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American Association of Endodontists  
46th Annual Session, May 3-7, 1989  
New Orleans, Louisiana
It is indeed my pleasure to welcome you to the 46th Annual Session of the American Association of Endodontists. New Orleans holds a unique place among American cities. There is no other place quite like it. Maybe it is the intriguing architecture of the French Quarter or the old south appeal of the Garden District, or the gaiety of Bourbon Street and the joys of jazz. But whatever it is, the tradition of hospitality is the hallmark of New Orleans.

I wish to extend a special welcome to our international members and guests who have come to participate and share in our Annual Session.

Please use this occasion to rekindle old friendships, develop new ones, and take every opportunity to broaden and update your knowledge and add to your skills, while also leaving enough time to enjoy the outstanding social and entertainment aspects provided for you.

Program Chairman Dick Burns and his committee designed our program to Focus on the Excellence of the clinician, the researcher and the educator. They all worked to bring you a meaningful, educational experience through the scientific sessions, limited attendance seminars, research seminars and the table and poster clinics.

Chip and Aimee Simon and the Local Arrangements Committee have done an outstanding job attending to your entertainment needs. Their energy and talents have produced a “let the good times roll” theme to the non-scientific aspects of our meeting.

General Chairman Paul Eleazer’s leadership and tireless efforts have produced what promises to be a memorable event. Please take advantage of all that has been provided for you.

They all deserve a special thank you for attending to the myriad of details that enable us to thoroughly enjoy our Annual Meeting.

To Irma Kudo, the best Executive Director any Association can have, and her devoted staff of Laura Cancilla, Letty Catrambone, Christine DeFazio, Karen Schultz, Monica Taylor and Mercedes Johnson—the biggest thank you possible. Your professional approach and concern for our enjoyment is necessary for the success of this great meeting—the best ever.

I wish you all a most enjoyable and fulfilling Annual Session as we continue together to “Focus on Excellence.”

Joseph D. Maggio, DDS
President
AMERICAN ASSOCIATION OF ENDODONTISTS

BOARD OF DIRECTORS

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District I

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District I

Manuel I. Weisman
District III

Darrell W. Zenk
District V

Bill R. Scharwatt
District VI
THE BIG EASY describes a city dedicated to the easy enjoyable life. Members of the American Association of Endodontists and associates are in for a wonderful time—sensational food, fantastic music and a party with good friends from around the world.

Hedonism aside, there is nothing big nor easy about the root canal system. Our success depends upon conquering the smallest imaginable spaces with the far-from-easy challenge of succeeding every time.

Whisperings overheard in the corridors of past annual sessions have suggested the need for more scientifically oriented meetings. In response, the Program Committee has chosen not only clinically scientific subjects, but an increased number of research presentations. We know that research is the framework and the fiber through which our clinical success is woven. Mahmoud Torabinejad has stimulated more submissions of papers than ever before for the Research Seminars, and the AAE Board of Directors has approved greater rewards for the best graduate student papers.

The popularity of the LAS (Limited Attendance Seminars) has led us to change the format in order to accommodate the membership who wish to attend these stimulating lectures. Seating is now available on a first-come first-served basis with no prior registration required. But seating has been purposely limited to provide a more casual setting conducive to better interactive discussions. Pete Paesani has invited some of our profession’s finest.

The ever-popular Table and Poster Clinics, under the direction of Sandra Madison, will again be presented on Saturday morning.

Something new this year is the Friday “Luncheon with Learning,” where you will be able to share your practice experiences and at the same time learn from your colleagues.

And, whether or not you brought your interesting case for discussion, don’t miss the Sunday Case Presentation Breakfast. A wonderful buffet breakfast awaits you as you bid farewell.

The theme, Focus on Excellence, is perfect for this meeting. Your experience in New Orleans will be stimulated by research, enhanced by clinical learning and titillated by the excitement of THE BIG EASY.

Richard C. Burns, DDS
Program Chairman
GENERAL INFORMATION

The Hyatt Regency Hotel will be the headquarters hotel for the 46th Annual Session.

AAE Headquarters — Versailles Room
AAE headquarters office will be staffed by members of the Central Office—Laura Cancilla, Letty Catrambone, Chris DeFazio, and Karen Schultz—and by members of the Annual Session Committee. Office hours are
8 am-5 pm Tuesday through Sunday.

Registration — Regency Ballroom Foyer
Wednesday, May 3: 11 am-8 pm
Thursday, May 4: 8 am-5 pm
Friday, May 5: 8 am-11 am

Registration fees include the following:
AAE members (excluding student members)—all sessions,
Welcome/Fellowship Reception, one full breakfast
(Thursday), two continental breakfasts, one breakfast
brunch (Sunday), two lunches (Friday & Saturday), and
one ticket to the Dinner Dance (Saturday).
AAE student members—all sessions, Welcome/Fellowship
Reception.
Non-member professionals, student & dental auxiliaries—
all sessions.
Spouses—Welcome/Fellowship Reception and use of the
Auxiliary hospitality suite.

Exhibits — French Market Hall
Because exhibitors help to defray some of the cost of the Annual Session, we encourage you to stop by the exhibits and place your order.

Complimentary coffee service will be provided on
Thursday and Friday in the exhibit area, 10:30 am and
2:30 pm.

Exhibit hours are:
Thursday, May 4: 10 am-6 pm
Friday, May 5: 8 am-5 pm
Saturday, May 6: 8 am-12 n

Cassette Tape Recordings
American Audio Association will record many of the sessions presented. The cassette tapes are available for purchase at the American Audio booth located in the registration area.

Continuing Education Credit
Academy of General Dentistry—all course forms may be validated at the AAE headquarters office.

California Board of Dental Examiners—forms to be picked up at the AAE headquarters office or AAE information booth.

Florida Certificates—forms to be picked up at the AAE headquarters office or the AAE information booth.

Limited Attendance Seminars
Limited seating. First-come, first-served basis. No pre-registration required. Fire regulations do not allow for any standing room.

Speaker AV Ready Room — Press Room
Program participants are urged to review their audio-visual material in the speaker ready room prior to their presentation to avoid possible problems that may occur.

Saturday Dinner Dance
Your table selection for the Saturday Dinner Dance must be made as soon as possible before 5 pm on Thursday by exchanging your voucher for a banquet ticket at the AAE registration desk. If you wish to have a group seating, you must present a voucher for each person in your group in order to reserve the space—all vouchers must be presented at the same time. No exceptions will be made.
CONTINUING EDUCATION COURSE
(Pre-registration required)
Regency Ballroom D

Clinical considerations in the management of the medically compromised patient
Moderators: CARL W. NEWTON, DDS, MSD, Indianapolis, IN
           GERALD N. GLICKMAN, DDS, MS, MBA, Dallas, TX

8:30 am Welcome

8:45 am Never treat a stranger
GEZA T. TEREZHALMY, DDS, MA,
Cleveland, OH
Diseases of the oral cavity and related structures, either local or systemic, may have profound physical and emotional effects on a patient. Consequently, today’s dentists must treat more medically and pharmacologically compromised patients than ever before. This presentation will address the principles essential to access the physical and emotional status of dental patients to identify high risk patients.

11:15 am Implications of substance abuse to the dental practitioner
HAROLD CROSSLEY, DDS, PhD,
Baltimore, MD
This presentation will cover commonly abused street drugs, risks that abusers are exposed to when using these drugs and any alterations of the dental treatment plan the dental practitioner must make when treating the substance abuser.

12:00 pm Lunch

2:15 pm Medical emergencies in the dental office
STANLEY MALAMED, DDS, Los Angeles, CA
This presentation will address the preparation for medical emergencies—basic drug kit, equipment, and staff training, and the recognition and management of the many emergency situations which can, and do, arise in the practice of dentistry.

4:30 pm Discussion

ADVANCED ENDODONTIC SURGERY
(Pre-registration required)
AAE ACTIVE MEMBERS ONLY
8:00 am-5:00 pm
Louisiana State University — Buses will depart from the main entrance of the Hyatt
To familiarize participants in clinical surgery of difficult anatomical areas.

