Clinical Biochemistry Division, Hospital for Sick Children



The CSCC is pleased to announce that the first award for Innovations in Laboratory Medicine will go to the Hospital for Sick Children (HSC), Clinical Biochemistry Division, for their CALIPER (Canadian Laboratory

Initiative on Pediatric Reference Intervals) Project.

The CALIPER Project distinguishes itself through outstanding contributions to all three focus areas of this award including:

- Innovation in strategic planning and implementation of laboratory services based on best practices.
- Innovation in development of new laboratory programs.
- Promotion of a positive public image for laboratory medicine.

This initiative has been spearheaded by the Clinical Biochemistry Division at the HSC which has been instrumental in making this an overwhelmingly successful Canadian initiative capturing the attention of the international laboratory medicine community and affecting laboratory practice around the world. The letter of nomination for this award came from Dr. Khosrow Adeli and was supported by John Racher (Managing/Clinical Director, Department of Pediatric Laboratory Medicine).

Few recent innovations in laboratory medicine have so profoundly affected pediatric clinical biochemistry as the CALIPER Project. This project's chief aim is to provide reliable reference intervals for accurate interpretation of biochemical markers of pediatric disease. It sets out to fill major knowledge gaps in pediatric population reference values, and reduce the risk of erroneous interpretation of laboratory data and the resulting risk of misdiagnosis, unnecessary medical follow-up and/or treatment.

The initiative first began at the HSC but has continued in collaboration with several other pediatric healthcare centers in Canada. The work from the HSC has led to the recruitment of over 8,600 healthy community children and adolescents in the Greater Toronto Area, and has generated age and sex partitioned reference intervals for more than 85 biochemical markers so far. CALIPER is also working to transfer the calculated reference intervals to encompass all major clinical chemistry analyzers. The widespread applicability of CALIPER data is evidenced by the implementation of its reference intervals across many laboratories in Canadian and US hospitals, and through the adoption of CALIPER has considerably raised both national and international awareness of inappropriate reference intervals, and how the new reference interval database will improve laboratory medicine.

The CSCC recognizes the positive profile that CALIPER brings to laboratory medicine in Canada and the direct positive impact it has on patient care, and is therefore pleased to recognize the CALIPER Project and the Department of Pediatric Laboratory Medicine at the HSC with this prestigious award.