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## CURRICULUM VITAE

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## EDUCATION

1967 - 1969 Honours Arts, University of Toronto, Toronto, Ontario

1973 - 1977 M.D. (Honours), University of Toronto, Toronto, Ontario  
1977 - 1978 Toronto East General Hospital, Toronto, Ontario,  
Rotating Internship

1980 - 1984 Dalhousie University, Halifax, Nova Scotia,  
Resident - General Surgery

1983 - 1984 Victoria General Hospital, Halifax, Nova Scotia,  
Chief Resident, General Surgery

1984 FRCS(C), General Surgery

1985 - 1987 Research Fellowship, McGill University, Montreal, Quebec  
Supervisor(s): Dr. J.L. Meakins  
Subject: Surgical infections and immunobiology

1990 FACS

## **UNIVERSITY AND HOSPITAL APPOINTMENTS**

1987 - 1990	Assistant Professor, Department of Surgery, Dalhousie University, Halifax, Nova Scotia
1989 - 1990	Assistant Professor, Department of Microbiology, Dalhousie University,
1990 - 1995	Assistant Professor, Department of Surgery, University of Toronto, Toronto
1995 - 2000	Associate Professor, Department of Surgery, University of Toronto,
2000 -	Professor, Department of Surgery, University of Toronto
1979 - 1980	Emergency Room Physician, Toronto East General Hospital, Toronto, Ontario
1987 - 1990	Attending Surgeon, Victoria General Hospital, Halifax, Nova Scotia
1990 - 1995	Associate Director, Surgical Intensive Care Unit, The Toronto Hospital, Toronto, Ontario
1990 - 2005	Active Staff, Toronto General Hospital, University Health Network, Toronto,
2005 -	Active Staff, St. Michael's Hospital, Toronto, Ontario
1995 - 2004	Director of Research, Medical/Surgical Intensive Care Unit, University Health Network, Toronto, Ontario
2003 - 2005	Head, Division of Clinical Investigation and Human Physiology, Toronto General Research Institute, University Health Network
2005 – Present	Director of Critical Care Research, St. Michael's Hospital, Toronto, Canada
2017 – Present	Co-director, Critical Illness and Injury Research Centre, Keenan Research Centre for Biomedical Science, St. Michael's Hospital, Toronto, Canada

### **Other Appointments**

1970 - 1972	Motion Picture Editor, Cinera Productions, Toronto, Ontario
1972 - 1975	Film Editor and Director, Freelance, Toronto, Ontario

1978 - 1980            Occupational Health Education Consultant, Ontario Federation of Labour,  
Toronto, Ontario

## PUBLICATIONS

1. Domovich E, Berger P, Wawer M, Etlin D, **Marshall J**: Human torture: Description and sequelae of 104 cases. *Can. Fam. Phys.* 1984; 30: 827-830.
2. Carrico CJ, Meakins JL, **Marshall JC**, Fry DE, Maier RV: Multiple-organ-failure syndrome: The gastrointestinal tract: The 'motor' of MOF. *Arch. Surg.* 1986; 121:196-208.
3. MacPhee MJ, Zakaluszny I, **Marshall J**, Rode HN, Puyana JC, Meakins JL, Gordon J, Christou NV: MLC supernatants provide effective immunotherapy for intraperitoneal sepsis in immunosuppressed rats. *Surg. Forum* 1986; 37:105-107.
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7. Fried LA, LeBrun GP, Norman RW, Fraser DB, Taylor MC, Roy PD, **Marshall JC**: Extracorporeal shock-wave lithotripsy in the management of bile duct stones. *Am. J. Radiol.* 1988; 151:923-926.
8. **Marshall JC**, Christou NV, Horn R, Meakins JL: The microbiology of multiple organ failure: The proximal GI tract as an occult reservoir of pathogens. *Arch. Surg.* 1988; 123:309-315.
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11. **Marshall JC**, Rode H, Christou NV, Meakins JL: In vivo activation of Kupffer cells by endotoxin causes suppression of non-specific, but not specific systemic immunity. *Surg. Forum* 1988; 39:111-113.
12. Taylor MC, **Marshall JC**, Fried LA, LeBrun GP, Norman RW: Extracorporeal shock wave

lithotripsy (ESWL) in the management of complex biliary tract stone disease. *Ann. Surg.* 1988; 208:586-592.

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15. **Marshall JC**: The ecology and immunology of the GI tract in health and critical illness. *J. Hosp. Infect.* 1991; 19(C):7-17.

16. **Marshall JC**: Prophylaxis of deep venous thrombosis and pulmonary embolism. *Can. J. Surg.* 1991; 34:551-554.

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20. ACCP-SCCM Consensus Conference (**Marshall JC**): Definitions of sepsis and organ failure and guidelines for the use of innovative therapies in sepsis. *Crit. Care Med.* 1992; 20:864-874.

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84. **Marshall JC**: The gastrointestinal flora and its alterations in critical illness. *Curr. Opin. Crit. Care* 1999; 5:119-125.
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100. Taneja R, **Marshall JC**: Vasoactive agents and the gut: Fuelling the motor of multiple organ failure. *Crit. Care Med.* 2000; 28:3107-3108.
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### **Books Edited**

1. **Marshall JC** Cohen J (Eds) *Immune Response in the Critically Ill*. Volume 31 in the series, *Update in intensive care and emergency medicine*. Springer-Verlag, Berlin, Heidelberg, New York, 2000
2. Schein M, **Marshall JC** (Eds) *Source Control: Principles and Practice in the Management of Surgical Infection*. Springer-Verlag, Berlin, 2002

### **Letters to Editor**

1. Van Saene HKF, Stoutenbeek CP, **Marshall JC**: Selective digestive decontamination in critically ill patients. *Crit. Care Med.* 23:601-602, 1995.
2. **Marshall JC**, Cook DJ, Christou NV, Bernard GR, Sprung CL, Sibbald WJ: Multiple organ dysfunction score. *Crit. Care Med.* 24:1272, 1996.
3. **Marshall JC** The most compelling lesson of September 11. *CMAJ* 2002
4. Panacek EA, **Marshall J**, Kaul M, Albertson T, Lemeshow S: MONARCS: Statistical or clinical meaning? *Crit. Care Med.* 2005; 33(9):2144-2146.
5. Vincent JL, Opal SM, **Marshall JC**, Tracey KJ: Sepsis definitions: Authors'reply. *Lancet* 2013; 381(9885):2250.
6. Vincent JL, Takala J, Moreno RP, Sakr Y, **Marshall JC**: The Richmond Agitation-Sedation Scale Should Not Be Used to Evaluate Neurologic Function. *Crit. Care Med.* 2016; 44(6):e450
7. **Marshall JC**, Murthy S, Diaz J: Fungal infections should be part of the core outcome set for COVID-19 - Authors' reply. WHO Working Group on the Clinical Characterisation and Management of COVID-19 infection. *Lancet Infect Dis.* 2020 Dec 7:S1473-3099(20)30681-2.

## Abstracts

1. MacPhee M, Zakaluszny I, **Marshall JC**, Rode H, Christou NV, Puyana JC, Meakins JL, Gordon J: Mixed lymphocyte culture (MLC) supernatants: Effective immunotherapy for acute peritonitis in immunosuppressed rats. *World Congress of Immunology, Proceedings* 1986.
2. **Marshall JC**, Laporte L, Christou NV, McLean APH, Forse RA, Tin L, Shizgal HA, Meakins JL: Secondary infection in critical surgical illness: The role of endogenous pathogens. *Royal College of Physicians and Surgeons of Canada*, 1986.
3. **Marshall JC**, Giannias B, de Santis M, Meakins JL: Aspiration pneumonia in the ICU patient is a bacterial pneumonia. *Clin. Invest. Med.* 1987; 10(B61).
4. **Marshall JC**, Rode H, Eshelby D, Meakins JL, Christou NV: Specific and non-specific immunity in the response to Pseudomonas infection following thermal injury. *Can. J. Surg.* 1987; 30: 300.
5. **Marshall JC**, Laporte L, McLean, Christou NV, Meakins JL: ICU-acquired infection: Microbiology and determinants of susceptibility. *Crit. Care Med.* 1988; 16: 426.
6. Taylor MC, **Marshall JC**, LeBrun PB, Fried LA, Norman RW: Extracorporeal shock wave

lithotripsy (ESWL): A valuable adjunct in the management of difficult biliary tract calculi. *Can. J. Surg.* 1988; 31: 284.

7. **Marshall JC**, Sutherland J, Kuehn R, Prent G: Suppression of in vitro spleen cell proliferation following in vivo Kupffer cell activation. *J. Leuk. Biol.* 1989; 46:326-327.
8. **Marshall JC**, Sutherland J, Christou N, Meakins J: The effects of in vivo Kupffer cell activation on cell-mediated immunity and resistance to bacterial infection. *5th World Congress of Intensive and Critical Care Medicine, New York. Intensive and Critical Care Medicine* 1990: p. 1111.
9. **Marshall JC**, Sweeney D, Roy PD, Allen CTB, Hall RI, Morrison D: The multiple organ failure (MOF) score: Correlation with mortality and infectious morbidity. *5th World Congress of Intensive and Critical Care Medicine, New York. Intensive and Critical Care Medicine* 1990: pp 1063-1064.
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22. **Marshall JC**, Watson RWG, Rotstein OD, Jimenez MF, Nathens AB, Parodo J: Alterations in Fas-induced apoptosis following neutrophil migration and activation. *J. Leuk. Biol.* 1996; 60 (Suppl): 39.
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  34. Foster DM, Steinberg M, Granton J, **Marshall JC**: The screen log: A tool for monitoring critical care clinical research activity. *Crit. Care* 1998; 2 (Suppl):85.
  35. Heyland DK, Cook DJ, **Marshall J**, Heule M, Guslits B, Lang J, Jaeschke R, for the Canadian Critical Care Trials Group: The clinical utility of invasive diagnostic techniques in the setting of ventilator-associated pneumonia. *Crit. Care Med.* 1999; 27(Suppl):A161.
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  40. Taneja R, Kapus A, Li, Y, Parodo J, **Marshall JC**: Delayed neutrophil (PMN) apoptosis is associated with increased mitochondrial membrane potential and preservation of cytochrome c in experimental and clinical sepsis. *Crit. Care Med.* 27:A37, 2000.
  41. **Marshall JC**, Panacek EA, Teoh L, Barchuk W: Modelling organ dysfunction as a risk factor, outcome, and measure of biologic effect in sepsis: Results of the MONARCS trial. *Crit.Care Med.* 28:A46, 2001.
  42. Jia S-H, Parodo J, Li Y, Fan L, **Marshall JC**: Pre-B cell enhancing factor (PBEF) inhibits apoptosis in inflammatory neutrophils (PMN) *J.Leuk.Biol.* S27-28, 2001.

(Truncated in 2001)

## SCIENTIFIC PRESENTATIONS

### Invited Presentations

1. International Conference on Carcinogens and Mutagens in the Environment and Workplace, Vancouver, British Columbia, 1984. Improvements for worker protection.
2. Controversies in Abdominal Surgery, Vienna, Austria, Nov. 1987. Peritoneal lavage in peritonitis: The case against the use of antibiotic lavage.
3. Glaxo Seminar in Orthopaedics, Orlando, Florida, May 1988. Surgery as immunomodulation in the orthopaedic patient.
4. Trauma Association of Canada/Royal College of Physicians and Surgeons of Canada, Edmonton, Alberta, Sept. 1989. New perspectives on sepsis and infection in the victim of multiple trauma.
5. University of Alberta Annual Critical Care Day, Edmonton, Alberta, Dec. 1989. Sepsis, infection and the pathogenesis of multiple organ failure.
6. Merck Frosst Medical Advisory Committee, Washington, D.C., May 1990. ICU-acquired pneumonia.
7. Refresher Course in Critical Care, Banff, Alberta, June 1990. The gut-liver axis in multiple organ failure.
8. International Congress on Infectious Diseases, Montreal, Quebec, July 1990. Does selective gut decontamination reduce multiple organ failure?
9. Hospital Infection Society, London, England, Sept. 1990. Microbial ecology and immunology of the GI tract in health and critical illness.
10. Grand Rounds, Queen Elizabeth Hospital, Charlottetown, Prince Edward Island, Sept. 1990. Multiple organ failure.
11. Royal Liverpool Hospital, Liverpool, United Kingdom, Sept. 1990. Perspectives on the GI tract in multiple organ failure.
12. Canadian Association of General Surgeons, Toronto, Ontario, Sept. 1990. Prophylaxis of deep venous thrombosis and pulmonary embolism.
13. American College of Chest Physicians, Toronto, Ontario, Oct. 1990. Multiple organ failure:

Clinical management.

14. American College of Surgeons Clinical Congress, San Francisco, California, Oct. 1990. Tertiary peritonitis.
15. Grand Rounds, Etobicoke General Hospital, Etobicoke, Ontario, Jan 1991. Management of complex surgical infections.
16. Immune Consequences of Trauma, Shock and Sepsis, Munich, Germany, Mar. 1991. (1) Gut barrier failure and systemic infection, (2) The gut-liver axis in multiple organ failure.
17. Merck Frosst Advisory Committee, Marina del Ray, Florida, Mar. 1991. The GI tract in multiple organ failure.
18. Grand Rounds, Humber Memorial Hospital, Toronto, Ontario, Apr. 1991. Multiple organ failure.
19. Grand Rounds, Mississauga General Hospital, Mississauga, Ontario, May 1991. Infection in the critically ill.
20. Canadian Association of General Surgeons, Postgraduate Course on Surgical Infections, Quebec City, Quebec, Sept. 1991. (1) The case against blind laparotomy, (2) The case for selective decontamination of the digestive tract.
21. The Doctors Hospital, Toronto, Ontario, Dec. 1991. Management of complex surgical infections.
22. Foothills Hospital, Calgary, Alberta, Dec. 1991. Modulation of systemic immunity by gut-liver interactions.
23. Surgical Grand Rounds, Ottawa General Hospital, Ottawa, Ontario, Dec. 1991. Multiple organ failure.
24. Calgary Society of Surgeons, Calgary, Alberta, Dec. 1991. The surgeon in the ICU.
25. Bathurst, New Brunswick, Jan. 1992. Infection: New perspectives on an old problem.
26. 12th International Symposium on Intensive Care and Emergency Medicine, Brussels, Belgium, Mar. 1992. Multiple organ failure: Sepsis, infection, and altered immunity.
27. Round Table Symposium on the Mediators of Sepsis, Brussels, Belgium, Mar. 1992. The gut-liver axis in multiple organ failure.
28. Bermuda Surgical Society, Bermuda, Apr. 1992. Advances in the management of infection in the critically ill surgical patient.
29. Annual Residents' Research Day, Dalhousie University, Halifax, Nova Scotia, May 1992.

How do we know that we know what we know? The role of research in surgery.

30. 2nd International Congress on the Prevention of Infection, Nice, France, May 1992. The liver and immunologic homeostasis in multiple organ failure.
31. Canadian Association of General Surgeons - Trauma Association of Canada Symposium on Trauma, Ottawa, Ontario, Sept. 1992. Prevention of multiple organ failure following trauma.
32. American College of Surgeons Surgical Forum, New Orleans, Louisiana, Oct. 1992. Chair, Critical Care IV Cytokines.
33. Hamilton Regional Critical Care Rounds, Hamilton, Ontario, Feb. 1993. Multiple organ dysfunction syndrome: Epidemiology and risk factors.
34. Society of Critical Care Medicine, Lake Tahoe, California, Mar. 1993. Fluid therapy: Is there still a controversy?
35. The Measure of Success: Severity of Illness and Quality of Care, Cleveland, Ohio, Apr. 1993. Prognostication versus biology: Outcome measures in critical illness.
36. 6th World Congress on Intensive and Critical Care Medicine, Madrid, Spain., June 1993. (1) Multiple organ failure: Infection, sepsis, and altered immunity. (2) Infection and the septic response in critical illness. (3) The gut-liver axis in multiple organ failure. (4) Scoring systems for sepsis and multiple organ failure.
37. Hospital Gregorio Maranon, Madrid, Spain, June 1993. Multiple organ failure and the gastrointestinal tract.
38. University of Miami, Miami, Florida, Nov. 1993. Altered gut flora and morbidity following multiple trauma: The potential role of selective decontamination of the digestive tract (SDD).
39. International Steglitz Symposium, Berlin, Germany, Feb. 1994. A scoring system for the multiple organ dysfunction syndrome (MODS).
40. International Congress on the Immune Consequences of Trauma, Shock, and Sepsis, Munich, Germany, March 1994. (1). MODS, sepsis, and SIRS: Consensus, controversy, and confusion, (2). Regulation of systemic immunity by gut-liver interactions.
41. Round Table Conference on Clinical Trials for Treatment of Sepsis, Brussels, Belgium, March 1994. Descriptors of organ system dysfunction for the multiple organ dysfunction syndrome (MODS).
42. International Symposium on Intensive Care and Emergency Medicine, Brussels, Belgium, March 1994. (1). Sepsis: Is the problem the bacterium or the host?, (2). Severity scoring systems for outcome from multiple organ failure, (3). The liver as an immunoregulatory organ, (4). The acute abdomen in the ICU.