Facility members: DONALD E. ARENS, DDS,
                 RONALD R. LEMON, DMD, Coordinator
                 DOUGLAS C. BOYD, DMD; NOAH CHIVIAN,
                 DDS; ALFRED L. FRANK, DDS; ALBERT C.
                 GOERIG, DDS, MS; JOHN W. HARRISON,
                 DMD, MS; RONALD M. MEFFERT, DDS;
                 JAMES H. QUINN, DDS; STEVEN H.
                 SANDERS, DDS; STEPHEN F. SCHWARTZ,
                 DDS, MS

ELECTRONIC GUMBO WORKSHOP
(Pre-registration required)
AAE MEMBERS ONLY
9:00 am-5:00 pm
Louisiana State University — Buses will depart from the main entrance of the Hyatt
To familiarize participants with the use of various devices to assist in root canal preparation and obturation.

Facility members: JOE H. CAMP, DDS, MSD,
                 VAN T. HIMEL, DDS, Coordinator
                 WALTER T. CUNNINGHAM, DDS; LISA P.
                 GERMAIN, DDS; MICHAEL M. HOEN, DDS;
                 JEAN-MARIE LAURICHESSE, DDS; HOWARD
                 MARTIN, DMD; NEVILLE J. MCDONALD, BDS,
                 MS; ROBERT J. MICHELICH, DDS; JOHN S.
                 OLMSTED, DDS; IRVIN A. ROSEMAN, DDS;
                 STEPHEN C. WHEELER, DDS

Participating companies: Amadent; Neosono
                       Neosonic; Analytical Tech; Endo Analyzer
                       Touch ‘N Heat; Dentsply Int’l: Cavi-Endo;
                       Ellman Int’l: Exact-A-Pex; Hygienic Corp.;
                       Endocater Ultrafil; L.D. Caulk: Endo-Tech;
                       Medidenta Int’l: MM-3000 Sonic Air; Osada
                       Electric: ENAC.

11:00 am-8:00 pm
Regency Ballroom Foyer

7:00 pm-9:00 pm
WELCOME/FELLOWSHIP RECEPTION
(By ticket only)
Regency Ballroom A-H
THURSDAY MORNING, MAY 4

8:00 am
OPENING SESSION BREAKFAST
(By ticket only)
Regency Ballroom D-E
Keynote: JOSEPH D. MAGGIO, DDS
AAE President

10:00 am
REGISTRATION
5:00 pm
Regency Ballroom Foyer

10:00 am
EXHIBITS
6:00 pm
French Market Hall

SCIENTIFIC SESSION I
10:30 am
Regency Ballroom A-C
Moderator: RICHARD C. BURNS, DDS,
San Mateo, CA

Genesis and genetic engineering
EDWARD RUBENSTEIN, MD, Stanford, CA
How does nature encompass and mold a
hundred billion galaxies, as a billion stars, the
earth teeming with exuberant life? New insights
into how nature operates come from parallel
advances in particle physics and molecular
biology. These reveal a previously hidden
unifying logic employed by nature—its plan for
construction from sub-atomic particles to
human beings.

LIMITED ATTENDANCE SEMINARS
10:30 am
Plaza Mall, ground level
Limited seating, NO standing permitted.

LAS 1 — Peachtree Room
Management of patients with drug related
problems
DENNIS MIERS, DDS, New Orleans, LA
This presentation will address drug abuse and
chemical dependency as they relate to patient
management. Alternative drug therapies and a
treatment protocol for the recovering chemically
dependent patient will be discussed.

LAS 2 — Grand Room
Management of large periapical lesions of
endodontic origin
CARL W. NEWTON, DDS, MSD,
WILLIAM R. ADAMS, DDS, MSD,
Indianapolis, IN
The role of the endodontist in treatment
planning and the surgical and non-surgical
treatment of large periapical lesions of pulpal
origin are discussed and illustrated with case
reports. This will be repeated Friday afternoon
as LAS 14.

LAS 3 — O'Hare Room
Ask a lawyer
JACK A. WEICHMAN, DDS, JD,
Pacific Palisades, CA
An opportunity to ask an endodontist/attorney
questions regarding legal problems you have or
wish to avoid (malpractice, employees, patients,
lease, etc.) in your dental office. Even if you
don't have or anticipate legal problems, you
may want to hear and/or participate in the
discussions.

LAS 4 — Waikiki Room
Bleaching of pulpless teeth—a safe and
predictable procedure?
SHIMON FRIEDMAN, DMD, Jerusalem, Israel
Bleaching of pulpless teeth is regarded as safe
and predictable. However, resulting external
resorption and poor long-term esthetic results
suggest the opposite. This conflict will be
presented and discussed.

LAS 5 — Maui Room
New age retrofills: alternatives to amalgam
SAMUEL O. DORN, DDS, Pembroke Pines, FL
ARNOLD H. GARTNER, DDS, Southfield, MI
This seminar will explore some of the new
materials being used for retrograde fillings in
endodontic surgery. This will be repeated Friday
morning at LAS 11.

LAS 6 — Kuilima Room
Periapical disease: what are you treating?
EVA C. DAHL, DDS, MA, MS, La Crosse, WI
An organized approach to diagnosis of
periapical lesions will be presented illustrating
the characteristics of inflammatory and non-
inflammatory lesions, emphasizing the
importance of a thorough evaluation, and
discussing the role of a biopsy in appropriate
cases. This will be repeated Friday morning as
LAS 12.

BADGES MUST BE WORN AT ALL OFFICIAL AAE
FUNCTIONS.
THURSDAY MORNING (continued)

RESEARCH SEMINARS I
Poydras Rooms (Plaza Mall, ground level)
Moderators: ROBERT E. AVERBACH, DDS,
Denver, CO
ERIC J. HOVLAND, DDS
Baltimore, MD

10:30 am Application of a device to lower pulpal
temperatures in vivo
HAROLD E. GOODIS*, R. ROSENBERG &
L. WATANABE, Univ of California

10:45 am Pulpo-dentinal Nociceptors
G. REX HOLLAND* & S. LAU, Univ of Alberta

11:00 am The role of arterio-venous shunting in the
defense of the pulp to inflammation
SYNGCUK KIM*, J. DORSCHER-KIM, M. LIU &
S. SIMCHON, Columbia Univ

11:15 am Physiological studies of neurogenic inflammation
in the dental pulp
KENNETH MARKOWITZ*, G. BILOTTO,
M. LIU, Y.T. JOU & S. KIM, Columbia Univ

11:30 am Evaluation of image quality in individual films
of double film packets
WILLIAM D. JARVIS*, R. PIFER, J. GRIFFIN &
A. SKIDMORE, West Virginia Univ

11:45 am Xeroradiography compared to radiography
during endodontic treatment of maxillary molars
JOEL B. ALEXANDER* & J. ANDREWS, Univ of
Texas at San Antonio

12:00 am An in vivo evaluation of the apex locator
Endocater
NEVILLE J. MCDONALD* & E.J. HOVLAND,
Univ of Maryland

12:15 pm Machining efficiency of endodontic fiiles
LARZ SPANGBERG*, Univ of Connecticut &
E. STENMAN, Univ of Umea

*Presenter

Mardi Gras Bal Masque
Don your finest evening attire and experience AAE’s
Mardi Gras celebration on Saturday night. You will
be enthralled by the beautifully costumed Mardi
Gras Krewe and revelers at this festive affair.
Dancing with your favorite partner will round out
this unforgettable evening. A cash bar reception
will precede the dinner.

Exchange your dinner dance voucher before
Thursday, 5 pm.

NEED A BREAK?
Visit the Technical Exhibits. Complimentary coffee service
will be provided in the Exhibit Area on Thursday and
Friday, 10:30 am and 2:30 pm.

SMOKING
For the comfort of others, no smoking is permitted in the
meeting rooms.

NEW ORLEANS NEW ORLEANS NEW ORLEANS NEW ORLEANS NEW ORLEANS
THURSDAY AFTERNOON, MAY 4

ABE/GROSSMAN MEMORIAL LUNCHEON
(By ticket only)
12:30 pm
Regency Ballroom D

Compassion and Healing
Rabbi ROBERT KIRSCHNER, PhD,
San Francisco, CA

Rabbi Kirschner has authored many articles in scholarly journals in the United States and Europe. He currently serves on the boards of many community organizations including the Mayor’s Task Force on Dependent Children and the Committee on Homelessness of the United Way of the Bay area. On the national level, he has been appointed to the Committee on AIDS of the Union American Hebrew Congregations and the Board of Governors of Hebrew Union College.

