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Welcome, my friends, to the 41st Annual Session of the American Association of Endodontists.

The beautiful city of Toronto, with its international flavor, stimulates an air of excitement and anticipation as we gather to share knowledge, experiences, and friendships.

Throughout the year, the Officers and the Board of Directors have tried to put before you an attitude of optimism that hopefully would be contagious. We talked little of the past, and spoke only of the new and exciting things planned for the future. We tried not to fix on problems but to address solutions. For this reason, it seems only appropriate that the theme for our meeting should be "Tomorrow's Endodontic Practice."

Through the untiring efforts of Drs. Stephen Cohen, Jerry S. Smith and Duane E. Compton, a fantastic array of internationally respected speakers has been gathered. These people will not only stimulate your scientific appetite but also will introduce you to the new world of practice management and marketing. It is obvious that tomorrow's practice will require knowledge, dexterity, communications, efficiency, and fortitude to survive in a competitive society. You already have the ability to succeed; we feel this program will provide direction.

As for the social activities, you will be the delightful recipients of the efforts of local arrangements chairman Dr. F. Bruce Burns and his many cooperative colleagues as they welcome you with a spectacular Caravan Cocktail Party featuring entertainment and delicacies from the rich and overwhelming heritage of international Toronto. Throughout the balance of your stay, you will be invited to experience the beauty, history, and pageantry of this magnificent area of the world, (not to mention the shopping and suggested tours which have been headlined for our lovely ladies).

Now, it is my great pleasure to pay thanks to those who put it all together. My sincerest appreciation to General Chairman, Mike Chubin, Executive Director, Irma Kudo, and the entire Central Office staff. Fantastical! These dedicated people along with all those associated with this meeting have been preparing for our visit for two years. Can you imagine the thousands of ideas considered, investigated, and culled; the excitement, the disappointments, the phone calls, the pressures of budget and, most of all, the time away from their families? All of these sacrifices were for us. Although they would enjoy our individual thanks, what will really please them is to see you enjoying the fruits of their labor by having the best time of your life in the great city of Toronto. To all of you, salute and God bless.

DONALD E. ARENS, DDS, MSD
President

Board of Directors

1984
Stephen Cohen
Joseph D. Maggio
M. Lamar Hicks

1985
Leif K. Bakland
Garth A. James
Carl L. Tinkelman

1986
Nguyen T. Nguyen
Milton Siglin
Herbert F. Spasser

Ex-Officio members of the Board of Directors
Immediate Past-President: Noah Chivian
Executive Director: Irma S. Kudo
The American Association of Endodontists is delighted to return to Canada to have the 41st Annual Session in scenic Toronto, one of the most sophisticated and dynamic cultural and commercial centers of Canada. The members of your Program Committee have done their best to offer you exciting courses, lectures, roundtables, and table clinics that will stimulate your clinical and scientific interests in the fine facilities of the Royal York Hotel. Responding to the newly emerging needs of the clinical endodontist, we have internationally prominent experts offering programs on marketing, business and computers for the endodontist. Our speakers and guests from many parts of the world will find Toronto a perfect setting for sharing information and exchanging ideas. Your local Arrangements Committee has done an outstanding job in arranging excellent parties, tours, cultural events and athletic activities to supplement and enhance your stay in Toronto.

My personal thanks go not only to the members of the Program Committee and the Local Arrangements Committee, but also to Dr. Jerry Smith as well for his helpful input and unfailing cooperation. I want to also thank Dr. Don Arens and Dr. Myron Chubin for their guidance and advice. I am especially indebted to our Executive Director, Ms. Irma Kudo and our Central Office staff for their assistance and coordination of numerous details which made my job so much easier.

Please let me know if there is anything more we can do to help you enjoy your stay in Toronto.

STEFPHEN COHEN, DDS
Program Chairman

1984 ANNUAL SESSION
COMMITTEE

Myron Chubin
General Chairman

Stephen Cohen
Program Chairman

Program
Program Co-chairman .................. Jerry S. Smith
Program Coordinator .................. Duane E. Compton
Continuing Education .................. James L. Gutmann
Endodontic Roundtable Seminars .......... Herb H. Borsuk, chairman
..................................................... Joe H. Camp, co-chairman
Printed Program ....................... Irma S. Kudo
Research Seminars ...................... Melvin Goldman
Sunday Session ......................... Jerry S. Smith
Table Clinics/Poster Clinics ........... William E. Bernier, chairman
..................................................... Donald J. Kleier, co-chairman

General Arrangements
Local Arrangements .................... F. Bruce Burns
Audio-Visual ......................... Terrence W. Hayes, chairman
..................................................... George E. Sas, co-chairman
Banquets & Meals .................... Kenneth S. Serota
Hospitality/Information Center ........ Calvin G. Pike
Luncheon Entertainment .............. Richard C. Burns
Publicity ............................... Calvin G. Pike, Sandy DiRocco
Registration .......................... Barry L. Chapnick
Signs ....................................... Lionel Lenkinski
Special Events ....................... Biruta A. Osins
Sports (Fun Run) ..................... Ian D. Watson
Technical Exhibits ................... Letty Catrambone
Ushers/Monitora ..................... Joel J. Edelson

AAE Auxiliary
Chairperson ......................... Josephine Burns
The Royal York Hotel is the headquarters hotel for the 41st Annual Session.

**AAE Headquarters Office**
The Headquarters Office is located in Salon B of the Royal York Hotel. It will be staffed by Central Office personnel—Laura Cancilla, Letty Catrambone, Sandy DiRocco, Elizabeth Peralta and members of the Annual Session Committee. Office hours are 8:00 am-6:00 pm, Wednesday-Friday and 8:00 am-12:00 noon on Saturday.

**General Registration—Convention Lobby, Convention Level**
Wednesday  11:00 am - 8:00 pm  
Thursday  8:00 am - 6:00 pm  
Friday  8:00 am - 5:00 pm  

AAE Members (after March 5) $160 (includes all scientific sessions Welcome/Fellowship Reception, one full breakfast on Thursday, two luncheons on Friday and Saturday, three continental breakfasts and one ticket to the Saturday evening Dinner Dance)

AAE Associate Members $215 (same as above)  
AAE Student Members $75 (All scientific sessions, Welcome/Fellowship Reception)  
Non-Member Professionals $190 (All scientific sessions)  
Non-Member Students $75 (All scientific sessions)  
Dental Auxiliaries $55 (All scientific sessions)  
Spouses $55 (Welcome/Fellowship Reception, hospitality suite)

**Exhibits**
The exhibits are located in the Concert Hall, Convention Level. Exhibit hours are:

- Thursday  8:00 am - 5:00 pm  
- Friday  8:00 am - 5:00 pm  
- Saturday  8:00 am - 12 Noon  

**Endodontic Roundtable Seminars/Computer Workshop**
Tickets reserved in advance are enclosed in each doctor’s registration packet. To register for an open Roundtable Seminar or Computer Workshop, or to exchange tickets, inquire at the special desk located in the AAE registration area on the Convention Level.