43. Bicon Conference on Chemotherapy of Infectious Diseases and Malignancies, Salzburg, Austria, March 1994. Prevention of ICU-acquired infection.
44. Critical Care Physiology Course, University of Calgary, Calgary, Alberta, April 1994. (1). The gut in sepsis, (2). Systemic septic response/MOSF.
45. Royal College of Physicians & Surgeons of Canada, Toronto, Ontario, Sept. 1994. Conjoint Symposium on Abdominal Catastrophes in the ICU. The gut in critical illness: What do we really know?
46. European Society of Intensive Care Medicine - Working Group on Sepsis, Paris, France, Nov. 1994. Description of the multiple organ dysfunction syndrome by a numeric score.
47. Fourth Annual Trauma Day, McMaster University, Hamilton, Ontario, Nov. 1994. Nosocomial infection and the multiple organ dysfunction syndrome following trauma: New approaches to prevention and therapy.
48. 5th Vienna Shock Forum, Vienna, Austria, May 7 1995. The liver as an organ of immune homeostasis in trauma and critical illness.
49. Queensway Hospital, Clinical Day, Toronto, Ontario, May, 1995. Intraabdominal Infection: An Update.
50. Canadian Surgical Biology Club, Montreal, Quebec, Sept. 1995. TGF-*B* as a counterinflammatory mediator in the gut-liver axis.
51. 5th Uruguayan Congress of Intensive Care Medicine, Montevideo, Uruguay, Oct. 1995. (1) Measuring the severity of organ dysfunction as an outcome in critical illness, (2) The gut-liver axis in critical illness, (3) Red cell transfusion: How much is enough?, (4) Continuous renal replacement therapy in SIRS and MODS?
52. DCIEM: Sepsis and Septic Complications, Toronto, Ontario, Oct. 1995. The gut in critical illness: Evidence in humans.
53. Surgical Infection Rounds, Victoria Hospital, London, Oct. 1995. (1) Mediator-directed strategies in sepsis: Current status, (2) The multiple organ dysfunction syndrome.
54. Surgery Grand Rounds, Ottawa General Hospital, Ottawa, Ontario, Nov. 1995. Modulation of the inflammatory mediator response in sepsis.
55. Ontario Thoracic Society, Toronto, Ontario, Feb. 1996. The multiple organ dysfunction syndrome.
56. Update in Critical Care, Halifax, Nova Scotia, March 1996. (1) Management of complex intraabdominal infections. (2) Mediator-directed therapy in sepsis.
57. Roundtable Conference on Gut Dysfunction in Critical Illness, Brussels, Belgium, March

1996. Gut dysfunction in critical illness: Definitions and prevalence.
58. 16th International Symposium on Intensive Care and Emergency Medicine, Brussels, Belgium, March 1996. (1) ICU-acquired infection: Microbiology and risk factors. (2) The gut as a counterinflammatory organ. (3) Rapid assay of endotoxin in the ICU. (4) Sepsis and organ dysfunction in critical illness.
  59. Symposium on the Inflammatory Response and its Implications for the Surgical Patient., Copenhagen, Denmark, May 1996. Evaluation of organ dysfunction in the critically ill surgical patient.
  60. IBC's 6th International Symposium on Sepsis, Cambridge, MA, June 1996. Outcome measures for clinical trials in sepsis.
  61. 3rd International Course on Advances in Critical Care Medicine, Quito, Ecuador, July 1996. 1. Cardiovascular dysfunction in septic shock. 2. Sepsis and SIRS: Changing concepts, changing definitions. 3. The multiple organ dysfunction syndrome. 4. Clinical management of sepsis and SIRS.
  62. Research Development Committee of the Canadian Association of Surgical Chairs, Royal College of Physicians and Surgeons, Halifax, Nova Scotia, Sept. 1996. Industry-funded fellowships.
  63. Critical Care Medicine Residents' Day. Royal College of Physicians and Surgeons of Canada, Halifax, Nova Scotia, Sept. 1996. The multiple organ dysfunction syndrome.
  64. Toronto Critical Care and Trauma Symposium, Toronto, Ontario, Oct. 1996. 1. Outcome measures for clinical trials in sepsis. 2. The multiple organ dysfunction (MOD) score.
  65. Postgraduate Course: Pre and postoperative critical care. American College of Surgeons, San Francisco, CA, Oct. 1996. Guidelines for the management of sepsis and SIRS.
  66. Royal College of Surgeons of Ireland/Beaumont Hospital, Dublin, Ireland, Oct. 1996. The gut and the surgeon.
  67. Waterford October Surgical Club, Waterford, Ireland, Oct. 1996. Mediator-directed therapy in clinical sepsis: challenges and prospects.
  68. Alder Hey Childrens' Hospital, Liverpool, England, Oct. 1996. Inflammation, not infection, determines outcome in critical illness.
  69. 5th Organ Failure Academy/7th APICE Meeting, Trieste, Italy, Nov. 1996. Critical questions for consensus-based scoring of the multiple organ dysfunction syndrome (MODS).
  70. Society of Critical Care Medicine, 26th Educational and Scientific Symposium, San Diego, CA, Feb. 1997. Outcome measures for clinical trials in sepsis.

71. 4th International Congress on the Immune Consequences of Trauma, Shock, and Sepsis., Munich, Germany, March 1997. 1. The multiple organ dysfunction (MOD) score. 2. The "two-hit" hypothesis: Infection. 3. The gut as a counterinflammatory organ. 4. Target populations for sepsis trials.
72. 17th International Symposium on Intensive Care and Emergency Medicine, Brussels, Belgium, March 1997. 1. Outcome measures for clinical trials in sepsis. 2. The gut in critical illness. 3. The multiple organ dysfunction score. 4. Apoptosis in the resolution of systemic inflammation.
73. Colombian Surgical Society, Bogota, Colombia, April 1997. 1. The intestinal hypothesis in the critically ill patient. 2. Guidelines for the management of sepsis and septic shock 3. Immunomodulation in sepsis: Present and future.
74. Surgical Infection Society, Pittsburgh, PA, May 1997. Evaluation of surgical source control in clinical trials in infection and sepsis. Chair.
75. 7th World Congress of Intensive Care and Critical Care Medicine, Ottawa, July 1997. The multiple organ dysfunction score... and beyond.
76. DCIEM Symposium- Immune Responses to Inflammation and Trauma: A Physical Training Model, Toronto, July 11, 1997. The gut as a trigger of exercise-induced inflammatory responses.
77. University of Massachusetts, Worcester MA, July 29, 1997. The multiple organ dysfunction syndrome. Vignettes from the evolution of an idea.
78. First International Congress on Infectious Critical Pathology, Rosario, Argentina, Aug 24-27, 1997. 1. The multiple organ dysfunction score in surgical sepsis. 2. The gut as a counter-inflammatory organ. 3. The systemic inflammatory response syndrome. 4. The gut-liver-lung axis in critical illness. 5. Modulation of the host response in sepsis. 6. ICU-acquired infections: Microbiology and risk factors.
79. 2nd Annual Sunnybrook Gut Club Retreat, Niagara-on-the-Lake, Sept. 6, 1997. Acute pancreatitis: Management update.
80. Royal College of Physicians and Surgeons of Canada, Post-graduate course- Update in critical care, surgical sepsis, and nutrition, Vancouver BC, Sept 25, 1997. Management of the septic patient- new modalities.
81. American College of Surgeons. Papers Session, Chicago IL, Oct. 16,1997. Discussion: The first randomized trial of human polymerized hemoglobin as a blood substitute in trauma and surgery
82. Mexican Association of General Surgery, Acapulco, Mexico, Nov 3-7, 1997. 1. Early enteral feeding of patients with GI fistulae 2. Apoptosis and inflammation for the surgeon 3. The gut and the surgeon 4. Management of necrotizing soft tissue infections 5. Critical care

surgery 6. Guidelines for the management of septic shock

83. Toronto Critical Care Symposium, Toronto, Ontario, Nov 14-16, 1997. 1. Apoptosis and the resolution of systemic inflammation 2. Does mediator-directed therapy have a future? 3. Current status of TNF antagonism in sepsis.
84. Society of Critical Care Medicine, San Antonio Texas, Feb 5, 1998. Tertiary peritonitis
85. 3rd International Symposium on Infections in Critically Ill Patients. Barcelona, Spain, Feb 13, 1998. The gut-liver axis in critical illness
86. 25th Annual Meeting of the Japanese Society of Intensive Care Medicine, Tokyo, Japan, March 4-7, 1998. 1. Cytokine regulation of neutrophil apoptosis 2. The Multiple Organ Dysfunction (MOD) Score 3. The future of intensive care medicine: A surgeon's perspective.
87. 18th International Symposium on Intensive Care and Emergency Medicine, Brussels, Belgium, March 17-20, 1998. 1. Management of complex gastrointestinal fistulae. 2. Modulation of neutrophil survival by inflammatory mediators. 3. Does antimicrobial therapy alter the outcome of nosocomial ICU-acquired infection? 4. Preclinical models of sepsis. 5. Organ dysfunction and mortality as outcome measures in sepsis trials.
88. University of Alberta, General Surgery Research Day, Visiting Professor, Edmonton, Alberta April 18, 1998. Asking questions.
89. SIS Roundtable Working Group on the Evaluation of Surgical Source Control in Clinical Trials of Intra-abdominal Infection New York NY, May 2,3, 1998. Chair; Overview of the concept of surgical source control.
90. University of Manitoba, General Surgery Research Day, Visiting Professor, Winnipeg Manitoba, May 20, 1998. 1. New perspectives on the life and death of cells and patients. 2. Questioning the answers.
91. McMaster University Department of Surgery Research Day, Visiting Professor, Hamilton Ontario, October 9, 1998. From concepts to syndromes to diseases: the challenges of sepsis research.
92. American College of Surgeons 84th Annual Clinical Congress, Orlando FL, Oct 26-28, 1998. Postgraduate Course in Surgical Infections. 1. Chair, Infection in the ICU. 2. Antibiotics in acute pancreatitis: The case against.
93. Toronto Critical Care Medicine Symposium, Toronto, October 30- November 1, 1998. 1. Introductory address, Workshop on Clinical Research in the ICU: Creating a culture of clinical research. 2. Rethinking the entry criteria for sepsis trials. 3. Can we stage systemic inflammation?
94. 3rd International Congress on Intensive and Critical Care Medicine, Guayaquil, Ecuador,



- November 16,17 1998. 1. Colloids or crystalloids- Which is better? 2. Endotoxemia in the critically ill patient. 3. Sepsis and SIRS: New insights. 4. Current prospects for endotoxin-directed therapies. 5. Why have sepsis trials failed?
95. 7th APICE meeting and meeting of the Organ Failure Academy, Trieste, Italy, November 20, 1998. 1. Neutrophil apoptosis and the resolution of systemic inflammation. 2. Does the MOD score help the doctor, the patient, or both? 3. Rapid assay of endotoxin in the ICU.
  96. Vancouver Health Sciences Centre, Vancouver, BC. Dec.9,10, 1998. 1. Advances in the management of acute pancreatitis. 2. Why do sepsis trials fail?
  97. Society of Critical Care Medicine 28th Educational and Scientific Symposium, San Francisco, CA. Jan. 23-27, 1999. 1. Tertiary peritonitis. 2. Daybreak Symposium on Lessons from Sepsis Trials- Putting our knowledge to use: Initiatives of the International Sepsis Forum (ISF). 3. Stress ulcer prophylaxis: Current status. 4. Strategies to prevent MODS/MOF in acute lung injury. 5. We should revise the 1992 definition of sepsis consensus statement: CON. 6. The challenge for clinical trials- Roundtable.
  98. Critical Care Advisory Meeting, Key West FL. March 6,7, 1999. Do transfusions kill?
  99. Roundtable Conference on the Immune Response in the Critically Ill, Brussels, Belgium. March 13-15, 1999. Co-chair. Apoptosis and the Immune Abnormalities of Critical Illness.
  100. 19th International Congress of Intensive Care and Emergency Medicine, Brussels, Belgium, March 16-19, 1999. 1. Report from the Roundtable Conference on the Immune Response in the Critically Ill. 2. Neutrophils as dynamic markers of systemic inflammation. 3. Surgical management of severe acute pancreatitis. 4. Ongoing challenges of clinical trials in sepsis. 5. Is there a surgeon in the ICU?
  101. Surgical Infection Society 19<sup>th</sup> Annual Meeting; Seattle WA May 1, 1999 Outcome measures for clinical trials in sepsis.
  102. 11th International Symposium of Intensive Care Medicine, Istanbul, Turkey, May 14,15 1999. The gut in critical illness.
  103. Fourth International Shock Congress, Philadelphia, PA, June 14, 1999. Are SIRS and MODS important entities in the clinical evaluation of patients?
  104. Infection and Host Responses in Critical Illness; Lago Maggiore, Italy, July 10, 1999. Mediator-directed therapy in sepsis: What have we learned?
  105. Canadian Association of General Surgeons, Montreal, Que. Sept 24, 1999. Preparing for a career in academic surgery. Panel Co-chair
  106. Lister Prize presentation, University of Toronto. Oct. 1, 1999. From apoplexy to apoptosis: Evolving insights in the biology of sepsis.

107. Surgical Infection Society- Europe Post-graduate course in surgical infections. Halle, Germany, Oct 3-5, 1999. 1. The multiple organ dysfunction syndrome. 2. Pulmonary failure. 3. Workshop- Source control in intra-abdominal infection.
108. Toronto Critical Care Medicine Symposium, Toronto, Oct 28-30, 1999. 1. Clinical research in sepsis: What have we learned? 2. The gut in multiple organ failure.
109. Margaux Conference on Critical Illness, Margaux, France, Nov 11-13, 1999. Therapeutic implications of anticoagulation mediator replacement in sepsis and DIC
110. 7th Vienna Shock Forum, Vienna, Austria, Nov 14-16, 1999. Host microbial interactions in critically ill patients.
111. 8th APICE and meeting of the Organ Failure Academy, Trieste, Italy, Nov 18,19 1999. Clinical trials in sepsis. Current status and the lessons learned.
112. 8th Winter Symposium on Intensive Care Medicine, Grindelwald, Switzerland, Feb 6-10, 2000. 1. Clinical trials in sepsis: Have we failed and how can we do better? 2. The multiple organ dysfunction syndrome 3. Apoptosis: What is it, and why is it important for the intensivist? 4. The immune response in critical illness. Panels: 1. How to run the ICU as an enterprise. 2. Essential monitoring in severe sepsis. 3. Clinical trials in the ICU: How much can we expect?
113. Society of Critical Care Medicine, 29th Educational and Scientific Symposium, Orlando, FL Feb 11-15, 2000. 1. Organ dysfunction in ARDS: Incidence, prevention, and management 2. The optimal hematocrit in the critically ill: Lower 3. Organ dysfunction as an outcome in sepsis trials. 4. Pro- and anti-inflammatory strategies in sepsis: Do we know where we are?
114. Rush Presbyterian St. Luke's Medical Center, Chicago. IL Feb 22, 2000, Visiting Professor, Critical Care Medicine: Update in the management of necrotizing pancreatitis.
115. MRC Workshop on the Design of Clinical Trials in Sepsis, London UK Feb 24,25, 2000 Sepsis clinical research: Historical background and clinical perspectives.
116. 5th International Congress on the Immune Consequences of Trauma, Shock, and Sepsis, Munich Germany, Feb 29 - March 4, 2000. 1. Measuring organ dysfunction as a clinical outcome in the ICU. 2. Regulation of neutrophil apoptosis during inflammation. 3. Preventing infection in acute lung injury. 4. Markers of inflammation.
117. ANZICS 2000 Conference: Life on the Edge, Hawkes Bay, New Zealand, March 8-10, 2000. 1. Antimicrobials in the post-antibiotic era. 2. Measuring endotoxin in the ICU. 3. Transfusion: How much is enough? 4. Sepsis clinical trials- What have we learned?
118. Faculty of Intensive Care, Greenslopes Hospital, Brisbane, Australia, March 13, 2000. Necrotizing pancreatitis.
119. Roundtable Conference on Evaluating Critical Care Using Health Services Research to

Improve Quality, Brussels, Belgium, March 18-20, 2000. Measuring treatment outcomes in intensive care: Mortality, morbidity, and organ dysfunction

120. 20th International Symposium on Intensive Care and Emergency Medicine, Brussels, Belgium, March 21-24, 2000. 1. Measuring endotoxin levels. 2. Neutrophil survival during acute inflammation. 3. Surgical source control. 4. My ICU beyond 2000: The inflammatory response is completely manipulated. 5. Minimizing antimicrobial use in the ICU. 6. Charting a new course for clinical trials in sepsis.
121. Surgical Infection Society, 20th Annual Meeting, Providence, RI, April 29, 2000. Controversies in surgical source control.
122. American Thoracic Society, 96th International Conference, Toronto, Ont. May 7, 2000. Sepsis: New Perspectives
123. University of Ottawa, Critical Care Rounds, Ottawa, Ont. May 16, 2000. Selective decontamination of the digestive tract.
124. Collins Day, Visiting Professor, University of Ottawa, May 17, 2000. Concepts, syndromes, and diseases: The ongoing challenges of sepsis research.
125. Critical Issues in Respiratory and Critical Care Medicine, Juan les Pins, France, June 12-14, 2000. 1. The immune response in critical illness. 2. The gut-liver axis in critical illness. 3. Iatrogenesis in the ICU.
126. Canadian Association of General Surgeons Residents' Research Conference, Rocky Crest, Ontario, June 16, 2000. An introduction to surgical knowledge.
127. 4th International Symposium on Critical Care Medicine, Mexico City, Mexico, Sept 6-8, 2000. 1. Sepsis, trauma, and pancreatitis. Does the origin matter? 2. The gut-liver-pulmonary axis in critical illness. 3. Measuring organ dysfunction as an outcome in critical illness. 4. Nutritional support of the patient with multiple organ dysfunction.
128. 11th Argentine Congress on Intensive Care Medicine, Buenos Aires, Argentina, Sept. 16-20, 2000. 1. Apoptosis for the intensivist. 2. Evaluation of the multiple organ dysfunction syndrome. 3. The Canadian Critical Care Trials Group. 4. Then, now, and then: Diseases, syndromes and the future of critical care medicine.
129. American Society of Nephrologists Update Course, Toronto, Oct. 11, 2000. Sepsis and the multiple organ dysfunction syndrome.
130. Hellenic Society of Intensive Care Medicine, Athens, Greece, Oct.14, 2000. Dysregulated apoptosis in sepsis.
131. American College of Surgeons 86th Annual Clinical Congress. Panel on New Technologies, Chicago IL, Oct 23, 2000. Transfusion triggers.

