Dalhousie University, Faculty of Dentistry

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Stimulus & Challenge

The voice of Dal Dental research

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This March 1994 edition is the seventy fifth edition of the Dental Research News.

Our 250th abstract Presented at the IADR

Bill Lobb will be the lucky person to have the honour of presenting the 250th abstract for the Faculty of Dentistry, Dalhousie University at the IADR in Seattle. This is a fitting tribute to a hard working faculty member, who in spite of his heavy teaching load, has maintained a very active level of research. Congratulations Bill keep up the good work. Prior to the submission of papers for the 1994 IADR meeting we had a total of 242 abstracts presented in the history of our Faculty. If you look in the programme for the 1994 IADR meeting you will see that our 8th paper as sequenced in the programme will be our 250th. The 1994 IADR represents an historic landmark for our Faculty of Dentistry, it also represents an important event in the history of the Canadian Association for Dental Research. Starting with the 1994 IADR Seattle meeting, CADR has organized and sponsored the first symposium in a series which will be held each year for all North American IADR meetings. In 1992 the President of CADR Derek Jones put forward a proposal to the IADR that a Canadian researcher from our Division should organize a series of symposia each year for the meetings in North America. This year we have the first of these symposia. The series is under the general heading of "Clinically-Oriented Scientifically Based Issues Facing Dental Practice." We believe that symposia under this title will prove to be very popular, as well as addressing the very important issues facing dentistry. Dalhousie and CADR are proud indeed to participate in "Sharing the Vision" of the future of dentistry with our colleagues from around the world. This years symposium, the first in the series deals with the vision of the future for restorative dentistry. The title is: "Restorative Dentistry in the 1990's and beyond." The Dental Research Development Office would like to pay tribute to our colleague Amid Ismail, for his hard work and dedication in putting this excellent 1994 Symposia together.

The Seattle IADR/-AADR/CADR meeting has a record number of 2763 papers being presented. Three of these papers at this international meeting are being presented by our dental undergraduate students. Congratulations to these students Gordon Taylor, Janice Wilson and Chris Zed, who will be excellent ambassadors for our Faculty and for Canada. The current membership of the CADR is about 250, some 2.75% of the total IADR membership and yet CADR have over 5% of the papers being presented at the 1994 meeting. A total of 146 abstracts at the meeting in Seattle in 1994 carry the names of Canadian authors. That is 1.7 Canadian members per Canadian abstract, this is an impressive statistic. The numbers are however, slightly down on last year when we had 166 Canadian papers at the 1993 meeting in Chicago. This represented 6.5% of the 2,539 papers at that meeting. The total for the two 1992 split meetings was 168 Canadian papers. The total of Canadian papers at the last four meetings is thus 480. With 12 abstracts carrying the name of Dalhousie we can justifiably claim that Dalhousie University is playing a significant role in the Canadian presence at international Dental research meetings.

Trends in Dental Research

Each year the IADR request that the abstracts submitted are accompanied by a list of five descriptor words selected from a list of 281. By looking at the number of listings of these words it is possible to get a reasonable idea of ongoing dental research.

Key Word Descriptors

The general areas or disciplines of research are depicted in Figure 1. It is important to note that each of the 2,763 abstracts in the IADR programme would be accompanied by five descriptor words. In some cases these words may not be so closely linked to the research as in other cases. As can be seen the most frequently listed wordings were dental materials, periodontics, microbiology and prosthodontics. It is encouraging to see that epidemiology is now listed quite strongly. A further bar diagram depicting key word descriptors is shown in Figure 2. It should be noted that these data are not on the same scale as for Figure 1. It can be seen that the trend in recent years for heavy concentration on adhesion, composite materials and dentine bonding agents is once again reflected in the 1994 IADR meeting. It is interesting to note that glass ionomer, ceramics and cements are listed higher than amalgams. Further data illustrating key word descriptors dealing with biological science and clinical research are depicted in Figure 3 on page 3. The listing of caries may be higher than many would predict. It is interesting to note the large number of abstracts listing the key word "human" as a descriptor. In fact almost 16% of the papers in the programme used the key word "human." However, only 17 abstracts used the key word descriptor "human experimentation." On the other hand, 146 used the descriptor "Clinical Trial." It was pleasing to see that the cell culture is now quite close to the listing of animal research.

