Joseph S. Dumas, Christine Dunsky, Joel L.  E El-Refai, Nivine	
Caicedo, Ricardo Calas, Paul L. Camp, Joe H. Campbell, R. Chris Carlson, Charles R. Carr, Gary B. Chogle, Sami Choi, Eugene H. Chung, H. Anthony Cohen, Philip W. Costa, Guido E. Coury, Kirk A. Creer, Paul Cunningham, Charles J.  D Deblinger, Ronald I. DeLeonardis, Dario Dines, Tevyah J. Dowinguez, Mercedes S. Douville, Christopher J. Dovgan, Joseph S. Dumas, Christine Dunsky, Joel L.	
Caicedo, Ricardo Calas, Paul L. Camp, Joe H. Campbell, R. Chris Carlson, Charles R. Carr, Gary B. Chogle, Sami Choi, Eugene H. Chung, H. Anthony Cohen, Philip W. Costa, Guido E. Coury, Kirk A. Creer, Paul Cunningham, Charles J.  D Deblinger, Ronald I. DeLeonardis, Dario Dines, Tevyah J. Dominguez, Mercedes S. Douville, Christopher J. Dovgan, Joseph S. Dumas, Christine Dunsky, Joel L.  E El-Refai, Nivine	
Caicedo, Ricardo Calas, Paul L. Camp, Joe H. Campbell, R. Chris Carlson, Charles R. Carr, Gary B. Chogle, Sami Choi, Eugene H. Chung, H. Anthony Cohen, Philip W. Costa, Guido E. Coury, Kirk A. Creer, Paul Cunningham, Charles J.  D Deblinger, Ronald I. DeLeonardis, Dario Dines, Tevyah J. Dominguez, Mercedes S. Douville, Christopher J. Dovgan, Joseph S. Dumas, Christine Dunsky, Joel L.  E El-Refai, Nivine	
Caicedo, Ricardo Calas, Paul L. Camp, Joe H. Campbell, R. Chris Carlson, Charles R. Carr, Gary B. Chogle, Sami Choi, Eugene H. Chung, H. Anthony Cohen, Philip W. Costa, Guido E. Coury, Kirk A Creer, Paul Cunningham, Charles J.  D Deblinger, Ronald I. DeLeonardis, Dario Dines, Tevyah J. Dominguez, Mercedes S. Douville, Christopher J. Dovgan, Joseph S. Dumas, Christine Dunsky, Joel L.  E El-Refai, Nivine Elsherif, Ismail	
Caicedo, Ricardo Calas, Paul L. Camp, Joe H. Campbell, R. Chris Carlson, Charles R. Carr, Gary B. Chogle, Sami Choi, Eugene H. Chung, H. Anthony Cohen, Philip W. Costa, Guido E. Coury, Kirk A Creer, Paul Cunningham, Charles J.  D Deblinger, Ronald I. DeLeonardis, Dario Dines, Tevyah J. Dominguez, Mercedes S. Douville, Christopher J. Dovgan, Joseph S. Dumas, Christine Dunsky, Joel L.  E El-Refai, Nivine Elsherif, Ismail  F Ferraz, Caio C.R.	19 20 17 18 18 18 18 18 18 18 18 18 18 18 18 19 18 19 11 11 11 12 12 14 15 15 15 15 15 15 15 15 15 15
Caicedo, Ricardo Calas, Paul L. Camp, Joe H. Campbell, R. Chris Carlson, Charles R. Carr, Gary B. Chogle, Sami Choi, Eugene H. Chung, H. Anthony Cohen, Philip W. Costa, Guido E. Coury, Kirk A. Creer, Paul Cunningham, Charles J.  D Deblinger, Ronald I. DeLeonardis, Dario Dines, Tevyah J. Dominguez, Mercedes S. Douville, Christopher J. Dovgan, Joseph S. Dumas, Christine Dunsky, Joel L.  E El-Refai, Nivine Elsherif, Ismail  F Ferraz, Caio C.R. Foroughi, Kamran	18 20 18
Caicedo, Ricardo Calas, Paul L. Camp, Joe H. Campbell, R. Chris Carlson, Charles R. Carr, Gary B. Chogle, Sami Choi, Eugene H. Chung, H. Anthony Cohen, Philip W. Costa, Guido E. Coury, Kirk A. Creer, Paul Cunningham, Charles J.  D Deblinger, Ronald I. DeLeonardis, Dario Dines, Tevyah J. Dominguez, Mercedes S. Douville, Christopher J. Dovgan, Joseph S. Dumas, Christine Dunsky, Joel L.  E El-Refai, Nivine Elsherif, Ismail  F Ferraz, Caio C.R. Foroughi, Kamran	18 20 18
Caicedo, Ricardo Calas, Paul L. Camp, Joe H. Campbell, R. Chris Carlson, Charles R. Carr, Gary B. Choi, Eugene H. Chung, H. Anthony Cohen, Philip W. Costa, Guido E. Coury, Kirk A. Creer, Paul Cunningham, Charles J.  D Deblinger, Ronald I. DeLeonardis, Dario Dines, Tevyah J. Dominguez, Mercedes S. Douville, Christopher J. Dovgan, Joseph S. Dumas, Christine Dunsky, Joel L.  E El-Refai, Nivine Elsherif, Ismail  F Ferraz, Caio C.R. Foroughi, Kamran Fouad, Ashraf	
Caicedo, Ricardo Calas, Paul L. Camp, Joe H. Campbell, R. Chris Carlson, Charles R. Carr, Gary B. Choi, Eugene H. Chung, H. Anthony Cohen, Philip W. Costa, Guido E. Coury, Kirk A. Creer, Paul Cunningham, Charles J.  D  Deblinger, Ronald I. DeLeonardis, Dario Dines, Tevyah J. Dominguez, Mercedes S. Douville, Christopher J. Dovgan, Joseph S. Dumas, Christine Dunsky, Joel L.  E  El-Refai, Nivine Elsherif, Ismail  F  Ferraz, Caio C.R. Foroughi, Kamran Fouad, Ashraf Fountain, Stuart B.	
Caicedo, Ricardo Calas, Paul L. Camp, Joe H. Campbell, R. Chris Carlson, Charles R. Carr, Gary B. Choi, Eugene H. Chung, H. Anthony Cohen, Philip W. Costa, Guido E. Coury, Kirk A. Creer, Paul Cunningham, Charles J.  D  Deblinger, Ronald I. DeLeonardis, Dario Dines, Tevyah J. Dominguez, Mercedes S. Douville, Christopher J. Dovgan, Joseph S. Dumas, Christine Dunsky, Joel L.  E  El-Refai, Nivine Elsherif, Ismail  F  Ferraz, Caio C.R. Foroughi, Kamran Fouad, Ashraf Fountain, Stuart B. Frank, Robert J.	
Caicedo, Ricardo Calas, Paul L. Camp, Joe H. Campbell, R. Chris Carlson, Charles R. Carr, Gary B. Choi, Eugene H. Chung, H. Anthony Cohen, Philip W. Costa, Guido E. Coury, Kirk A. Creer, Paul Cunningham, Charles J.  D  Deblinger, Ronald I. DeLeonardis, Dario Dines, Tevyah J. Dominguez, Mercedes S. Douville, Christopher J. Dovgan, Joseph S. Dumas, Christine Dunsky, Joel L.  E  El-Refai, Nivine Elsherif, Ismail  F  Ferraz, Caio C.R. Foroughi, Kamran Fouad, Ashraf Fountain, Stuart B. Frank, Robert J.	
Caicedo, Ricardo Calas, Paul L. Camp, Joe H. Campbell, R. Chris Carlson, Charles R. Carr, Gary B. Chogle, Sami Choi, Eugene H. Chung, H. Anthony Cohen, Philip W. Costa, Guido E. Coury, Kirk A. Creer, Paul Cunningham, Charles J.  D Deblinger, Ronald I. DeLeonardis, Dario Dines, Tevyah J. Dominguez, Mercedes S. Douville, Christopher J. Dovgan, Joseph S. Dumas, Christine Dunsky, Joel L.  E El-Refai, Nivine Elsherif, Ismail  F Ferraz, Caio C.R. Foroughi, Kamran Fountain, Stuart B. Frank, Robert J. Fried, Irving	
Caicedo, Ricardo Calas, Paul L. Camp, Joe H. Campbell, R. Chris Carlson, Charles R. Carr, Gary B. Choi, Eugene H. Chung, H. Anthony Cohen, Philip W. Costa, Guido E. Coury, Kirk A. Creer, Paul Cunningham, Charles J.  D  Deblinger, Ronald I. DeLeonardis, Dario Dines, Tevyah J. Dominguez, Mercedes S. Douville, Christopher J. Dovgan, Joseph S. Dumas, Christine Dunsky, Joel L.  E  El-Refai, Nivine Elsherif, Ismail  F  Ferraz, Caio C.R. Foroughi, Kamran Fouad, Ashraf Fountain, Stuart B. Frank, Robert J.	