132. 5th Toronto Sepsis Roundtable, Toronto. Ontario, Oct 25, 2000: Mediators and markers: An overview
133. Toronto Critical Care Medicine Symposium, Toronto, Ontario, Oct 26-28, 2000. 1. Apoptosis for the intensivist. 2. Antibiotics: A reasoned approach
134. 2nd Margaux Conference on Critical Illness, Margaux, France, Nov. 9-11, 2000. Microvascular coagulopathy and organ dysfunction in sepsis.
135. 15th Annual International Symposium on Critical Care Medicine APICE, Trieste Italy, Nov 17-21, 2000. Light and shadows in the prevention and management of severe infections.
136. Napa Workshop on the Role of Tissue Factor in the Pathogenesis of Critical Illness, Yountsville, CA, Nov. 28-30, 2000. Coagulation activation and tissue factor biology in critical illness.
137. Visiting Professor, Department of Surgery, Sinai Hospital of Baltimore, Johns Hopkins University, January 11, 2001. The septic response in critical surgical illness.
138. Visiting Professor, Burn Shock Trauma Institute, Loyola University, Chicago IL, January 17, 2001. 1. Immune cell apoptosis in critical illness. 2. Limiting iatrogenesis in the ICU: Antibiotics and transfusion.
139. Queensville Lecture Series, Newmarket, Ontario. February 5, 2001. Difficult infections in the ICU.
140. Society of Critical Care Medicine 30th International Educational and Scientific Symposium, San Francisco, CA Feb 10-14, 2001. 1. Is endotoxemia a frequent event in surgical patients?. 2. Organ dysfunction in sepsis. 3. Morbidity measures in critical illness. 4. Guidelines for surgical source control in the management of sepsis.
141. 3rd Jena International Symposium on Sepsis and Multiple Organ Failure, Jena, Germany, February 14 - 16, 2001. 1. Bacterial translocation: Myth or reality? 2. Measurement of endotoxin in the ICU: Can we? Does it help?
142. Visiting Professor, Jersey Shore Medical Center, Robert Wood Johnson Medical School, Neptune NJ, February 22, 2001. Transfusion strategies in critically ill surgical patients.
143. Roundtable Conference on Mechanisms of Organ Dysfunction in Critical Illness, Brussels, Belgium, March 17-19, 2001. Prolongation of inflammation through inhibition of neutrophil apoptosis in critical illness.
144. 21st International Symposium of Intensive Care and Emergency Medicine, Brussels, Belgium, March 20-23, 2001. 1. Rethinking systemic inflammation. 2. Intra-abdominal infection. 3. Regulation of neutrophil survival in critical illness. 4. Management guidelines: Severe pancreatitis. 5. Anti-TNF antibodies: Who may benefit? 6. How I manage severe pancreatitis. 7. Rapid detection of endotoxin: The MEDIC trial. 8. Modelling organ

dysfunction as an outcome measure in clinical trials. 9. Organ dysfunction in sepsis. 10. Sepsis markers.

145. 3rd Conference on Conundrums in Critical Care, Vail, CO, April 5 - 7, 2001. Does sepsis exist?
146. 41st Annual Update in General Surgery, University of Toronto, April 19, 2001. Transfusion in the surgical patient: Evolving strategies
147. Intensive Care Society Annual Meeting, Bournemouth UK, May 30, 2001. Is the gut still the motor of multiple organ failure?
148. Surgical Infection Society, Europe, 14th annual meeting, Gdansk, Poland, June 1, 2001. Is sepsis a syndrome?
149. Hospital Sao Lucas da Pucrs, 8th Meeting of Intensive Care Medicine, Porto Alegre, Brazil, June 7-9, 2001. 1. The multiple organ dysfunction score. 2. Iatrogenesis in the ICU. 3. The role of the surgeon in abdominal sepsis. 4. The gut-liver axis in MODS.
150. 14th Brazilian Congress on Surgery, Sao Paulo, Brazil July 8 - 12, 2001. 1. Source control in surgical infection. 2. Mediator-directed therapy in sepsis: Current status. 3. The surgeon in the ICU.
151. 12th Argentinian Congress of Intensive Care, Rosario, Argentina, September 8-11, 2001. 1. The immune response in critical illness. 2. Infection prophylaxis in severe acute pancreatitis. 3. The pathophysiology of sepsis and septic shock. 4. Difficult infections in the ICU.
152. International Sepsis Forum, Lausanne, Switzerland, September 29, 2001. Statistical issues in sepsis research.
153. 14th Annual Congress, European Society of Intensive Care Medicine, Geneva Switzerland, October 1, 2001. Drotrecogin alfa (activated) in patients with severe sepsis. Symposium Chair
154. American College of Surgeons 87th Clinical Congress, New Orleans, LA October 8-10, 2001. 1. Endpoints for resuscitation. 2. Modulation of the inflammatory response.
155. 6th Toronto Critical Care Medicine Symposium, Toronto ON. October 18, 2001. The interface between sepsis and oncology.
156. Fluid Resuscitation in Combat, DCIEM, Toronto, Ontario. October 25, 2001. Endpoints in resuscitation.
157. 8th World Congress of Intensive and Critical Care Medicine, Sydney, Australia, October 28 - November 1, 2001. 1. Finding and controlling the source of sepsis. 2. Overview of inflammatory mechanisms in sepsis.

158. Hong Kong Society of Critical Care Medicine, Hong Kong, November 6, 2001. Mediator-directed therapy in sepsis: Current status.
159. 16th International Symposium on Critical Care Medicine, APICE, Trieste Italy, November 16-20, 2001. 1. Microbial translocation: From myth to mechanism. 2. Scoring systems in sepsis and MODS. 3. Novel therapies in sepsis: Does a cost-effectiveness target exist? 4. SDD reduces pneumonia and mortality.
160. SCCM/ESICM International Sepsis Definitions Conference, Washington D.C., December 8, 2001. The IRO System: Towards a Staging System for Clinical Sepsis.
161. Sepsis Advisory Board Meeting, Monte Carlo, Monaco, January 10, 11, 2002. Evolving concepts in the design of clinical trials in sepsis.
162. 31st Critical Care Congress, Society of Critical Care Medicine, San Diego CA, January 26-30, 2002. 1. Principles of Source Control. 2. How will we treat sepsis in 2051?. 3. Neutrophil apoptosis. 4. The PIRO model. 5. Meet the Professor: Intra-abdominal sepsis.
163. 8<sup>th</sup> International Congress of Intensive Care Medicine, New Delhi, India, February 14-16, 2002. 1. Gut ischemia in critical illness: Management and consequences. 2. Severe acute pancreatitis: Management guidelines. 3. Principles of surgical source control. 4. Iatrogenesis in the ICU. 5. Intra-abdominal infection in the critically ill patient.
164. National Congress of Critical Care Medicine, Quito, Ecuador, February 22-24, 2002. 1. Principles of source control 2. Management of acute necrotizing pancreatitis. 3. Mediator-directed therapy in sepsis: Current status. 4. Measuring organ dysfunction as an outcome in critical illness. 5. Strategies to minimize antimicrobial use in nosocomial ICU-acquired infections
165. Visiting Professor, Harborview Medical Center, Seattle WA, February 27, 2002. Mediator-targeted therapy in sepsis: Current status and future prospects.
166. CIDS Lecture 2002, Banff, Alberta, March 2, 2002. Are we on the horizon of new therapies for sepsis?
167. 22<sup>nd</sup> International Symposium of Intensive Care and Emergency Medicine, Brussels, Belgium, March 19-22, 2002. 1. How leukocytes live longer. 2. Endotoxemia in critical illness: Insights from the MEDIC trial 3. Infection in critical illness: Minimizing antibiotic use. 4. Iatrogenesis in the ICU.
168. 42<sup>nd</sup> Annual Update Course in General Surgery, University of Toronto, Toronto, April 11, 2002. Iatrogenesis in the ICU.
169. FRSQ Critical Care Conference, Mont Tremblant, April 20,21, 2002. Scoring systems for sepsis.
170. First Conjoint Meeting, Surgical Infection Society North America/Surgical Infection Society

Europe, Madrid, May 2-4, 2002. Inflammation or Infection: Serum mediators as biologic markers.

171. Center for Critical Care Excellence Conference, Toronto, May 15, 2002. Sepsis update.
172. Visiting Professor, St. Louis University School of Medicine, St. Louis MO, May 28, 29, 2002.
  1. Sepsis: Evolving terminology, evolving concepts.
  2. Principles of source control in the management of surgical infection.
173. DRDC Workshop on Clinical Research Methodology, Toronto, May 30, 2002. Outcome measures: Dependent and confounding variables.
174. SCCM/ESICM Summer Conference on Sepsis, Boston, MA, June 28-30,2002.
  1. Clinical trials in sepsis: Recent results.
  2. Multiple organ dysfunction syndrome: Can we make a difference?
175. Combined Pulmonology and Intensive Care Congress, Sun City, South Africa, July 22-25, 2002.
  1. Iatrogenesis in the ICU.
  2. Management of severe sepsis.
  3. Rapid assay of endotoxin.
  4. Principles of source control.
  5. Management of severe pancreatitis.
  6. Immune response in critical illness.
176. 28<sup>th</sup> National Congress of the Colombian Surgical Society, Cartagena, Colombia, August 27-30, 2002.
  1. Management of necrotizing pancreatitis.
  2. The gut in critical illness.
  3. Apoptosis for the surgeon.
177. Critical Care Rounds, McMaster University, Hamilton, Sept 30, 2002. Evolving concepts in the description of sepsis.
178. American College of Surgeons, New Treatment Options in Surgical Infections: Appendicitis to Pancreatitis, San Francisco CA, Oct. 6, 2002. Source control in intra-abdominal infections.
179. Visiting Professor, McGill University, Montreal Que. Oct. 15, 16, 2002.
  1. Sepsis and septic shock.
  2. Sepsis: Evolving concepts, emerging therapies.
180. 7<sup>th</sup> Congress of Asian Pacific Society of Respirology, Taipei, Taiwan, Oct. 28, 2002.
  1. The multiple organ dysfunction syndrome.
  2. Definitions and classifications for sepsis: Are they useful?
181. Center for Critical Care Excellence, Toronto, Oct. 29, 2002. Sepsis update.
182. 7<sup>th</sup> Annual Toronto Critical Care Medicine Symposium, Toronto, Ontario, Oct. 31 - Nov. 2, 2002
  1. Sepsis: Is it enough to show a biologic effect?
  2. Innate immunity
  3. Empiric antibiotics in the ICU: Con
183. Ontario Association of General Surgeons, Annual Meeting. Toronto Ont. Nov 2, 2002. Critical care surgery: Results of an OAGS survey

184. 17<sup>th</sup> Symposium on Critical Care Medicine: APICE, Trieste, Italy, Nov. 15-19, 2002. 1. Definitions of sepsis revisited: The 2001 Washington Conference. 2. After SIRS, Then.... 2. Mortality, Morbidity, and Costs of ICU-acquired infections. 4. What is the motor of Sepsis/MODS?
185. 8<sup>th</sup> Annual Update Course, Dalhousie Division of General Surgery, Halifax NS Nov. 22 2002. 1. Hepatobiliary quandaries in the ICU. 2. Sepsis
186. Visiting Professor, University of Calgary, Dec 4, 2002: Hope, hype, and Hippocrates: The ongoing challenges of clinical research.
187. 32<sup>nd</sup> Annual Congress, Society of Critical Care Medicine, San Antonio, TX, Jan. 30 - Feb 2, 2003. 1. The ISF Debates: Empiric antibiotics for suspected nosocomial infection: CON. 2. Iatrogenesis in the ICU. 3. Endotoxemia: Detection and clinical significance. 4. Minimizing antibiotic use in the ICU. 5. Cellular mechanisms of delayed neutrophil apoptosis in sepsis. 6. The stratification and staging of sepsis.
188. 23<sup>rd</sup> International Symposium of Intensive Care and Emergency Medicine, Brussels, Belgium March 18-21, 2003. 1. Lipopolysaccharide: endotoxin or exohormone? 2. Empiric antibiotics in the ICU: More harm than good? 3. Pre-B cell colony-enhancing factor. 4. Management of severe pancreatitis. 5. Source control 6. Targeting apoptosis in sepsis. 7. Are we ready for the clinical trial? 8. The PIRO model
189. 43<sup>rd</sup> Update Course in General Surgery, University of Toronto, Toronto, April 25, 2003. SARS: The anatomy of an epidemic.
190. Visiting Professor, University College, Dublin, Ireland April 29, 2003. From SIRS to SARS: Reflections on host-microbial interactions.
191. Jornadas de Medicina Intensiva da Primavera, Porto, Portugal, May 22,23, 2003. 1. Damage control in trauma 2. Measuring organ dysfunction in critical illness.
192. M.O. Iype Lecture in Surgery, Saint John, NB, June 25, 2003. Why do critically ill patients die?
193. 2<sup>nd</sup> Cambridge Colloquium, International Sepsis Forum, Cambridge UK, June 30-July 1, 2003: Measuring morbidity in sepsis clinical trials.
194. XV Congreso Latinoamericano de Cirugia, Panama City, Panama, July 17, 2003. 1. The multiple organ dysfunction syndrome. 2. Infection in the critically ill patient.
195. American Association for Clinical Chemistry Annual Meeting, Philadelphia, PA July 21, 2003. Sepsis: Clinical and pathophysiologic features.
196. 1<sup>st</sup> International Congress, German Sepsis Society, Weimar, Germany, September 3-6, 2003. 1. Stratification of Patients with sepsis: The PIRO concept. 2. Roundtable report: Improving the design of clinical trials in sepsis. 3. SIRS: An outdated concept. 4. TNF-



directed therapies.

197. Polish Sepsis Group, Warsaw Poland, September 9, 2003: The treatment of severe sepsis: Current status, future prospects.
198. Canadian Surgery Forum, Vancouver B.C., September 20, 2003: Antibiotic prophylaxis in severe acute pancreatitis: What is the evidence?
199. Transfusion Alternatives in Medicine and Surgery, Jersey Shore University Medical Center, September 22, 2003: Transfusion management in the critical care unit.
200. CIHR Workshop: Sepsis Research from Bench to Bedside, Mont Tremblant Que. Sept. 27-28, 2003. 1. Mechanisms of delayed neutrophil apoptosis in sepsis. 2. Outcome measures for clinical research in sepsis.
201. 16<sup>th</sup> Annual Congress; European Society of Intensive Care Medicine. Amsterdam, October 4-8, 2003. 1. Post graduate course on systemic inflammation and sepsis: Predisposition and Co-morbidities. 2. Despite quality improvement programs, are we doing better? Multiple organ failure and sepsis. 3. Recovery after severe sepsis.
202. American College of Surgeons 89<sup>th</sup> Annual Clinical Congress, Chicago, IL, October 19-22, 2003. 1. Symposium on treating difficult infections in surgical patients: New definitions of sepsis. 2. Surgical Forum Critical Care II. Moderator 3. How do intra-abdominal infections cause mortality?
203. 8<sup>th</sup> Toronto Critical Care Medicine Symposium, Toronto, October 30 - November 1, 2003. 1. Residents' Day: Combining careers in critical care and basic research. 2. SARS: How we got here 3. The treatment of severe sepsis: Evolving strategies.
204. International Consensus Conference on Definitions of Infection, Coral Gables, USA, November 8,9 2003: Definitions for intra-abdominal infection.
205. Peruvian Society of Intensive Care Medicine, 7<sup>th</sup> Annual Meeting, Lima Peru, November 19 - 21, 2003. 1. The cellular biology of critical illness. 2. The gut-liver axis in critical illness. 3. Evolving concepts: Sepsis, SIRS, and PIRO. 4. Empiric antibiotics: What is the evidence? 5. Principles of source control in life-threatening infection.
206. Eisai CABG Investigators' Meeting, Versailles, France, February 7, 2004: Measuring organ dysfunction in clinical trials.
207. Medical Grand Rounds, St. Joseph's Healthcare, Hamilton, Ontario, February 18, 2004. Empiric antibiotics for suspected ICU-acquired infection: Do they help or harm?
208. 33<sup>rd</sup> Critical Care Congress, Society of Critical Care Medicine, Orlando FL, February 22-24, 2004. 1. The ISF Debates: Sepsis is good for the patient. 2. Defining and classifying sepsis. 3. Pro-Con Debate: Early tracheostomy- Con. 4. The role of delayed neutrophil apoptosis in critical illness.

209. 33<sup>rd</sup> Critical Care Congress, Society of Critical Care Medicine, Orlando FL, February 23<sup>rd</sup>, 2004. Plenary Address. Sepsis: We have met the enemy ...”
210. 6<sup>th</sup> World Congress on Trauma, Shock, Inflammation, and Sepsis, Munich, Germany, March 3-6, 2004. 1. ICU monitoring: The PIRO concept. 2. The time course of mediator production in gram positive infection. 3. Apoptosis in the lung in trauma and sepsis. 4. Surviving Sepsis Campaign guidelines: Source control. 5. Organ dysfunction as an outcome in sepsis. 6. TNF as a therapeutic target in sepsis.
211. ANZICS New South Wales Regional Critical Care Educational Meeting, Terrigal, NSW, Australia, March 12 – 14, 2004. 1. Selective decontamination of the digestive tract. 2. Asking the right questions in sepsis trials. 3. Empiric antibiotics: The case against.
212. 6<sup>th</sup> ANZICS Clinical Trials Group Meeting, Noosa, Australia, March 20, 2004: Sepsis research: The clinical-industry interface.
213. 24<sup>th</sup> International Symposium on Intensive Care and Emergency Medicine, Brussels, Belgium, March 30 - April 2, 2004. 1. Do we have relevant animal models in sepsis studies? 2. Empiric antibiotics are harmful. 3. Surgical treatment of severe pancreatitis. 4. Intra-abdominal infections – non-antibiotic strategies. 5. Cell biology for the uninitiated. 6. Measuring outcomes in critical care. 7. PIRO ... What is next?
214. Critical Care Rounds, London, Ontario, April 13, 2004. Appropriate Antimicrobial Therapy in Critical Care.
215. International Consensus Conference on Severe Acute Pancreatitis, Washington DC, April 15, 16, 2004. Sepsis therapies: Revisiting their role in pancreatitis.
216. 24<sup>th</sup> Annual Meeting, Surgical Infection Society, Indianapolis, IN April 29, 2004. Early management of severe sepsis and septic shock.
217. American Thoracic Society 100<sup>th</sup> International Conference, Orlando, Florida, May 25, 2004. Targeting toll-like receptors in sepsis.
218. Shock Society/International Sepsis Forum Symposium on the Translational Biology of Acute Illness, Oak Island, Nova Scotia, June 3, 4 2004. Pre-clinical studies of G-CSF.
219. Shock Society 27<sup>th</sup> Annual Conference on Shock, Halifax, Nova Scotia June 8, 2004. Corticosteroids: An evolving story.
220. 3<sup>rd</sup> ISF Cambridge Colloquium on Identifying Responsive Populations in Sepsis, Cambridge, UK, July 11, 12, 2004. Lipopolysaccharide: Endotoxin or exohormone?
221. IMS Summer Student Research Day, University of Toronto, August 26, 2004. Keynote address: Such stuff as dreams are made on: Unravelling the clinical and biologic intricacies of sepsis.