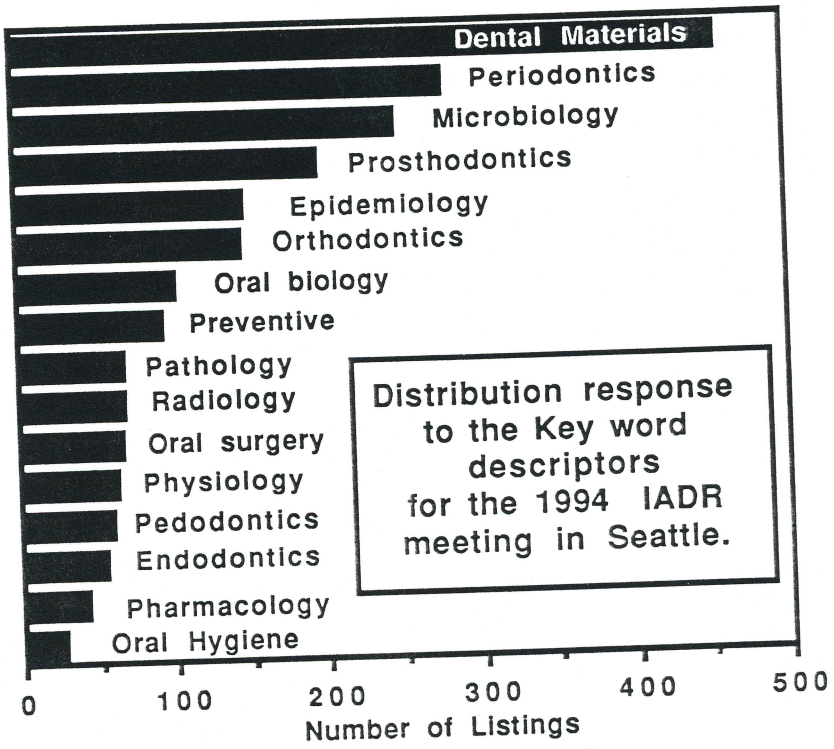

Figure 1

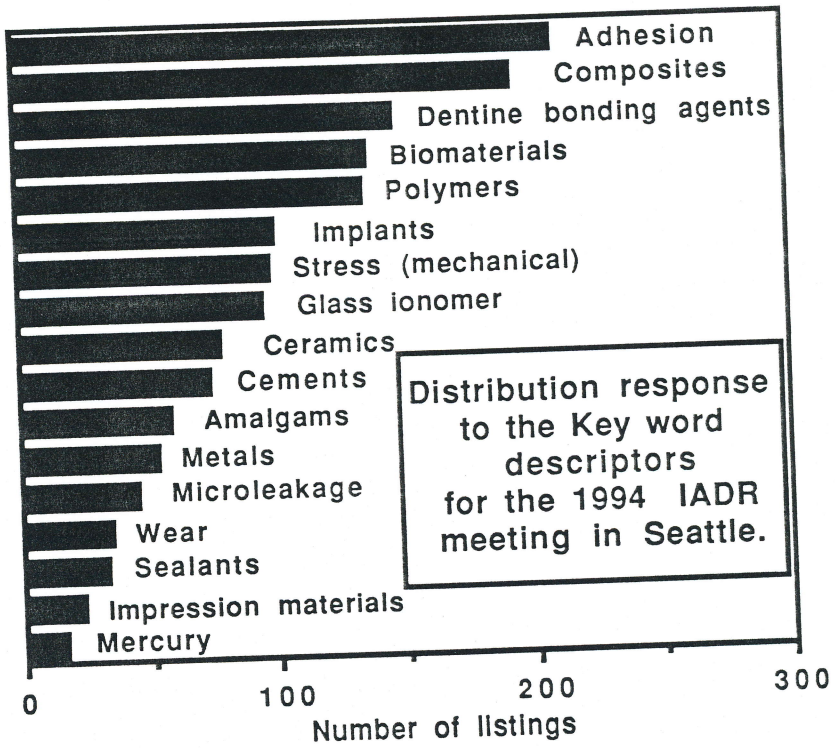

Figure 2

Interplay

"Because events are the result of a multiplicity of causes, explanations usually identify a number of interacting causes that joined together to produce the event."

Ernest R. House, Educ.Res., Aug-Sept. 1991 p 2-9.