DISTRICT CAUCUSES
2:00 pm
District I — Peachtree Room
CT, DC, ME, MD, MA, PA, PR, RI, VT
and VA

3:00 pm
District II — Waikiki Room
NJ and NY

District III — O’Hare Room
FL, GA, NC, Army, Navy, Air Force,
Public Health and Veterans Adm.

District IV — Grand Room
IL, IN, KY, MI, OH, TN, WV and WI

District V — Maui Room
AL, AZ, AR, CO, IA, KS, LA, MN, MS,
MO, NE, NM, OK, TX and UT

District VI — Kukila Room
AK, CA, HI, OR and WA

REFERENCE COMMITTEE HEARINGS
3:30 pm
Plaza Mall, Ground Level

4:30 pm
Open forums to present your views on
AAE activities

Association Affairs — Peachtree Room
Member Services — Peachtree Room
Communications/Publication — O’Hare Room
Education/Development — Grand Room
Membership — Grand Room

4:30 pm
AADS SECTION MEETING
5:30 pm
Kuilima Room

SCIENTIFIC SESSION II
2:00 pm
Regency Ballroom A-C
Managing the apical third
Moderator: MICHAEL A. HEUER, DDS, MS,
Chicago, IL

Biologic goals
F. JAMES MARSHALL, DMD, MS,
Lake Oswego, OR

Present filling techniques require a biologic barrier to limit their toxicity and to enhance the healing potential of the periapical tissues. A controlled, predictable procedure will be outlined and discussed.

Balance force instrumentation and modified files
JAMES B. ROANE, DDS, MS,
Oklahoma City, OK

Management of the altered apex
STEVEN H. SANDERS, DDS, Chicago, IL

The key anatomic landmark for any endodontic preparation is the somewhat elusive apical constriction. However, a growing number of cases seem to be appearing where this fragile landmark has been lost due to overinstrumentation or external resorption. Management of these cases will be the main topic of this presentation. The use of calcium hydroxide as an apical barrier will be emphasized as a method for bringing these cases to a successful completion.

For patient comfort and clinical success
HERBERT SCHILDER, DDS, Boston, MA

Deliacy in manipulation of the apical third of root canals is the sine qua non of endodontic preparation. Effective obturation of the apical third is the basis for the 3-dimensional filling of the entire root canal system. This presentation will examine principles and techniques of cleaning, shaping and sealing this portion of the canal. Emphasis will be placed on anatomical, mechanical, biologic and material considerations to maximize endodontic success.
THURSDAY AFTERNOON (continued)

RESEARCH SEMINARS II
Poydras Rooms (Plaza Mall, ground level)
Moderators: JOHN G. FRASER, BDS, MDS, Vancouver, Canada
MAHMOUD TORABINEJAD, DMD, MSD, Loma Linda, CA

Graduate Student Section

2:00 pm  The use of laser Doppler flowmetry in pulp physiological studies
MIN-TSAI LIU* & S. KIM, Columbia Univ

2:15 pm  Sprouting of pulpal nerve fibers in response to dental injuries
PATRICK E. TAYLOR* & M. BYERS, Univ of Washington

2:30 pm  The effects of protoporphyrin IX depletion on Bacteroides gingivalis
SANDRA A. SHOSTAD*, P.K. BARUA, & M.E. NEIDERS, SUNY at Buffalo

2:45 pm  Rapid enzyme assays for the identification of endodontic pathogens
NONA L. BREELAND*, G. BERGENHOLTZ & S. MADISON, Univ of North Carolina

3:00 pm  An immunoassay to detect antibodies against endodontic medicaments
LOUIS M. SHOHA* & D.E. LOPATIN, Univ of Michigan

3:15 pm  Regulation of osteoblastic cyclic-AMP production by tumor necrosis factor alpha
STEWARD SHAPIRO*, D.N. TATAKIS & R. DZIAK, SUNY at Buffalo

3:30 pm  Examination of periapical lesions by magnetic resonance imaging
BRUCE R. TERRY* & S. SELTZER, Temple Univ

3:45 pm  Comparison of Gow-Gates and Akinosi techniques in human mandibular anesthesia
STEVEN A. GOLDBERG*, A. READER, M. BECK & W. MEYERS, Ohio State Univ

4:00 pm  Comparison of epinephrine concentrations and mepivacaine in human maxillary anesthesia
RICK MASON*, A. READER, M. BECK & W. MEYERS, Ohio State Univ

4:15 pm  Anesthetic comparison of prilocaine and lidocaine in human maxillary infiltration
STEVEN J. KATZ*, A. READER, M. BECK & W. MEYERS, Ohio State Univ

4:30 pm  A clinical evaluation of five electronic apex locators
ASHRAF F. FOUAD*, Univ of Iowa

4:45 pm  An in vitro and in vivo study on the relationship of NaOCl and temperature
JENNIFER F. LITTON* & H. SCHILDER, Boston Univ

5:00 pm  One year recall evaluation of root canals clinically determined to be ledged
D.J. McKENDRY & LAURIE L. McKENDRY*, SUNY at Buffalo

*Presenter

IMPORTANT NOTICE
To reserve seats for the Dinner Dance on Saturday, vouchers must be exchanged for tickets no later than 5 pm Thursday. Parties wishing to sit together should return all vouchers at the same time. Your cooperation is greatly appreciated as we cannot extend this deadline.
FRIDAY MORNING, MAY 5

6:00 am-
FUN RUN — Audobon Park
(By ticket only)
Buses will depart from the main entrance of
the Hyatt

7:30 am-
NEW MEMBERS' BREAKFAST

9:00 am
Burgundy A-B

8:00 am-
CONTINENTAL BREAKFAST
(By ticket only)
Regency Ballroom E

8:00 am-
EXHIBITS

5:00 pm
French Market Hall

8:00 am-
REGISTRATION

11:00 am
Regency Ballroom Foyer

LIMITED ATTENDANCE SEMINARS

9:00 am
Plaza Mall, ground level
Limited seating, NO standing permitted.

LAS 7 — Peachtree Room
Associateship and sale/purchase agreement for
an endodontic practice
JAMES H. PEARCE, JR, DDS
ERIC M. JAHDE, DDS, Denver, CO
Both parties must feel like winners in an
associateship or sale of a practice. This seminar
discusses the important issues for making
satisfactory agreements and designing contracts
for a successful conclusion.

LAS 8 — Grand Room
"Bacteria busters"—a clinical update on
infection control
ROBERT E. AVERBACH, DDS, Denver, CO
This presentation will detail current concepts
in dental office infection control products and
procedures. Emphasis will be placed on a
practical approach for both doctor and
professional staff.

LAS 9 — O'Hare Room
Sonic instrumentation: from research to clinics
CATHERINE R. RICCI, DDS
JEAN-MARIE LAURICHESSE, DDS, Paris, France
Sonic instruments were developed from 1983
and preliminary investigations demonstrated
their viability in root canal treatment. Then
safety, efficiency and working time of sonic
were experimentally evaluated prior to
introducing new clinical procedures for
penetration and shaping of the root canals.

LAS 10 — Waikiki Room
Apical mineralization in response to root canal
filling with calcium hydroxide-containing sealers
MICHAEL TAGGER, DMD, MS
ETTY TAGGER, DMD, Tel Aviv, Israel
Histological examination of usage tests in
monkeys indicated that a calcium oxide-
containing sealer may promote apical
mineralization thanks, in part, to its
resorbabilty. In contrast, the effect of another
sealer that contains calcium hydroxide was
similar to that of zinc oxide-eugenol sealers.

LAS 11 — Maui Room (LAS 5 repeat)
New age retropolis: alternatives to amalgam
SAMUEL O. DORN, DDS, Pembroke Pines, FL
ARNOLD H. GARTNER, DDS, Southfield, MI
This seminar will explore some of the new
materials being used for retrograde fillings in
endodontic surgery.