222. 6<sup>th</sup> European Congress of Trauma and Emergency Surgery, Rotterdam, Netherlands, September 10 – 12, 2004. 1. Consensus guidelines for the management of severe sepsis and septic shock. 2. The multiple organ dysfunction syndrome. 3. The gut-liver axis in critical surgical illness. 4. Necrotizing pancreatitis: Current management.
223. Ake and Inger Grenvik Visiting Professorship, University of Pittsburgh, September 14,15, 2004. 1. Cellular mechanisms of delayed neutrophil apoptosis in sepsis. 2. Host-microbial interactions in critical illness.
224. ISF/PALISI Forum on Sepsis in Infants and Children, Boston, MA, September 23-26, 2004: Skin and soft tissue infections.
225. 34<sup>th</sup> World Congress, International College of Surgeons, Quito, Ecuador, Oct. 6-10, 2004. 1. Sepsis: Current and future management. 2. Principles of source control in life-threatening infection. 3. Necrotizing pancreatitis: Current management.
226. 17<sup>th</sup> Annual Congress, European Society of Intensive Care Medicine, Berlin, Germany, October 10-13, 2004. The PIRO concept: Organ dysfunction.
227. 90<sup>th</sup> Clinical Congress, American College of Surgeons, New Orleans, LA, October 14, 2004: Transfusion trigger: When to transfuse.
228. 9<sup>th</sup> Toronto Critical Care Medicine Symposium, Toronto, Canada, Oct 21-23, 2004. 1. Prevention and management of infection in necrotizing pancreatitis. 2. The AATICC trial. 3. Do we have effective therapies for sepsis?
229. Winkleman Lecture, State University of New York at Syracuse, October 28, 2004. Host-microbial interactions in sepsis: An evolving perspective.
230. Annual Scientific Meeting in Anaesthesiology, Hong Kong, China, November 12-14, 2004. 1. Apoptosis for the intensivist. 2. Sepsis: New targets, new strategies. 3. Endotoxemia in the intensive care unit.
231. Grand Rounds, Department of Critical Care Medicine, Rush University Medical Center, Chicago, IL November 29, 2004. Lipopolysaccharide in critical illness: Endotoxin or exohormone?
232. 19<sup>th</sup> World Congress of the International Society for Digestive Surgery, Yokohama, Japan, December 12, 2004. New strategies for the treatment of sepsis and septic shock.
233. Shiga University, Kyoto, Japan, December 13, 2004. Lipopolysaccharide: Endotoxin or exohormone?
234. Scottish Critical Care Trials Group Research Day, Bridge of Allan, Scotland, January 27, 2005. The Canadian Critical Care Trials Group – Current studies and initiatives.

235. Scottish Intensive Care Society, Annual Scientific Meeting, Stirling University, Stirling, Scotland, January 28, 2005. New insights into sepsis.
236. 11<sup>th</sup> European Shock Society Meeting/8<sup>th</sup> Vienna Shock Forum, Vienna, Austria, January 30, 2005. Late-acting mediators of innate immunity: Novel targets for sepsis therapeutics.
237. 25<sup>th</sup> International Symposium on Intensive Care and Emergency Medicine, Brussels, Belgium, March 22-25, 2005. 1. Host microbial interactions: Adversarial or symbiotic? 2. Endotoxin levels. 3. No to empiric antibiotics 4. Antibiotics for ventilator-associated pneumonia – Any preference? 5. Necrotizing pancreatitis.
238. 25<sup>th</sup> Annual Meeting, Surgical Infection Society, Miami FL May 6, 2005. Preventing and managing surgical infections: Perspectives from the Surviving Sepsis Campaign guidelines.
239. First International Pan-Arab Critical Care Medicine Congress, Taif, Saudi Arabia, May 9-12, 2005. 1. The multiple organ dysfunction syndrome. 2. Host-microbial interactions in the pathogenesis of critical illness. 3. Endotoxemia in the critically ill. 4. Severe sepsis and septic shock: 2005 Management guidelines 5. Empiric antibiotics for suspected ICU-acquired infection - No. 6. Principles of source control in life-threatening infection. 7. Acute necrotizing pancreatitis.
240. 28<sup>th</sup> Annual Meeting, Shock Society, Marco Island FL, June 6, 2005. Necrosis and apoptosis of neutrophils.
241. 4<sup>th</sup> Annual Colloquium of the International Sepsis Forum, Mougins, France, June 19, 20. Intermediate and translational outcomes for sepsis research.
242. Morrow Lecture, Royal Victoria Hospital, Belfast, Northern Ireland, June 29, 2005. Pathogen or partner: Host-microbial interactions in the pathogenesis of critical illness.
243. XVI Latin American Surgical Congress, Cartagena, Colombia, August 4-7, 2005. 1. Preserving the indigenous gut flora in critical illness. 2. Necrotizing pancreatitis: Are we making a difference? 3. New horizons in sepsis.
244. 9<sup>th</sup> Congress of the World Federation of Societies of Intensive and Critical Care Medicine, Buenos Aires, Argentina, August 27 – 31, 2005. 1. The ISF Debates: Sepsis is good for the patient. 2. Scores: Why don't we use them? 3. Scores and composite severity measures: What can they tell us? 4. Neutrophil apoptosis in sepsis 5. The epidemiology of sepsis: Multiple organ dysfunction syndrome.
245. 2<sup>nd</sup> International Congress, German Sepsis Society, Weimar Germany, September 7-10, 2005. 1. Measuring endotoxin in critically ill patients. 2. From SIRS to PIRO.
246. 8<sup>th</sup> Annual Meeting, Tuscany Critical Care Group, Pisa, Italy, September 23, 2005. 1. Organ dysfunction in sepsis: Mechanisms and clinical course. 2. Intra-abdominal infection.
247. 18<sup>th</sup> Annual Congress, European Society of Intensive Care Medicine, Amsterdam,

- Netherlands, September 25- 28, 2005. 1. Adjuvant therapy for sepsis: Activated protein C. 2. Biomarkers in sepsis: Performance requirements. 3. Procalcitonin as a marker in sepsis: Not yet.
248. 4<sup>th</sup> Annual Meeting, Society for Complexity in Acute Illness, Köln, Germany, September 29<sup>th</sup> to October 1, 2005. 1. Evidence-based modeling: Outcome data. 2. Complexity theory: Questions that need to be asked.
249. 91<sup>st</sup> Annual Clinical Congress, American College of Surgeons, San Francisco CA, October 18, 2005. The transfusion trigger: When to pull it.
250. 10<sup>th</sup> Toronto Critical Care Medicine Symposium, Toronto, ON, October 26-28, 2005. 1. Apoptosis in critical illness. 2. Selective decontamination of the digestive tract (SDD): Why don't we use it?
251. ISF Colloquium on Biomarkers of Sepsis, Mississauga, ON October 28-30, 2005. 1. Biomarkers of sepsis: An overview. 2. Cytokines as biomarkers
252. CHEST 2005, Montréal, Québec, October 31, 2005. Towards better criteria for sepsis.
253. Intensive Care Society of Ireland Annual Meeting, November 12, 2005. 1. Empiric antibiotics in the intensive care unit. 2. The Canadian Critical Care Trials Group.
254. Critical Care Society of Southern Africa, Capetown South Africa, November 28, 2005. The Canadian Critical Care Trials Group
255. Visiting Professor, Johannesburg General Hospital, University of Witwatersrand, Johannesburg South Africa, December 7, 2005. Host-microbial interactions in the pathogenesis of critical illness.
256. 35<sup>th</sup> Critical Care Congress, Society of Critical Care Medicine, San Francisco CA, January 9, 2006. The Surviving Sepsis Campaign: Future bundles- source control
257. 11<sup>th</sup> International Symposium on Infections in the Critically Ill Patient, Sevilla, Spain, February 3,4, 2006. 1. Sepsis: Current status, future prospects 2. Debate: Empiric antibiotics are rarely needed in the patient with severe infection. Pro.
258. Novartis Foundation Symposium 280: Sepsis: Emerging Targets, Future Prospects, London UK, February 14-16, 2006. Modulating neutrophil apoptosis
259. Joint Symposium, Novartis Foundation, British Medical Society, University College, London, February 17, 2006. Modulation of apoptosis is a rational therapeutic strategy.
260. 3<sup>rd</sup> World Shock Forum, Tokyo, Japan, February 24, 25, 2006. The multiple organ dysfunction syndrome: Evolving insights, future challenges.
261. 33<sup>rd</sup> Congress, Japanese Society of Intensive Care Medicine, Osaka, Japan, March 2,3<sup>rd</sup> 2006.

1. Nosocomial infection in the ICU. 2. Host-microbial interactions in critical illness.
262. Visiting Professor, Department of Trauma and Acute Medicine, Osaka University Hospital, Osaka, Japan, March 4, 2006. Host-microbial interactions in critical illness.
263. Roundtable Conference on Mechanisms of Organ Dysfunction and Resolution in Sepsis, Brussels, Belgium, March 18-20, 2006. The role of the neutrophil
264. 26<sup>th</sup> International Symposium of Intensive Care and Emergency Medicine, Brussels, Belgium, March 21-24, 2006. 1. Pre-B cell colony-enhancing factor(PBEF)/visfatin. 2. Outcomes from clinical trials. 3. Report of the ISF colloquium on biomarkers of sepsis 4. Neutrophil survival 5. Do we need empiric therapy? 6. Staging sepsis using PIRO 7. TNF: Still a target in sepsis?
265. Visiting Professor, R. Adams Cowley Shock/Trauma Center, University of Maryland, Baltimore MD March 29,30, 2006. 1. Cellular mechanisms of impaired neutrophil apoptosis in sepsis. 2. Targeting the host response in trauma and sepsis: Where do we stand?
266. 16<sup>th</sup> European Congress of Clinical Microbiology and Infectious Diseases, Nice, France, April 1-4, 2006. Sepsis biomarkers in 2006.
267. Critical Care Course, Pontificia Universidad Catolica de Chile, Santiago Chile, April 19-21, 2006. 1. Severe sepsis: New perspectives. 2. Organizing multicentre investigations in critical care. 3. The multiple organ dysfunction syndrome. 4. The Surviving Sepsis Campaign.
268. Critical Care Quarterly Forum, University of Minnesota, St. Pauls MN, May 10, 2006. Decision-making in critical care: Integrating evidence, inference, and experience.
269. Post-graduate Course on Clinical Research in the ICU, American Thoracic Society, San Diego CA, May 19, 2006. Developing a research program.
270. Joint Faculty of Intensive Care Medicine/Australia and New Zealand Intensive Care Society Annual Scientific Meeting, Melbourne, Australia, June 9-11, 2006. 1. Pathogenesis and molecular biology of sepsis. 2. Overview of guidelines development. 3. Debate- Heparin is efficacious in septic shock: No 4. Sepsis research: Where have we gone wrong?
271. Canadian Critical Care Trials Group, First Residents' Research Day. Windermere, Ontario, June 12, 2006. Planning an academic career.
272. 5<sup>th</sup> International Sepsis Forum Colloquium on Host-Microbial Interactions in Critical Illness, Toledo, Spain, June 17-18, 2006. 1. The micro-organism is irrelevant to the host response in sepsis: Pro 2. Host-microbial interactions in sepsis: Adversarial or adaptive?
273. XLI Annual Congress, Spanish Society of Intensive Care Medicine, Pamplona, Spain, June 25-28, 2006. 1. Guidelines for the management of acute necrotizing pancreatitis. 2. Sepsis

bundles: A standard of care?

274. 9<sup>th</sup> Course on Critical Care Medicine, Mechanical Ventilation, and Sepsis, Mexico City, Mexico, July 13-15, 2006. 1. Outcomes from clinical trials in the ICU. 2. Staging sepsis using PIRO. 3. Biomarkers of sepsis.
275. Sunnybrook Gut Club, Sherwood Inn, Ontario, August 19, 2006: Management of acute pancreatitis.
276. 3<sup>rd</sup> Critical Care Science Symposium, Brisbane, Australia, August 25-26, 2006: 1. Sepsis: Evolving concepts. 2. Choosing the best biomarker. 3. Is there still a place for anti-TNF therapies?
277. International Conference on Surgical Infections, Stockholm, Sweden, September 6-8, 2006: Markers of severity during severe infections.
278. 12<sup>th</sup> International Veterinary Emergency and Critical Care Symposium, San Antonio, Texas, September 18,19, 2006: 1. R.P. Knowles Memorial Lecture: Optimizing strategies beyond evidence-based medicine: Integration of evidence, inference, and experience. 2. The gut-liver axis in shock. 3. Iatrogenesis in the ICU. 4. Diagnostic and therapeutic challenges in sepsis.
279. 60<sup>th</sup> SIAARTI, Umbria, Italy, October 11, 2006. The role and measurement of endotoxin in the septic patient.
280. 6<sup>th</sup> ISF Colloquium: Enabling Clinical Research in Severe Sepsis, Canyon City, Utah, USA, October 20, 21, 2006: Programmatic research: The Canadian Critical Care Trials Group model.
281. Canadian Critical Care Society Residents' Day, October 17, 2006. 1. The Canadian Critical Care Trials Group. 2. Management of acute pancreatitis.
282. 11<sup>th</sup> Toronto International Symposium on Acute Care, Toronto, ON, Canada, October 18-20, 2006. 1. Endotoxin in the critically ill. 2. How does the immune system recognize danger? 3. What is the role of endotoxemia?
283. 34<sup>th</sup> Annual Meeting of the Japanese Association of Acute Medicine, Fukuoka, Japan, October 31, 2006. Evidence-based management of severe sepsis: The Surviving Sepsis Campaign.
284. Visiting Professor, Fukuoka University, Fukuoka Japan, November 1, 2006: The Surviving Sepsis Campaign.
285. 8<sup>th</sup> Congress of the German Interdisciplinary Union of Intensive Care and Emergency Medicine, Hamburg, Germany, November 9, 2006. The Canadian Critical Care Trials Group.

286. 21<sup>st</sup> APICE Meeting, Venice, Italy November 10-13, 2006: Source control
287. 4<sup>th</sup> Symposium on the Functional Genomics of Critical Illness and Injury, NIH, Bethesda Maryland, November 13,14, 2006: The Canadian Critical Care Trials Group
288. 19<sup>th</sup> Annual Meeting, Alberta Society of Intensive Care Physicians, Lake Louise, Alberta, January 26, 2007. Sepsis: Evolving concepts.
289. 7<sup>th</sup> World Congress on Trauma, Shock, Inflammation and Sepsis, Munich, Germany March 13 – 17, 2007: 1. Source control: How to achieve it; why it fails. 2. The case for treating colonized patients to reduce antibiotic resistance development: Con. 3. Sepsis: How important is infection? 4. Therapeutic targets and clinical staging in antimicrobial trials. 5. Endpoints for randomized controlled trials in trauma.
290. Evaluating Surgery, Balliol College, Oxford England, March 23, 2007. Evaluating surgical interventions: How do the issues differ from the evaluation of non-surgical interventions?
291. 27<sup>th</sup> International Symposium of Intensive Care and Emergency Medicine, Brussels, Belgium, March 27-30, 2007. 1. Endotoxemia in the critically ill. 2. Basic cell biology for the intensivist. 3. Biomarkers: What do we do with all this? 4. Pre-B Cell Colony-Enhancing Factor (PBEF)/Visfatin. 5. The Canadian Critical Care Trials Group. 6. The role of apoptosis. 7. Protocolized care: Proceed with caution. 8. Empiric antibiotics: Good or bad?
292. 17<sup>th</sup> European Congress of Clinical Microbiology and Infectious Disease, Munich, Germany, March 31, 2007. From SIRS to PIRO: What makes the difference?
293. 27<sup>th</sup> Annual Meeting, Surgical Infection Society, Toronto, April 19, 2007: SIS Presidential Address - Coming of age.
294. 2<sup>nd</sup> International Pan-Arab Critical Care Congress, Dubai, UAE, April 23, 24 2007: 1. ICU-acquired infection: Insights from the AATICC Trial. 2. Principles of source control. 3. Altered apoptosis as a mechanism of disease. 4. Lipopolysaccharide: Endotoxin or exohormone? 5. The PIRO model: How can it be used to improve the design of clinical trials?
295. 6<sup>th</sup> Annual Colloquium, International Sepsis Forum, Annapolis MD, June 8, 9 2007: Conceptual models of acute illness and chronic health.
296. 30<sup>th</sup> Annual Meeting, Shock Society, Baltimore MD, June 9, 2007: Statistical inference and the scientific method.
297. 4<sup>th</sup> International Symposium on Intensive Care and Emergency Medicine, Sao Paulo, Brazil, June 20-23, 2007. 1. Host-microbial interactions in critical illness. 2. Iatrogenesis, inflammation, and organ injury. 3. Blood transfusion for resuscitation of septic shock: Con. 4. Advances in sepsis source control. 5. Surgical decision-making: Integrating evidence, inference, and experience. 6. Critical appraisal of the Surviving Sepsis Campaign



