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Editor

All manuscripts and manuscript correspondence should be addressed to: The Editor, **Dr. C. Dawes**, JOURNAL OF DENTAL RESEARCH, Dept. of Oral Biology, Faculty of Dentistry, University of Manitoba, 780 Bannatyne Ave., Winnipeg, MB, Canada R3E 0W3. Telephone: (204) 786-3614. Articles are accepted only if they are contributed solely to this Journal. For current "Instructions to Authors", refer to the December, 1983, issue of the Journal.

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SOCIETY OF
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Call for Nominees

1985 IADR Science Awards

The Science Awards Committee is now soliciting nominations for the annual IADR Science Awards, to be presented at the 63rd General Session in Las Vegas, Nevada, March 21-24, 1985. The Awards are: H. Trendley Dean Memorial Award, Biological Mineralization Research Award, Oral Science Research Award, Research in Periodontal Disease Award, Dental Caries Research Award, Prosthodontics Research Award, and Wilmer Souder Award (Dental Materials Group).

These awards are made in recognition of distinguished accomplishments in research and development and not on the basis of competition.

H. TRENDLEY DEAN MEMORIAL AWARD

This award for meritorious research in epidemiology and dental caries was established and is supported by the estate of Frank J. McClure in memory of the late H. Trendley Dean. The award, consisting of a bronze plaque and a cash stipend, is presented annually, provided a worthy recipient is nominated.

BASIC RESEARCH IN ORAL SCIENCE AWARD

Supported by The Procter & Gamble Co., this award is designed to stimulate basic research in areas of natural sciences having an important relationship to oral biology. The award consists of a cash prize and a plaque.

A nominee must have accomplished outstanding basic research in an area of the natural sciences that has an important relationship to oral biology. Contributions to experimental therapeutics, experimental pharmacology, and clinical investigations are not regarded as basic research for the purposes of this award. The contribution should be worthy in its particular basic science (anatomy, bio-chemistry, biophysics, genetics, histology, inorganic chemistry, microbiology, physiology, etc.), in addition to being important to oral biology. The nominee must not have reached his 41st birthday (age limit change is subject to approval by the IADR Board of Directors) at the time of the meeting at which the award is presented.

BASIC RESEARCH IN PERIODONTAL DISEASE AWARD

Supported by the Colgate-Palmolive Co., this award was established to recognize, encourage, and stimulate outstanding research achievements in basic research in periodontal disease. The award consists of a cash prize and a plaque.

A nominee shall have accomplished significant basic research related to periodontal disease. Clinical investigation alone is not considered basic research for this award; however, clinical investigation in support of basic research may be considered a part of the contribution in determining the recipient of the award. There is no restriction on age, but at the time of the nomination the nominee must be actively engaged in the line of research for which the award is made.

BASIC RESEARCH IN BIOLOGICAL MINERALIZATION AWARD

Supported by Lever Brothers Co., this award is designed to stimulate, encourage and recognize basic research in the field of biological mineralization. The award consists of a cash prize and a plaque.

Evidence must be presented of original thought and accomplishment in the field of calcification. This should include work done on the mechanism of mineralization in biologic systems, including teeth, bone, ectopic deposits, or model systems.

RESEARCH IN PROSTHODONTICS AWARD

Supported by The Vicks Oral Hygiene Group and given in memory of Dr. W. J. Tarbet, this award was established to encourage and give recognition to outstanding research accomplishments in the field of prosthodontics. The award consists of a cash prize and a plaque.

The nominee must have contributed significantly to the basic knowledge related to prosthodontics. To be considered worthy contributions, clinical studies must be supported soundly by the basic sciences.

RESEARCH IN DENTAL CARIES AWARD

Supported by Trident Professional Services Division, Warner Lambert Company, this award is designed to stimulate and recognize outstanding

and innovative achievements that have contributed to the basic understanding of caries etiology and/or to the prevention of dental caries. The award consists of a cash prize and a plaque.

Evidence must be presented that the nominee has conducted original and important investigations in any of the biological or chemical disciplines involved in caries research. Clinical investigations may be considered also if they have contributed significantly to the prevention and control of dental caries. At the time of nomination, the nominee must be actively engaged in the area of research for which the award is presented. Work considered for the award should be fully tested and accepted by the scientific community and must have been published not less than ten years prior to the time of the nomination.

WILMER SOUDER AWARD

Initiated in 1955, this is the oldest of the Science Awards. The award honors Dr. Wilmer Souder, the motivating force in establishing the Dental Section at the National Bureau of Standards, and is designed to perpetuate the scientific ideals which he exemplified, and to encourage interest in dental materials research.

The award is made on the basis of scientific achievement of outstanding quality which has advanced or may reasonably be expected to significantly advance dental service to the public. It is intended to confer the highest honor in the field of dental materials research upon those scientists who, through research in this field, bring about outstanding advances in dental health.

Sponsored by IADR's Dental Materials Group, the award consists of a cash prize and a plaque. The award committee is composed of former Souder awardees.

