

## CST NEWS



Welcome to CST News. This newsletter is sent to all CST members and is posted on the CST Website. CST News is published three times a year by the Canadian Society of Transplantation. Views expressed in news and feature articles are those of the individuals quoted.

**CST Communication Committee:** John Gill, Patrick Luke, Vivek Rao, Chris Nguan and Martin Karpinski

**Information & Queries:** The Canadian Society of Transplantation • 774 Echo Drive • Ottawa ON K1S 5N8  
Tel.: 613-730-6274 • Fax: 613-730-1116 • E-mail: [cst@rcpsc.edu](mailto:cst@rcpsc.edu) • Website: [www.cst-transplant.ca](http://www.cst-transplant.ca)

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## CST 2009 ANNUAL SCIENTIFIC CONFERENCE IN BANFF, MARCH 5-8

The planning committee is very excited to update you on plans for the upcoming CST 2009 annual meeting. There will be 5 plenary sessions for the CST meeting, which will include successful programs from previous years, such as the ethics symposium and 2 scientific debates. One exciting change is the development of concurrent clinical sessions, which will be held on Friday morning. These will be for Lung, Heart, Liver and Kidney/Pancreas respectively, and will afford opportunity for speakers to present on organ-specific topics and to showcase abstracts of particular interest to each specialty area.

Pre-meeting programming features the CTA trainee day, SIG meetings and pediatric symposium on neonatal organ failure. This will also mark the second time the CST is co-hosting the AST winter symposium, and builds on the great success of the first joint meeting in 2005. The theme for the AST winter symposium is “Antibodies and Transplantation: Moving up from the B-list” and starts Wednesday, March 4th.

Parallel programs have been developed by the associate membership and Canadian Association of Transplantation respectively, which will offer sessions that will be of interest to the entire CST community. This will also include a program sponsored by the CST Pharmacist group that is open to all.

The Marginal Donors are back to entertain again this year, and the Gala dinner will feature the amazing illusions of Brian Michaels. Please visit the CST website for the full scientific program at [www.cst-transplant.ca](http://www.cst-transplant.ca). As always, there will be plenty of time set aside for winter fun as well! On behalf of the program committee, we look forward to seeing you all in Banff!

*Tom Blydt-Hansen, MD and  
Kathryn Tinckam, MD*

### Mission Statement – Canadian Society of Transplantation

1 It is the purpose of the Canadian Society of Transplantation to further all aspects of transplantation in Canada.

2 To provide and maintain a national professional forum for physicians and surgeons, scientists and others occupied in clinical and scientific aspects of transplantation.

3 To promote the educational and scientific advancement of the broad discipline of transplantation.

4 To study and to comment appropriately upon the impact of educational and scientific advances and of changing social and economic developments as they relate to the maintenance of high standards of patient care among its members.

5 To collaborate with other national and/or regional organizations having responsibilities or mutual interests related to the attainment of the Society's objectives.

## CANADIAN BLOOD SERVICES LAUNCHES THE FIRST NATIONAL ORGAN TRANSPLANT REGISTRY FOR CANADA

In late December, the Living Donor Paired Exchange (LDPE) Registry went “live” and is starting to be populated with candidates. The launch of this Registry became the first major deliverable of Canadian Blood Services’ new Organs and Tissues division.

Although the Registry is operational, there is still more work to be done before all Canadians can benefit from this very important advancement. The first match run involving pilot transplant programs in Ontario, Edmonton and Vancouver was scheduled for late January 2009. Match run results will be analyzed by a specialist working group to validate the matching algorithms. Shortly thereafter, the Canadian Blood Services registry team will assist other transplant programs to prepare for Registry participation, including the completion of Privacy Impact Assessments, information sessions for hospital staff and in-depth training for those who will be using the new LDPE Registry. However, the limiting factor in success is the number of pairs entered into the system. In the Netherlands, a country with a similar population to ours, there has been a high percentage of matches because of excellent participation. Thus, centres are encouraged to start screening pairs now.

Canadian Blood Services appreciates the foundational work contributed by the Kidney Working Group of the Canadian Society of Transplantation by developing recommended operating procedures for a Canadian LDPE Registry this past March. These recommendations, along with a matching algorithm program kindly supplied by Drs. Sommer Gentry, Dorry Segev and Robert Montgomery from Johns Hopkins

A living donor paired exchange registry is a database of medical information on incompatible donor-recipient pairs. Each pair consists of a patient with chronic kidney disease and someone who would like to donate a kidney to them, but cannot do so because they are ABO or HLA incompatible. At regular intervals, a mathematical algorithm is applied to the database to identify and optimize the number of compatible pairs that might be able to exchange donors so that both patients can receive a living donor kidney transplant.

