

# CAPD News

*The Canadian Academy of Pediatric Dentistry*

## President's Message



*Dr. Paul MacDonald*

The Canadian Academy of Pediatric Dentistry (CAPD) was pleased to be invited to participate in this issue of *JCDA* devoted to children's dentistry. As president, I strive to represent a specialty group that numbers less than 200 members dispersed across a rather large country. I'm proud to see our pediatric dentists contribute to children's oral health on multiple levels, including in private practice, public health clinics, and university and hospital-based facilities. Formerly known as pedodontists, we hope that our dental colleagues can now not only spell our specialty name more easily, but also continue to appreciate the benefit of learning and working with our specialty to improve dental care for children.

Pediatric dentistry is an age-defined specialty that provides both primary and comprehensive preventive and therapeutic oral care for infants and children through adolescence. This patient group includes many with special health care needs. Indeed, we are often called on to continue providing care for young handicapped adults. Most specialties focus on a particular area of dental expertise. Pediatric dentists acquire a broad base of dental knowledge and skills, which they adapt to the special needs of their patients. Canadian

pediatric dentists are versed in such disciplines as behaviour management, care of medically and developmentally compromised children, orofacial growth and development, caries prevention, sedation dentistry and hospital dentistry. It is not uncommon for pediatric dentists to use all these skills on a daily basis.

Pediatric dentists in Canada can receive training through one of 2 Canadian programs or through many American hospitals and university-based institutions. CAPD worked closely with the Royal College of Dentists of Canada to help set the fellowship examination, which is the current standard for specialty certification. Our members serve on numerous committees of provincial associations, CDA, the American Academy of Pediatric Dentists, and international associations concerned with dentistry for handicapped children.

Our vision is the achievement of optimal health for all children. Early childhood caries remains a significant problem, as evidenced by the high numbers of children being treated in hospital for rampant caries. Improved oral health in children means simply improved general health. CAPD is dedicated to the goal of improving and maintaining the oral health of infants, children, adolescents and persons with special health care needs. Access to treatment time in hospital operating rooms and appropriate funding of children's dental programs remain a priority. CAPD has tried to build strong partnerships with CDA, the Canadian Pediatric Society and the American Academy of Pediatric Dentists, in an effort to enhance dental care for children. CAPD advocates that infants should be assessed by oral health care providers within 6 months of the eruption of the first tooth or by one year of age.

Our specialty group has set communication as a goal for 2003, and an important first step toward achieving that goal will be taken when we launch our new Web site in July. We invite you to visit our site this summer and also to contact any of our members to discuss any aspect of children's dental care.

*Dr. Paul MacDonald*



## Message from the Editorial Consultant



*Dr. Alan Milnes*

It is indeed a pleasure to have been asked to serve as the guest scientific editor for this special issue on pediatric dentistry. This landmark issue marks the first time that CAPD has participated in the development of a theme issue of *JCDA*. The idea for an issue devoted to pediatric dentistry arose in conjunction with the October 2001 meeting of CAPD in Vancouver, British Columbia. The theme adopted for this meeting was early childhood caries. Although dentists have been inundated with information suggesting that caries is on the decline, tooth decay affecting preschool children continues to be a significant problem in many communities throughout Canada. In fact, in some jurisdictions there is now good evidence to show

that tooth decay in young children is on the increase.

Three keynote speakers were invited to present on different aspects of early childhood caries. Dr. Stephen Levy's up-to-date review of the use of fluoride in children and the presence of fluoride in the food chain is particularly useful at this time. Many parents are now requesting that their children not receive fluoride for fear they will develop fluorosis. While this is a legitimate concern, it is important that dentists recognize the children who are at high risk for decay and who would benefit from enhanced fluoride exposure. Furthermore, it is important that dentists use the most appropriate form of fluoride in the most appropriate fashion when treating children who are at moderate to high risk for early childhood caries.

It has long been known that dental caries occurs as a result of activity by indigenous bacteria in the oral cavity. Too often, however, dentists have adopted a surgical model for the correction of dental disease and ignored its bacteriologic basis. The paper by Dr. Berkowitz provides up-to-the-minute information on the infectious nature of dental caries, in particular early childhood caries, and highlights several novel approaches for controlling oral microbial populations with antibacterial substances.

Those who work in community dentistry in public health have finally recognized the ravages of dental disease in preschool children, something pediatric and family dentists who treat these children have known for far too long. Community interventions by nondental personnel aimed to convey preventive information and to assess risk for early childhood caries have been the thrust of a research program developed by Dr. Rosamund Harrison at the University of British Columbia. Collectively, these 3 papers provide new ideas for managing a particularly

virulent form of tooth decay that can have lifelong effects.