**Cassette Tape Recordings**
American Audio Association will record many of the sessions. The cassette tapes are available for purchase at the American Audio Association booth located in the foyer of the Concert Hall.

**Speaker Ready Room**
Program participants are urged to review their AV material in the Speaker Ready Room (Prince Edward Island 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 by exchanging your voucher for a banquet ticket at the AAE registration desk. If you wish to make up a party, you must present a voucher for each person in your group in order to reserve the space. No exceptions will be made.

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

**ADA Continuing Education Registry**
Individuals* whose constituent societies, federal dental service or state boards of dentistry participate in the ADA registry program will receive continuing education credits as follows:

- 5 credits for general attendance at annual session. This includes attendance at table clinics and/or exhibits.
- Hour-for-hour credit for attendance at a scientific presentation of at least one hour’s duration. This must be of a scientific or clinical nature.
- A separate form for each presentation attended, as well as a separate form for general attendance, should be completed in detail, and deposited in the special box located in the AAE Headquarters Office.

*Refers only to those individuals from Connecticut, Georgia, Maine, Massachusetts, Minnesota, New Hampshire, North Dakota, South Dakota, Rhode Island, Tennessee, Vermont, US Army, Veterans Administration.

**California Board of Dental Examiners**
California dentists may obtain a certificate of completion sheet to receive continuing education credits. The forms are available at the Headquarters Office and each California member is required to complete the information requested. The maximum total number of credit hours approved for the Annual Session is 28.

**Academy of General Dentistry**
Members of the Academy of General Dentistry may have their course forms validated at the AAE Headquarters Office.

**IMPORTANT NOTICE**
Be sure to exchange your voucher by 5:00 pm Thursday and reserve a seat for the Canadia Sea-to-Sea Dinner Dance on Saturday. Your cooperation will be appreciated as we cannot extend this deadline.
TUESDAY, APRIL 24

9:00 am  E&M FOUNDATION BOARD MEETING
4:30 pm  Saskatchewan Room

12 Noon  E&M FOUNDATION BOARD LUNCHEON
          New Brunswick Room

5:00 pm  ABE BOARD MEETING
9:00 pm  Room 3-132

WEDNESDAY, APRIL 25

8:00 am  ABE ORAL EXAMINATIONS
          Rooms 3-110, 3-132, 3-134, 3-140
6:00 pm

9:00 am  AAE BOARD OF DIRECTORS MEETING
5:00 pm  Saskatchewan Room

12 Noon  AAE BOARD OF DIRECTORS LUNCHEON
          New Brunswick Room

CONTINUING EDUCATION COURSE
           Ballroom (Pre-registration required.)

BIOLOGICAL AND CLINICAL ASPECTS OF BONE
REPAIR AND REGENERATION
Moderators: JAMES L. GUTMANN, DDS, Dallas
           EDWARD M. OSFET, DDS, MA, Chicago

8:30 am  Bone histophysics: an update
          J.N.M. HEERSCHE, MSc, PhD, University of Toronto

10:15 am  COFFEE BREAK

10:30 am  Principles of wound healing in bone, including
          periodontium
          ANTONY H. MELCHER, MDS, HDD, PhD, University of Toronto

12 Noon  LUNCHEON
          Ontario Room

1:15 pm  Biological and clinical aspects of bone repair and
          regeneration
          JAMES T. MELLONIC, DDS, MS, Periodontics Naval
          Dental Clinic, Great Lakes, IL

2:45 pm  COFFEE BREAK

3:00 pm  Correction of intrabony defects—state-of-the-art
          GERALD M. BOWERS, DDS, MS,
          University of Maryland

4:30 pm  Discussion

11:00 am  REGISTRATION OPENS
8:00 pm  Convention Level

7:30 pm  WELCOME/FELLOWSHIP RECEPTION
10:00 pm  Canadian Room (By ticket only)

THURSDAY MORNING, APRIL 26

8:00 am  REGISTRATION
6:00 pm  Convention Level

8:00 am  EXHIBITS OPEN
5:00 pm  Concert Hall

8:00 am  ABE ORAL EXAMS
6:00 pm  Rooms 3-110, 3-132, 3-134, 3-140

6:00 pm  ABE BOARD MEETING
9:00 pm  Room 3-140

8:00 am  OPENING SESSION BREAKFAST
          Canadian Room

Welcome: MYRON CHUBIN, General Chairman
          STEPHEN COHEN, Program Chairman
          F. BRUCE BURNS, Local Arrangements

Keynote: “It’s now or never”
          KAREN MOAWAD, BS, Piedmont, CA

Pres. Address: DONALD E. ARENS

BUSINESS SESSION I
           Ballroom

Moderator: NOAH CHIVIAN, DDS, West Orange, NJ

10:15 am  Creative marketing within the endodontic practice
          KAREN MOAWAD, BS, Piedmont, CA

12 Noon  A discussion of the ways to increase productivity in an
          endodontic office through effective personnel
          management. Topics addressed will include increas-
          ing salaries without adding payroll costs, develop-
          ing and implementing workable personnel
          policy, improving inter-office communication,
          generating enthusiastic staff attitude, marketing your
          practice imaginatively and more.

SCIENTIFIC SESSION I
           Ontario Room

Moderator: PAUL M. VANEC, DDS, Ann Arbor, MI

10:15 am  Is the formation of a new periodontal attachment
          possible on endodontically treated teeth?
          GERALD M. BOWERS, DDS, MS, Baltimore

12 Noon  A discussion of this controversial issue and presenta-
          tion of clinical and histological evidence to
          demonstrate that both hard and soft tissue attach-
          ment is possible on endodontically treated teeth.