LAS 12 — Kuilima Room (LAS 6 repeat)
Periapical disease: what are you treating?
EVA C. DAHL, DDS, MA, MS, La Crosse, WI
An organized approach to diagnosis of
periapical lesions will be presented illustrating
the characteristics of inflammatory and non-
inflammatory lesions, emphasizing the
importance of a thorough evaluation, and
discussing the role of a biopsy in appropriate
cases.
SCIENTIFIC SESSION III
Regency Ballroom A
9:00 am - 12:00 n
Moderator: JOEL C. SMALL, DDS, Plano, TX
Treatting perforating root resorption
NOAH CHIVIAN, DDS, West Orange, NJ
Perforating root resorption presents a series of problems whose solution lies within a range of possibilities: 1) nonsurgical approach, 2) recalcification with calcium hydroxide, 3) surgical repair. The lecture will focus on the indications and limitations of each approach to preserving the affected tooth, its health and function.

Managing perforations
FRED W. BENENATI, DDS, MEd, Norman, OK
Perforation repair poses one of the greatest problems in endodontics. A review of related clinical and lab studies and an analysis of the factors recognized as critical to the success of repair form the basis for selection of repair materials and techniques. Several methods of repairing actual clinical cases using calcium hydroxide, hydroxyapatite and amalgam will be presented in an effort to promote a better understanding and ability to deal with these complex problems.

Furcation perforation repair using hydroxyapatite as an internal matrix
RONALD R. LEMON, DMD, New Orleans, LA
One of the most devastating injuries affecting the long-term prognosis of a posterior tooth is the perforation of the furcation. Traditionally, treatment of this type of defect has required surgical intervention. By using hydroxyapatite as a matrix, most of these defects can now be repaired nonsurgically and the prognosis greatly improved. The technique has been researched at LSU School of Dentistry for over six years, and many cases have been successfully treated by this simple method.

SCIENTIFIC SESSION IV
Regency Ballroom F-H
9:00 am - 12:00 n
Moderator: STEVEN G. MORROW, DDS, Loma Linda, CA
Lasers in dentistry... When, which types and for which uses?
KENNETH L. ZAKARIASEN, DDS, MS, PhD, Halifax, Nova Scotia
THOMAS J. BORAN, DDS, Truro, Nova Scotia
DOUGLAS N. DEDERICH, DDS, MSc, PhD, Edmonton, Alberta
Lasers have wide application in such areas as communications, industry and medicine. The literature increasingly suggests that lasers will also have numerous dental uses, e.g. in preventive, endodontic, periodontic and restorative dentistry procedures. This presentation will focus on dental laser applications and technology, and will hazard guesses as to when it all may become reality.

BADGES MUST BE WORN AT ALL OFFICIAL AAE FUNCTIONS.

NEED A BREAK?
Visit the Technical Exhibits. Complimentary coffee service will be provided in the Exhibit Area on Thursday and Friday, 10:30 am and 2:30 pm.
FRIDAY MORNING (continued)

RESEARCH SEMINARS III
Poydras Rooms (Plaza Mall, ground level)
Moderators: THOM C. DUMSHA, DDS, MS,
Baltimore, MD
SANDRA MADISON, DDS, MS,
Chapel Hill, NC

9:00 am Torsional ductility and cutting efficiency of the nitinol file
HARMEET WALIA*, J. COSTAS, W. BRANTLEY
& H. GERSTEIN, Marquette Univ

9:15 am Shape of canals instrumented by hand and ultrasonically using macroradiography
MAJINAH AHMAD*, Univ of Malaya &
T.R. PITT FORD, Guy's Hospital,
London, England

9:30 am A quantitative evaluation of three different cleaning techniques for endodontic files; an SEM examination
CARLOS MURGEL*, R. WALTON, B. RITTMAN
& J. PECORA, Univ of Iowa

9:45 am Performance of Gates-Glidden drill with an applied deflection load
NEILL H. LUEBKE*, Marquette Univ

10:00 am Effects of sterilization and usage on cutting efficiency of endodontic instruments
SCOTT W. MORRISON*, C. NEWTON &
C. BROWN, Indiana Univ

10:15 am Smear layer effect on dentin permeability following calcium hydroxide treatments
JIANN-JANG WU*, R.D. BARFIELD,
J. LEMONS, W. LACEFIELD & T. HEAVEN,
Univ of Alabama

10:30 am Smear layer removal effects on root canal dentin tubule infection
KAMRAN E. SAFAVI*, L. SPANGBERG &
K. LANGELEND, Univ of Connecticut

10:45 am Dentinal permeability to calcium hydroxide and to bleaching agents
ZVI FLUX*, S. SZAJKIS & M. TAGGER,
Tel Aviv Univ

11:00 am Sterilization of extracted human teeth
EUGENE A. PANTERA, JR.* & G.S. SCHUSTER,
Medical College of Georgia

11:15 am In vitro evaluation of chlorhexidine efficacy as an intracanal medication
ILANA HELING*, M. SOMMER, D. STEINBERG,
M.M. SELA & M. FRIEDMAN, Hebrew Univ

11:30 am Antimicrobial effect of chlorhexidine in a controlled release delivery system
FRANK J. CERVONE*, L. TRONSTAD &
B.F. HAMMOND, Univ of Pennsylvania

11:45 am Endodontic flare-ups after post-instrumentation application of different intracanal medicaments
MARTIN TROPE*, Temple Univ

*Presenter

SMOKING
For the comfort of others, no smoking is permitted in the meeting rooms.
FRIDAY AFTERNOON, MAY 5

12:00 n -
1:45 pm
LUNCHEON WITH LEARNING
(By ticket only)
Regency Ballroom D
Presentation of the Louis I. Grossman award

MELVIN GOLDMAN
1989 Grossman
Award Recipient

The Louis I. Grossman Award is given to an AAE member for cumulative publication of significant research studies which have made an extraordinary contribution to endodontology.

LIMITED ATTENDANCE SEMINARS

2:00 pm-
4:00 pm
Plaza Mall, ground level
Limited seating, NO standing permitted.

LAS 13 — Peachtree Room
Controversies in the management of endodontic emergencies
GERALD N. GLICKMAN, DDS, MS, MBA,
Dallas, TX
This presentation will focus on the major issues that are often raised in the management of endodontic emergencies. Topical areas will include the “open/close” controversy, degree of debridement, occlusal adjustment, incision and drainage, apical and cortical trephination, and antibiotics and analgesics.

LAS 14 — Grand Room (LAS 2 repeat)
Management of large periapical lesions of endodontic origin
CARL W. NEWTON, DDS, MSD
WILLIAM R. ADAMS, DDS, MSD,
Indianapolis, IN
The role of the endodontist in treatment planning and the surgical and non-surgical treatment of large periapical lesions of pulpal origin are discussed and illustrated with case reports.

LAS 15 — O'Hare Room
What they didn't teach you in grad school: don't worry, be happy!
JOHN S. OLMSTED, DDS, MS
HAL W. MOHORN, JR, DDS, MS,
Greensboro, NC
The endodontic graduate student and recent graduate has numerous career opportunities. Preparing for careers in academics, research, and clinical practice will be examined. An emphasis on establishing a clinical practice will be explored with choices as an employee, an independent contractor and associate.

LAS 16 — Waikiki Room
Treatment planning in the diagnosis and management of endodontic failures
ADAM STABHOLZ, DMD, Jerusalem, Israel
The question of when to retreat a tooth that has had endodontic treatment is a common occurrence in dental practice. Treatment planning based on correct diagnosis and proper case selection may influence attempts to turn an endodontic failure into a success.

LAS 17 — Maui Room
The biology of pulpal diagnosis
STEVEN M. SIERASKI, DDS, MS, Maywood, IL
Painful and non-painful pulpal diagnosis will be examined from a biological viewpoint. Emphasis will be placed on the roles of intrapulpal pressure, vasculature, dentinal versus pulpal pain, and pulpal defense mechanisms.