Two other papers appear in this issue. The first paper, which was also presented at the CAPD meeting, discusses intravenous sedation. Traditionally, dentists have treated children affected with early childhood caries under general anesthesia in hospital-based settings. Intravenous sedation is an alternative method for managing the behaviour of preschool children who require treatment for early childhood caries. While it is recognized that this modality of sedation is beyond the realm of general dentistry, it is presented as an alternative that could become more common should postgraduate programs in pediatric dentistry choose to offer such training. This is especially important in light of increasingly difficult access to general anesthesia services across Canada. The second paper, from the Dental Trauma Research Unit of The Hospital for Sick Children, reviews treatment guidelines for the perplexing and controversial issue of tooth avulsions and intrusions.

We were fortunate to have been able to secure presentations for the CAPD meeting from Drs. Harrison, Berkowitz and Levy, all leaders in their respective fields. We sincerely hope that all the articles selected for publication in this issue will be of interest to all those who provide dental care for children in Canada.

Finally, I must pay tribute to Dr. John O'Keefe, editor of *JCDA*. It has been a great pleasure to work with someone who is entirely dedicated to ensuring that the dentists of Canada have practical and up-to-date information available to assist them in the daily practice of dentistry. His vision and forward thinking have resulted in a significant transformation of this journal.

*Dr. Alan Milnes*

## Pediatric Dentistry and the Royal College of Dentists of Canada



*Dr. David B. Kennedy*

The attainment of fellowship in the Royal College of Dentists of Canada (RCDC) serves a dual function for pediatric dentists. First, the National Dental Specialty Examination (NDSE), run by RCDC, has served as part of the specialty licensing process for all provinces in Canada since 2001. Second, fellowship in RCDC is a useful qualification to possess for obtaining hospital privileges, and many pediatric dentists work in hospitals. A one-step examination was adopted in 1997, which allowed pediatric dentists to obtain fellowship immediately upon graduation, as do their medical confreres. This movement to a one-step fellowship followed a similar route taken by oral and maxillofacial surgeons in the mid-1990s and by other hospital-based specialty groups, such as oral pathologists and oral radiologists.

When the dental regulatory authorities sought to establish a national dental specialty exam, CAPD supported RCDC as the examining body of choice, because of its proven track record in providing quality exams. The pediatric dentistry exam has evolved from a blueprint that identifies topics to be covered, weighted by importance. A reading list is provided to guide candidates in their preparation for the exam, divided into 2 parts: a 3-hour objective structured clinical exam (OSCE), consisting of questions

generated by photographic images of clinical or radiographic situations; and a 2.5-hour case simulation exercise, involving a variety of pediatric dental case histories presented in a multiple-choice format. Many CAPD members have participated in the development of the exam and continue to maintain its quality. These individuals donate many hours of their time and are to be thanked for their efforts: Drs. Bill Croft, Nanaimo, British Columbia (former chief examiner), Sam Cheung, Coquitlam, B.C., Felicity Hardwick, Nanaimo, Alan Milnes, Kelowna, B.C. (chief examiner), Robert Barsky, Calgary, Alberta, Christine Corbeil, Montreal, Quebec, David Richardson, Hunter River, Prince Edward Island, Heather Dymont, Halifax, Nova Scotia, Lorne Koroluk and Rocio Quinonez, Chapel Hill, North Carolina, and Keith Morley, Barry, Ontario (former chief examiner).

Pediatric dentists in good standing who have been in practice for at least 3 years can take the interim examination (OSCE and case simulation exercise) to obtain fellowship. This window of opportunity ends at the fall exam session in 2004. Interested parties should telephone RCDC at (416) 512-6571 or visit the College's Web site at [www.rcdc.ca](http://www.rcdc.ca).

RCDC has enjoyed a mutually beneficial relationship with CAPD, presenting reports at its annual meetings and including information in communications vehicles sent to its members. As a result, pediatric dentistry boasts a high percentage of members who have successfully completed the NDSE and obtained fellowship in RCDC.

*Dr. David B. Kennedy*  
President  
*Royal College of Dentists of Canada*



## **CAPD Statement on the Training and Practice of Pediatric Dentistry**

### ***Definition***

As defined by CDA, the Commission on Dental Accreditation of Canada, the Canadian Academy of Pediatric Dentistry and the Royal College of Dentists of Canada, pediatric dentistry is that branch and specialty of dentistry concerned with providing primary and comprehensive preventive and therapeutic oral health diagnosis, care and consultative expertise for infants and children through adolescence, including those of all ages with special care needs.