BADGES MUST BE WORN AT ALL OFFICIAL AAE FUNCTIONS
RESEARCH SEMINARS I
Confederation Rooms

Moderator: SAMUEL SELTZER, DDS, Philadelphia

10:15 am
Clinical effectiveness of root canal medicaments
HISASHI NAGASAWA*, DDS; MASAKO HIRATA, DDS, Kyushu University

10:30 am
Tissue response to root fillings with a medicated material
T. R. PITT FORD, PhD, Guy's Hospital, London, England

10:45 am
Microleakage under full cast crowns and possible pulpal effects
PINIT LAOSONTHORN, DDS; MELVIN GOLDMAN*, DDS; RUSTAM DEVI'TRE, DMD; GINO PASSAMONTI, MD, DMD, Tufts University

11:00 am
Dentin morphology in various cavity preparations
ROBERT R. WHITE*, DMD; MELVIN GOLDMAN, DDS; JOSEPH I. TENCA, DDS, MA, Tufts University

11:15 am
A means of blocking dentinal microleakage
SCOTT A. D. WILLIAMS*, DDS; MELVIN GOLDMAN, DDS; JOSEPH I. TENCA, DDS, MA; Tufts University and DAN NATHANSON, DDS, Boston University

11:30 am
Relation between pulpitis and acute periodontal abcesses in multirooted teeth
LEON A. WEISS, DDS, Tufts University

11:45 am
A long term histological study of root fractures in baboons
ABDUSSALAM S. BENASHUR*, BDS, MS; ANDREW E. MICHAHOWICZ, DDS; ROBERT MUNDELL, PhD; JOHN SCHMUTZ, DDS, PhD; JOHN P. MICHAHOWICZ, DDS, University of Pittsburgh

THURSDAY AFTERNOON, APRIL 26

12 Noon
LUNCHEON
(On Your Own)

BUSINESS SESSION II
Ballroom
Moderator: NOAH CHIVIAN, DDS, West Orange, NJ

1:30 pm
Creative marketing within the endodontic practice
KAREN MOAWAD, BS, Piedmont, CA
(Continuation of morning session)

SCIENTIFIC SESSION II
Ontario Room
Moderator: LEIF K. BAKLAND, DDS
Loma Linda, CA

1:30 pm
The pulp: function and clinical disorders
HENRY O. TROWBRIDGE, DDS, PhD, Philadelphia

1:45 pm
Resistance to fracture of restored, endodontically treated teeth
MARTIN TROPE*, DMD; D. O. MALTZ, DMD, MS; LEIF TRONSTAD, DMD, PhD, University of Pennsylvania

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

IMPORTANT NOTICE
Be sure to exchange your voucher by 5:00 pm Thursday and reserve a seat for the Canada Sea-to-Sea Dinner Dance on Saturday. Your cooperation will be appreciated as we cannot extend this deadline.

*Presenter
2:00 pm  A comparison of five irrigating solutions: SEM study
EGILL L. JACOBSEN*, DDS; MARK S. BERG, DDS; GORDON L. STASTNY, DDS; NUIOLE A.
REMEKIS, DDS, University of Illinois

2:15 pm  Laser utilization in endodontics
ALLEN R. HELFER*, DDS, MScD; STANLEY M.
SHAPSHAY, MD, Boston University

2:30 pm  Effectiveness of a sonic vibratory endodontic
instrument
FREDERIC BARNETT*, DMD; LYON J. SCHWARTZ-
BEN, DDS; LEIF TRONSTAD, DMD, PhD, University
of Pennsylvania

2:45 pm  Complex endodontic anatomy: a microradiographic
study
MICHEL E. EVENOT*, DSO, Fac. Chr. Dent. Paris, Boulogne, France; A. M. LAVAL-JEANET,
DSO, Fac. de Medecine, Paris, France

3:00 pm  The effect of different files on the final canal shape
MAHMoud E. EIdeeB, BDS, MS, University of
Minnesota

3:15 pm  Apical leakage vs. density with different gutta percha
filling techniques
MAHMoud E. EIdeeB*, BDS, MS; KENNETH J.
ZUCKER, DDS, MS; HAROLD H. MESsER, BCD,
MDSc, PhD, University of Minnesota

3:30 pm  Evaluation of injection-thermoplasticized gutta percha
using radioactive isotopes
MARIO CZONSTKOWSKY*, DDS, MS; ANDREW E.
MICHANOWICZ, DDS; JORGE VAZQUEZ, MD,
University of Pittsburgh

3:45 pm  Sealing ability of intermediate restoratives used in
endodontics
AIDA A. CHOHAyEB*, DDS, MSD, Howard University;
M. BASSIOUNY, BDS, MSc, PhD, Temple University

4:00 pm  Radiographic evaluation of iatrogenic root perfora-
tions repaired with amalgam and gutta percha
FRED W. BENENATI*, DDS, MEd; JAMES B.
ROANE, DDS, MS; JOHN T. BIGGS, DDS, MS,
MEd, University of Oklahoma; JAMES H. SIMON,
DDS, VA Medical Center

4:15 pm  Cytotoxicity vs. antibacterial activity of CMCP in vitro
HAROLD H. MESSER*, BDS, MDSc, PhD; R. J.
FEIGAL, DDS, PhD; L. TELLEFSON, BS; G. R.
GERMAINE, PhD, University of Minnesota

4:30 pm  Effect of sealer cement consistency on apical
leakage of endodontic implants
STELLA M. VERGARA-KITZENBERG*, DMD;
HAROLD H. MESSER, BDS, MDSc, PhD, University
of Minnesota

1:30 pm  ENDODONTIC ROUNDTABLE SEMINARS
& 3:15 pm  The following Roundtable Seminars will be presented
twice—at 1:30 pm and again at 3:15 pm. Pre-regis-
tration is required. Tickets still available may be
obtained from ERS Information Desk.

ERS 1 & ERS 2  —  Manitoba Room
Endosonic endodontics
HOWARD MARTIN, DMD, Silver Spring, MD and
WALTER T. CUNNINGHAM, DDS, Annapolis, MD

ERS 3 & ERS 4  —  Alberta Room
Endocompundontics: adaptation of a dental computer
program to endodontic practice
MITCHELL LEVINE, DDS, Willowdale, Canada

ERS 5 & ERS 6  —  New Brunswick Room
The computer and the dental office
THOMAS L. JONES, DDS, MS, Asheville, NC

ERS 7 & ERS 8  —  Algonquin Room
New horizons in endodontics—the complete in-office
cast gold post and core service
MANUEL I. WEYSMAN, DDS, Augusta, GA

ERS 9 & ERS 10  —  Quebec Room
Endodontic aspects of transplantation of teeth
LEIF TRONSTAD, DMD, PhD, Philadelphia

ERS 11 & ERS 12  —  British Columbia Room
Xelan—a guaranteed financial success plan
JOHN E. MAROSKY, DDS, MSD, Indianapolis
CARL J. FLATLEY, DDS, MSD, Clearwater, FL

5:00 pm  AADS ENDODONTIC SECTION MEETING
6:00 pm  Confederation Rooms

6:30 pm  DINNER THEATER
(Optional—By ticket only)
Buses depart from hotel front (south) entrance.