Gallatin, Eric	14 20 10 2 23 9 10 5,5 15 22 22 16 11 7 10 5 20 2
H Ham, Karla A. Hargreaves, Kenneth M. 5, 16, 2 Harrison, John W. Hartoonian, Armen A. Hartwell, Gary R. Hasegawa, Masako Hata, Gin-Ichiro Hiatt, James Hicks, M. Lamar 8, Himel, Van T. 2 Hizatagu, Ruy Holland, G. Rex Hower, Jeffrey Hosoya, Noriyasu Hovland, Eric J. Huey, Michael W.	16 20 19 15 15 19 11 1,8 15 15 15 18
I Imura, Noburo Ingle, John I.	15 16
J Jablon, Sharon S	19 19 18
Kang, Jean H. Kato, Augusto S. Katsuumi, Ichiroh Kennedy, Michelle A. Khademi, John A. Khalefa, Mohamed	15 14 12 11 15 14 9 6 19 15 10 19 2
L Lemon, Ronald R. 16, 2 Lenet, Bradley J. Levin, Jeffrey A. Levin, Martin D. Levine, Debora F. Lindberg, Donald A.B.	14 18 17 20

Linden, Jeffrey	
	12
Liu, Donald T	20
Longfelder, Lawrence L	17
Ludwig, Garrett B	
Dud (118) Control of Illinois	
20	
M	
MacIntyre, Roderick M	20
Madison, Sandra	10
Maggio, Joseph D.	Q
Malina Coatt B	1.4
Makins, Scott R.	14
Makkar, Sandra R	(
Marino, Thomas J	14
Marshall, J. Gordon	14
Mastromihalis, Nick	20
Mayhew, Jack T	
McGraw James C	
McNaught, Anthony G	20
McSpadden, John T	
Meidinger, Dennis L	17
Menke, Eric R	20
Meyers, John P.	16
Mich I'd Debet I	10
Michelich, Robert J	2
Mickel, Andre K	9
Mihailoff, Alex K	20
Miles, Dale A	
Millis, Joy 1	7 22
Mills, John C.	12
Mainainaita - L. L. L.	10
Moiseiwitsch, Julian	13
Mork, Thomas O	11
Munce, C. John	13
Muraski, Steven J	
manufacture of the second	1120-215
۵.	
N	
Nagle, Douglas J	14
Namerow, Kenneth N	22
No Dito F /	20
Ne, Rita F Nearing, Mark V.	10
Nearing, Mark V	18
Neary, Shannon M	20
Nelson, Edward A	10
Newsom, W. Joel III	2
Newton, Carl W.	6
Nielsen, Christen J	14
0	
	2
Odum, Richardson M	2
Odum, Richardson M Okada, Geoffrey	10
Odum, Richardson M Okada, Geoffrey	10
Odum, Richardson M Okada, Geoffrey	10
Odum, Richardson M Okada, Geoffrey Okeson, Jeffrey P. O'Leary, Le Yen Thi	10
Odum, Richardson M Okada, Geoffrey	10
Odum, Richardson M Okada, Geoffrey Okeson, Jeffrey P. O'Leary, Le Yen Thi Olsen, Meryl H.	10
Odum, Richardson M. Okada, Geoffrey Okeson, Jeffrey P. O'Leary, Le Yen Thi Olsen, Meryl H.	10 5 16 14
Odum, Richardson M. Okada, Geoffrey Okeson, Jeffrey P. O'Leary, Le Yen Thi Olsen, Meryl H.	10 5 16 14
Odum, Richardson M. Okada, Geoffrey Okeson, Jeffrey P. O'Leary, Le Yen Thi Olsen, Meryl H.  P Padachey, Natanya Palermo, Joseph F.	10 5 16 14 14
Odum, Richardson M. Okada, Geoffrey Okeson, Jeffrey P. O'Leary, Le Yen Thi Olsen, Meryl H.  P Padachey, Natanya Palermo, Joseph F.	10 5 16 14 14
Odum, Richardson M. Okada, Geoffrey Okeson, Jeffrey P. O'Leary, Le Yen Thi Olsen, Meryl H.  P Padachey, Natanya Palermo, Joseph F. Pantera, Eugene A. Jr.	10 5 16 14 14 20 10
Odum, Richardson M. Okada, Geoffrey P. Okeson, Jeffrey P. O'Leary, Le Yen Thi Olsen, Meryl H.  Padachey, Natanya Palermo, Joseph F. Pantera, Eugene A. Jr. Park, Jeong Won	10 5 16 14 14 20 10 15
Odum, Richardson M. Okada, Geoffrey	10 5 16 14 14 20 10 15 20
Odum, Richardson M. Okada, Geoffrey	10 5 16 14 14 20 10 15 20 20
Odum, Richardson M. Okada, Geoffrey	10 5 16 14 14 20 10 15 20 20
Odum, Richardson M. Okada, Geoffrey Okeson, Jeffrey P. O'Leary, Le Yen Thi Olsen, Meryl H.  P Padachey, Natanya Palermo, Joseph F. Pantera, Eugene A. Jr. Park, Jeong Won Parry, Sigrid S. Patel, Jayesh S. Paulk, Glenn L. Paurazas, Susan B.	10 5 16 14 14 20 10 15 20 20 20