298. 3<sup>rd</sup> International Congress, German Sepsis Society, Weimar, Germany, September 4-8, 2007. 1. Theragnostics: A clinical perspective 2. How can theragnostics meet an unmet clinical need? 3. What is the clinical utility of measuring endotoxin? 4. How I manage the patient with sepsis. 5. Describing the ideal sepsis marker.
299. 47<sup>th</sup> International Congress on Antimicrobial Agents and Chemotherapy, Chicago, IL, September 19, 2007: Antibiotics for acute pancreatitis?
300. Sepsis 2007: An International Conference of the International Sepsis Forum, Paris, France, September 27-29, 2007. 1. Principles of source control 2. Endotoxin translocation in the critically ill. 3. Improving sepsis clinical research: Better patient selection.
301. 93<sup>rd</sup> Annual Clinical Congress, American College of Surgeons, New Orleans LA, October 9, 2007. 1. Integrating evidence and inference in surgical decision-making. 2. The use of corticosteroids in surgical sepsis.
302. 35<sup>th</sup> Annual Meeting, Japanese Association for Acute Medicine, Osaka, Japan, October 18, 2007. Sepsis: Evolving concepts, emerging therapies.
303. Visiting Professor, Osaka University Medical School, Osaka, Japan. October 19, 2007. Host-microbial interactions in critical illness.
304. Australian and New Zealand Intensive Care Society, Annual Scientific Meeting, Rotorua, New Zealand, October 25-28, 2007. 1. The Canadian Critical Care Trials Group: An update. 2. Cardiovascular system: New therapies. 3. My ICU in 2017. 4. Monitoring cellular dysfunction. 5. Measuring organ dysfunction. 6. How many Canadians does it take to change a light bulb?
305. 12<sup>th</sup> Critical Care Canada Forum, Toronto, Canada October 30- November 1, 2007. 1. A critique of the SOFA score. 2. From biology to physiology to epidemiology. 3. Neutrophil survival in sepsis. 4. When does research become knowledge?
306. 17<sup>th</sup> Atlantic Respiriology and Critical Care Meeting, Dartmouth, NS, November 30, December 1, 2007. 1. Sepsis: Clinical trials and conceptual tribulations. 2. Surgical critical care: Contributions and challenges.
307. Association of Organ Procurement Organizations Medical Directors' Symposium, Park City, Utah, January 10, 2008: The Canadian Critical Care Trials Group: 12 lessons learned.
308. 16<sup>th</sup> Winter Symposium on Intensive Care Medicine, Steamboat Springs, CO, January 29-February 1, 2008. 1. Quantifying sepsis at the bedside. 2. New therapeutic interventions in sepsis: What is the future? 3. What is sepsis after all?
309. 37<sup>th</sup> Critical Care Congress, Society of Critical Care Medicine, Honolulu, Hawaii, Feb3-6, 2008. 1. Preventing or reversing MODS: The role of guideline implementation. 2. Multiple organ failure: The role of apoptosis.

310. Roundtable Conference on Improving Clinical Trials in the Critically Ill, Brussels, Belgium, March 15-17, 2008: Clinical trials consortia: Construction, maintenance and future.
311. 28<sup>th</sup> International Symposium of Intensive Care and Emergency Medicine, March 18-21, 2008. 1. Regulation of inflammation: The role of apoptosis. 2. Late-acting mediators of sepsis. 3. The sepsis trial of the future. 4. What is a biomarker, and what is its purpose? 5. Early antibiotic therapy: Insights from the AATICC trial.
312. International Critical Care Conference, Dubai, UAE, April 8-10, 2008. 1. Sepsis: Rethinking the approach to clinical research. 2. PIRO and the staging of sepsis. 3. Damage control in trauma. 4. Principles of source control. 5. A primer on the cell biology of critical illness. 6. Apoptosis as a mechanism of disease in the critically ill. 7. The multiple organ dysfunction syndrome. 8. An approach to nosocomial infection in the critically ill. 9. Controversies in sepsis management in the ICU.
313. 18<sup>th</sup> ECCMID, Barcelona, Spain, April 19, 2008. Sepsis: The role of viable organisms and microbial products.
314. 28<sup>th</sup> Annual Meeting, Surgical Infection Society, Hilton Head SC, May 6-9, 2008. Introduction of president Dr. Stephen Lowry.
315. 7<sup>th</sup> ISF Colloquium on the Systems Biology of Acute Illness, Chapel Hill, NC, May 12-14, 2008. Limitations of entry criteria in current sepsis trials.
316. Canadian Critical Care Trials Group Research Education Day, Québec City, Québec, June 2, 2008: Building an academic career.
317. Janie and Michael Miller Visiting Professor, University of the Witwatersrand; 21<sup>st</sup> Biennial Symposium, Association of Surgeons of South Africa, Johannesburg, South Africa, June 14-17, 2008. 1. Recognizing sepsis in the sick patient. 2. Futile care: When is enough, enough? 3. Overwhelming systemic inflammation.
318. 6<sup>th</sup> Meeting of the International Federation of Shock Societies, Köln, Germany, June 30, 2008. The challenge of description: Is it sepsis, is it shock?
319. 34<sup>th</sup> National Congress of Surgery, Asociación Colombiana de Cirugía, Bogota, Colombia, August 18-21, 2008. 1. Management of acute necrotizing pancreatitis. 2. ICU-acquired infection. 3. The multiple organ dysfunction syndrome.
320. 18<sup>th</sup> Argentinian Congress of Intensive Care, Buenos Aires, Argentina, August 28-31, 2008. 1. Adjuvant therapy in sepsis: Needs and prospects. 2. A clinician's guide to the biology of sepsis. 3. Rethinking the approach to clinical research in sepsis. 4. Management of severe necrotizing pancreatitis. 5. Modulating neutrophil apoptosis. 6. Measuring organ dysfunction in the critically ill.
321. 21<sup>st</sup> Congress, European Society of Intensive Care Medicine, Lisbon, Portugal, September 22-

- 24, 2008. 1. Maintenance of gut integrity: The role of enteral nutrition. 2. We need a biologic definition of sepsis, Pro.
322. Pediatric Acute Lung Injury and Sepsis Investigators (PALISI) Network 2008 Meeting, Montreal, Quebec, September 25, 26 2008. 1. Clinical trials in sepsis. Phenotype and stratification. 2. The Canadian Critical Care Trials Group Model of Programmatic Research.
323. 62<sup>nd</sup> National Congress, SIAARTI. Palermo, Sicily, October 14-17, 2008. 1. The future of research in sepsis. 2. Guideline development: The Surviving Sepsis Campaign.
324. Trauma, Accident and Emergency Congress, Abu Dhabi, United Arab Emirates, October 26-28, 2008. 1. Sepsis: Bench to bedside. 2. ICU supportive care: An update.
325. 4<sup>th</sup> Kuwait Critical Care Conference/3<sup>rd</sup> International Pan-Arab Critical Care Medicine Congress, Kuwait City, Kuwait, November 6-8, 2008. 1. Damage control. 2. Acute care surgery: The surgeon in the ICU. 3. Staging sepsis: The PIRO model. 4. APC in sepsis: Con.
326. Critical Care Canada Forum, Toronto, Canada November 11-13, 2008 1. The PROWESS-Shock Trial. 2. Resuscitation and deresuscitation: What are the unanswered questions? 3. Blunt cerebrovascular injury. 4. Host-microbial interactions in critical illness. 5. Investigator-led clinical research in critical care. 6. Commentary: Enteral feeding- Less is more?
327. International Forum of Acute Care Trialists, Granada Spain, November 17,18 2008. The Canadian Critical Care Trials Group.
328. International Sepsis Forum, Sepsis 2008, Granada, Spain, November 19-22, 2008. Peritonitis as a source of sepsis.
329. Intensive Care Society of the United Kingdom, State of the Art 2008 Meeting, London, December 15, 16, 2008. 1. Gillian Hanson Lecture: Sepsis trials – Current limitations, future prospects. 2. Surgical management of acute pancreatitis.
330. Intensive Care Seminar, Glasgow, Scotland, December 16, 2008. Sepsis trials: Current limitations, future prospects.
331. 11<sup>th</sup> Postgraduate Course on Sepsis and MODS, Ostrava, Czech Republic, January 20-23, 2009: The PIRO concept: A work in progress.
332. 38<sup>th</sup> Critical Care Congress, Society of Critical Care Medicine, Nashville TN USA February 4, 2009: Sepsis: What does infection have to do with it?
333. American College of Physicians, Ontario Chapter Scientific Meeting, Toronto, Ontario, February 22, 2009: Update in intensive care: Sepsis
334. 13<sup>th</sup> Meeting, Scandinavian Critical Care Trials Group, Oslo, Norway, March 12,13, 2009.

Investigator-led critical care research: Why and how.

335. 29<sup>th</sup> International Symposium on Intensive Care and Emergency Medicine, Brussels, Belgium, March 24-27, 2009. 1. MODS: An overview of the mechanisms 2. Controlling bleeding in pelvic fractures. 3. Host-microbial interactions in health and critical illness. 4. From data to guidelines: A cautionary tale. 5. Pancreatitis: When (Not) to operate. 6. Resuscitative thoracotomy.
336. McGill Critical Care Symposium: The Critical Elements. Montréal, Québec, April 23,24 2009. Embracing controversy.
337. 36<sup>th</sup> Preston A. Wade Memorial Lecture in Trauma, Weill Cornell Medical College, New York, NY, April 27, 2009. Infection, inflammation, iatrogenesis: The multiple organ dysfunction syndrome in trauma.
338. 8<sup>th</sup> Colloquium of the International Sepsis Forum: Convergences and Divergences of the Septic Phenotype, St. Charles, IL, May 3-5, 2009. Phenotypes in sepsis: Matching the population to the intervention.
339. 29<sup>th</sup> Annual Conference, Surgical Infection Society, Chicago, IL. May 6-9, 2009. The Surviving Sepsis Campaign: Process and results.
340. First Annual Meeting of the Surgical Infection Society of Latin America, Rio de Janeiro, Brazil, May 14, 2009. Keynote Address: Infection, sepsis and the surgical sensibility.
341. 6<sup>th</sup> International Sepsis Forum, São Paulo, Brazil, May 15, 16, 2009. 1. State of the art: Critical care of the septic patient. 2. Challenges in the development of interventional strategies for sepsis.
342. 19<sup>th</sup> European Congress of Clinical Microbiology and Infectious Disease, Helsinki, Finland, May 16-19, 2009. Adjuvant therapy for community-acquired pneumonia: A role?
343. International Symposium on Surgical Intensive Care, Hospital Germão Osvaldo Cruz, São Paulo, Brazil, May 22, 2009. 1. The immune response in critical illness. 2. Approaches and challenges in large clinical trials in critical care.
344. Symposium on New Therapeutic Options in Intensive Care Medicine, Köln, Germany, June 3-5, 2009. Biomarkers of sepsis and critical illness.
345. Canadian Critical Care Trials Group, Resident Research Education Day, Picton, Ontario, June 15, 2009: The role of research in critical care practice.
346. Wakefield Roundtable on Complexity and Variability, Wakefield Quebec, August 25, 2009. Complexity and the host response to injury and infection.
347. 10<sup>th</sup> Congress, World Federation of Societies of Intensive and Critical Care Medicine, Florence Italy, August 28 – September 1, 2009. 1. Developing the guidelines: Using the

- GRADE system. 2. Sepsis: Old compounds in a new context. 3. ICU-acquired infection: Morbidity, mortality, and costs. 4. Predisposition to sepsis.
348. 4<sup>th</sup> International Congress Sepsis and Multiorgan Dysfunction Deutsche Sepsis-Gesellschaft, Weimar Germany, September 9-12, 2009. 1. Theragnostics – a logical advance for sepsis clinical trials. 2. How I manage the patient with sepsis. 3. Use of the SIRS criteria contributed to the failure of sepsis trials: Pro.
349. 12<sup>th</sup> Annual Meeting, Tuscany Critical Care Group, Florence, Italy, October 8, 2009: Endotoxemia: Diagnostic, prognostic and therapeutic role.
350. 22<sup>nd</sup> Annual Congress, European Society of Intensive Care Medicine, Vienna, Austria, October 11-14, 2009: From the CCCTG to InFACT.
351. WHO Consultation on H1N1 influenza, Washington, DC USA, October 14-16, 2009: The InFACT H1N1 collaboration.
352. Critical Care Canada Forum Residents' Day, Toronto Ontario, October 25, 2009: Coming online by 2039.
353. Critical Care Canada Forum, Toronto, Ontario, October 26-28, 2009: 1. 30 years of sepsis trials. 2. InFACT: Collaborative, investigator-led research in critical care.
354. Sepsis 2009, Amsterdam, Holland, November 11-14, 2009: 1. InFACT and Severe H1N1 influenza. 2. The PROWESS-Shock trial
355. 4<sup>th</sup> Pan-Arab Critical Care Congress, Sharm el Sheikh, Egypt, November 12, 2009: 1. Severe H1N1 Influenza in Canada. 2. Multiorgan failure in sepsis. 3. Management of severe pancreatitis. 4. PIRO: A critical illness stratification model.
356. 39<sup>th</sup> Annual Congress, Society of Critical Care Medicine, Miami, FL, January 10-13, 2010. 1. We should use biomarkers to guide sepsis care. 2. Should sepsis bundles be mandated?
357. iCAPTURE Rounds, University of British Columbia, January 29, 2010: Neutrophil survival in sepsis: The caspase-8 survivalsome.
358. Roundtable Conference: Thinking outside the box, Brussels Belgium, March 6-8, 2010. Critical illness is an iatrogenic disorder.
359. 30<sup>th</sup> International Symposium on Intensive Care and Emergency Medicine, Brussels, Belgium, March 9-12, 2010. 1. Critical illness is an iatrogenic disorder. 2. The InFACT initiative. H1N1 as a catalyst for collaborative research. 3. The role of leukocytes in sepsis. 4. Pre-B Cell Colony Enhancing Factor/Nampt/Visfatin. 5. Pelvic fractures.
360. 8<sup>th</sup> World Congress on Trauma, Shock, Inflammation and Sepsis, Munich Germany, March 10-13, 2010. 1. Abdominal sepsis and organ failure. 2. Diagnostic assessment of endotoxin in diverse clinical states. 3. Albumin resuscitation in septic shock: Not yet. 4.

Endotoxemia: A target for therapeutic intervention?

361. Emirates Critical Care Conference, Dubai UAE April 25-27, 2010. 1. Sepsis trials: How can we move forward? 2. Resuscitative thoracotomy. 3. Management of severe acute pancreatitis. 4. The role of endotoxin in sepsis.
362. CIHR-ICRH Young Investigator Symposium, Vancouver B.C, May 5-7, 2010. Keynote address: InFACT: A global critical care response to severe H1N1 infection.
363. 7<sup>th</sup> International Conference on Extracorporeal Blood Purification in Intensive Care Medicine, Moscow, Russia, May 27-28, 2010: 1. Endotoxemia and sepsis: Pathophysiology and emerging therapies. 2. New perspectives on sepsis and the multiple organ dysfunction syndrome.
364. International Sepsis Forum Sepsis 2010, Paris France September 1-3, 2010. 1. Biomarkers in sepsis: Ready for prime time? 2. The gut and nutrition in sepsis. 3. Lipopolysaccharide removal. 4. InFACT: What did we learn from H1N1?
365. 50<sup>th</sup> Interscience Conference on Antimicrobial Agents and Chemotherapeutics, Boston MA September 13, 2010. Risk stratification in sepsis: The PIRO concept.
366. 37<sup>th</sup> Annual Meeting, Mexican Intensive Care Association, Monterrey, Mexico, September 14-18, 2010. 1. Principles of source control for the non-surgeon. 2. Where do we stand in the early management of sepsis? 3. PBEF/Visfatin: A novel mediator of innate immunity.
367. Montebello Roundtable on Complexity and Variability at the Bedside, Chateau Montebello, Quebec, September 28-October 1, 2010. Iatrogenesis in the ICU: The interface between complex patients and simple technologies.
368. Merinoff Symposium/Global Sepsis Alliance Inaugural Meeting, Feinstein Institute, Manhasset, NY, September 29-Oct.1, 2010. Sepsis as a complication of other illness.
369. 23<sup>rd</sup> Annual Congress, European Society of Intensive Care Medicine, Barcelona, Spain, October 9-13, 2010. 1. Building a research team. 2. Successful grant writing 3. The concept of the run-in trial. 4. Should sepsis bundle be mandated? 5. Manipulation of the host response in sepsis is harmful: Con.
370. National Conference of Critical Care Medicine, Chinese Society of Critical Care Medicine, Beijing, China, October 15-17, 2010. 1. Management of severe acute pancreatitis. 2. Cell biology for the clinician. 3. ICU-acquired infection: Epidemiology and treatment.
371. Visiting Professor, Xijing Hospital, Fourth Military Medical University, Xi'an China, October 18, 2010. The Multiple Organ Dysfunction Syndrome: Complex biology and complicated patients.
372. Visiting Professor, Department of Anesthesiology and Intensive Care, Changhai Hospital, Shanghai, China. October 20, 2010. 1. InFACT: A global collaboration for critical care

- research. 2. Sepsis research: How can it be improved?
373. Critical Care Canada Forum, Toronto, Canada, November 8 – 10, 2010. 1. Sepsis research: Seven lessons from oncology. 2. PIRO: What is the status of clinical staging of critical illness? 3. InFACT: Promoting global collaboration in critical care research.
374. 40<sup>th</sup> Annual Congress, Society of Critical Care Medicine, San Diego CA, January 17, 2011: Toll-like receptors: Recognizing danger in the innate immune system.
375. Wellcome Trust/International Severe Acute Respiratory Infection Consortium, London UK, February 14-16, 2011. The International Forum for Acute Care Trialists (InFACT).
376. Visiting Professor, Department of Critical Care Medicine, University of Pittsburgh School of Medicine, February 22, 23, 2011. 1. The caspase-8 survivalosome: Mechanisms of prolonged neutrophil survival in trauma and sepsis. 2. Catalyzing global collaboration in critical care research: The InFACT H1N1 initiative.
377. 2011 Canadian Critical Care Conference, Whistler, B.C. February 23-25, 2011. 1. Empiric antibiotics for ICU-acquired infections: Balancing risks and benefits. 2. Source control for complex abdominal infections.
378. 31<sup>st</sup> International Symposium on Intensive Care and Emergency Medicine, Brussels, Belgium, March 22-25, 2011. 1. The epidemiology of sepsis in 2011. 2. Outcome measures for clinical trials in critical care: More than mortality.
379. 8<sup>th</sup> National Congress on Advances in Anesthesiology and Resuscitation, Shanghai, China, March 26, 2011. Sepsis: From basic biology to clinical management.
380. 31<sup>st</sup> Annual Conference, Korean Society of Critical Care Medicine/11<sup>th</sup> Joint Congress KSCCM/JSCCM, Seoul, Korea April 22-23, 2011. 1. Severe H1N1 infection: An international perspective. 2. What have we learned from the H1N1 pandemic? 3. Sepsis: Current therapy, future prospects.
381. CIHR/ICRC Pulmonary Network Meeting, Montreal Quebec, May 5, 2011: The Canadian Critical Care Trials Group.
382. 9<sup>th</sup> International Symposium on Emergency Medicine and the Critically Ill Patient, Santiago, Chile, May 12-14, 2011. 1. Critical illness is an iatrogenic state. 2. Damage control for the intensivist. 3. Management of severe pancreatitis.
383. Canadian Critical Care Trials Group Research Education Day, St. Alexis-des-Monts, Québec, June 14, 2011. Building an academic career.
384. XIV Foro Internacional de Medicina Crítica, Mexico City, Mexico, July 8-10, 2011. 1. PIRO: A staging system for critical illness. 2. Resuscitation and deresuscitation. 3. Damage control for the intensivist.