NEED A BREAK?
Visit the Technical Exhibits. Complimentary coffee service will be
provided in the Exhibit Area (Concert Hall) on Thursday and Fri.-
day, 10:30 am - 12 Noon and 2:30 pm - 4:00 pm.

* Presenter
FRIDAY MORNING, APRIL 27

7:00 am
FUN RUN
(Pre-registration required)
Buses leave from hotel front (south) entrance at 7:00 am.

8:00 am
CONTINENTAL BREAKFAST
Canadian Room

9:00 am
REGISTRATION
Convention Level

5:00 pm
EXHIBITS
Concert Hall

BUSINESS SESSION III
Ballroom
Moderator: JOSEPH D. MAGGIO, DDS, Oak Brook, IL

9:00 am -
12 Noon
Marketing techniques for the endodontic practice
ROBERT A. HANKIN, PhD, Chicago
Marketing the endodontic practice is a specialized component of marketing, just as endodontics is a specialized component of dentistry. The key lies in developing new inter-relationships with the general practitioner and in developing a profile with the general public. These approaches will be discussed.

SCIENTIFIC SESSION III
Ontario Room
Moderator: CALVIN D. TORNECK, DDS, MS, Toronto, Canada

9:00 am -
12 Noon
Understanding pulpal pain
HENRY O. TROWBRIDGE, DDS, PhD, Philadelphia
Although pain is an unreliable criterion of pulp disease, it is an important diagnostic consideration. This session examines pain processes in the dentin and pulp. Topics include development of neural elements, extent of innervation of dentin, how sensory signals arise, chemical mediators, hyperalgiesia and sensitivity associated with exposed root surfaces.

RESEARCH SEMINARS III — Graduate Section
Confederation Rooms

Moderator: MELVIN GOLDMAN, DDS, Boston

9:00 am
Histologic appraisal of osseous healing kinetics after apicectomy
STEVEN M. SIERASKI*, DDS; JOHN F. CORCORAN, DDS, MS; ROBERT L. ELLISON, DDS, MSc; R. M. COURTNEY, DDS, MS, University of Michigan

9:15 am
Endodontic implications of orthodontic tooth movement
FRANCINE T. CYYK*, DMD; FRANCOISE SAINT-PIERRE, DDS; LEIF TRONSTAD, DMD, PhD, University of Pennsylvania

9:30 am
Periodontal ligament injection: saline vs. 2% lidocaine (1:100,000 epinephrine)
KERRY D. MOORE*, DDS, MS; ALFRED W. READER, DDS, MS; F. MIKE BECK, DDS, MA; WILLIAM J. MEYERS, DMD, MEd, Ohio State University

9:45 am
Pulpal and periodontal tissue effects of the periodontal ligament injection
JAMES O. ROALEN*, DDS; F. JAMES MARSHALL, DMD, MS; ROBERT QUINTON-COX, PhD, Oregon Health Sciences University

10:00 am
Human lymphocyte subpopulations in chronic periapical lesions
JEROME J. CYMERMAN*, DMD; DIANE H. CYMERMAN, MD, Long Island Jewish-Hillside Medical Center; JAMES WALTERS, BS; ALAN J. NEVINS, DDS, Nassau County Medical Center

10:15 am
Radiation effects on dental pulp responses to operative and endodontic procedures
MERAVI I. FAWZI*, DDS, MS; GERALD SHKLAR, DDS, MS; ALVIN A. KRAKOW, DDS, Harvard/Forshyth Dental Center

10:30 am
BREAK

10:45 am
The effects of pH on apical closure of immature teeth
JEFFREY M. JAVELET*, DDS; MAHMOUD TORABINEJAD, DMD, MSD; LEIF K. BAKLAND, DDS, Loma Linda University

11:00 am
The incidence of mandibular premolars with two canals in different race groups as assessed radiographically
LESLIE R. ELFEBEIN*, DMD; MARTIN TROPE, DMD; LEIF TRONSTAD, DMD, PhD, University of Pennsylvania

*Crescent

CASSETTE TAPES OF SCIENTIFIC SESSIONS are available from American Audio Association in the foyer of the Concert Hall.
11:15 am  Use of xeroradiography for length determination in endodontics
PAUL A. SAN MARCO, DDS, University of Texas at Houston; STEVE MONTGOMERY, DDS, University of Texas at San Antonio

11:30 am  A comparison of culture media and methods of specimen collection
THOMAS J. RYSZ, DDS; RICHARD A. MURPHY, PhD; ROBERT ZELIKOW, DDS; JOSEPH E. VAN CURA, DDS; NIJOLE A. REMEIKIS, DDS, University of Illinois

9:00 am  COMPUTER WORKSHOP
12 Noon  Tudor Rooms
& repeated
1:30 pm
4:30 pm  GERALD C. DIETZ, DDS, MS, Birmingham, MI (Equipment provided by Kelly Systems of Birmingham, MI)

Limited attendance. Pre-registration required. If you have not registered but would like to attend, please check with the registration desk to see if there are any remaining tickets available.