LAS 18 — Kuliima Room
The restoration of endodontically treated teeth
ROBERT R. WHITE, DMD, Boston, MA
A cooperative presentation from both sides of "the fence." Endodontics: case selection and planning. Pretreatment, treatment, and post-treatment responsibilities. Prosthodontics: what to expect after endodontics. When are posts, cores and crowns necessary?
FRIDAY AFTERNOON  (continued)

RESEARCH SEMINARS IV
Poyduras Rooms (Plaza Mall, ground level)
Moderators: WALTER DOBLECKI, DMD,
Rockville, MD
MARSHALL ENGLAND, JR, DDS,
Richmond, VA

Graduate Student Section

2:00 pm  Sealer adhesive strength to dentin with/without
the smear layer
BRADLEY GETTLEMAN*, H.H. MESSER &
M. EL DEEB, Univ of Minnesota

2:15 pm  Changes in the physical properties for the
Ultrafil gutta-percha system
MICHAEL D. GRASSI*, D.J. PLAZEK,
A.E. MICHANOWICZ & I. CHAY,
Univ of Pittsburgh

2:30 pm  Apical seal following intracanal medication with
calcium hydroxide
PATCHARIN PORKAEW*, R. BARFIELD,
H. RETIEF, W. LACEFIELD & S. SOONG,
Univ of Alabama

2:45 pm  Longitudinal evaluation of the seal of
endodontic retrofillings
KENNETH T. KING*, R.W. ANDERSON,
D.H. PASHLEY & E.A. PANTERA,
Medical College of Georgia

3:00 pm  Sealing ability of the Thermafil obturation
technique
CARMEN LARES-ORTIZ* & M. EL DEEB,
Univ of Minnesota

3:15 pm  A microleakage study of temporary restorative
materials used in endodontics
HARRY G. BOBOTIS*, R.W. ANDERSON,
D.H. PASHLEY & E.A. PANTERA,
Medical College of Georgia

3:30 pm  A comparison of intracanal stresses in a post-
restored tooth
JOHNNY G. CAILLETTEAU*, M. RIEGER, Univ
of Texas at Houston & J. AKIN, Rice Univ

3:45 pm  The effect of therapy on the healing response to
experimentally-induced vertical root fractures in
beagle dogs
RONALD C. MARKARIAN*, E.J. KAMINSKI,
G.T. ISERMANN & E.M. OSETEK,
Northwestern Univ

4:00 pm  Bone healing with continuously infused calcium
hydroxide, barium hydroxide or tetracycline
KIM FREEMAN*, J. LUDINGTON, G. PINERO
& J. HOOVER, Univ of Texas at Houston

4:15 pm  Scanning electron microscope study of in vitro
cell attachment to titanium surfaces
PATRICIA S. WALTER*, B. GIAMMARA,
D.B. GREEN & G. SONNENFELD,
Univ of Louisville

4:30 pm  Histologic evaluation of fibrin adhesive in
endodontic surgical wound closure
DEBORAH C. CREEL* & J.W. HARRISON,
Baylor College of Dentistry

4:45 pm  Light microscope evaluation of wound healing
following periradicular surgery
KATHRYN A. JUROSKY* & J.W. HARRISON,
Baylor College of Dentistry

5:00 pm  Factors influencing the prognosis of endodontic
therapy
EUGENE I. SUGITA*, L. BAKLAND &
M. TORABINEJAD, Loma Linda Univ

*Presenter
CONTINENTAL BREAKFAST
8:00 am
8:45 am
(By ticket only)
Regency Ballroom E

EXHIBITS
8:00 am
12:00 n
French Market Hall

LIMITED ATTENDANCE SEMINARS
9:00 am
11:00 am
Plaza Mall, ground level
Limited seating, NO standing permitted.

LAS 19 — Peachtree Room
Differential diagnosis and treatment of endodontic-periodontal lesions
ROBERT J. MICHELICH, DDS, Jonesboro, GA
Knowledge of the progression and interaction of pulpal and periodontal inflammation is necessary to interpret clinical findings and initiate proper treatment. This clinical seminar will include the pathogenesis, evaluation of diagnostic methods, relevant treatment alternatives and prognoses for these lesions of masquerading symptoms.

LAS 20 — Grand Room
Clarifying the confusion about cracked cusps and roots
JAMES GUTTUSO, DDS, MSD,
West Palm Beach, FL
The “cracked tooth” is a perplexing problem and has resulted in speculation on its diagnosis and management. A straightforward, clinical approach to the recognition and management of cracked cusps and/or roots will be presented.

LAS 21 — O’Hare Room
Office and treatment records for the modern endodontic practice
DAVID D. FRANCISCO, DDS, MS,
Overland Park, KS
Suggestions for all office paperwork will be discussed, emphasizing better organization within the office, improved communication with patients or referring dentists, and especially stressing reduction in liability risk. Includes treatment letters, charts, registration, health, insurance, consent forms and more.

LAS 22 — Waikiki Room
Surgical repair of vertical root fractures
GEORGE G. STEWART, DDS, Philadelphia, PA
GUNNAR HASSELGREN, DDS, PhD,
Fort Lee, NJ
There will be a review of studies of the recognition and treatment of vertical root fractures. Surgical repair of these fractures will be illustrated with case history presentations.

LAS 23 — Maui Room
Radiographic interpretation
M. LAMAR HICKS, DDS, MS, Rockville, MD
Good quality radiographs can provide the endodontic practitioner with a wealth of information. This LAS will emphasize the usefulness of radiographs for discriminating between normal and abnormal, localizing objects in and around the oral cavity, elucidating occult anatomical features, and providing better treatment and evaluation capabilities.

LAS 24 — Kuilima Room
Acute care: symptomatic to asymptomatic
CHARLES J. CUNNINGHAM, DDS,
Lexington, KY
A comprehensive first-visit management protocol for patients with symptomatic pulp and/or periapical disease will be the focus of this seminar. Our evaluation sequence of diagnosis, etiology and treatment alternatives comprise the initial phase of care. The treatment sequence will extend from anesthesia to post-operative instructions. Transition from symptomatic to asymptomatic status is the goal of our one-visit emergency treatment.
SCIENTIFIC SESSION V

9:00 am-12:00 n

Regency Ballroom A-C

Stereoids reconsidered
Moderator: RICHARD E. WALTON, DMD, MS, Iowa City, IA

Inflammation and the mechanism of action of anti-inflammatory medications
MAHMOUD TORABINEjad, DMD, MS, Loma Linda, CA

Inflammation is mediated by a variety of chemicals from tissues, migrating cells, and plasma. Release of these substances is curtailed by using their inhibitors and their antagonists. The process of inflammation in pulpal and periapical tissues will be reviewed and the role of anti-inflammatory drugs will be discussed.

Nonsteroidal inflammatory agents—their pharmacology and clinical use
MICHAEL K. GAYNOR, DDS, MS, Chicago, IL

This presentation will discuss the pharmacological aspects of the non-steroidal anti-inflammatory agents and will examine in depth their use in dentistry. All of the agents available, their side effects, and clinical advantages will be evaluated.

Steroids do work in endodontics
GARRY J. NERVO, DDS, MDS, Ivanhoe, Australia

Endodontic disease is essentially an inflammatory reaction to infection and damaged tissue. This presentation will discuss the use of intra canal depot steroids as an adjunct to the other biological tenets of endodontics. Their application to painful teeth, root resorption and the management of avulsed teeth will be discussed.

RESEARCH SEMINARS V

Poydras Rooms (Plaza Mall, ground level)

Moderators: SYNGCUK KIM, DDS, PhD, New York, NY
ALFRED W. READER, DDS, Pataskala, OH

9:00 am Purification and characterization of capsular polysaccharides from Bacteroides intermedius
ROSEMARY LINZER*, SUNY at Buffalo

9:15 am Presence of bacteria in experimentally induced periapical lesions
ELIZEU A. PASCON*, K. LANGELAND, Univ of Connecticut & W. GREMSKY, Univ Fed Brazil

9:30 am The in vitro production of IgG in periapical inflammatory lesions
J. CRAIG BAUMGARTNER* & W. FALKLER, Univ of Maryland

9:45 am Role of calcium, cyclic AMP and GTP-binding proteins in bone metabolism
SUSAN E. HAGEL-BRADWAY* & R. DZIAK, SUNY at Buffalo

10:00 am Methodology in the assessment of biocompatibility of endodontic sealers
KAARE LANGELAND*, S. ANDREANA & E.A. PASCON, Univ of Connecticut

10:15 am An evaluation of Ultrafil obturation
MARK R. JENSEN*, M.C. BAKER, J.E. VAN CURA & N.A. REMEIKIS, Univ of Illinois at Chicago

10:30 am Pain perception and analgesic use during root canal retreatment
JERRY F. TANTOR*, Univ of Tennessee, A. FAHID, UCLA & R.C. BIESTERFELD, Edina, MN