Odum, Richardson M. Okada, Geoffrey Okeson, Jeffrey P. O'Leary, Le Yen Thi Olsen, Meryl H.  P Padachey, Natanya Palermo, Joseph F. Pantera, Eugene A. Jr. Park, Jeong Won Parry, Sigrid S. Patel, Jayesh S. Paulk, Glenn L. Paurazas, Susan B.	10 5 16 14 14 20 10 15 20 20 20
Odum, Richardson M. Okada, Geoffrey Okeson, Jeffrey P. O'Leary, Le Yen Thi Olsen, Meryl H.  P Padachey, Natanya Palermo, Joseph F. Pantera, Eugene A. Jr. Park, Jeong Won Parry, Sigrid S. Patel, Jayesh S. Paulk, Glenn L. Paurazas, Susan B.	10 5 16 14 14 20 10 15 20 20 20
Odum, Richardson M. Okada, Geoffrey Okeson, Jeffrey P. O'Leary, Le Yen Thi Olsen, Meryl H.  P Padachey, Natanya Palermo, Joseph F. Pantera, Eugene A. Jr. Park, Jeong Won Parry, Sigrid S. Patel, Jayesh S. Paulk, Glenn L. Paurazas, Susan B. Pecora, Gabriele Peikoff, Marshall D.	10 5 16 14 14 20 15 20 20 20 21 10 21 19
Odum, Richardson M. Okada, Geoffrey	10 5 16 14 14 20 10 15 20 20 20 21 21 19
Odum, Richardson M. Okada, Geoffrey	10 5 16 14 14 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 21 10 11 19 1, 14 20
Odum, Richardson M. Okada, Geoffrey Okeson, Jeffrey P. O'Leary, Le Yen Thi Olsen, Meryl H.  P Padachey, Natanya Palermo, Joseph F. Pantera, Eugene A. Jr. Park, Jeong Won Parry, Sigrid S. Patel, Jayesh S. Paulk, Glenn L. Paurazas, Susan B. Pecora, Gabriele Peikoff, Marshall D. Peters, Ove	10 5 16 14 14 20 15 20 20 21 21 21 19 1, 14 20 15
Odum, Richardson M. Okada, Geoffrey Okeson, Jeffrey P. O'Leary, Le Yen Thi Olsen, Meryl H.  P Padachey, Natanya Palermo, Joseph F. Pantera, Eugene A. Jr. Park, Jeong Won Parry, Sigrid S. Patel, Jayesh S. Paulk, Glenn L. Paurazas, Susan B. Pecora, Gabriele Peikoff, Marshall D. Peters, Ove	10 5 16 14 14 20 15 20 20 21 21 21 19 1, 14 20 15
Odum, Richardson M. Okada, Geoffrey Okeson, Jeffrey P. O'Leary, Le Yen Thi Olsen, Meryl H.  P Padachey, Natanya Palermo, Joseph F. Pantera, Eugene A. Jr. Park, Jeong Won Parry, Sigrid S. Patel, Jayesh S. Paulk, Glenn L. Paurazas, Susan B. Pecora, Gabriele Peikoff, Marshall D. Peters, Ove 1 Peterson, Jill Pettiette, Mary T. Pineda, Franklin	10 5 16 14 14 20 15 20 20 21 10 21 11 11 11 11 11 11 11 11 11 11
Odum, Richardson M. Okada, Geoffrey Okeson, Jeffrey P. O'Leary, Le Yen Thi Olsen, Meryl H.  P Padachey, Natanya Palermo, Joseph F. Pantera, Eugene A. Jr. Park, Jeong Won Parry, Sigrid S. Patel, Jayesh S. Paulk, Glenn L. Paurazas, Susan B. Pecora, Gabriele Peikoff, Marshall D. Peters, Ove	10 5 16 14 14 20 15 20 20 21 21 19 1, 14 20 15 21 19 11
Odum, Richardson M. Okada, Geoffrey Okeson, Jeffrey P. O'Leary, Le Yen Thi Olsen, Meryl H.  P Padachey, Natanya Palermo, Joseph F. Pantera, Eugene A. Jr. Park, Jeong Won Parry, Sigrid S. Patel, Jayesh S. Patel, Jayesh S. Paulk, Glenn L. Paurazas, Susan B. Pecora, Gabriele Peikoff, Marshall D. Peters, Ove	10 5 16 14 14 20 15 20 15 20 21 19 1, 14 21 19 1, 14 20 15 21 19 11 20
Odum, Richardson M. Okada, Geoffrey P. Okeson, Jeffrey P. O'Leary, Le Yen Thi Olsen, Meryl H.  P Padachey, Natanya Palermo, Joseph F. Pantera, Eugene A. Jr. Park, Jeong Won Parry, Sigrid S. Patel, Jayesh S. Paulk, Glenn L. Paurazas, Susan B. Pecora, Gabriele Peikoff, Marshall D. Peters, Ove	10 5 16 14 14 20 15 20 20 21 19 1, 14 20 15 21 19 1, 14 20 15 19 17