8:45 am  ENDOdontIC RoundTabLe SEMINARS
(Pre-registration required)
The following Roundtable Seminars will be presented once, from 8:45 am-10:15 am
ERS 16 — Quebec Room
Endodontic diagnostic perplexities
MARSHALL D. PEIKOFF, DMD, MSD, Winnipeg, Canada
ERS 17 — British Columbia Room
Root fractures—their diagnosis, treatment and repair
ANDREW E. MICHANOWICZ, DDS, Pittsburgh
ERS 18 — New Brunswick Room
Calcium hydroxide therapy for traumatic injuries
RAYMOND T. WEBBER, DDS, MS, Gainesville, FL
ERS 19 — Algonquin Room
Where do we go from here?
STUART J. FOUNTAIN, DDS, MSc, Greensboro, NC

10:30 am  The following Roundtable Seminars will be presented once, from 10:30 am-12 Noon
ERS 20 — Manitoba Room
Intraligamentary anesthesia—no block needed
JOSEPH J. WILLIAMS, DDS, Boston
ERS 21 — Alberta Room
The saga of multiple offices
JAMES S. TATE, DDS, Atlanta
ERS 22 — Quebec Room
"Wanted: dead or alive"—update on clinical diagnosis
ROBERT F. AVERBACH, DDS, Denver, CO
ERS 23 — British Columbia Room
Success and failure in endodontics—doctor versus patient expectations
RALPH BELLUZZI, DDS, West Germany
ERS 24 — Nova Scotia Room
Pulpal and periapical pathology—diagnosis and treatment
GIANNFRANCO VIGNOLETTI, MD, DDS, Verona, Italy
ERS 25 — New Brunswick Room
Retrograde amalgam filling: let’s discuss why and when
GIORGI M. LAVAGNOLI, DDS, Milan, Italy
ERS 26 — Algonquin Room
Functional splinting of luxated teeth
DONALD D. ANTRIM, DDS, MS, MA, Olney, MD

NEED A BREAK?
Visit the Technical Exhibits. Complimentary coffee service will be provided in the Exhibit Area (Concert Hall) on Thursday and Friday, 10:30 am - 12 Noon and 2:30 pm - 4:00 pm.

SMOKING
For the comfort of others, no smoking is permitted in the meeting rooms.
FRIDAY AFTERNOON, APRIL 27

12 Noon
LUNCHEON
Canadian Room (By ticket only)
Presentation of the Grossman and Sommer Awards.
Speaker: MR. DAVE BROADFOOT
A witty, well-known Canadian satirist

BUSINESS SESSION IV
Ballroom
Moderator: JOSEPH D. MAGGIO, DDS, Oak Brook, IL

1:30 pm
Marketing techniques for the endodontic practice
ROBERT A. HANKIN, PhD, Chicago
(Repeat of morning session)

2:15 pm
Dowel space preparation and the apical seal
JOHN A. SUCHINA*, DDS, MS; JOHN R. LUDINGTON JR., DDS, MSD, University of Texas at Houston

2:30 pm
Clockwise torsional properties of used root canal files
BRUCE L. CHENAIL, DMD, Marquette University

2:45 pm
BREAK

3:00 pm
The effectiveness of engine driven root canal instruments
STEPHEN P. NIEMCZYK*, DMD; PETER VELVART, DMD; FREDERIC BARNETT, DMD; LEIF TROMSTAD, DMD, PhD, University of Pennsylvania

3:15 pm
A comparison of the efficiency of various delivery methods on sealer distribution
ROBERT B. AMATO, DMD; MELVIN GOLDMAN, DDS; JOSEPH I. TENCA, DDS, MA; GREG A. BURK*, DDS, Tufts University

3:30 pm
Comparative sealing abilities of gutta percha using McSpadden and engine plugger compactors
ZVI FUSC*, DMD; S. A. LEON, PhD; BRUCE D. RICKOFF, DDS, Albert Einstein Medical Center

3:45 pm
The efficacy of the serialization technique vs. a serialization/ultrasonic technique
ALAN T. GOODMAN*, DDS, MS; ALFRED W. READER, DDS, MS; F. MIKE BECK: DDS, MA; RUDY MELFI, DDS, PhD; WILLIAM J. MEYERS, DMD, MEd, Ohio State University

4:00 pm
A six month bacterial microleakage evaluation of reverse-filling materials
JAMES A. AURELIO*, DDS, MS; HAROLD GESTEIN, DDS; WILLIAM KOS, PhD; PAUL HOEHENFELD, DDS, Marquette University

4:15 pm
An in vitro model for evaluation of apex locators
YOSEF NAHMIAS*, CD, MS; JAMES A. AURELIO, DDS, MS; HAROLD GESTEIN, DDS, Marquette University

SCIENTIFIC SESSION IV
Ontario Room
Moderator: NGUYEN T. NGUYEN, DDS, San Francisco

1:30 pm
Root canal obturation utilizing the PAC-160 method of thermoplastic injection-molding
G. JOHN SCHOFFFEL, DDS, MMS, Lancaster, CA and FULTON S. YEE, DDS, San Francisco

Technical advancements in the thermoplastic injection-molded gutta percha obturation method now address the problem of apical control. Clinical applications, indications, limitations and contraindications of this technique will be presented and supported by current research, including studies in density, SEM, and sealing ability. Clinical case histories will also be presented.

RESEARCH SEMINARS IV—GRADUATE SECTION
Confederation Rooms
Moderator: ALVIN A. KRAKOW, DDS, Boston

1:30 pm
Effect of degree of preparation on leakage of apical dentin plug
RANDALL D. J. YEE*, DDS, MSD; SAMUEL S PATTERSON, DDS; CARL W. NEWTON, DDS, MSD; MARJORIE L. SWARTZ, MS, Indiana University

1:45 pm
The effectiveness of a dentin plug in sealing pulpless teeth
PAUL H. BERY*, DDS; EGILL L. JACOBSEN, DDS; ELLEN A. BEGOLLE, PhD, University of Illinois

2:00 pm
The morphology of the prepared post space
MELVIN GOLDMAN, DDS; RUSTAM DeVITRE, DMD; CHARLES RAY MOSER*, DMD, Tufts University

2:15 pm
Dowel space preparation and the apical seal
JOHN A. SUCHINA*, DDS, MS; JOHN R. LUDINGTON JR., DDS, MSD, University of Texas at Houston

2:30 pm
Clockwise torsional properties of used root canal files
BRUCE L. CHENAIL, DMD, Marquette University

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BREAK

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4:15 pm
An in vitro model for evaluation of apex locators
YOSEF NAHMIAS*, CD, MS; JAMES A. AURELIO, DDS, MS; HAROLD GESTEIN, DDS, Marquette University

1:30 pm
COMPUTER WORKSHOP
Tudor Rooms
(Pre-registration is required)
GERALD C. DIETZ, DDS, MS, Birmingham, MI
(Equipment provided by Kelly Systems of Birmingham, MI)

*Presenter
SATURDAY MORNING, APRIL 28

8:00 am  CONTINENTAL BREAKFAST
         Canadian Room

9:00 am  Recent concepts of pain control
         RONALD MELZACK, PhD, Montreal, Canada
         Pain experience comprises at least three dimensions —
sensory, affective and cognitive. Pain control can
be achieved by attempting to influence one or more
of these. Sensory modulation procedures, such as
local blocks or electrical stimulation, are effective. So
are methods aimed at influencing the emotional and
cognitive components of pain.

