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Canadian President of IADR.

Dr. Barry Sessle, Dean at the Faculty of Dentistry, University of Toronto, became the 8th Canadian to become President of IADR at the 1994 meeting in Seattle. The first Canadian to be elected as President of the IADR was Albert E. Webster, who served as the 3rd IADR President in 1924-25 and again in 1931-32. Dr. Webster served as Dean of the University of Toronto, Faculty of Dentistry from 1915-1923. Dr. Leuman M. Waugh, was IADR President 1926-27, William G. Skillen, was President IADR 1936-37, and John B. MacDonald, was President 1968-69. Interestingly five of the eight Canadian Presidents of the IADR, Albert Webster, George Beagrie (1977-78), Tony Melcher (1982-83), Richard Ten Cate (1984-85) and Barry Sessle (1994-95) were from the University of Toronto. The last four are also good Canadians, from Scotland, South Africa, England and Australia. In fact only the first four of the eight Canadian Presidents of IADR were Canadian born.

Research Presentation at Student's Banquet

History can now record that Dalhousie Faculty of Dentistry have now presented over 254 papers at international research IADR/AADR/CADR meetings. Of these papers 76% have been

presented in the past seven years, and 54% in the past 5 years.

It was 26 years ago that the very first research paper was given at an international dental meeting of the IADR by a member of Dalhousie University Dental Faculty. This first Dalhousie research paper was given by Dr. A. P. Angelopoulos, Professor of Oral Biology. The paper was presented at 9:00 am on Saturday March 23rd 1968 at an IADR meeting which was held in San Francisco, at the Hilton Hotel.

The total number of papers at the 1968 IADR meeting was 641, and the official attendance 1,904. In contrast the total number of papers at the IADR meeting in Seattle in March 1994 was a record 2,763 and the record attendance was over 5,500.

Over 8% of the Canadian papers presented at the 1994 IADR meeting carried the name of Dalhousie University. It took our Faculty 19 years to present our first 50 papers at the IADR/AADR [average for first 19 years 2.63 papers/year]. However, as our research productivity increased, it took only 2 years to add a further 50 to reach 100 with an average of 25 papers/year for the two year period. Following this it only took a further two years to reach the 150 total with a further average of 25 for the two year period. An additional two year

period has seen the total reach 250, with an average of 23.5 papers/year.

It was encouraging to note that three of our undergraduate dental students were funded by Alumni, Canadian Fund for Dental Education and a corporate sponsor to attend and present papers at the IADR meeting in Seattle in March 1994. Two of these students are members of this years graduating class. All three students, Gordon Taylor, Janice Wilson and Chris Zed were excellent ambassadors for Dalhousie and Canada at this international research meeting. At the 1994 Student's Banquet held on the 26th March Dr. William Lobb was awarded in absentia with a framed certificate in honour of his giving the 250th research paper for our Faculty of Dentistry, at the IADR meeting in Seattle. This certificate commemorates an important historic event for our Faculty of Dentistry. We have come a long way since 1968, when Dr. Angelopoulos presented our very first research paper at an international meeting.

Bill Lobb presented our 250th paper at 11.15 am on March 12th 1994. It was a fitting tribute that Bill Lobb was the individual who presented this landmark paper. Bill Lobb is a very hard working faculty member, who in spite of his heavy teaching load, has maintained a very active level of research.

Research Councils

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Collaborative Research

Concern has been expressed within the scientific community about the possibility that the policy of NSERC may be changed over the next ten years to favour more collaborative research rather than the traditional individual grant support. The rumours seem to have stemmed from remarks attributed to the president of NSERC, Dr. Morand. It is particularly interesting to compare this NSERC debate with the one which is now going on within the MRC community. The development of a strategic plan and the implementation of a new structure for the MRC programmes has caused some concern amongst researchers who see the breaking up of the traditional MRC Programme grants and the MRC groups as a blow to those who believe that collaborative research is where the future lies for successful research during difficult economic times. In fact the MRC proposals call for a very flexible structure in which a modular system will allow the building blocks of individual grants to be put together to form a collaborative grant. Nigel Lloyd, Director General, Research Grants, NSERC has stated in reply to the rumours about NSERC policy, that individual research grants remain one of the most important means by which NSERC supports university research. The \$5 million in grants awarded in March by NSERC to a large number of Faculty members form Dalhousie University clearly show that support of individual research grants is continuing in the traditional way. Additional funds have been added by NSERC to the Research Grants Program every year until the most recent competition. The current 1994

budget stands at \$200 Million which represents a 55% increase compared to the \$129 Million budget of 1984. The number of grantees supported by NSERC has also grown every year for the past eight years. However, the overall NSERC funding level has not changed for the last two years. The growth of the university research community, combined with the decline in value of the research dollars available has meant that the value of individual grants has been reduced and some Canadian researchers have not been funded. The same is also true for the MRC programmes, many excellent research proposals put forward by top researchers have failed to be supported due to the inadequate level of funding.