385. 53<sup>rd</sup> Annual Meeting, Israeli Society of Critical Care Medicine, Nazareth, Israel, July 14-16, 2011. 1. The immune response in critical illness. 2. Principles of source control.
386. COPICON Congress 2011, Durban South Africa, July 27 – 31, 2011. 1. Critical illness is an iatrogenic state. 2. Apoptosis in the pathogenesis of critical illness.
387. Weimar Sepsis Update 2011, Weimar, Germany, September 7-10, 2011. How do I treat sepsis in a surgical patient?
388. 24<sup>th</sup> Annual Congress, European Society of Intensive Care Medicine, Berlin, Germany, October 1-5, 2011. 1. Building a research team. 2. Grant writing: What you should know. 3. The concept of run-in trials. 4. Care of the septic patient is best advanced by targeting the doctor.
389. Sepsis 2011 Beijing, China October 27-28, 2011. 1. Clinical trials in sepsis: A critique. 2. The role of the neutrophil. 3. The PROWESS Shock Trial.
390. Critical Care Canada Forum, Toronto, Canada, November 14 – 16, 2011. 1. Active deresuscitation: Does it have a role? 2. I'm a physician. What quality means to the practitioner. 3. InFACT: Global collaboration in critical care research.
391. IX Congreso Panamericano e Ibérico de Medicina Crítica y Cuidado Intensivo, Cartagena, Colombia, November 30 – December 2, 2011. 1. Host-microbial interactions in critical illness. 2. PIRO: A staging model for critical illness. 3. Damage control for the intensivist. 4. Resuscitation and deresuscitation. 5. InFACT: Global collaboration in critical care research.
392. CIHR/ICRH Advisory Board Meeting, Kananaskis, Alberta, January 11, 12 2012. The Canadian Critical Care Trials Group.
393. 2012 Emergency Preparedness and Response Forum, Public Health Agency of Canada, Edmonton, Alberta January 18, 2012: Facilitating pandemic research in the sickest patients: Emerging global strategies.
394. 32<sup>nd</sup> International Symposium of Intensive Care and Emergency Medicine, Brussels, Belgium, March 20-23, 2012. 1. Goal-directed deresuscitation. 2. After PROWESS-Shock: Implications for future studies. 3. Talactoferrin as a treatment for sepsis.
395. 9<sup>th</sup> Annual Critical Care Symposium, Manchester, UK April 26-27, 2012. 1. Source control in sepsis. 2. Industry-led trials are obsolete in the 21<sup>st</sup> century PRO. 3. Resuscitation and deresuscitation. 4. PIRO in 2012 – Where do we stand? 5. Management of severe pancreatitis.
396. 10<sup>o</sup> Simposio Internacional Emergencias Médicas y Paciente Crítico, Santiago, Chile May 10-12, 2012. 1. TNF as a target in sepsis. 2. Damage control for the intensivist. 3. Source control in complex infections. 4. Resuscitation and deresuscitation.



397. 10<sup>th</sup> Greek Armed Forces Medical Corps Critical Care and Emergency Medicine Conference, Athens, Greece, May 25,26, 2012. 1. Critical illness is an iatrogenic disorder. 2. Empiric antibiotics in the critically ill: Results of the AATICC trial.
398. 2<sup>nd</sup> Paris International Conference on Intensive Care, Société de Réanimation del la Langue Française, Paris France, June 7,8, 2012. 1. Source control and Selective Decontamination of the Digestive Tract. 2. Activated protein C in septic shock: Results of the PROWESS-Shock study. 3. Intravenous immunoglobulins in sepsis.
399. WHO Consultation: Towards effective treatment of severe acute respiratory illnesses, Annecy France, July 5,6, 2012. Critical care for severe acute respiratory illness.
400. 11<sup>th</sup> International Congress on Complexity in Acute Illness, Ottawa, Canada, September 6 – 9, 2012: What is a disease in the critically ill? Towards a staging system for severe acute illness.
401. Seminar on the Treatment of Severe Infections, Winnipeg, Manitoba, September 18, 2012: Acute therapy and de-escalation in abdominal sepsis.
402. 1er Simposio Internacional de Medicina Crítica “Dr. José Besso”, Caracas Venezuela, September 20, 21, 2012. 1. Management of severe intra-abdominal sepsis. 2. MODS: New horizons. 3. The marvelous world of biomarkers. 4. Sepsis trials: What do we need to know?
403. 16<sup>th</sup> International Meeting, Peruvian Society of Intensive Medicine, Cusco, Peru, September 26-28, 2012: 1. Biomarkers in shock. 2. Damage control in the ICU. 3. What can we do to improve the management of sepsis? 4. Resuscitation and deresuscitation.
404. XXXIX Reunión Annual Nacional Asociación Mexicana de Medicina Crítica y Terapia Intensiva, León, Guanajuato, Mexico, October 24 – 27, 2012. 1. Principles of source control in the management of infection for the intensivist. 2. Critical illness is an iatrogenic disorder. 3. Management of severe acute pancreatitis.
405. American Heart Association Resuscitation Science Symposium, Los Angeles, CA, November 4, 2012: InFACT: A global research initiative.
406. International Sepsis Forum Sepsis 2012, Paris France, November 7-9, 2012: Establishing efficacy in clinical trials.
407. 9<sup>th</sup> Turkish Congress of Intensive Care Medicine/1<sup>st</sup> Euro-Asian Critical Care Meeting, Ankara, Turkey, November 28-30, 2012. Guidelines, the Global Sepsis Alliance, and InFACT
408. International Influenza Networks Meeting, Scottsdale, Arizona, January 14 – 16, 2013. InFACT: A global acute care research initiative.
409. Canadian Critical Care Trials Group Residents Research Day, Lake Louise Alberta, January

- 27, 2013. 1. The Canadian Critical Care Trials Group: Eight lessons learned. 2. Building an academic career.
410. 11<sup>th</sup> ASM Biodefense and Emerging Diseases Research Meeting, Washington, D.C. February 25 – 27, 2013. InFACT: Global collaboration in acute care research.
411. 33<sup>rd</sup> International Symposium of Intensive Care and Emergency Medicine, Brussels, Belgium, March 19 – 22, 2013. 1. Is critical illness a disease? 2. The abdominal compartment syndrome: Is it relevant? 3. Why do good trials yield divergent results? 4. How does the host recognize danger? 5. Endotoxin plays an important role in sepsis. 6. Decision-making in multiple trauma.
412. 10<sup>th</sup> Critical Care Symposium, Manchester UK, April 25-26, 2013. 1. The neutrophil in critical illness. 2. Pre-B Cell Colony Enhancing Factor (PBEF)/Nampt/Visfatin.
413. InFACT/ISF Outcome Measures Colloquium, Amsterdam, Netherlands May 5-7, 2013: Overview and objectives.
414. 11<sup>th</sup> Simposio Internacional Emergencias Médicas y Paciente Crítico, Santiago, Chile, May 9-10, 2013. 1. Source control in the management of complex infections. 2. Cell biology for the intensivist. 3. Endotoxin in critical illness: Epidemiology and treatment options.
415. 1<sup>st</sup> meeting, Latin American Clinical Trials Investigators Network (LACTIN), Maipo, Chile, May 11, 2013: The Canadian Critical Care Trials Group and InFACT: Lessons learned.
416. American Thoracic Society 2013 International Conference, Philadelphia PA, May 18- 23, 2013: Animal models of sepsis: Where have we gone wrong?
417. CIHR/ICRH Young Investigator Forum, Toronto, Ontario May 27-29, Keynote address: Speaking science: New tools for a changing world.
418. 2<sup>nd</sup> Singapore-ANZICS Intensive Care Forum, Singapore, July 12 – 14, 2013. 1. Building the evidence base of critical care: Global collaboration in investigator-led research. 2. Metaphor as syndrome: The Multiple Organ Dysfunction Syndrome in 2013. 3. Resuscitation and deresuscitation of the critically ill patient. 4. Host-microbial interactions in critical illness
419. Singapore ISARIC Roundtable Meeting, Singapore. July 14, 2013. The Canadian Critical Care Trials Group and the International Forum for Acute Care Trialists (InFACT).
420. 11<sup>th</sup> Congress of the World Federation of Societies of Intensive and Critical Care Medicine, Durban, South Africa, August 28-September 1, 2013. 1. Should ICU admission be dictated by prediction tools? 2. The root cause of critical illness. 3. Surgical source control. 4. InFACT: Global collaboration in acute care research. 5. Lessons learned from failed sepsis trials.
421. 6<sup>th</sup> International Congress on Sepsis and Multiorgan Dysfunction, Weimar Germany,

- September 4-6, 2013. 1. The role of biomarkers to guide treatment in sepsis. 2. PIRO: Sepsis diagnosis and stratification.
422. World Sepsis Day, Houston Methodist Hospital, Houston TX, September 12, 2013. World Sepsis Day at 2: Successes and challenges.
423. ESICM 26<sup>th</sup> Annual Congress, Paris France, October 8, 2013: Keynote address – Thinking big: Towards global collaboration in critical care research.
424. ESICM 26<sup>th</sup> Annual Congress, Paris France, October 7 – 9 2013. 1. It is unsafe to resuscitate without SvCO<sub>2</sub>: Con. 2. Source control. 3. Complicated surgical wounds 4. Source control in less than 12 hours.
425. International Sepsis Forum Sepsis 2013, Rio de Janeiro Brazil, November 5-6, 2013. 1. Planning for the next pandemic. 2. Designing smarter Phase II trials 3. Novel devices in sepsis. 4. The Canadian Critical Care Trials Group: Current activities.
426. XVIII Annual Congress, Brazilian Society of Intensive Care Medicine, Rio de Janeiro, Brazil, November 7 – 9, 2013. 1. Iatrogenesis in the ICU. 2. The global impact of investigator-led research in critical care.
427. Asian Critical Care Conference, Hong Kong, November 21, 22 2013. 1. Regulation of neutrophil survival in trauma and sepsis. 2. Sepsis trials: Where have we gone wrong? 3. Host-microbial interactions in critical illness.
428. Annual Congress, British Society for Immunology, Liverpool, UK. December 5, 2013: Plenary address: Evolving concepts in the pathophysiology of sepsis.
429. Critical Care Congress, Society of Critical Care Medicine, San Francisco, January 12, 2014. Empiric therapy and source control in septic shock.
430. SCCM/ESICM Consensus Conference on Definitions for Sepsis, San Francisco CA, January 13-14, 2014. 1. Sepsis: A history of the concept. 2. Compartmentalization of inflammation.
431. Critical Care Reviews, Galgorm, Northern Ireland, January 24, 2014. 1. Deresuscitation of the critically ill patient. 2. Intensive care in 2034.
432. University of Washington Department of Anesthesia Visiting Professor, Seattle WA, February 12, 2014. Resuscitation and deresuscitation of the critically ill patient.
433. Roundtable Meeting on Evidence in Critical Care Medicine, Brussels Belgium, March 15-17, 2014. Building global collaboration in acute care research
434. 34<sup>th</sup> International Symposium of Intensive Care and Emergency Medicine, Brussels Belgium, March 18-21, 2014. 1. Pandemics: How should the critical care community respond? 2. Apoptosis as a mechanism of critical illness. 3. Big international research consortia. 4.

PBEF/Nampt/Visfatin. 5. Core outcome measures for critical care research. 6. The microbial flora of critical illness: What does it tell us? 7. Abdominal trauma. 8. Acute pancreatitis: Principles of management.

435. Shandong Provincial Critical Care Medicine Conference, Jinan, China, April 18 – 20, 2014. 1. Sepsis trials: Where have we gone wrong? 2. Host-microbial interactions in critical illness.
436. Visiting Professor, Xiangya School of Medicine, Changsha China, April 21, 2014. 1. InFACT: Global collaboration in acute care research. 2. Management of severe acute pancreatitis.
437. Resuscitation in Motion Symposium, Toronto Ontario, April 28, 2014. Keynote address: A passion for the art of science.
438. Surgical Infection Society 34<sup>th</sup> Annual Meeting, Baltimore MD, May 1-3, 2014. The multiple organ dysfunction syndrome.
439. Rapid Response Systems: Driving Patient Safety, 10<sup>th</sup> Annual Meeting, Miami, FL USA, May 11-13, 2014: 1. Building consensus on outcome measures for acute illness. 2. Surgical checklists: Do they Work? 3. Building global collaboration in critical care.
440. LACCTIN 2<sup>nd</sup> Annual Meeting, Casa Blanca, Chile, May 14, 2014: InFACT- Collaborative global acute care research
441. 12 Simposio Internacionale de Emergencias Médicas y Paciente Crítico, Santiago Chile, May 15 – 17, 2014. 1. Sepsis 2014. 2. Source control in complex infections. 3. Scores: What is new?
442. Canadian Perioperative Anesthesia and Medicine Meeting, Toronto, Canada May 31, 2014: Sepsis 2014: New guidelines, old challenges.
443. Canadian Critical Care Trials Group Residents' Research Day, Montreal, June 16, 2014. Building a career in academic medicine.
444. 3<sup>rd</sup> Neurocritical Care Research Conference, Houston TX, August 15-17, 2014. 1. What is evidence-based medicine? 2. When are randomized clinical trials unnecessary?
445. SepsEast; 2nd Central and Eastern European Sepsis Forum, Budapest, Hungary, September 18 – 20, 2014. 1. The PIRO concept. 2. Opportunities for global collaboration in sepsis research.
446. 14<sup>th</sup> Acute Dialysis Quality Initiative, Bogota, Colombia, October 13-14, 2014. Immune cells in sepsis.
447. 68<sup>th</sup> SIAARTI Meeting, Venice, Italy, October 23 -25, 2014. Fluid replacement in septic shock.

448. 3<sup>rd</sup> Patient Blood Management Symposium, Toronto, Canada November 29, 2014. Age of blood: What do we know?
449. Sepsis 2014, Paris France. December 3-5, 2014: NAD in sepsis: The Nampt connection.
450. 7<sup>th</sup> Baltic Congress of Anesthesia, Intensive Care, and Emergency Medicine. Riga, Latvia December 4-6, 2014. 1. Fluid and hemodynamic support: Controversies and challenges. 2. Deresuscitation of the critically ill patient.
451. State of the Art 2014 Intensive Care Society of the UK, London England, December 8 – 10, 2014. 1. Critical illness is an iatrogenic disorder. 2. Understanding the host response to sepsis.
452. Working Group on Rethinking Endpoints for Trials in the Critically Ill, Paris France, January 12-13, 2015. 1. Mortality as an outcome measure for sepsis trials. 2. Matching the trial to the disease.
453. AKI Outcomes: Overcoming barriers in AKI Research, NIH, Bethesda MD, February 11,12, 2015. Lessons from sepsis: Understanding heterogeneity.
454. Roundtable Conference on Reducing the Global Burden of Sepsis, Brussels, Belgium. March 14 – 16, 2015. Are we ready for the next pandemic?
455. 35<sup>th</sup> International Symposium on Intensive Care and Emergency Medicine, Brussels, Belgium. March 17 – 20, 2015. 1. Gastrointestinal fistulae: Basic principles for the intensivist. 2. Standardizing outcome measures for acute care research. 3. Damage control resuscitation. 4. Regulation of inflammation by the insulin receptor. 5. D is for deresuscitation.
456. 35<sup>th</sup> Surgical Infection Society, Westlake Village CA USA. April 16-18, 2015. From inflammation to the Multiple Organ Dysfunction Syndrome.
457. 12<sup>th</sup> Critical Care Symposium, Manchester UK, April 23-24, 2015. 1. Sepsis: The bacterium or the host? 2. Is critical illness a disease? 3. Endotoxin as a therapeutic target in critical illness. 4. Priorities in the management of multiple trauma.
458. GloPID-R Meeting, Cape Town South Africa. May 4-5 2015. Pandemic research collaboration: Priorities and challenges.
459. 13<sup>th</sup> Simposio Internacional Emergencias Médicas y Paciente Crítico, Santiago, Chile, May 14-16, 2015. 1. International collaboration in acute care research. 2. Management of severe acute pancreatitis. 3. Age of blood: Does it make a difference? 4. Understanding the host response in sepsis.
460. ATS 2015, Denver, CO USA May 18, 2015: Primum non nocere.