10:30 am  Physiology of the pulp
         SYNGCUK KIM, DDS, PhD, Columbia University
         In the second half of 1970, many new techniques
were tried in order to study the dynamic aspects of
the pulp physiology. Among them the 133 Xenon
Washout and Radioisotope Labelled Microsphere In-
jection Methods and vital microscopy of the living
pulp were found to be the most suitable. Using
these state-of-the-art methods, control mechanisms of
pulpal blood flow were studied. Results of this study indicate that pulpal vessels are equipped
with both cholinergic and adrenergic receptors. In
the past three years, the study has been focused on how various vasoactive agents, released during in-
flammation affect the pulpal blood flow.

9:00 am  IMMUNOPATHOLOGY OF PULPAL AND PERIAPICAL LESIONS
         MAHMUD TORABINEJAD, DMD, MSD, Loma
         Linda University
         Egress of potential antigens from pathologically in-
        volved root canals into the periapical tissues can
        lead to various types of immunological reactions. The
        role of immune complexes, IgE mediated reactions,
        and delayed hypersensitivity responses in the forma-
        tion of periapical lesions are discussed.

9:45 am  IMMUNOPATHOLOGY OF PULPAL AND PERIAPICAL LESIONS
         MAHMUD TORABINEJAD, DMD, MSD, Loma
         Linda University
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        volved root canals into the periapical tissues can
        lead to various types of immunological reactions. The
        role of immune complexes, IgE mediated reactions,
        and delayed hypersensitivity responses in the forma-
        tion of periapical lesions are discussed.

11:15 am  Apexification and avulsed teeth—new treatments
         ALAN J. NEVINS, DDS, Nassau County Medical
         Center
         Several short presentations will focus on new modal-
        ities of endodontic treatment with special considera-
        tion to histopathology and immunology. The applica-
        tion of collagen gel to stimulate closure of open apex
tooth, the replantation of enzyme treated teeth and
the discovery of circulating IgE in patients with
infected teeth exhibiting symptoms will be discussed.

BADGES MUST BE WORN AT ALL OFFICIAL AAE FUNCTIONS
TABLE CLINICS — POSTER CLINICS
Alberta, British Columbia, Manitoba, and Quebec Rooms

GRADUATE STUDENT SECTION

1. Alternate approaches to silver point removal
JOHN D. ALLEMANG, JR., DDS, and JOHN D. BRAMWELL, DDS, Naval Dental Clinic

2. Endosonics—a new dimension in root canal therapy
BRUCE CHENAILL, DMD and DANIEL G. STAMOS, DDS, Marquette University

3. The effect of removal of the “smear layer” on leakage of endodontically treated teeth—an in vitro study
GERALDINE ROSS BILLS, DDS, University of North Carolina

4. A method for evaluating endodontic failure
BARRY L. BURKETT, DMD and ROBERT K. FLATH, DDS, Naval Dental Clinic

5. Bypassing separated carbon steel instruments through the use of tincture of iodine
MICHEL W. FULLER, DDS and BRIAN A. MYKLEBY, DDS, University of Iowa

6. Management of avulsed teeth
ZVI FUS, DMD, Albert Einstein Medical Center

7. Anatomical variation in endodontics
JOHN L. GOODRICH, DDS, University of Nebraska

8. In vitro study of root canal morphology
JOSE LUIS MEMBRILLO, DDS, MSD, and JUAN MANUEL FERNANDEZ, DDS, Mexico

9. A 15 ga. tube as an aid to isolation and root canal treatment
THOMAS O. MORK, DDS, and JOHN A. WEISENSEEL JR., DDS, National Naval Dental Center

10. Endodontic surgery: the apical seal
RICHARD J. POCKAT, DDS, University of North Carolina

11. Endodontic stabilizer implants
GINNINE S. RIBOLOW, DDS, Kingsbrook Jewish Medical Center

12. In vivo effect of the application of different thermal stimuli on the dental pulp
BRUCE D. RICKOFF, DDS, Albert Einstein Medical Center

13. Anatomical pathways for the spread of infection
JOHN B. ROSS V, DDS, MSc, and HEDLEY RAKUSIN, BDS, MSc, Baylor College of Dentistry

NON-GRADUATE SECTION

GERARD ARMANDOU, DDS, Paris, France

15. Bold endodontic management of large radiolucent lesions
ROBERT A. AUGSBURGER, DDS, MSD, Fort Leavenworth, KS

16. Electronic apex location
PETER BROTHERMAN, DDS, Bala Cynwyd, PA

17. Non surgical treatment of large periapical pathology: a new approach
AIDA A. CHOHAYEB, DDS, MSD and KHODABAIX-H Salamat, DCS, Washington, DC

18. Computer assisted pulpal diagnosis
WALTER DOBLECKI, DMD, Gales Ferry, CT

19. Placing calcium hydroxide powder—a different technique
KEITH V. KRELL, DDS, MA, MS, Iowa City, IA

20. Stereomicroscopic St. M. and scanning electron microscopic study of thermo-mechanical compaction of gutta percha
GIAMPIERO MALAGNINO, Rome, Italy

21. Efficiency of Ultrasonic endodontic treater (super euco)
MASARU MARUHASHI, DDS, Takasaki-shi, Japan

22. Orthodontic extrusion of endodontically treated teeth
KATSUHIDE MORI, DDS, and KUNIYOSHI IIJIMA, DDS, Tokyo, Japan

23. Removal of cemented solid objects from canals with ultrasonic energy
NGUYEN T. NGUYEN, DDS, San Francisco, CA

24. U.B.O.—Unidentified buccal object
ALFRED W. READER, DDS, MS, and WILLIAM J. MEYERS, DMD, MEd, Columbus, OH

25. One-visit-sterilizing and filling of root canals in “hot” teeth by means of iontophoresis
JOACHIM SCHULZ-BONGERT, DMD, Dusseldorf, West Germany

26. Twelve clinical tips for more efficient and easier endodontics
JERRY F. TANTOR, DDS, MS, Sherman Oaks, CA and ALAN B. ROSENTHAL, DMD, Anchorage, AK