10:45 am Profile of initial root canal treated teeth in private practice
J.F. TANTOR, Univ of Tennessee, ROBERT C. BIESTERFELD*, Edina, MN & A. FAHID, UCLA

11:00 am Factors affecting microleakage
AIDA A. CHOHAYEB*, Howard Univ, F.C. EICHMILLER & N.W. RUPP, ADAHF PRC, NIST, Gaithersburg, MD

11:15 am The incidence of flare-ups following endodontic treatment
FREDERIC BARNETT* & L. TRONSTAD, Univ of Pennsylvania

11:30 am Endodontic treatment before and after autotransplantation of mature dog teeth
GUNNAR HASSELGRENN*, Columbia Univ, P. NELLESTAM, Univ of Lund & A. SKOGlund, Univ of Umea

11:45 am Lateral condensation using differently tapered root canal models
ICHIROH KATSUUMI*, T. SUZUKI, H. NAKAMURA, H. GOTOH, T. TSUZUKI, Y. NAKAMURA, Nippon Univ & E.M. OSETEK, Northwestern Univ

*Presenter
### SATURDAY MORNING (continued)

**TABLE CLINICS**

8:30 am  TABLE CLINICS  
11:30 am  French Market Hall

<table>
<thead>
<tr>
<th>TC 1</th>
<th>Alternate methods of obturating the curved canal with thermoplasticized gutta-percha</th>
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<tbody>
<tr>
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<td>JACK P. CAMPBELL, DMD, Bethesda, MD</td>
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<tr>
<th>TC 2</th>
<th>Anaerobic microbiologic sampling in endodontic therapy</th>
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<td>FRANK J. CERVONE, DMD, Yeadon, PA</td>
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<tr>
<th>TC 3</th>
<th>Intracanal medicaments: you make the choice</th>
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<tr>
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<td>HESHAM M. EL-TAGOURI, BDS</td>
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<td>MARIO CZONSTKOWSKY, DMD, MDS, Univ of Pittsburgh</td>
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Graduate Student Section

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<tr>
<th>TC 4</th>
<th>Endodontic success and failure</th>
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<tr>
<td></td>
<td>ROBERT D. BERNIE, DDS</td>
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<td>MICHAEL L. MARK, DDS, Univ of Maryland</td>
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<th>TC 5</th>
<th>The XCP film holder with a modification to reproduce radiographs free of distortion</th>
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<td>JOSEPH S. DOVGAN, DDS, Univ of Iowa</td>
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<tr>
<th>TC 6</th>
<th>Endodontic flare-ups</th>
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<tbody>
<tr>
<td></td>
<td>MARIA J. FOURNIER, DDS</td>
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<td>CLAY ECKERT, DDS, Northwestern Univ</td>
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<th>TC 7</th>
<th>Post space preparation</th>
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<td>STEPHEN J. FRAME, DMD</td>
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<td>ZAREH OUZOUNIAN, DDS, Boston Univ</td>
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<th>TC 8</th>
<th>Endodontic-periodontal lesions</th>
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<tr>
<td></td>
<td>MICHAEL R. FUKAWA, DDS</td>
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<td>JAMES F. GIANAKAKIS, DDS, Northwestern Univ</td>
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<th>TC 9</th>
<th>Internal or external resorption?</th>
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<tr>
<td></td>
<td>RICHARD E. GOLDEN, JR, DDS</td>
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<td>Naval Dental School</td>
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<th>TC 10</th>
<th>Root length distortion with high distal palatal projection radiographs</th>
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<td>WILLIAM C. HIGHTOWER, DDS, Naval Dental School</td>
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<th>TC 11</th>
<th>Mach band or adumbration</th>
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<td>KENNETH R. HUNTER, DDS, Naval Dental School</td>
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<th>TC 12</th>
<th>Orthodontic extrusion of an endodontically treated tooth with root resorption</th>
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<td>DOUGLAS J. KOCH, DDS, SUDHA PATIL, DDS, Univ of Maryland</td>
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<th>TC 13</th>
<th>Actinomycosis</th>
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<td>ROBERT W. LADLEY, DMD, Naval Dental School</td>
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<th>TC 14</th>
<th>Instrumentation of the ribbon shaped canal</th>
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<td>WILLIAM D. LUPER, DDS, Naval Dental School</td>
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<tr>
<th>TC 15</th>
<th>The use of transillumination in endodontics</th>
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<tr>
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<td>RANDY S. METZLER, DDS, THOMAS J. FOGARTY, DDS, USAF Wilford Hall</td>
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<tr>
<th>TC 16</th>
<th>Orthodontic extrusion in difficult endodontic cases</th>
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<td>DAVID S. MORESI, DDS, Naval Dental School</td>
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<th>TC 17</th>
<th>Methylene blue—an adjunct to endodontic surgery</th>
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<td>LANGSTON D. SMITH, DMD, Naval Dental School</td>
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<th>TC 18</th>
<th>An improved amalgam retroseal technique</th>
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<td>HOM-HSIANG WANG, DDS, Case Western Reserve Univ</td>
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<th>TC 19</th>
<th>The endodontic flare-up: inflammation or infection?</th>
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<td>DENNIS J. WOURMS, DDS, Naval Dental School</td>
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### 8:30 am  POSTER CLINICS  
### 11:30 am  French Market Hall

<table>
<thead>
<tr>
<th>PC 1</th>
<th>Comparative study of micro leakage of four retrofilling materials by die penetration</th>
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<tbody>
<tr>
<td></td>
<td>JEAN-YVES COCHET, DDS, ISABELLE BARRIL, DDS, Paris, France</td>
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<tr>
<th>PC 2</th>
<th>A SEM study of the mesiolingual canal in human maxillary first and second molars</th>
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<td>JAMES A. GILLES, DDS, San Antonio, TX, ALFRED W. READER, DDDS, Columbus, OH</td>
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<tr>
<th>PC 3</th>
<th>Vertical root fracture and dentin deformation in curved canals: effect of spreader design</th>
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<td>CARLOS MURGEL, DDS, Iowa City, IA</td>
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<tr>
<th>PC 4</th>
<th>Performance flaws in root canal therapy by undergraduate students</th>
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<td>GARY M. RITCHIE, DDDS, Kansas City, MO</td>
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<tr>
<th>PC 5</th>
<th>Evaluation of the gutta-percha filling conditions obturated by McSpadden compactor method</th>
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<td>TAMIKI TSUZUKI, DDS, ICHIROH KATSUMI, DDS, Nippon Dental Univ</td>
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SATURDAY AFTERNOON, MAY 6

12:00 n-
2:00 pm
COOLIDGE LUNCHEON
(By ticket only)
Regency Ballroom D-E
Presentation of the Edgar D. Coolidge Award

SAMUEL S PATTERSON
1989 Coolidge Award Recipient

The Edgar D. Coolidge Award is presented annually to an AAE member who has had active participation in the AAE during the individual's professional lifetime and who has displayed leadership and exemplary dedication to dentistry and to endodontics.

2:30 pm-
5:00 pm
GENERAL ASSEMBLY
Regency Ballroom F-H
Business meeting, elections and presentation of Graduate Student Award winners.