Research is Research

A group of some 20 faculty members attended a meeting on Wednesday 13th April to discuss and debate the focus and thrust of research within the Faculty of Dentistry. The meeting opened with short presentations from Derek Jones, David Precious and Amid Ismail. Derek Jones reviewed the historical development of research within the Faculty, highlighting the significant increase in recent years in the level of research funding and presentations of papers at international meetings. It was pointed out that the Faculty had obtained a total of \$3.35 million in research funding during the past five years. However, it was also pointed out by Derek that these were crude measures of the level of research productivity and did not take into account the research which was being conducted in the absence of research funding or indeed the very important statistic of published refereed papers. An example was given of the phenomenal publication record and international reputation of Michael Cohen. It was also mentioned by Derek Jones that the majority of the research

conducted during the past 15 years was laboratory based research. Since most of the faculty members are clinicians we should clearly try to develop a much greater emphasis on clinical research. It was mentioned that the MRC were placing increased emphasis on clinical research with their broader mandate which should provide greater opportunities for clinical faculty members. The establishment of the Clinical Research Unit within the faculty provides an opportunity and a focus for the development of clinical research. David Precious provided a thoughtful comment on the role of research within the Faculty. He put forward the concept that the patient should be the important focus for our research outcomes. Educational and clinical research were the means by which we could improve the level of care for the patients. Amid Ismail emphasized that a long-term structured and focused programme in clinical research was an objective that we should try to achieve. A lively debate was held in which it was argued back and forth about the relative importance of clinical and educational research. A strong argument was made that there should be no distinction between different types of research, laboratory, clinical or educational. All are research in which hypotheses are put forward, experiments are conducted, data is collected, analyzed and conclusions are drawn, and new knowledge obtained. This knowledge will ultimately be beneficial to the patients. Since the dental profession exists to serve the public, all of our research should have the same general end objective as pointed out by David Precious. However, a small faculty cannot be all things to all people, we must concentrate on our strengths with an emphasis on clinical research as one of our objectives.

The challenge

The debate involving the funding of the federal research programmes on page 2, brings home to us the difficult challenges we face in our research careers. In these times of soaring research costs and a decline in real dollars for funding from federal research agencies we need to be innovative. The challenge is to use our creativity to address the many fertile and valuable areas of clinical and educational research which do not require vast amounts of funding. Brain power, an enquiring mind, determination and enthusiasm are the main ingredients to fuel any research programme.

We must be vigilant in setting down the research programmes which will form the foundation of the future of our academic institution. We owe this to the Faculty, Dalhousie University, our profession and the general public, but most of all to ourselves to be as productive as we can be, by working at the cutting edge of the knowledge base. Knowledge is the lifeblood of any university.

We need to be vigilant to observe the difficulties and problems which face each of us as we go about our daily tasks. Experienced clinicians have a wonderful opportunity with their wealth of innate knowledge which can be exploited to solve many of the unexplained problems in clinical practice. Clinical knowledge and skills combined with intuition can be powerful tools in any research endeavor. The newly established Clinical Research Unit provides our clinical faculty members with a wonderful opportunity to engage in the pursuit of new knowledge through the medium of clinical research and scholarship.

One of the major strategies we can adopt to cope in times of limited funding is to collaborate with colleagues. Interdisciplinary research programmes consisting

of a team of experts from two or more allied fields working together on a research project can be most rewarding. Normally one of the problems facing members of an interdisciplinary team is the probability of not being rewarded in their respective fields for work outside traditional boundaries. However, this should not be a problem for faculty members in dentistry as they work together on projects which are valuable aspects of general dentistry. Although many of us recognize that interdisciplinary research can produce major advances, it is also true that, working as a team is not easy, it requires a considerable amount of understanding by the members involved. Individuals on research teams whose backgrounds and formal training are in different areas, can contribute important new perspectives and insights. Collaborative research on clinical research projects is clearly the way in which our Faculty needs to move. However, as we try to establish the Clinical Research Unit we need to remember that we cannot direct people to move in a specific direction in terms of research. Funding is important, having sufficient time is even more important. However, Dalhousie history Professor Peter Waite, said it all when he stated that "Researchers are driven; they are driven not just by a sense of duty, or by being paid to do what they do; they are driven by excitement." Our clinical colleagues will participate and collaborate in the Clinical Research Unit for one reason and one reason only, the excitement of discovery. Educational research can be linked to clinical research as pointed out by Amid Ismail at the meeting on the 13th April. However, it is also true that our ability as teachers will be enhanced by knowledge gained through all types of research and intellectual inquiry. Insights gained from research can lead to improved teaching and clinical

treatments. Professor Donald Betts our Dalhousie colleague in Physics has said "Teaching on the frontiers of knowledge, where most of Dalhousie's teaching occurs, can be done well by only those who are contributing to the advancement of that knowledge." It has been said in this publication very many times, the major cost of conducting research is time. The willingness of faculty members to devote time to the building of their research career through the Clinical Research Unit will provide a solid future for research at Dalhousie. For our younger faculty members it is often difficult to strike a balance between family commitments and spending additional time away from the home. The implementation of our new curriculum might on the one hand seem to put a restriction on the time and opportunity for research activity. However, now that the new curriculum is underway it provides us all with stimulation, motivation and ideas for research projects. With the right approach to this stimulation and a more effective and efficient use of our time, we can perhaps undertake even more research and scholarly activity than previously. Our new science driven curriculum provides significant opportunities to conduct research to satisfy many questions relating to clinical and educational problems.

Biomaterials Boost

The Division of Biomaterials are pleased to report that on the 1st April 1994, they received an additional \$148,000.00 to support their MRC/University Industry grant involving cement biomaterials. The industrial funding of the 50/50 MRC-industrial grant comes from a very well established multinational corporate partner. In these difficult economic times it is gratifying to see that our quality research at Dalhousie is recognized.

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