461. 5<sup>th</sup> COMET (Core Outcome Measures in Effectiveness Trials) Meeting, Calgary, Alta, Canada; May 20-21, 2015. Outcome measures: A critical care perspective.
462. 50<sup>th</sup> Congreso Nacional SEMICYUC, San Sebastián, Spain, June 14-17, 2015. 1. Care bundles: A methodologic critique. 2. What happened to the gut as motor of MOF?
463. 12<sup>th</sup> World Congress of Intensive and Critical Care Medicine, Seoul, Korea, August 29 – September 1, 2015. 1. Critical illness is an iatrogenic disorder. 2. Global collaboration for sepsis research. 3. Guidelines are the future of sepsis management – Con. 4. Global collaboration for acute care research. 5. Report of the WFSICCM Task Force: What is an ICU?
464. 4<sup>to</sup> Simposio Nacional de Sepsis, Cali, Colombia, September 10, 11, 2015. 1. The PIRO Model: Predisposition, Insult, Response, Organ Dysfunction. 2. Targets for vasopressor therapy in septic shock. 3. Inflammation, coagulopathy, and the pathogenesis of the Multiple Organ Dysfunction Syndrome.
465. First Endotoxemia Congress, Gurgaon, India, September 26, 2015. 1. New concepts, new models: Critical care 2015. 2. Endotoxin in critical illness: Significance and therapeutic implications. 3. Testing new treatments in complex diseases: EUPHRATES and beyond.
466. Critical Care Canada Forum, Toronto, Canada, October 26, 2015. Staging sepsis: How far have we come?
467. 2<sup>nd</sup> ICON Conference, Cebu, Manila Philippines, November 12, 13 2015: 1. Surgical source control and the difficult abdomen. 2. Deresuscitation of the critically ill patient.
468. ISARIC Meeting, London. UK November 30 – December 1, 2015: Capacity building, collaboration, and networking: The critical care perspective.
469. 20<sup>th</sup> Annual Meeting, Japanese Society of Critical Care for Endotoxemia, Tokyo, Japan, January 29-30, 2016: Hope, hype, and Hippocrates: The ongoing challenges of sepsis research.
470. Sepsis 2016/22<sup>nd</sup> Annual Conference of the Indian Society of Critical Care Medicine, Agra, India, February 5-6, 2016. 1. Pandemics: How to prepare. 2. Outcome measures for ICU trials. 3. Peritonitis 4. Investigator-led research: The Canadian Critical Care Trials Group. 5. Basic immunology for the intensivist
471. Scientific Computing for Improved Diagnosis and Therapy of Sepsis (SCIDATOS) Inaugural Meeting, Heidelberg, Germany, February 18, 19, 2016. Molecular therapies for sepsis: Why have they failed?
472. Leopoldina Symposium: Sepsis: The challenges of science, politics and society, Jena Germany, March 10, 11, 2016. The role of the ICU in the response to pandemics.
473. 36<sup>th</sup> International Symposium of Intensive Care and Emergency Medicine, Brussels, Belgium,

- March 15 - 18, 2016. 1. What is an ICU? 2. Deresuscitation. 3. Why do good trials yield divergent results? 4. Priorities in the management of trauma.
474. 13<sup>th</sup> International Sepsis Forum, Latin American Sepsis Institute, Sao Paulo Brazil, April 7,8, 2016. 1. Failure: The inevitable pathway of sepsis protocols. 2. Deresuscitation: The final stage in sepsis management. 3. CCCTG: What is next in sepsis clinical trials?
475. 14<sup>th</sup> SIEMPAC, Santiago, Chile, May 12-14, 2016: 1. Sepsis 2016: Are we making progress? 2. The Multiple Organ Dysfunction Syndrome (MODS) at 40. 3. *Acinetobacter* infection in the ICU. 4. Why do good trials yield divergent results?
476. American Thoracic Society Workshop on Determining the Outcome Measures for Recovery after Critical Illness, San Francisco CA May 14, 2016. The InFACT Outcome Measures Working Group.
477. Shock Society Annual Meeting, Austin TX, June 11-14, 2016. MODS: The role of the doctor.
478. International Society for Influenza and Respiratory Viruses Options IX, Chicago, August 25-28, 2016. Influenza: The role of the ICU.
479. First World Sepsis Congress; Online Conference September 8, 9 2016 Pandemic Readiness: The role of global collaboration.
480. Chinese Critical care Congress 2016, Dalian China September 23, 24 2016. 1. Why have sepsis clinical trials failed? 2. The gut in multiple organ failure: Where do we stand in 2016? 3. Deresuscitation. 4. Endotoxin in critically ill patients.
481. 297 Annual Congress, European Society of Intensive Care Medicine, Milan, Italy, October 1-5, 2016. 1. Update on sepsis. 2. Acute pancreatitis 3. Clinical trials in sepsis: Is big beautiful?
482. Critical Care Canada Forum 2016, Toronto, Canada, October 31 – November 2, 2016. 1. Definitions: Do they help us? 2. Endotoxemia: Harmful or beneficial? 3. International collaboration for RCTs in the 21<sup>st</sup> Century.
483. International Sepsis Forum Colloquium on Antimicrobial Resistance, Paris, France December 4 – 6, 2016: 1. Insights from the international epidemiology of ICU-acquired infection with *Acinetobacter*. 2. Source control to reduce antimicrobial resistance.
484. Sepsis 2016, Paris France, December 6 – 8, 2016. Investigator-led clinical trials.
485. Society of Critical Care Medicine 46<sup>th</sup> Annual Congress, Honolulu, HI, January 21 – 25, 2017. 1. Plenary Lecture: Global collaboration in acute care research: Opportunities, challenges, and prospects. 2. Putting the personal in personalized medicine: Understanding capabilities and potential benefits.

486. 37<sup>th</sup> International Symposium of Intensive Care and Emergency Medicine, Brussels, Belgium, March 21-24, 2017. 1. De-escalation: How aggressive? 2. Is endotoxemia harmful or beneficial? 3. Precision: Integrating Evidence, inference, and experience. 4. Abdominal trauma: Observe or operate? 5. Large pragmatic trials. 6. The gut hypothesis of acute illness: A history. 7. Global research collaboration.
487. 14<sup>th</sup> Critical Care Symposium, Manchester UK. April 27-28, 2017. 1. Global collaboration in critical care research. 2. Reducing antibiotic exposure: The role of source control. 3. Abdominal trauma: Observe or operate? 4. Should we deresuscitate? 5. Nosocomial infection: The role of the hospital environment.
488. 2017 Wiggers-Bernard Conference: Pre-clinical modeling in sepsis. Vienna, May 4, 5, 2017. Humane endpoints for pre-clinical studies.
489. 15<sup>th</sup> SIEMPAC, Santiago, Chile, May 11-13, 2017. 1. Global collaboration in acute care research. 2. Should we deresuscitate? 3. Abdominal trauma: Observer or operate? 4. Endotoxemia in critical illness: Harmful or beneficial? 5. InFACT: Current activities.
490. American Thoracic Society International Conference 2017. Washington DC, May 21, 2017: Conceptualizing sepsis research: Where do the translational signals point?
491. BASIC Research Course, Sydney Australia, May 24, 2017. Global collaboration in acute care research.
492. Westmead Hospital, Sydney Australia, May 25, 2017. From Hippocrates to Sepsis 3.0
493. College of Intensive Care Medicine 2017. A Gut Reaction, Sydney, Australia, May 26-28, 2017. 1. The gut hypothesis of critical illness: A subjective history in five acts. 2. Acute pancreatitis.
494. Sepsis Update 2017, Weimar Germany, September 7, 8 2017. 1. The gut as a target to modulate inflammation. 2. Identifying responders to treatment.
495. Sepsis 2017, Paris France, September 11-13, 2017. 1. The caspase-8 survivalsome 2. Modulating immune responses in the elderly.
496. Critical Care Canada Forum, Residents' Day Toronto, Canada, October 1, 2017. 20 years of sepsis research.
497. Critical Care Canada Forum, Toronto, October 2-4, 2017. Michael Ward Memorial Lecture: The Gut Hypothesis of Critical Illness: A subjective history in 5 acts.
498. Acute Care Update, St. Joseph's Hospital, Toronto, October 14, 2017. From Hippocrates to Sepsis 3.0.
499. American College of Surgeons Clinical Congress 2017, San Diego CA, October 25, 2017: Fluids, resuscitation targets, vasopressors: What has changed?



500. Symposium on Inflammation in Health and Disease, Ottawa Center for Infection, Immunity, and Inflammation, Ottawa, Canada, October 27, 2017. The caspase-8 survivalosome: Linking activation and cell death in the neutrophil.
501. XIII World Congress of Intensive and Critical Care Medicine, Rio de Janeiro, Brazil, November 8 – 11, 2017. 1. Vasoactive medications: What has changed? 2. Critical care research: Should we work in networks? 3. Abdominal infection in the critically ill. The basis for surgical decision-making. 4. Deresuscitation: How aggressive should we be?
502. McMaster University Department of Critical Care Medicine Retreat, Hamilton, Ontario, December 7, 2017. The Gut in Critical Illness: A History in Five Acts
503. Joint Programming Initiative on Antimicrobial Resistance, Frankfurt, Germany, March 8, 9, 2018: Antimicrobial resistance in intensive care: The AMRIC program.
504. 38<sup>th</sup> International Symposium on Intensive Care and Emergency Medicine, Brussels, Belgium, March 20-23, 2018. 1. So many bacterial species, so few infections. 2. The survivalosome: Linking activation and cell death in the neutrophil. 3. Why do we use antibiotics in the critically ill? 4. Anti-endotoxin therapies: Is there still a role? 5. Why do patients develop a positive fluid balance? 6. We should abandon the sepsis trial. 7. Mortality as an endpoint in clinical trials. 8. Abdominal trauma: When (not) to operate.
505. 11<sup>th</sup> International Congress on Critical Care Medicine and Intensive therapy, Panama City, Panama April 19-21, 2018. 1. Endotoxin in critical illness. 2. Deresuscitation. 3. ICU-acquired infection: Microbiology, risk factors, and management. 4. A history of the gut in critical illness.
506. European Stroke Organization, 4<sup>th</sup> International Conference, Gothenburg Sweden, May 16, 2018: InFACT: What can stroke learn from critical care?
507. 2<sup>nd</sup> World Sepsis Conference Online conference, September 5,6, 2018. Surgical source control.
508. International Sepsis Symposium, Glasgow, Scotland, September 27, 2018. 1. Why have sepsis trials not given us new treatments? 2. What I'd like to leave you with.
509. International Sepsis Forum Sepsis 2018/9<sup>th</sup> Symposium of the Thai Society for Critical Care Medicine, Bangkok, Thailand, October 1-3, 2018. 1. A reappraisal of sepsis therapy: Can it cause harm? 2. Abdominal sepsis: The basis for surgical decision-making. 3. Focused trials are the way to go.
510. 39<sup>th</sup> International Conference of the European Society of Intensive Care Medicine, ESICM LIVES, Paris, France, October 21-24 2018. 1. Sepsis and ARDS are outdated concepts. 2. Plasma in Sepsis: Risks and benefits.
511. Critical Care Canada Forum 2018, Toronto Canada, November 7-9, 2018. 1. What's new in

- source control. 2. 30 Years ago: The Canadian Critical Care Trials Group. 3. Integrating research and quality improvement.
512. CIHR/ICRH/CCCS Distinguished Lecturer Award in Critical Care Science, Toronto, November 9, 2018. The art and science of collaboration.
513. Sepsis: Physiology, prediction, and precision. Chan-Zuckerberg BIOHUB, San Francisco CA, November 30, 2018. Sepsis: Understanding heterogeneity in biology and treatment response.
514. 1<sup>st</sup> Critical Care Clinical Trialists Workshop, Washington DC, February 7, 8, 2019. Four fallacies in the design of sepsis trials.
515. 48<sup>th</sup> Annual Congress, Society of Critical Care Medicine, San Diego CA, February 17-20, 2019. Life after landmark clinical trials. Prevention of the Multiple Organ Dysfunction Syndrome.
516. 39<sup>th</sup> International Symposium on Intensive Care and Emergency Medicine, Brussels, Belgium, March 19-22, 2019: 1. So many species of bacteria, so few cause infection. 2. The microbiome of the ICU. 3. How do cells decide to activate or die? 4. Sepsis and ARDS are outdated concepts. 5. Patients as partners in ICU research.
517. 12<sup>th</sup> International Congress on Critical Care Medicine and Intensive therapy, Panama City, Panama April 11-13, 2019. 1. A history of the involvement of surgeons in intensive care. 2. Management of severe acute pancreatitis. 3. Source control: Principles and practice. 4. Decision-making in acute care surgery.
518. Sepsis 2019, Rio de Janeiro Brazil, May 9,10, 2019: 1. No more doctors, just computers: Clinicians are essential. 2. Sepsis trials: Why do we keep making the same mistakes? 3. Who should receive steroids for septic shock?
519. 17<sup>th</sup> International Symposium on Emergency Medicine and the Critical Patient, Santiago Chile, May 16,17, 2019. 1. Deresuscitation of the critically ill patients. 2. The ICU Microbiome in Critical Illness. 3. Antimicrobial Resistance in the ICU. 4. Beyond Sepsis and ARDS: Staging Critical Illness
520. Pediatric Acute Lung Injury and Sepsis Investigators' Network, Vancouver, B.C. September 6,7, 2019. 1. The International Forum for Acute Care Trialists (InFACT): Building global collaboration in acute care research. 2. The platform trial: Integrating research and quality improvement.
521. Sepsis Update 2019, Weimar, Germany, September 11<sup>th</sup>-13<sup>th</sup>, 2019. 1. Predictive enrichment using subendotypes in ARDS and sepsis. 2. The failing gut in sepsis: How to assess.
522. 14<sup>th</sup> World Congress of Intensive and Critical Care Medicine, Melbourne Australia, October 15 – 18, 2019. 1. The Gut Hypothesis of Secondary Infection: A History 2. The International Forum for Acute Care Trialists (InFACT): Why do we need global

collaboration? 3. Moving Beyond Current Constructs of Sepsis Trials: Resolving Heterogeneity

523. NHLBI Colloquium on Precision Medicine in ARDS, Washington DC, October 21, 22, 2019: Heterogeneity: What are the issues?
524. International Sepsis Forum Colloquium on Phenotypes and Treatable Traits in Sepsis, Boston MA, November 6, 7 2019: The sepsis hypothesis.
525. Ottawa Hospital Research Institute Annual Research Day, November 7, 2019. Keynote address. Speaking science: Scientific literacy and global collaboration in perilous times.
526. Critical Care Canada Forum, Toronto, Canada, November 11-13, 2019: 1. Global collaboration in acute care research. 2. The gut hypothesis of MODS: A history.
527. Critical Care Trialists Workshop, Washington DC, February 28, 2020: What drugs have we abandoned unnecessarily?
528. CITI; Online: April 23, 2020: Harmonizing outcomes in COVID-19 clinical trials
529. BARDA Online Symposium on Outcomes in COVID-19 disease. April 28, 2020. The WHO Common Outcome Measure Set.
530. The Global Health Network Webinar, May 12, 2020: REMAP-CAP.
531. The Global Health Network Webinar, June 15, 2020: Community Engagement in COVID-19 Research: Vital, but Challenging
532. Continulus online webinar, August 18, 2020: The gut in critical illness: Three millennia of history.
533. National Academy of Sciences Workshop, August 27, 2020: Biomarkers of Organ Dysfunction
534. 40<sup>th</sup> International Symposium of Intensive and Critical Care Medicine (Online), September 15-18, 2020. 1. Platform trials can integrate research and quality improvement 2. The Bayesian intensivist: Reconciling evidence, experience, and common sense. 3. The Role of the gastrointestinal tract in MODS revisited. 4. The sepsis hypothesis is simply wrong.
535. E-Visiting Professor, University of Alberta, Edmonton Alberta, September 15, 2020: Pandemic research: Lessons from COVID-19.
536. Critical Care Canada Forum Online, October 3-6, 2020: 1. Critical care: Advice for the next generation. 2. Lessons from COVID-19 for large collaborative clinical trials.
537. WHO Advisory Group Online, December 7, 2020. Rescue treatments for COVID-19

538. Shock Society Webinar, December 17, 2020. Sepsis: The odyssey continues.
539. John Hinds Memorial Lecture, Critical Care Reviews Online, January 22, 2021. Collaboration on the edge: A global critical care research story.
540. Japanese Intensive Care Society (Online) February 13, 2021. Global collaboration: Changing the face of pandemic research.
541. Continulus Webinar, April 13, 2021. Clinical research in critical care: Lessons from COVID-19.
542. 23rd International Symposium Turkish Society of Intensive Care; Online May 19-22, 2021. 1. Reconciling evidence, experience, and common sense in critical care. 2. Global collaboration in acute care clinical research: Opportunities, challenges, and needs.
543. 41<sup>st</sup> International Symposium of Intensive Care and Emergency Medicine, Brussels, Belgium, August 31 – September 3, 2021 1. The Multiple Organ Dysfunction Syndrome: A brief history. 2. Platform trials to integrate research and quality improvement. 3. Severe acute pancreatitis. 4. COVID-19: Impact on development of new sepsis therapies.
544. Sepsis Update 2021, Weimar Germany, September 7-10, 2021 Anakinra in severe COVID-19.
545. International Severe Acute Respiratory and Emerging Infections Consortium (ISARIC) online forum, October 5, 2021: Pandemic research: A perspective from the ICU.
546. World Conference on COVID-19 and Critical Care, Jaipur, India October 22-24, 2021. COVID-19 is changing critical care.