University, were used as the starting point from which Canadian Blood Services developed a secure, web-accessible LDPE Registry. Many other individuals have supported the work done by Canadian Blood Services. Particularly instrumental were the physician LDPE Working Group of Dr. Ed Cole (chair), Dr. Patricia Campbell, Dr. John Gill, Dr. Peter Nickerson and Dr. Jeffrey Zaltzman, as well as the LDPE User Group of transplant coordinators and laboratory technologists from the three pilot provinces (Ruth McCarrell, Laura Sills, Teri Dahlgren, Erika Bryldt, Laura Shabada, Anne Halpin, Maureen Connelly, Michael Garrels, Chang-Ming Ng.)

Note: Kathy Yetzer is the national Canadian Blood Services Program Manager for the LDPE Registry. Kathy will provide support to users of the system and assist all sites with their planning, preparation and training for participation in the Registry. Kathy can be reached at [kathy.yetzer@blood.ca](mailto:kathy.yetzer@blood.ca) or 780-409-5656.

## CIHI ANNUAL REPORT AND CORR

A new report released on December 18th 2008, Treatment of End-Stage Organ Failure in Canada, 1997 to 2006, draws on data from the Canadian Organ Replacement Register (CORR) and examines dialysis, transplantation and organ donation characteristics and trends in Canada over a 10-year period. Among the findings of note this year, trends in lung transplantation were highlighted in the release.

The annual data report using CORR data shows that since the world’s first successful lung transplant was performed in Canada 25 years ago, the number of lung transplants performed annually has grown significantly. The number of lung transplants in Canada increased from 93 in 1997, to 171 in 2006, rising at a faster rate than solid organ transplants in general (up 29% over the same period). In total, 1,222 lung transplants were performed in this country between 1997 and 2006. Patients receiving double-lung transplants accounted for 75% of the procedures performed in 2006, a number that more than doubled since 1997 (from 52 to 129). Canada’s lung transplant experience is highly regarded internationally, and the country’s lung transplantation rate is 5.3 per million population (PMP), compared to 4.7 PMP in the United States and 2.9 PMP in France.

Not only has the number of surgeries performed increased, but over a similar time frame, the three-year survival rate for lung transplant recipients increased from 60% in 1997, to 80% in 2003.

CORR is a pan-Canadian information system for renal and extra-renal organ failure and transplantation in Canada and is managed by The Canadian Institute for Health Information (CIHI). For additional information go to [www.cihi.ca/corr](http://www.cihi.ca/corr), or contact [corr@cihi.ca](mailto:corr@cihi.ca).

## ANTIBODIES AND TRANSPLANTATION: MOVING UP FROM THE B-LIST – AST WINTER SYMPOSIUM 2009 – BANFF

Cognizant of the impact of alloantibodies in graft survival and the growing number of patients at risk for alloantibody-induced injury, the program committee of the 2009 Winter Symposium of the American Society of Transplantation (AST) chose humoral alloimmunity as the central topic of the meeting. This comprehensive symposium has been designed with translational research in mind, and will examine the B-cell response in transplantation from biology to clinical application.

The production of antibodies against Human Leukocyte Antigen (HLA) Class I and/or Class II molecules was identified over 30 years ago. In the dawn of solid-organ transplantation, antibodies against HLA and ABO antigens were identified as important immunological hurdles to early graft survival. For many ensuing years, however, the presence of alloantibody was deemed to be irrelevant to long term transplant outcomes in spite of the fact that the majority of series showed that allosensitization correlated with poor long-term outcomes and graft loss.

Over the past 10 years, thanks in part to the development of sensitive methods of detection and markers of antibody-induced endothelial injury such as C4d, alloantibodies have moved back to the forefront of transplant immunology. A growing body of experimental and clinical literature has shown their putative role in acute/chronic immune injury, as well as in tolerance to and accommodation of the allograft.

No longer considered an exclusive problem of kidney transplantation, antibody-mediated injury of solid-organ transplants will be discussed using a multi-organ approach with emphasis on clinical presentation, risk factors, histocompatibility, histological and molecular diagnosis, and modalities of treatment and their outcomes.

The current understanding of humoral alloimmunity, mechanisms of injury, and cytoprotection will be addressed by experts who will also speak to the gaps in knowledge. They will also discuss how a translational approach might resolve outstanding issues in the field such as accommodation and development of B- and plasma cell immunomodulatory agents.

The meeting will encourage scientific communication and attendees will present their research in abstract and poster formats. It will also serve as a forum for scientific discourse in which therapeutic interventions will be discussed and controversies debated.

In our quest to conquer immunologic failure and improve graft survival, we have returned to the beginning to find answers. Antibodies were relevant in the early stages of transplantation and remain relevant in the current era. Perhaps this understanding and change in perspective will generate the knowledge that will take us closer to our ultimate goal – successful long-term graft survival and function.

The CST website has recently been revised at [www.cst-transplant.ca](http://www.cst-transplant.ca). Over the past year, the CST communications committee has worked to identify deficiencies from the previous CST web presence. In the new site, additional functionality has been implemented in order to facilitate use for visitors and members alike. Navigation of the site is provided through the left column link hierarchy, which also includes new sections for Special Interest Groups, Jobs & Fellowships, etc.