Odum, Richardson M. Okada, Geoffrey P. Okeson, Jeffrey P. O'Leary, Le Yen Thi Olsen, Meryl H.  P Padachey, Natanya Palermo, Joseph F. Pantera, Eugene A. Jr. Park, Jeong Won Parry, Sigrid S. Patel, Jayesh S. Paulk, Glenn L. Paurazas, Susan B. Pecora, Gabriele Peikoff, Marshall D. Peters, Ove	10 5 16 14 14 20 15 20 20 21 21 21 19 1, 14 20 15 19 11 20 17
Odum, Richardson M. Okada, Geoffrey P. Okeson, Jeffrey P. O'Leary, Le Yen Thi Olsen, Meryl H.  P Padachey, Natanya Palermo, Joseph F. Pantera, Eugene A. Jr. Park, Jeong Won Parry, Sigrid S. Patel, Jayesh S. Paulk, Glenn L. Paurazas, Susan B. Pecora, Gabriele Peikoff, Marshall D. Peters, Ove	10 5 16 14 14 20 15 20 20 21 21 19 1, 14 20 15 19 17 11
Odum, Richardson M. Okada, Geoffrey P. Okeson, Jeffrey P. O'Leary, Le Yen Thi Olsen, Meryl H.  P Padachey, Natanya Palermo, Joseph F. Pantera, Eugene A. Jr. Park, Jeong Won Parry, Sigrid S. Patel, Jayesh S. Paulk, Glenn L. Paurazas, Susan B. Pecora, Gabriele Peikoff, Marshall D. Peters, Ove	10 5 16 14 14 20 15 20 20 21 21 19 1, 14 20 15 19 17 11
Odum, Richardson M. Okada, Geoffrey P. Okeson, Jeffrey P. O'Leary, Le Yen Thi Olsen, Meryl H.  P Padachey, Natanya Palermo, Joseph F. Pantera, Eugene A. Jr. Park, Jeong Won Parry, Sigrid S. Patel, Jayesh S. Paulk, Glenn L. Paurazas, Susan B. Pecora, Gabriele Peikoff, Marshall D. Peters, Ove	10 5 16 14 14 20 15 20 20 21 21 19 1, 14 20 15 19 17 11
Odum, Richardson M. Okada, Geoffrey P. Okeson, Jeffrey P. O'Leary, Le Yen Thi Olsen, Meryl H.  P Padachey, Natanya	10 5 16 14 14 20 15 20 20 21 21 19 1, 14 20 15 19 17 11
Odum, Richardson M. Okada, Geoffrey Okeson, Jeffrey P. O'Leary, Le Yen Thi Olsen, Meryl H.  P Padachey, Natanya Palermo, Joseph F. Pantera, Eugene A. Jr. Park, Jeong Won Parry, Sigrid S. Patel, Jayesh S. Paulk, Glenn L. Paurazas, Susan B. Pecora, Gabriele Peikoff, Marshall D. Peters, Ove Peterson, Jill Pettiette, Mary T. Pineda, Franklin Piepenbring, Michael E. Pourjamasb, Bijan Powell, William D. Pratten, Don H. Proctor, Martha E. Propper, Terryl A.	10 5 16 14 14 20 15 20 20 20 21 19 1, 14 15 20 15 19 17 17 17 17 17
Odum, Richardson M. Okada, Geoffrey P. Okeson, Jeffrey P. O'Leary, Le Yen Thi Olsen, Meryl H.  P Padachey, Natanya	10 5 16 14 14 20 15 20 20 20 21 19 1, 14 15 20 15 19 17 17 17 17 17
Odum, Richardson M. Okada, Geoffrey Okeson, Jeffrey P. O'Leary, Le Yen Thi Olsen, Meryl H.  P Padachey, Natanya Palermo, Joseph F. Pantera, Eugene A. Jr. Park, Jeong Won Parry, Sigrid S. Patel, Jayesh S. Paulk, Glenn L. Paurazas, Susan B. Pecora, Gabriele Peikoff, Marshall D. Peters, Ove Peterson, Jill Pettiette, Mary T. Pineda, Franklin Piepenbring, Michael E. Pourjamasb, Bijan Powell, William D. Pratten, Don H. Proctor, Martha E. Propper, Terryl A.	10 5 16 14 14 20 15 20 20 20 21 19 1, 14 15 20 15 19 17 17 17 17 17
Odum, Richardson M. Okada, Geoffrey Okeson, Jeffrey P. O'Leary, Le Yen Thi Olsen, Meryl H.  P Padachey, Natanya Palermo, Joseph F. Pantera, Eugene A. Jr. Park, Jeong Won Parry, Sigrid S. Patel, Jayesh S. Paulk, Glenn L. Paurazas, Susan B. Pecora, Gabriele Peikoff, Marshall D. Peters, Ove	10 5 16 14 14 20 15 20 20 20 21 19 1, 14 15 20 15 19 17 17 17 17 17