6:30 pm-
7:30 pm
PAST PRESIDENTS' RECEPTION
Regency Ballroom Foyer

7:30 pm-
12:00 m
MARDI GRAS BAL MASQUE DINNER DANCE
(By ticket only)
Regency Ballroom

SUNDAY, MAY 7

8:30 am-
10:30 am
CASE PRESENTATION FAREWELL BREAKFAST
(By ticket only)
Regency Ballroom F-H
Case discussion with your peers and to say farewell until next year.
THURSDAY, MAY 4
French Endo Society 12:30-1:45 pm
Int'l Fed of Endo Assns 2-5 pm
Minnesota Endo Alumni 6:30-8:30 pm
Northwestern Alumni 6-8 pm
Tufts Univ Endo Alumni 6-8 pm
Univ of Maryland Endo Alumni 6-8 pm
UNC Endo Alumni 6-8 pm
Univ of Pitts 6-8 pm
US Army Assn of Endo 1-2 pm
US Army Assn 6:30-9:30 pm

FRIDAY, MAY 5
Boston Univ Endo Alumni 7:30-9 am
Med College of VA 7-9 am
HJ Healey Endo Study Club 7:30-9 am
Univ of Michigan Endo Alumni 7:30-9 am
Oklahoma Assn of Endo 7:30-9 am
Penn Academy of Endo 7:30-9 am
Christian Endo Society 5-6 pm
Florida Assn of Endo 5-6 pm
FJ Marshall Recpt 5:30-7:30 pm
UTH Endo Alumni 6-7:30 pm
Temple Univ Endo Alumni 6-8 pm
Iowa Endo Group 6-8 pm
A Einstein Med Ctr Alumni 6-8 pm
Univ of Wash Endo Alumni 6:30-8:30 pm
Boston Univ Endo Alumni 7-10:30 pm
Univ of Connecticut Alumni 6:30-8 pm

SATURDAY, MAY 6
USAF Assn of Endo 7:30-9 am
US Navy Assn of Endo 7:30-9 am

ROOMS
Burgundy A
Burgundy B
Burgundy C
Dauphine
Magnolia
Royale
Burgundy D
Burgundy A-B
O'Hare
Howard
Johnson
Burgundy D
St. Louis Hotel
Kenilworth
Dauphine
Rampart
Burgundy C
Elmwood
Rosedown
Buena Vista
Dauphine
Burgundy A
Kenilworth
Burgundy B
Rampart
Burgundy C-D
Royale
Rampart
Burgundy C

MONDAY, MAY 1
ABE Board 8 am-6 pm

TUESDAY, MAY 2
R&E Foundation Trustees 8 am-5 pm

WEDNESDAY, MAY 3
AAE Board of Directors 8 am-5 pm

FRIDAY, MAY 5, 7:30-9 am
Editorial Board
Federal Dental Health Services
Honors & Awards
International Relations
New Members' Breakfast

SATURDAY, MAY 6, 7:30-9 am
Dental Care & Clinical Practice
7:30-10 am
Educational Affairs
Membership
Member Services
Past Presidents' Breakfast
Professional Standards, Peer Review & Ethics
Public & Professional Affairs
Research & Scientific Affairs

SUNDAY, MAY 7
AAE Board of Directors 8 am-1 pm
DIRECTORS

AMERICAN BOARD OF ENDODONTICS

1989
Leif K. Bakland
Carlos E. del Rio
Robert Zelikow

1990
Stephen Cohen
Alvin A. Krakow, President
William E. Bernier

1991
M. Lamar Hicks
F. James Marshall
Edward M. Osetek, Secretary/Treasurer

TRUSTEES

RESEARCH & EDUCATION FOUNDATION OF THE AAE

1989
Joel B. Alexander
Raleigh C. Cummings
Marshall D. Peikoff, President

1990
Paul D. Eleazer, President-elect
Gregory C. Galland
Carl W. Newton

Ex officio: Eric J. Hovland

1991
Gary R. Hartwell
Sandra Madison,
Secretary/Treasurer
John W. Myers

1992
Harold E. Goodis
Peter A. Paesani
Carl L. Tinkelman

AAE AUXILIARY

The AAE Auxiliary will maintain a hospitality suite in the Oak Manor Room on Thursday & Friday from 1:00 pm-3:00 pm.

OFFICERS

Mrs. Sherry Heller (A. Stephen) .......... President
Mrs. Ann Ratkus (Victor) ............ President-elect
Mrs. Linda Powell (William) .......... Vice president
Mrs. Elizabeth Rubin (Samuel) ........ Secretary
Mrs. Cheryl Pranikoff (Howard) ......... Treasurer
Mrs. Helen Mills (John C.) .......... Parliamentarian

THURSDAY, MAY 4

Continental Breakfast/Lecture & slide presentation
8 am-9 am, Woody Herman Room
All registered spouses are welcome.

Board Meeting
4 pm-5 pm, Mrs. Heller's suite

How to start a business from the idea stage to success
4 pm-5 pm, Rampart Room
BEVERLY A. MARGOLIS, Utica, NY
A leading communicator, Ms. Margolis breaks on being a woman entrepreneur in today's world. Ms. Margolis shared her experiences on TV shows such as P.M. Magazine to SMART MONEY and on radio telephone interviews. She was selected Woman of the Year for 1988 by her local Business & Professional Women's Association.

SATURDAY, MAY 6

Auxiliary Brunch—Learning to Cook Creole
(By ticket only)
8:30 am-10:30 am, Woody Herman Room

JOE CAHN, New Orleans
Learn first hand how to prepare the incomparable Creole Cuisine that has made New Orleans famous. You will be entertained with the history and origins of Creole recipes—a combination of French, Spanish, African and Choctaw Indians. See and sample delicacies such as jambalaya and learn the secret of making the native pecan pralines. Recipes and taste samples will be provided. This is in conjunction with the Auxiliary Breakfast at 8:30 am.

Board Meeting
11 am-12 n, Mrs. Heller's suite
TECHNICAL EXHIBITS

(Booth #) 204 Amadeant P.O. Box 733 Cherry Hill, NJ 08003
(Booth #) 215 Analytic Technology Corp. 3301 - 181st Place NE Redmond, WA 98052
(Booth #) 322 Aspentico/North Pacific Dental P.O. Box 3209 Kirkland, WA 98083
(Booth #) 110 Astra Pharmaceutical Products, Inc. 50 Otis St. Westborough, MA 01581
(Booth #) 321 Becker-Parkin Dental Supply Co. 325 Seventh Ave. New York, NY 10001
(Booth #) 214 Block Drug Co., Inc. 257 Cornell Ave Jersey City, NJ 07302
(Booth #) 206 Brascero USA Inc. 800 King George Blvd. Savannah, GA 31419
(Booth #) 319 CMI Group 4533 US 220 North Summerville, NC 27358
(Booth #) 203 L.J. Caulk Co. P.O. Box 359 Milford, DE 19963
(Booth #) 207 Columbus Dental/Miles, Inc. 475 W. Merrick Rd. Valley Stream, NY 11580
(Booth #) 304 Eurasia Dental Equipment Co. P.O. Box 602 St. Louis, MO 63188
(Booth #) 315 Dentasat Int'l 1324 W. Collins Ave. Orange, CA 92668
(Booth #) 314 Designs for Vision 760 Koehler Ave. Ronkonkoma, NY 11779
(Booth #) 306 Dunvale Corp. 141 Union St. Gilberts, IL 60136
(Booth #) 109 Ellman International Mfg., Inc. 1135 Railroad Ave. Hewlett, NY 11557
(Booth #) 123 Encyclopaedia Britannica, USA 310 S. Michigan Ave. Chicago, IL 60604
(Booth #) 108 Endo Technic Corp. 3002 Dow Ave., #512 Tustin, CA 92680
(Booth #) 209 Endoco, Inc. 5180 Park Ave., Suite 170 Memphis, TN 38119
(Booth #) 106 Essential Dental Systems 7 W. 36th St. New York, NY 10018
(Booth #) 317 Hall Surgical/Zimmer 1170 Mark Ave. Carpinteria, CA 93013
(Booth #) 121 Healthco Int'l, Inc. 25 Stuart St. Boston, MA 02116
(Booth #) 211 Hu-Friedy Mfg. Co., Inc. 3232 N. Rockwell St. Chicago, IL 60618
(Booth #) 103 Hygenic Corp. 1245 Home Ave. Akron, OH 44319
(Booth #) 107 Inter-Dent 391 Steelcase Rd. W., Unit 16 Markham, ON, Canada L3R 3V9
(Booth #) 222 JS Dental Mfg. Inc. P.O. Box 904 Ridgefield, CT 06877
(Booth #) 308 K-Corp Systems 535 N. Brand Blvd., Suite 601 Glendale, CA 91203
(Booth #) 101 Kelly Systems, Inc. 6735 Telegraph Rd., Suite 205 Birmingham, MI 48010
(Booth #) 223 Kerr Mfg. Co. 20200 Wick Rd. Romulus, MI 48174
(Booth #) 220 Knoll Pharmaceuticals 30 W. Jefferson Rd. Whippany, NJ 07981
(Booth #) 316 Lea & Febiger 600 S. Washington Sq. Philadelphia, PA 19106
(Booth #) 114 Life Tech Inc. 13910 N. Dale Mabry Hwy., Suite 2 Tampa, FL 33618
(Booth #) 217 Medidenta Int'l, Inc. 39-23 62nd St. Woodside, NY 11377
(Booth #) 216 C. V. Mosby Co. 11830 Westline Industrial Dr. St. Louis, MO 63146
(Booth #) 313 Nat'l Dental Mutual Insurance Co. 44 Montgomery St., Suite 400 San Francisco, CA 94104
(Booth #) 311 Navy Recruiting Command Code 122 Rm. 203-4015 Wilson Blvd. Arlington, VA 22203
(Booth #) 120 Ortho Management Systems (OMS) 3120 Crossing Park Norcross, GA 30071
(Booth #) 100 Osada Electric Co., Inc. 8242 W. Third St., #150 Los Angeles, CA 90048
(Booth #) 112 Patterson Dental Co. 1100 E. 80th St. Minneapolis, MN 55420
(Booth #) 111 Premier-Espe/Espe 203 1770 Romano Dr., Box 111 Norristown, PA 19404
(Booth #) 208 Pulpedent Corp. 80 Oakland St. Watertown, MA 02272
(Booth #) 102 Quality Aspirators P.O. Box 382120 Duncangville, TX 75138
(Booth #) 104 Quintessence Publishing 870 Oak Creek Dr. Lombard, IL 60148
(Booth #) 210 Roydent Dental Products, Inc. 6964 Crooks Rd., Suite 4 Troy, MI 48098
(Booth #) 305 SafeSkin Corp. 6567 N.W. 13th Ct. Plantation, FL 33313
(Booth #) 310 Charles B. Schwed Co., Inc. 138 Audley St. Kew Gardens, NY 11418
(Booth #) 221 Tamko Corp. 15020 Delano St. Van Nuys, CA 91411
(Booth #) 122 Thermofil/Tulsa Dental Products 6004 S. Canton, Suite 600 Tulsa, OK 74136
(Booth #) 124 TreLoar & Heisel, Inc. (Registration Area) 3132 Wilmington Rd. New Castle, PA 16105
(Booth #) 320 Uniflex Endodontic Co. 6964 Crooks Rd. Troy, MI 48098
(Booth #) 115 Union Broach/A.H. Health-Cem Co. 1107 Broadway New York, NY 10010
(Booth #) 116 Dentsply Int'l 570 W. College Ave. York, PA 17405