Nomination Regulations

The Science Awards Committee has the responsibility of selecting awardees from among the nominations of renowned scientists submitted by Association members. The Committee consists of the Science Awards Chairman and the subcommittee chairman for each award. The subcommittee members for each award are appointed on the basis of their expert knowledge in the field of the award. Appointments are made annually for a period of five years on a rotation basis.

Any IADR member may nominate a candidate for a science award. The deadline for nominations is September 1, 1984. Once a nomination is made, it is considered each year for five years unless the nominee is selected for an award during this period. After the fifth year, the nomination is withdrawn unless a renomination is received.

The following information MUST accompany each nomination:

- (1) a short statement describing the reasons you are nominating the individual for the particular award; and
- (2) complete *curriculum vitae*—
 - (a) name,
 - (b) address,
 - (c) date and place of birth,
 - (d) education,
 - (e) honors,
 - (f) employment,
 - (g) membership in professional organizations,
 - (h) bibliography, and
 - (i) summary of specific scientific contributions of the candidate.

Nominations and supporting documents should be sent to:

Dr. William D. McHugh
Chairman, Science Awards Committee
Eastman Dental Center
625 Elmwood Avenue
Rochester, NY 14620

Preface

The development of minimum standards and guidelines for the conduct of clinical trials of anti-caries agents was the subject of a conference sponsored by the American Dental Association in 1953. This conference resulted in the publication in 1955 of a monograph, "Clinical Testing of Dental Caries Preventives". For a number of years, this monograph provided guidelines for clinical investigations. In 1968, following 1½ years of planning by an advisory committee, the American Dental Association — through a grant (DHO6120) from the Division of Dental Health, Bureau of Health Manpower Education, National Institutes of Health — conducted a conference on the clinical testing of cariostatic agents. This conference resulted in two publications, "Proceedings of the Conference on the Clinical Testing of Cariostatic Agents" and "Principles for the Clinical Testing of Cariostatic Agents". The principles for the conduct of clinical caries trials resulting from this conference relating to operational aspects, design and analysis of the trial, and the measurement of dental caries have generally served as the basis for numerous caries trials conducted since 1970.

There have been a number of developments which have occurred during the past 25 years since the original conference in 1953, and even since the publication of the results of the conference in 1968, which indicated the need for another conference to be held on certain aspects of caries trials. The National Institute of Dental Research, National Institutes of Health, sponsored a number of conferences on different aspects of dental caries since the 1968 conference, dealing with a wide variety of topics, including: the microbial aspects of dental caries; methods of caries prediction; immunological aspects of dental caries; saliva and dental caries; the effect of sweeteners on dental caries and cariostatic mechanisms; and, most recently, animal models in dental caries. While it is generally recognized that the ultimate test of an anti-caries or cariostatic agent is in the human clinical trial, for the past 14 years there has been no organized effort to have a meeting devoted specifically to this subject.

Staff of the Council on Dental Research and the Research Institute of the American Dental Association and members of the Task Force on Design and Analysis in Dental and Oral Research appointed a planning committee to consider a third conference on dental caries. The Task Force is composed of biostatisticians and experienced clinical investigators who not only work in the dental/oral/caries field but who also bring their expertise in other areas to the areas of our interest. After much deliberation, the planning committee felt that certain topics in the area of caries clinical trials should be included because: (1) they require updating since the 1968 conference; (2) there have been advances in methodology which would make them more applicable and more effective in clinical trials; (3) new methods have been developed in other fields of biology, *e.g.*, cancer, agronomy, and epidemiology; (4) constraints of design of caries clinical trials have been imposed by regulatory agencies for safety and/or ethical reasons; (5) restrictions have occurred on the availability of study populations; (6) there has been an overall decrease in the prevalence of dental caries; (7) increased costs of clinical trials have occurred; and (8) there is increased emphasis on cost-effectiveness of proposed caries-inhibitory or cariostatic agents, requiring greater efficiency in clinical trials.

The results of these efforts follow in the proceedings of this conference.

Neal W. Chilton
Gordon H. Schrotenboer

EDITORIAL

I am pleased that the *Journal* has the opportunity to print a Special Issue devoted to a Conference held in May, 1983, on Clinical Caries Trials. Since the last conference on this topic, many changes have occurred in such areas as caries prevalence, ethical standards, and techniques of data analysis. The time was certainly appropriate to draw together the latest information on these topics, and the National Institute of Dental Research deserves credit for assuming the costs of publication to ensure wide distribution of this report of the Proceedings.

I would like to take this opportunity to comment on two questions of nomenclature. The disease under consideration is dental caries, and the site of caries attack is commonly termed a lesion. Although one can speak of carious enamel or carious dentin, I do not think that one should refer to a carious lesion, since a lesion in a tooth, by definition, is carious. If qualification of "lesion" is necessary, a caries lesion would seem to be the appropriate terminology.

The other matter of terminology concerns the contact surfaces of adjacent teeth. These should be termed the approximal surfaces rather than the proximal or interproximal, since they are the surfaces which approximate, *i.e.*, are located close together. On the other hand, interproximal would be suitable as a description of the space between adjacent teeth or of the plaque present in that location.

—Dr. C. Dawes

Clinical Caries Trials

Proceedings of a Conference
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Edited by

Neal W. Chilton
Gordon H. Schrotenboer

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