27. Endosonic bio-mechanical obturation system
MASAYOSHI TAKUBO, DDS, and HIROSHI HADA, DDS, Fukuoka-shi, Japan

28. Solving clinical endodontic problems with newly patented FujiI cement
ROBERT V. WEISSMAN, DDS, Fairlawn, NJ

29. Precision access
S. ARTHUR RYBECK, JR., DDS, Wheeling, WV
POSTER CLINICS
Manitoba Room

GRADUATE STUDENT SECTION

1. SEM analysis of canal-wall dentin following Nd-YAG laser irradiation
   DOUGLAS N. DEDERICH, DDS, University of Alberta

2. Flow properties of gutta percha
   MIAN KHALID IQBAL, BDS, University of Minnesota

3. The radiographic appearance of experimental periapical lesions
   SEUNG-JONG LEE, DDS, University of Minnesota

4. Osseous healing kinetics after apicoectomy in monkeys: an isoclinometric interpretation of radiographic images
   STEVEN M. SIERASKI, DDS, and JOHN F. CORCORAN, DDS, MS, University of Michigan

5. Hand vs. engine-driven files: the effect on canal preparation shape
   SPYRIDON T. SPYROPOULOS, DDS, University of Minnesota

NON-GRADUATE DENTAL STUDENTS

6. In vitro pH and [Ca\(^{2+}\)] changes associated with Ca(OH)\(_2\) apical plugs
   DANIEL R. CULLUM, BSc, The University of Alberta

7. An SEM analysis of apical plugs of four condensable materials
   D. MORELA, BSc, The University of Alberta

8. Micro-morphology of two dentin bonding agents utilizing six dentin pretreatments
   ERNEST REEH, BSc, The University of Alberta

NON-GRADUATE SECTION

9. The infraorbital nerve block: an extraoral approach
   ROBERT E. AVERBACH, DDS, and DONALD J. KLEIER, DMD, University of Colorado Health Science Center

10. Leakage associated with apical resection and reverse filling techniques
    RICHARD G. BEATTY, DDS, MS, and DAVID K. SULLIVAN, DMD, Gainesville, FL

11. Endodontic microleakage
    B. DAVID COHEN, BDS, Manchester, England

12. Potential effects of ultrasounds on root canal sealer dispersion
    DONALD M. COLLINSON, DDS, Edmonton, Canada

13. Apical preparation shape: effect of differing instrumentation techniques
    DARRELL DANG, Iowa City, IA

14. Endodontic treatment of the medically compromised patient
    ROBERT L. ELLISON, DDS, MSc, Ann Arbor, MI

15. Does the innervation of the canine pulp return to normal after damage to the inferior alveolar nerve?
    G. REX HOLLAND, BDS, PhD, Edmonton, Canada, and P. P. ROBINSON, BDS, PhD, Oxford, England

16. Blood vessels of the human dental pulp
    JEAN-MARIE LAURICHESSE, DDS, Paris, France

17. A study of the relationship between the endodontist and the general dentist
    JOHN C. MILLS, DMD, Birmingham, AL

18. Canal filling by syringe: obturation system
    MITSURU OTANI, DDS, DMSc and MUTO SU FUJISAWA, MD, DMSc, Tokyo, Japan

19. Endodontic controversies: to treat or retreat. What is your decision?
    WAYNE H. PULVER, DDS, Willowdale, Canada

20. Analyzing dentinal tubule morphology as a potential method for reducing leakage variance
    DAVID A. SCOTT, MSc, DDS, Edmonton, Canada

CASSETTE TAPES OF SCIENTIFIC SESSIONS are available from American Audio Association in the foyer of the Concert Hall.
21. Apical leakage in root canals filled by the hybrid technic
MICHAEL TAGGER, DMD, MS, Ramat Aviv, Israel

22. The morphology of periapical lesions in monkey molars
RICHARD E. WALTON, DMD, MS, Iowa City, IA and
JERRY J. GARNICK, DDS, MS, Augusta, GA

23. Effects of four apical plug materials on root canal sealability
KENNETH L. ZAKARIASEN, DDS, MS, PhD,
Edmonton, Canada

SUNDAY MORNING, APRIL 29

8:00 am
CONTINENTAL BREAKFAST
Ballroom

9:00 am
AAE BOARD OF DIRECTORS MEETING
Toronto Room

9:00 am
SCIENTIFIC SESSION VI
Toronto Room
Moderator: JERRY S. SMITH, DDS, Toronto, Canada

12 Noon
CANADIAN ACADEMY OF ENDOdontICS

Lasers, intentional apical plugs and other new directions in endodontic instrumentation/obturation
KENNETH L. ZAKARIASEN, DDS, MS, PhD,
Edmonton, Canada

Laser radiation utilizing a fiber optic delivery system and intentional apical plugging offer exciting new directions in endodontics. Improved canal sealability, more favorable apical tissue responses and effective control of obturation materials which may facilitate new obturation techniques are possible. These topics and their potential interactions will be discussed and illustrated in detail.

Composite materials and techniques for endodontically involved teeth
RONALD E. JORDAN, DDS, MSD, London, Canada

The advent of new improved composite materials together with the development of refined techniques has resulted in a conservative approach to the restoration of anterior and posterior teeth.

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

**Thursday, April 26, 12:00 N**  
Education ........................................ Territories  
Honors and Awards ................................ Library

**Friday, April 27, 7:30 am**  
Dental Care and Clinical Practice ................... Territories  
Editorial Board .................................... Territories  
Membership ........................................ Territories  
Research ............................................ York  
Study Clubs ........................................ Library  
International Relations ............................ Library

**Saturday, April 28, 7:30 am**  
Career Counseling ................................. Saskatchewan  
Insurance ......................................... Saskatchewan  
Public and Professional Affairs .................. Saskatchewan

### STUDY CLUBS, ALUMNI & OTHER GROUPS

**Thursday, April 26**  
AADS-Endodontic Section Meeting  
(5:00-6:00 pm) ................................ Confederation  
Air Force Endodontic Luncheon Meeting  
(12:00-1:30 pm) ................................ York