A new server structure and site architecture allows CST members to perform online registration for the 2009 combined CST/AST annual meeting, as well as future annual meetings for CST. The new site also includes updated content reflecting “What’s New”, “Coming Events” in a calendar view, and an ongoing collection of resources for members. As the new website presents the society’s information in a new format, we invite the CST membership to evaluate the new site with suggestions about how the site can be improved, how it may be used as a communication tool for members, or if should play a role in facilitating nationwide collaborative research.

### DR. WILLIAM WALL

Dr. William Wall has been awarded the Canadian Society of Transplantation Lifetime Achievement Award in 2009. This is the Society’s highest award and the decision of the Awards Committee was based both on Dr. Wall’s significant contributions to transplantation and to his continued important work in the support of scientific research in Canada. Previous winners have been Dr. Allan MacDonald, Dr. Ron Guttman, Dr. Suren Sehgal, Dr. Calvin R. Stiller, Dr. Pierre Daloze, Dr. Phil Halloran, Dr. Carl Cardella, Dr. Robert Zhong and Dr. David Rush.

Dr. William Wall has also been appointed to the Order of Canada by the Governor General. Dr. Wall is a faculty member in the Schulich School of Medicine & Dentistry (Department of Surgery) at Western, and he was recognized for his contributions to the development and advancement of liver transplantation in Canada, and for promoting awareness of the need for organ donation at London Health Sciences Centre.



# CANADIAN SOCIETY OF TRANSPLANTATION

## ACCREDITATION STANDARDS FOR ORGAN AND TISSUE DONATION AND TRANSPLANTATION

In 2006, Accreditation Canada began developing accreditation standards for organ and tissue donation and transplantation in response to requests from organizations across the country. An essential part of the standards' development was a focus group discussion with pan-Canadian stakeholders—the Trillium Gift of Life Network, British Columbia Transplant Services, Canadian Council for Donation and Transplantation (CCDT), Québec Transplant, and the Canadian Healthcare Association (CHA). Funding for the project was initially secured from CCDT and Trillium Gift of Life, and supplemented by Canadian Blood Services (CBS) when CCDT's mandate was transferred to them.

Since March 2006, a number of activities have taken place. An Organ and Tissue Donation and Transplantation (OTDT) Advisory Committee with national representation, including Health Canada and the Canadian Standards Association, was established. This expert panel guides the development of the standards. An international comparative literature review for OTDT-specific performance measures was conducted, followed by a national web-based consultation. Drafts of both the donation and the transplantation standards were produced and are being reviewed for accuracy and applicability by the Advisory Committee. In collaboration with Advisory Committee members, Accreditation Canada's Emergency Department Services and Critical Care Services standards were enhanced to incorporate key donation and transplantation components.

Preparations are underway to pilot test both the donation and the transplantation standards in spring 2009. Test sites include the University of Alberta Hospital (Edmonton), Winnipeg Health Sciences Centre, University Health Network (Toronto), The Hospital for Sick Children (Toronto), McGill University Health Centre (Montreal), and Saint John Regional Hospital.

A focus group discussion will be held in spring 2009 with field experts to seek input on the standards. In addition, the standards will be shared within a national consultation process. This web-based consultation will provide Accreditation Canada

with a large volume of valuable feedback from organizations. After the OTDT standards are finalized, they will be approved by Accreditation Canada's Board of Directors in May 2009. Accreditation Canada provides health care organizations with a voluntary, external peer review to evaluate and improve the quality of their services. Accreditation examines activities and services and assesses them against standards of excellence. "Organ and tissue donation and transplantation is a crucial area in health care. Including this new component in our accreditation program will result in more definitive steps being taken to improve our rates of donation and transplantation in Canada," says Wendy Nicklin, Accreditation Canada's President and CEO.

Literature shows that accreditation enhances patient safety through effectively managing and mitigating clinical and safety related risks, and contributes to ensuring an acceptable level of quality. Accreditation provides a framework that assists in creating and implementing systems and processes to improve operational effectiveness and enhance positive health outcomes.

Accreditation Canada looks forward to participating in CST's 2009 Annual Scientific Conference in Banff in March 2009. Please drop by and visit us at our booth.

For more information on the organ and tissue donation and transplantation standards, please contact Mireille Cyr-Hansen at [PartnershipContracts@accreditation-canada.ca](mailto:PartnershipContracts@accreditation-canada.ca).

Accreditation Canada, formerly the Canadian Council on Health Services Accreditation, is a not-for-profit, independent organization that provides national and international health and social service organizations with a voluntary, external peer review to assess the quality of their services based on standards of excellence. Accreditation Canada's programs and guidance have been helping organizations strive for excellence for more than 50 years.

### DR. ATUL HUMAR

Dr. Humar has received a Top 40 Under 40 Award for his innovations in reducing the chance of infection following transplants. In boosting the prognosis for patients undergoing this common and frequent procedure in Canada, he has made great strides in maximizing patient safety in his field of specialization.

Congratulations to Dr. Humar!