Odum, Richardson M. Okada, Geoffrey Okeson, Jeffrey P. O'Leary, Le Yen Thi Olsen, Meryl H.  P Padachey, Natanya Palermo, Joseph F. Pantera, Eugene A. Jr. Park, Jeong Won Parry, Sigrid S. Patel, Jayesh S. Paulk, Glenn L. Paurazas, Susan B. Pecora, Gabriele Peikoff, Marshall D. Peters, Ove Peters, Ove Pettiette, Mary T. Pineda, Franklin Piepenbring, Michael E. Pourjamasb, Bijan Powell, William D. Pratten, Don H. Proctor, Martha E. Propper, Terryl A.  R	10 5 16 14 14 20 15 20 20 21 19 1, 14 19 11 20 17 17 11 20 17 11 22
Odum, Richardson M. Okada, Geoffrey Okeson, Jeffrey P. O'Leary, Le Yen Thi Olsen, Meryl H.  P Padachey, Natanya Palermo, Joseph F. Pantera, Eugene A. Jr. Park, Jeong Won Parry, Sigrid S. Patel, Jayesh S. Paulk, Glenn L. Paurazas, Susan B. Pecora, Gabriele Peikoff, Marshall D. Peters, Ove Peters, Ove Pettiette, Mary T. Pineda, Franklin Piepenbring, Michael E. Pourjamasb, Bijan Powell, William D. Pratten, Don H. Proctor, Martha E. Propper, Terryl A.  R Radman, W. Paul	10 5 16 14 14 20 15 20 20 20 21 19 1, 14 15 19 11 20 15 19 11 20 15 19 11 20 15 19 11 20 15 19 11
Odum, Richardson M. Okada, Geoffrey Okeson, Jeffrey P. O'Leary, Le Yen Thi Olsen, Meryl H.  P Padachey, Natanya Palermo, Joseph F. Pantera, Eugene A. Jr. Park, Jeong Won Parry, Sigrid S. Patel, Jayesh S. Paulk, Glenn L. Paurazas, Susan B. Pecora, Gabriele Peikoff, Marshall D. Peters, Ove Peterson, Jill Pettiette, Mary T. Pineda, Franklin Piepenbring, Michael E. Pourjamasb, Bijan Powell, William D. Pratten, Don H. Proctor, Martha E. Propper, Terryl A.  R Radman, W. Paul Ratisoontorn, Chootima	10 5 16 14 14 20 15 20 20 20 21 19 1, 14 20 15 19 11 20 17 11 20 17 11 20 17 11 20 16 20
Odum, Richardson M. Okada, Geoffrey Okeson, Jeffrey P. O'Leary, Le Yen Thi Olsen, Meryl H.  P Padachey, Natanya Palermo, Joseph F. Pantera, Eugene A. Jr. Park, Jeong Won Parry, Sigrid S. Patel, Jayesh S. Paulk, Glenn L. Paurazas, Susan B. Pecora, Gabriele Peikoff, Marshall D. Peters, Ove	10 5 16 14 14 15 20 10 15 20 20 10 11 21 19 1, 14 20 15 11 21 15 11 20 17 11 20 17 11 20 17 11 20 13
Odum, Richardson M. Okada, Geoffrey Okeson, Jeffrey P. O'Leary, Le Yen Thi Olsen, Meryl H.  P Padachey, Natanya Palermo, Joseph F. Pantera, Eugene A. Jr. Park, Jeong Won Parry, Sigrid S. Patel, Jayesh S. Paulk, Glenn L. Paurazas, Susan B. Pecora, Gabriele Peikoff, Marshall D. Peters, Ove	10 5 16 14 14 15 20 10 15 20 20 10 11 21 19 1, 14 20 15 11 21 15 11 20 17 11 20 17 11 20 17 11 20 13
Odum, Richardson M. Okada, Geoffrey Okeson, Jeffrey P. O'Leary, Le Yen Thi Olsen, Meryl H.  P Padachey, Natanya Palermo, Joseph F. Pantera, Eugene A. Jr. Park, Jeong Won Parry, Sigrid S. Patel, Jayesh S. Paulk, Glenn L. Paurazas, Susan B. Pecora, Gabriele Peikoff, Marshall D. Peters, Ove Peterson, Jill Pettiette, Mary T. Pineda, Franklin Piepenbring, Michael E. Pourjamasb, Bijan Powell, William D. Pratten, Don H. Proctor, Martha E. Propper, Terryl A.  R Radman, W. Paul Ratisoontorn, Chootima	10 5 16 14 14 15 20 10 15 20 21 19 1, 14 20 15 19 1, 14 20 15 19 1, 14 20 15 19 11 20 15 19 11 20 13 21