**Friday, April 27**  
Army Endodontic Reception  
(6:30-8:30 pm) ................................... Algonquin  
Boston University Endodontic Alumni Breakfast  
(6:00-9:00 am) ..................................... Room 3  
Boston University Endodontic Alumni Reception  
(6:00-9:00 pm) .................................... 3-132, 3-134, 3-140  
Florida Association of Endodontists  
(4:30-5:30 pm) ..................................... Room 4  
Harry Healy Endodontic Study Club Breakfast  
(7:30-9:00 am) .................................... Saskatchewan  
Harvard/Forsyth Alumni Cocktails and Banquet  
(Cocktails 7:30—Banquet 8:30 pm) *Wellington Restaurant  
Iowa Endodontic Party  
(6:00-10:00 pm) ................................... Rooms 5 and 6  
University of Pennsylvania School of Dental Medicine Reception  
Honoring Dr. Louis I. Grossman and the Grossman Professorship  
(7:00-8:30 pm) .................................... Territories  
Temple University Alumni Endodontic Cocktail Party  
(6:30-8:00 pm) ..................................... Manitoba

**Saturday, April 28**  
Oklahoma Association of Endodontists  
(7:30-9:00 am) .................................... New Brunswick  
Navy Endodontic Breakfast  
(7:30-9:00 am) .................................... Upper Canada  
Past Presidents' Breakfast  
(7:30-9:00 am) .................................... Library

*North side of Wellington Street, between Yonge and Bay Street.

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### FUTURE ANNUAL SESSION SCHEDULE

**42nd ANNUAL SESSION**  
April 24-28, 1985, Town & Country Hotel, San Diego, CA

**43rd ANNUAL SESSION**  
April 16-20, 1986, Boston-Sheraton Hotel, Boston, MA

**44th ANNUAL SESSION**  
April 29-May 3, 1987, Hilton & Hyatt Hotels, San Antonio, TX
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* Noah Chivian ............ 23-24

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Worth B. Gregory .......... 76
Jacob B. Freedland .......... 78
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The AAE Auxiliary will maintain hospitality suite in the Toronto Room for all registered spouses.

WEDNESDAY, APRIL 25
3:30 pm- 5:00 pm
PRESIDENT’S WELCOME TEA
Toronto Room

THURSDAY, APRIL 26
8:10 am- 2:4 pm
AUXILIARY HOSPITALITY OPEN
and
Toronto Room

7:30 am- 9:00 am
AUXILIARY BOARD MEETING
Library Room

FRIDAY, APRIL 27
8:10 am- 2:4 pm
AUXILIARY HOSPITALITY OPEN
and
Toronto Room

SATURDAY, APRIL 28
12:00 Nn- 4:00 pm
AUXILIARY HOSPITALITY OPEN
Toronto Room

9:00 am- 11:00 am
AUXILIARY BUSINESS BREAKFAST
Confederation Rooms

A TRAVEL WARDROBE BY PATRICIA WHITE
Attendees will enjoy a Canadian Buffet Breakfast
and the presentation of a travel wardrobe by
Patricia White Shoppes, commented by Audrey
Hozack. Informal modeling will be provided by
dentists’ wives.

11:00 am- 2:00 pm
AUXILIARY BOARD MEETING
Library Room

TOURS
THURSDAY, APRIL 26
9:00 am- 10:30 am
Toronto City Highlights

9:30 am- 4:00 pm
McMichael Gallery

6:30 pm- 11:30 pm
Dinner Theater

FRIDAY, APRIL 27
8:30 am- 4:00 pm
Niagara Falls

9:30 am- 1:00 pm
Think Mink
## CONDENSED PROGRAM

### TUESDAY, APRIL 24
- **E&M Foundation Board Meeting**
  - Time: 9 am-4:30 pm
- **ABE Board Meeting**
  - Time: 5:9 pm

### WEDNESDAY, APRIL 25
- **ABE Oral Exams**
  - Time: 8 am-6 pm
- **AAE Board of Directors Meeting**
  - Time: 9 am-5 pm
- **Continuing Education Course**
  - Time: 8:30 am-5 pm
- **Registration**
  - Time: 11 am-8 pm
- **Welcome Reception**
  - Time: 7:30-10 pm

### THURSDAY, APRIL 26
- **ABE Oral Exams**
  - Time: 8 am-6 pm
- **ABE Board Meeting**
  - Time: 6:9 pm
- **Exhibits**
  - Time: 8 am-5 pm
- **Registration**
  - Time: 8 am-6 pm
- **Opening Session Breakfast**
  - Time: 8-10 am
- **Business Session I**
  - Time: 10:15 am-Nn
- **Scientific Session I**
  - Time: 10:15 am-Nn
- **Research Seminars I**
  - Time: 10:15 am-Nn
- **Business Session II**
  - Time: 1:30-5 pm
- **Scientific Session II**
  - Time: 1:30-5 pm
- **Research Seminars II**
  - Time: 1:30-5 pm
- **Roundtable Seminars**
  - Time: 1:30 pm & 3:15 pm
- **AADS Endodontic Section Meeting**
  - Time: 5-6 pm
- **Dinner Theater**
  - Time: 6:30 pm

### FRIDAY, APRIL 27
- **Fun Run**
  - Time: 7:00 am
- **Continental Breakfast**
  - Time: 8-9 am
- **Exhibits**
  - Time: 8 am-5 pm
- **Registration**
  - Time: 8 am-5 pm
- **Business Session III**
  - Time: 9 am-Nn
- **Scientific Session III**
  - Time: 9 am-Nn
- **Research Seminars III**
  - Time: 9 am-Nn
- **Computer Workshop**
  - Time: 9 am & 1:30 pm
- **Roundtable Seminars**
  - Time: 8:45 am & 10:30 am

### SATURDAY, APRIL 28
- **Continental Breakfast**
  - Time: 8-9 am
- **Exhibits Open**
  - Time: 8 am-Nn
- **Research Seminars IV**
  - Time: 9 am-Nn
- **Scientific Session V**
  - Time: 9 am-Nn
- **Table Clinics/Poster Clinics**
  - Time: 9 am-Nn
- **E.D. Coolidge Luncheon**
  - Time: Nn-1:45 pm
- **General Assembly Meeting**
  - Time: 2:30-4:30 pm
- **Past Presidents' Reception**
  - Time: 6:30-7:30 pm
- **Canada Sea-to-Sea Banquet**
  - Time: 7:30 pm-McIntire

### SUNDAY, APRIL 29
- **Continental Breakfast**
  - Time: 8-9 am
- **AAE Board of Directors Meeting**
  - Time: 9 am-Nn
- **Scientific Session VI**
  - Time: 9 am-Nn