### ***Education and Training***

As with all areas of dentistry, pediatric dentistry has undergone a remarkable number of changes over the last 20 years. The development of new restorative materials, the increasing demand for treatment under sedation, issues of informed consent and age of consent to treatment, and the need for presenting evidence-based rationales for treatment decisions have had a significant impact on education and training. Pediatric dentists, like their counterparts in general practice, are expected to be skilled in all areas of dentistry. They are also expected to possess the special skills necessary to provide comprehensive oral health care for children and adolescents, as well as medically, physically or emotionally compromised individuals.

The specialty program curriculum for pediatric dentistry must ensure that residents receive comprehensive training in all of the above areas. This training involves the management and treatment of healthy children in a dental faculty clinic and the treatment of medically compromised and disabled individuals in a hospital setting, with particular attention paid to interactions with physicians, surgeons and other health care providers from related disciplines. Training is given in pharmacologic

and nonpharmacologic behaviour management techniques, preventive practices (including prenatal and postnatal counselling), and diagnosis and management of abnormalities in the developing occlusion. The curriculum also includes training in the surgical management of the hard and soft tissues and traumatic dental injuries. Residents are also expected to gain teaching experience in the undergraduate DDS/DMD program and to participate in outreach programs.

A substantial part of a pediatric dental specialty program takes place in a hospital setting, where residents are trained to physically evaluate patients, recognize oral diseases, provide dental services to patients under general anesthesia, and assist in managing anesthetic emergencies. At the University of Toronto, residents rotate between the departments of anesthesia, cardiology, hematology and plastic surgery.

At present there are 2 specialty programs in pediatric dentistry in Canada. The University of Toronto's 3-year program leads to an MSc degree. Three places are available in each year of the program. The residents train at the Hospital for Sick Children, Mount Sinai Hospital, Bloorview MacMillan Centre and the City of Toronto dental clinic on Victoria Street. In their final year the students give seminars and teach in the undergraduate preclinical laboratories and treatment clinics. Outreach experience is obtained in the first 2 years of the program and involves 2 rotations of 2 weeks at the Weeneebayko General Hospital in Moose Factory, Ontario. To successfully complete the MSc degree, each student must undertake a research project and defend a thesis.

The other program, given at the University of Montreal, is also a 3-year program that leads to an MSc degree. Two places are available in each year of the program. The residents train at the Sainte-Justine Hospital and the Mother-Child University Medical

Centre. They are also able to observe pediatric dentists in their private clinics. The residents rotate between the departments of anesthesia, cardiology, hemato-oncology, dermatology, pediatrics, general surgery, gastroenterology, immunology, nephrology, and the emergency room. In their second and third year, they teach in the undergraduate clinic.

The pediatric specialty programs of the Universities of Toronto and Montreal are both accredited by the Commission on Dental Accreditation of Canada.

*Dr. Keith Titley  
Professor, Faculty of Dentistry  
University of Toronto*



### **Pediatric Hospital Dentistry**

Hospital dentistry has existed at The Hospital for Sick Children (HSC) since the turn of the nine-

teenth century, when it was realized that good dental health is essential if young children are to overcome various medical problems.

The department of dentistry at HSC has grown over the years and currently treats almost 20,000 patients a year, all of whom are either medically compromised or very young and afflicted with severe dental caries. About 15% of the patients are treated under general anesthesia. The department includes dental specialists in pediatric dentistry, orthodontics, oral and maxillofacial surgery, endodontics and periodontics.

HSC is affiliated with the University of Toronto's faculty of dentistry, and the academic linkages have promoted research and education at the graduate level. The pediatric dentistry program is the only English-speaking program in Canada. Graduate students treat patients with the most complex and rare of medical problems, cleft lip and

palate, craniofacial anomalies and traumatic injuries. This exposure provides them with sufficient experience to feel comfortable and competent treating pediatric dental patients with complex needs.

The need for pediatric dentists and residents with hospital experience is great in this country. Some provinces have so few hospital-trained dentists that the ratio of patients to dentist is staggering. There is a need for a second graduate training facility outside of Ontario to train more pediatric dentists than Toronto currently trains. The University of Manitoba is in the process of developing such a training facility.

*Dr. Doug Johnston  
Dentist-in-chief, The Hospital for Sick Children  
Director, Dental Services and Cleft Lip and Palate/Craniofacial Dental Program,  
Bloorview MacMillan Children's Centre  
Associate professor, University of Toronto*