Rivera, Eric M Roane, James B	6
Rosenberg, David B Rossman, Louis E	11
Rubinstein, Richard A	6, 9
Sabins, Ronald A	21
Safavi, Kamran Salman, Mohamed A	14
Santos, Maria D	18
Sawada, Norihiro Sayago, Maria E	15
Schanker, Steven MSchwartz, Stephen F	10
Schwarze, Thomas	15
Sempira, Helen N Senia, E. Steve	8
Shetler, Gary MShoji, Yoshiro	12 13
Shon, Won-Jun Shulman, Barnet B	15
Shuping, George P	20
Sigurdsson, Asgeir Simcock, Rick M	21
Smith, Bruce C Smith, Richard S	12
Snider, Douglas H	18
Solomon, Charles SSolomon, Henry	9
Southard, Denny W Spolnik, Kenneth J	9
Steiman, H. Robert	6
Strassler, Howard E Strimer, Adam P	21
Strittmatter, Edward J. Jr Svec, Timothy A	11
Swift, Maureen L	12
T Tagouri, Hesham M. Takizawa, Hisashi Tatosian, Charles V. Taylor, Ronald C. Teixeira, Fabricio B. Tongbaiyai, Chomquan Trautmann, Glenn A. Trope, Martin	15 22 20 15 14 21
U Uemura, Manabu	15
v	
Vafaie, Nader Mvan Dyk, William A	
Vanek, Paul M	9
Verraich, Kulwant S	20
W Walker, William A., III	14
Walsch, Helmut	21
Walton, Richard E Ward, W. Christopher	21
Watkins, Brian D Weber, Carol D	21
Weeks, Stephen M	13
Werter, Valerie West, John D	22
Willershausen, Brita Wiser, Gary	
Witherspoon, David E Wright, Ronald Ş. Jr	
Wucherpfennig, Anne L	20
Y	
Yaccino, John M Yang, Shue-Fen	18 15
Yoshikawa, Gosei Yoshioka, Takatomo	15
Z	
Zhu, Qiang	19