Good News From the US

Science, education and health care policy decisions in the United States can often have an influence on the direction that Canadian policy may move. One or two recent items of news from across the border are worth noting. The good news for our colleagues in the US is that President Clinton has announced an increase of 3.7% for federal support of research for the fiscal year 1995. However, the bad news for the universities in the US is that reimbursements for the overhead costs of research would be frozen at 1994 levels

Last year US Senator Barbara Mikulski, warned the US National Science Foundation that it must support more "strategic research" -- or forget about any future budget increases. However, in a recent speech the Senator stated that much of basic research can and should be viewed as "strategic." This was a great relief to many scientists anxious about the interpretation of her views.

An interesting piece of news for health research in the US is that President Clinton's top science advisor has stated that the chief of National Institutes of Health, Harold E. Varmus, should be added to a new Cabinet-level council in charge of policy.

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Biomedical Research Gets a Major Boost

The Howard Hughes Medical Institute in the US will spend an additional $30 million on biomedical research. The plan is to add a further 49 top biomedical researchers to the 225 currently supported at several dozen universities and medical centers.

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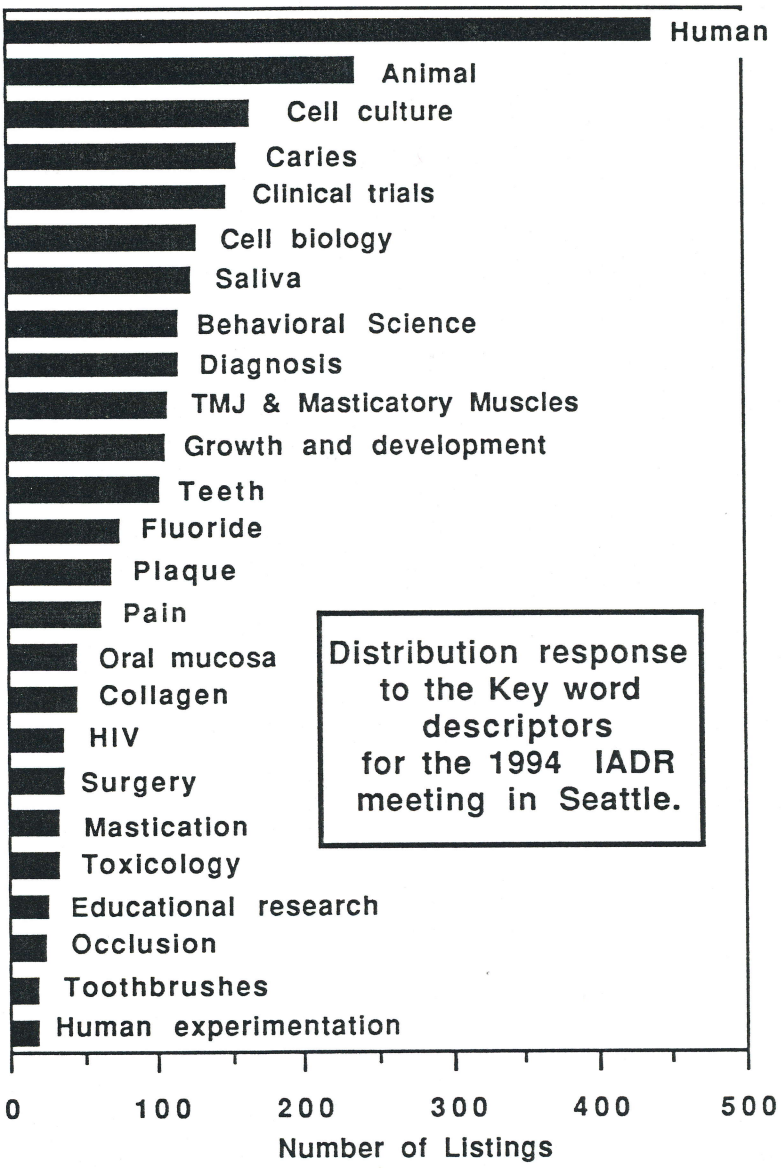

Figure 3

The External World

".. science is an attempt to gain predictive and explanatory knowledge of the external world. To do this, one must construct theories, which consist of highly general statements, expressing the regular relationships that are found to exist in that world. These general statements, or laws, enable us both to predict and explain the phenomena that we discover by means of systematic observation and experiment."

R. Keat and J. Urry, Social Theory as Science, 2nd ed. London, Routledge and Kegan Paul, 1982.