Non-Technical Exhibits
American Audio Association (Registration Area) 307 Willis Avenue Mineola, NY 11501
AAE Career Counseling Research & Education Foundation 1990 Annual Session
PAST PRESIDENTS

*W. Clyde Davis ..................................... '43-'44
*Ralph F. Sommer .................................. '44-'45
*Robert G. Kesel ................................... '45-'46
*E.G. Van Valey ..................................... '46-'47
Maynard K. Hine .................................. '47-'48
*Louis I. Grossman .................................. '48-'49
*Elmer A. Jasper .................................... '49-'50
*Raymond L. Girardot ................................ '50-'51
*George G. Sharp ................................... '51-'52
F. Darl Ostrander .................................. '52-'53
Laurence A. Lucas .................................. '53-'54
*N. Weir Burkman ................................... '54-'55
*Harry J. Healey .................................... '55-'56
John R. Pear ....................................... '56-'57
*George C. Hare .................................... '57-'58
George G. Steward ................................. '58-'59
*J. Henry Kaiser ..................................... '59-'60
*Paul P. Sherwood ................................... '60-'61
*Glenn R. Brooks ................................... '61-'62
*Vincent B. Milas ................................... '62-'63
James H. Sheard, Jr. ................................ '63-'64
Jacob B. Freedland .................................. '64-'65
*Henry S. Schmidt .................................. '65-'66
John I. Ingle ........................................ '66-'67
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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. Zerkow ................................... '77-'78
Harry Blechman ...................................... '78-'79
Paul E. Zeigler ...................................... '79-'80
Edward M. Osetek ................................... '80-'81
Henry J. Van Hassel .................................. '81-'82
Noah Chivian ........................................ '82-'83
Donald E. Arens ..................................... '83-'84
Stephen F. Schwartz .................................. '84-'85
Herbert Schilder ..................................... '85-'86
Michael A. Heuer ................................... '86-'87
Charles J. Cunningham .............................. '87-'88

*Deceased

AWARD RECIPIENTS

Edgar D. Coolidge Award
*Edgar D. Coolidge .................................. '69
*Harry B. Johnston .................................. '70
*Henry A. Bartels ................................... '71
Bertram L. Wolfsohn ................................. '74
*Vincent B. Milas ................................... '75
Worth B. Gregory ................................... '78
Jacob B. Freedland .................................. '80
Alfred L. Frank ...................................... '81
George G. Stewart .................................. '82
F. Darl Ostrander ................................... '83
Maynard K. Hine ................................... '83
*George C. Hare .................................... '84
*Irving J. Naidorf ................................... '85
Harry Blechman ...................................... '86
I.B. Bender .......................................... '87
Dudley H. Glick ..................................... '88
Samuel S Patterson .................................. '89

Louis I. Grossman Award
*Louis I. Grossman .................................. '73
*Birger Nygaard-Ostby ............................... '76
I.B. Bender .......................................... '78
Samuel Seltzer ...................................... '80
Harold R. Stanley ................................... '81
Kaare Langeland ..................................... '82
Henry J. Van Hassel .................................. '84
Melvin Goldman ...................................... '89

Ralph F. Sommer Award
Calvin D. Torneck ................................... '84
Alfred L. Frank ...................................... '85
Mahmoud Torbenejad .................................. '86
John I. Ingle ........................................ '87

HONORARY MEMBERS

Mary Crowley
*Louis I. Grossman
Maynard K. Hine
Oscar A. Maisto
Maury Massler
Harold R. Stanley
Henry O. Trowbridge
PRINCIPAL SPEAKERS

FRED W. BENENATI, DDS, MEd, Norman, OK
Assistant Professor of Endodontics, University of Oklahoma College of Dentistry, also in private practice.

GARRY J. NERVO, BDS, MDS, Ivanhoe, Australia
Part-time teacher, University of Melbourne and Royal Dental Hospital of Medicine, also in private practice.

THOMAS L. BORAN, DDS, Truro, Canada
Assistant Professor, General Dentistry & Director, Artificial Caries Laboratory, Dalhousie University, also in private practice part-time.

JAMES B. ROANE, DDS, MS, Oklahoma City, OK
Chairman & Associate Professor of Endodontics, University of Oklahoma College of Dentistry, also in private practice.

NOAH CHIVIAN, DDS, West Orange, NJ
Director of Endodontics, Newark Beth Israel Medical Center, also in private practice.

EDWARD RUBENSTEIN, MD, Stanford, CA
Associate Dean & Professor of Medicine (Clinical), Stanford University School of Medicine.

DOUGLAS N. DEDERICH, DDS, MSc, PhD, Edmonton, Canada
Chairman & Associate Professor, Division of Biomaterials, Faculty of Dentistry, University of Alberta.

STEVEN H. SANDERS, DDS, Chicago, IL
Associate Professor of Endodontics, Northwestern University, also in private practice.

MICHAEL K. GAYNOR, DDS, MS, Chicago, IL
Staff appointment at University of Illinois at Chicago and Evanston Hospital, and faculty appointment at Northwestern University, also in private practice.

HERBERT SCHILDER, DDS, Boston, MA
Chairman & Professor of Endodontics, Goldman School of Graduate Dentistry, Boston University, also in private practice.

RONALD R. LEMON, DMD, New Orleans, LA
Acting Head, Department of Endodontics, Louisiana State University School of Dentistry, also in private practice.

MAHMOUD TORABINEJAD, DMD, MSD, Loma Linda, CA
Professor of Endodontics, Loma Linda University School of Dentistry, also in private practice.

F. JAMES MARSHALL, DMD, MS, Lake Oswego, OR
Chairman & Professor of Endodontology, Director of Graduate Endodontics, Oregon Health Sciences University.

KENNETH L. ZAKARIASEN, DDS, MS, PhD, Halifax, Canada
Dean & Professor of Endodontics, Faculty of Dentistry, Dalhousie University, also in private practice part-time.
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