## Topical Index

A	
AADS Endodontic Section Meeting 16	
AAE Board of Directors2	
AAE Career Opportunities Exchange 4	
AAE Foundation24	
AAE Headquarters Office3	
AAE Information Center	
AAE Online	
Access cavity, LAS 15	
Acute endodontic pain, SS 4	
Affiliate Leadership Conference	
Alliance Program	
American Board of Endodontics	
Board Walk19	
Louis I. Grossman Memorial	
Luncheon 4, 8	
Anesthesia, LAS 13	
Annual Session Committee2	
Antibiotics in endodontics, SS 2	
Apical control, LAS 4 7	
Attire	
Dinner Dance3	
General	
Audio Tapes (Teach'em)4	
Auxiliary program	
Team building, Staff 1 12	
Successful endodontic practice,	
Staff 2	
Skills in dental practice, Staff 3 22	
Award Recipients	
Edgar D. Coolidge Award 4,16	
Edward M. Osetek Educator Award 4, 22	
Honorary Membership	
Oral Research Presentations	
Poster Research Presentations 15, 19, 20	
Table Clinic Presentations 15, 20, 21	
В	
Badges 3	
Board Walk: Becoming a Diplomate 19	
그것이 있다면 하는 아들이 있었다. 그리는 그리는 이번 이번 이번 그리고 있다면 하는데 되었다.	
Bonding agents in the restoration of teeth,	
LAS 17	
Bone repair material, SS 521	
Breakfasts	
Wednesday CEC Continental 5	
Thursday Opening Session4, 6	
Friday Continental11	
Saturday Continental	
Sunday Farewell23	

C
Calcium hydroxide, LAS 18 18
Calcium sulfate, SS 521
Cardiovascular stress, GI 2
Cleansing root canals, LAS 10 13
College of Diplomates
Mentoring workshop and annual
business meeting11
CE Certificate
Communication skills, GI 5 and
Staff 3 17, 21
Complications in periradicular surgery,
LAS 3 7
Computer basics, GI 16
Continuing Education Course, Wednesday
Orofacial pain 5
Coronal-radicular breakdown, LAS 11 13
Crown-down technique, CS 16
270 11. 30 11. 1221111111111
D
Delivery of patient care, GI 1022
Dental drug interactions, SS 3 21
Dental implants, CS 11 16
Dental trauma, CS 9 12
Digital radiography, SS 1 8
Dinner dance
Diplomate (ABE), "How to's"19
Disability assistance 3
District caucuses 6
E
Educational Technology Forum 16
Electronic canal length, LAS 12 13
Emergency endodontic procedures, SS $4\dots21$
Endodontic Educators' Forum
Educational Technology Forum 16
Financial strategies 16
Endodontic flare-ups, LAS 2 7
Endodontic surgical procedures, CS 12 22
Endoscope, CS 12
Estate planning, LAS 7 10
Estate taxation, GI 7
Exhibits
Exhibit hours
Exhibitors
Exotic animal dentistry, LAS 1 7
The second secon

F
Faculty Development Seminar
Farewell Breakfast
Financial planning, GI 7
Portfolio theory
Successful retirement
Estate taxation
Financial strategies
Endodontic Educators' Forum
Food and stress, GI 29
Future meeting dates
ruture meeting dates
G
General Assembly22
General information
н
High-tech dental advances, Staff 2 18
riigii-tecti dental advances, Stail 2
I
Improving relationships in dentistry, GI 5 17
Insurance
Treloar & Heisel, Inc 4
Internet demonstration 3
Intraosseous anesthesia, LAS 13 13
L
Luncheons
Wednesday CEC 5
Thursday Louis I. Grossman 4,8
Friday Edgar D. Coolidge
Saturday Award
M
Malpractice, GI 8 17
Management of apical third, CS 8
Maps
Medical emergencies, CS 7 11
Meetings
Affiliate Leadership Conference 6
Alliance 24
Alumni
Board of Directors
Committees
Foundation23
Microscope, CS 26
Microsurgery, CS 59

## 0

## **Topical Index**

N
Neurogenic inflammation, SS 4
New endodontic practice,
LAS 6 and LAS 9 10
New technologies vs. new science, CS $3 \dots 8$
Nickel titanium
Crown-down technique, CS 16
Rotary instrumentation, LAS 16 14
0
Office design and planned
clinical facilities, GI 6 17
One-step endodontics, CS 4 8
Opening Session Breakfast 4,6
Oral Research Presentations
Endodontist Section 11, 18, 19
Graduate Student Section
7, 10, 11, 14, 15, 18
Orofacial pain, Wednesday CEC 5
P
Pain management, SS 321
Paperless office, GI 3
Participants
Past Presidents
Past Presidents' Breakfast
Perio-endo, CS 10
Periradicular surgery, LAS 3
Pharmacology of pain control, SS 4
Planned clinical facilities, GI 6
Portfolio theory, GI 7
Poster Research Presentations
Endodontists Section
Graduate Student Section
Practice Management Software 11
Practice transition, GI 4 12
President's Dinner Dance
R
Referred pain, LAS 8
Registration
Registration and Exhibit hours 3
Relationships in dentistry, Staff 3
Restorative management in endodontics,
CS 6
Restaurant Guide
Retirement, successful, GI 7
Retreatment, LAS 5
Root-end surgery, LAS 14
Rotary instrumentation, LAS 16
The state of the s

C			
0			

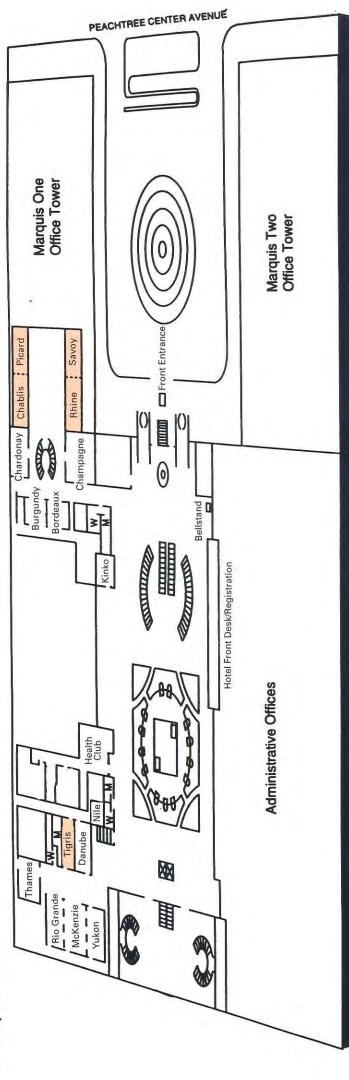
Skills in dental practice, Staff 3
Smoking Policy3
Speaker AV Ready Room4
Staff Assistants/Administrators
Program/ Auxiliary
Team building, Staff 1 12
Successful endodontic practice,
Staff 2 18
Skills in dental practice, Staff 3 22
Stress management, GI 2
Cardivascular stress9
Food and stress9
Stress in the oral muscosa9
Successful retirement, GI 7 17
Table Clinic Presentations Endodontists Section
Treloar & Heisel 4
Veterinary endodontics, LAS 1 7
W
Web Site 3
Welcome Reception 4, 6
Y
Year 2000 problem, GI 9 17

#### Key

CEC=Continuing Education Course
CS=Clinical Session
GI= General Interest Session
LAS=Limited Attendance Session
SS=Scientific Session

The American Association of Endodontists does not endorse any product or service exhibited at the Annual Session except MBNA America, issuer of the AAE affinity credit card; Lippincott Williams & Wilkins, publisher of the *Journal of Endodontics*; Treloar & Heisel, Inc. for AAE sponsored insurance programs; and Direct Vision Software, Inc. for the *Endo-Vision*<sup>TM</sup> practice management software.

# Lobby Level



# Convention Level