### Peer-Reviewed Presentations

1. **Marshall JC**, Bodurtha A, Jones G, Charman JH: Changing patterns in the management of subphrenic abscess. Canadian Association of Clinical Surgeons, Eastern Division, Halifax, Nova Scotia, May 1983.
2. **Marshall JC**, Lee C, Meakins JL, Christou NV: Kupffer cell modulation of the systemic immune response. Surgical Infection Society, Chicago, Illinois, April 1986.
3. **Marshall JC**, Laporte L, Christou NV, McLean, Forse RA, Tin L, Shizgal HA, Meakins JL: Secondary infection in critical surgical illness: The role of endogenous pathogens. Canadian Critical Care Society/Royal College of Physicians and Surgeons of Canada, Toronto, Ontario, Sept. 1986.
4. **Marshall JC**, Christou NV, Horn R, Meakins JL: The microbiology of multiple organ failure: The proximal GI tract as an occult reservoir of pathogens. Surgical Infection Society, Philadelphia, Pennsylvania, April 1987.

5. **Marshall JC**, Giannias B, de Santis M, Meakins JL: Aspiration pneumonia in the ICU patient is a bacterial pneumonia. Canadian Critical Care Society/Royal College of Physicians and Surgeons of Canada, Winnipeg, Manitoba, Sept. 1987.
6. **Marshall JC**, Rode H, Eshelby D, Meakins JL, Christou NV: Specific and non-specific immunity in the response to pseudomonas infection following thermal injury. Canadian Association of General Surgeons/Royal College of Physicians and Surgeons of Canada, Winnipeg, Manitoba, Sept. 1987.
7. **Marshall JC**, Christou NV, de Santis M, Meakins JL: Proximal gastrointestinal flora and systemic infection in the critically ill surgical patient. Surgical Forum, American College of Surgeons, San Francisco, California, Oct. 1987.
8. **Marshall JC**, Christou NV, Meakins JL: Altered small bowel flora and systemic immunosuppression in experimental peritonitis. Society of University Surgeons, San Antonio, Texas, Feb. 1988.
9. **Marshall JC**, Rode H, Christou NV, Meakins JL: Impaired pulmonary clearance of *Pseudomonas* following thermal injury: The role of specific antibacterial antibody and nonspecific immune mechanisms. First International Congress on the Immune Consequences of Trauma, Shock and Sepsis, Munich, Germany, March 1988.
10. **Marshall JC**, Christou NV, Meakins JL: Small bowel overgrowth with *E. coli* produces systemic immunosuppression in peritonitis in the rat. First International Congress on the Immune Consequences of Trauma, Shock and Sepsis, Munich, Germany, March 1988.
11. **Marshall JC**, Laporte L, McLean AH, Christou NV, Meakins JL: ICU-acquired infection: Microbiology and determinants of susceptibility. Society of Critical Care Medicine, Orlando, Florida, May 1988.
12. **Marshall JC**, Christou NV, Meakins JL: Modulation of non-specific and specific systemic immunity by orally-administered pseudomonas aeruginosa. Surgical Infection Society, San Francisco, California, May 1988.
13. **Marshall JC**, Rode H, Christou NV, Meakins JL: In vivo activation of Kupffer cells by endotoxin causes suppression of non-specific, but not specific systemic immunity. Surgical Forum, American College of Surgeons, Chicago, Illinois, Oct. 1988.
14. **Marshall JC**, Sweeney D: Sepsis or infection: Determinants of outcome in critical surgical illness. Surgical Infection Society, Denver, Colorado, April 1989.
15. **Marshall JC**, Christou NV, McLean APH, Meakins JL: The GI tract: The undrained abscess in multiple organ failure. 33rd World Congress of Surgery, Toronto, Ontario, Sept. 1989.
16. **Marshall J**, Sutherland J, Christou N, Meakins J: The effects of in vivo Kupffer cell activation on cell-mediated immunity and resistance to bacterial infection. 5th World

Congress of Intensive and Critical Care Medicine, Kyoto, Japan, Sept. 1989.

17. **Marshall JC**: The gut-liver axis in multiple organ failure: Sepsis, infection and altered immunity in critical surgical illness (Medalist in Surgery Lecture). Royal College of Physicians and Surgeons of Canada, Edmonton, Alberta, Sept. 1989.
18. **Marshall JC**, Sweeney D, Roy P, Bethune DCG: The multiple organ failure (MOF) score correlates with mortality and susceptibility to ICU-acquired infection. 33rd World Congress of Surgery, Toronto, Ontario, Sept. 1989.
19. **Marshall JC**, Sweeney D, Roy PD, Allen CTB, Hall RT, Morrison D: The multiple organ failure score: The severity of organ dysfunction in critical illness correlates with ICU outcome. 5th World Congress of Intensive and Critical Care Medicine, Kyoto, Japan, Sept. 1989.
20. **Marshall J**, Sutherland J, Kuehn R, Prent G: Suppression of in vitro spleen cell proliferation following in vivo Kupffer cell activation. Society for Leukocyte Biology, Marco Island, Florida, Oct. 1989.
21. **Marshall J**, Cheung D, Kuehn R: Gut luminal bacteria contribute to impairment of cell-mediated immunity in bacterial peritonitis. 23rd Annual Meeting, Association for Academic Surgery, Louisville, Kentucky, Nov. 1989.
22. O'Brien R, Murdoch J, Kuehn R, **Marshall JC**: The effects of albumin resuscitation on bacterial translocation and absorption of gut endotoxin following thermal injury. Association for Academic Surgery, Houston, Texas, Nov. 1990.
23. Kucey DS, Cheung PYC, **Marshall JC**, Rotstein OD: Modulation of macrophage procoagulant activity by arachidonic acid metabolites. Association for Academic Surgery, Colorado Springs, Colorado, Nov. 1991.
24. **Marshall JC**, Ribeiro MB, Chu PTY, Sheiner PA, Rotstein OD: Portal endotoxemia stimulates the release of an immunosuppressive factor from alveolar and splenic macrophages. Association for Academic Surgery, Colorado Springs, Colorado, Nov. 1991.
25. **Marshall JC**, Sibbald WJ, Cook DA, Roy PD, Christou NV: The multiple organ dysfunction (MOD) score: A reliable descriptor of a complex clinical outcome. Society of Critical Care Medicine, Los Angeles, California, May 1992.
26. Chu PT, Ribeiro MA, Rotstein OD, **Marshall JC**: Alveolar macrophage mediated-immune suppression following portal endotoxemia: The role of transforming growth factor beta. Surgical Forum, American College of Surgeons, New Orleans, Louisiana, Oct. 1992.
27. Gamliel Z, Romaschin AD, Liauw S, **Marshall JC**, Walker PM: Regional hemodynamic and metabolic effects of chronic hyperdynamic sepsis cause multiorgan failure. Surgical Forum, American College of Surgeons, New Orleans, Louisiana, Oct. 1992.

28. **Marshall JC**, Shields J: Infection and the host septic response in the development of the multiple organ dysfunction syndrome (MODS). Surgical Infection Society, Baltimore, Maryland, April 1993.
29. **Rotstein OD, Cheung PYC, Marshall JC**, Brisseau GF: Intracellular oxidants modulate macrophage activation by lipopolysaccharide (LPS). Surgical Infection Society, Baltimore, Maryland, April 1993.
30. Chu P, Ribeiro M, Mills G, Rotstein O, **Marshall J**: Immune regulation by the liver: Macrophage-mediated suppression of T cell activation following gram negative portal bacteremia. AAI/CIS Annual Meeting, Denver, Colorado, May 1993.
31. Stewart T, Toth J, Higgins R, Herman S, Walker P, **Marshall JC**, Winton T, Demajo W: Barotrauma in severe ARDS is greatest in non dependent lung zones: Evaluation by computed tomography. Society of Critical Care Medicine, New York, New York, June 1993.
32. Chiu P, Roy PD, **Marshall JC**: Blood transfusion is a risk factor for ICU-acquired infection and the multiple organ dysfunction syndrome (MODS). Society of Critical Care Medicine, New York, New York, June 1993.
33. Nathens A, Rotstein OD, **Marshall JC**: Tertiary peritonitis: Clinical features of a complex nosocomial infection. Society of Critical Care Medicine, New York, New York, June 1993.
34. Brisseau GF, Cheung PYC, **Marshall JC**, Rotstein OD: N-acetylcysteine differentially modulates macrophage activation by lipopolysaccharide. Surgical Forum, American College of Surgeons, San Francisco, California, Oct. 1993.
35. Brisseau GF, Tsai OC, Nordstrom T, **Marshall JC**, Grinstein S, Rotstein OD: Oxidant stress modulates macrophage pH regulatory mechanisms. Society of University Surgeons, Jackson, Mississippi, Feb. 1994.
36. **Marshall JC**, Shields J: Infection, host response, and organ dysfunction contribute independently to outcome in sepsis syndrome: Towards a staging system for clinical sepsis. Surgical Infection Society, Toronto, Ontario, April 1994.
37. Nathens AB, Ribeiro MB, Ding JW, Rotstein OD, **Marshall JC**: The gut as a cytokine-generating organ: Small bowel TNF-alpha production during systemic endotoxemia. Surgical Infection Society, Toronto, Ontario, April 1994.
38. Brisseau GF, Cheung PYC, **Marshall JC**, Romanek R, Grinstein S, Rotstein OD: The role of tyrosine phosphorylation in endotoxin-induced macrophage activation. Surgical Infection Society, Toronto, Ontario, April 1994.
39. Dackiw APB, Nathens AB, Ribeiro MB, **Marshall JC**, Rostein OD: Effect of mast cells on macrophage procoagulant activity and TNF production. Association for Academic Surgery, 28th Annual Meeting, Albuquerque, New Mexico, Nov. 1994.

40. Nathens AB, Ribeiro M, Rotstein OD, **Marshall JC**: Intestinal epithelial cells downregulate macrophage (M0) TNF production. Society of University Surgeons, 56th Annual meeting, Denver, Colorado, Feb. 1995.
41. Foster D, Wilson D, Smith R, Todd T, Demajo W, **Marshall J**: Cardiopulmonary resuscitation (CPR) is an extraordinary intervention in a non-cardiac adult intensive care unit. Society of Critical Care Medicine, Annual Meeting, San Francisco, California, Feb. 1995.
42. Nathens AB, Brisseau GF, Dackiw APB, Rotstein OD, **Marshall JC**: Intestinal epithelial cells downregulate macrophage activation: Reversal by epithelial cell hypoxia. Surgical Infection Society, 15th Annual meeting., Louisville, KY, April 1995.
43. Dackiw APB, Nathens AB, Cheung PYC, **Marshall JC**, Rotstein OD: Mast cell/macrophage interactions during inflammation. Surgical Infection Society, 15th Annual meeting, Louisville, KY, April 1995.
44. Dackiw APB, Nathens AB, **Marshall JC**, Rotstein OD: Antioxidant inhibition of mast cell-induced macrophage activation. Surgical Forum, American College of Surgeons, New Orleans, Louisiana, Oct. 1995.
45. Dackiw APB, Nathens AB, **Marshall JC**, Rotstein OD: Integrin engagement induces monocyte procoagulant activity and TNF production via induction of tyrosine phosphorylation. Association for Academic Surgery, Dearborn, Michigan, Nov. 1995.
46. Foster D, Tkaczyk, A, Cook D, McDonald E, Wilson D, McLellan PA, Puksa S, Stallwood G, Ricci C, Lazar N, **Marshall J**: Decision making in an adult tertiary care ICU following provincial legislation of advance directives. Society of Critical Care Medicine, New Orleans, Louisiana, Feb. 1996.
47. Foster D, Wilson D, Cook D, McDonald E, Tkaczyk A, Buckingham L, **Marshall J**, Lazar N: Health care workers' predictions of survival compared to illness severity scoring systems: How accurate are we? Society of Critical Care Medicine, New Orleans, Louisiana, Feb. 1996.
48. Nathens AB, Huang J, Wilson D, Baptist D, **Marshall J**: Nosocomial infection in the Surgical ICU: attributable morbidity and mortality. Society of Critical Care Medicine, New Orleans, Louisiana, Feb. 1996.
49. **Marshall JC**, Foster D, Smith R, McKenna C, Demajo W, Walker P: Quantification of the multiple organ dysfunction syndrome (MODS) as a risk factor, outcome descriptor, and surrogate measure of morbidity in the ICU. Society of Critical Care Medicine, New Orleans, Louisiana, Feb. 1996.
50. Hackam D, Foster D, Zahn C, McLeod R, **Marshall J**: The ICU Coma Score (TICS): a novel instrument for evaluation of altered consciousness in the critically ill. Society of Critical Care Medicine, New Orleans, Louisiana, Feb. 1996.



51. Watson RWG, Rotstein OD, Nathens AB, **Marshall JC**: Thiol mediated redox regulation of neutrophil apoptosis. The Society of University Surgeons, Washington, DC, Feb. 1996.
52. Nathens AB, **Marshall JC**, Watson RWG, Dackiw AB, Rotstein OD: Diethylmaleate ameliorates endotoxin induced acute lung injury. The Society of University Surgeons, Washington, DC, Feb. 1996.
53. Hackam DJ, Grinstein S, Nathens AB, Watson RWG, **Marshall JC**, Rotstein OD: Exudative neutrophils exhibit impaired pH regulation compared to circulating neutrophils. Surgical Infection Society, Milwaukee, Wisconsin, April 1996.
54. Dackiw APB, McGilvray ID, Nathens AB, **Marshall JC**, Rotstein OD: Prevention of endotoxin induced mortality by anti-tissue factor immunization. Surgical Infection Society, Milwaukee, Wisconsin, April 1996.
55. Nathens AB, Bujard M, Watson RWG, Dackiw APB, **Marshall JC**, Rotstein OD: Pyrrolidine dithiocarbamate attenuates endotoxin induced lung injury. Surgical Infection Society, Milwaukee, Wisconsin, April 1996.
56. Watson RWG, Rotstein OD, Nathens AB, **Marshall JC**: Cross-linking neutrophil *B2* integrins delays apoptosis. FASEB, New Orleans, Louisiana, June 1996.
57. McLeod RS, Geerts W, Sniderman K, Greenwood C, Gregoire R, Taylor B, Silverman R, Atkinson K, Burnstein M, **Marshall J**, Burul C, Anderson D, Ross T, Wilson S, Barton P: Comparison of low-dose heparin (LDH) to low molecular weight heparin (LMWH) in the prevention of venous thromboembolism (VTE) in patients undergoing colorectal surgery. Canadian Association of General Surgeons/The Royal College of Physicians and Surgeons of Canada, Sept. 1996.
58. Dackiw APB, Nathens AB, **Marshall JC**, Rotstein OD: Integrin engagement induces monocyte procoagulant activity and TNF production via induction of tyrosine phosphorylation. Canadian Association of General Surgery/The Royal College of Physicians and Surgeons, Halifax, Nova Scotia, Sept. 1996.
59. McLeod RS, Geerts W, Sniderman K, Greenwood C, Gregoire R, Taylor B, Silverman R, Atkinson K, Burnstein M, **Marshall J**, Burul C, Anderson D, Ross T, Wilson S, Barton P: Risk of thromboembolism (TE) and bleeding in patients receiving heparin prophylaxis undergoing colorectal surgery. Canadian Society of Colorectal Surgeons/The Royal College of Physicians and Surgeons of Canada, Halifax, Nova Scotia, Sept. 1996.
60. **Marshall JC**, Watson RWG: Dysregulation of neutrophil apoptosis in the systemic inflammatory response syndrome (SIRS). Canadian Surgical Biology Club Halifax, Nova Scotia, Sept. 1996.
61. Hackam DJ, West MA, Nathens AB, **Marshall JC**, Grinstein S, Rotstein OD: Intracellular acidification of macrophages ameliorates the host immune response to laparoscopic surgery. Surgical Forum, American College of Surgeons, San Francisco, CA, Oct. 1996.

62. Dackiw APB, Watson RWG, Nathens AB, Parodo J, **Marshall JC**, Rotstein OD: Monocyte transendothelial migration induces monocyte activation. Surgical Forum, American College of Surgeons, San Francisco, CA, Oct. 1996.
63. Nathens AB, Bitar R, **Marshall J**, Dackiw A, Watson RWG, Rotstein OD: Thiol-mediated regulation of endothelial ICAM-1 expression in acute lung injury. Surgical Forum, American College of Surgeons, San Francisco, CA, Oct. 1996.
64. **Marshall JC**, Watson RWG, Rotstein OD, Jimenez MF, Nathens AB, Parodo J: Alterations in Fas-induced apoptosis following neutrophil migration and activation. Society of Leukocyte Biology, Verona, Italy, Oct. 1996.
65. Watson RWG, Rotstein OD, McGilvray ID, Lu Z, Parodo J, **Marshall JC**: Neutrophil apoptosis modulated by adhesion molecule engagement is dependent on tyrosine phosphorylation. Society for Leukocyte Biology, Verona, Italy, Oct. 1996.
66. Foster DM, Doig GS, Romaschin A, Walker P, **Marshall JC**: The prognostic and clinical significance of endotoxemia in sepsis: Results using a new rapid reliable endotoxin assay. Society of Critical Care Medicine, San Diego, CA, Feb. 1997.
67. Watson RWG, Rotstein OD, Nathens AB, Parodo J, **Marshall JC**: Impaired apoptotic death signaling in inflammatory lung neutrophils is associated with decreased ICE expression. Society of University Surgeons, Tampa, Florida, Feb. 1997.
68. Jimenez MF, Watson RWG, Evans D, Evans D, Steinberg M, Rotstein OD, **Marshall JC**: Dysregulated expression of neutrophil apoptosis in the Systemic Inflammatory Response Syndrome (SIRS). Surgical Infection Society, Pittsburgh PA, May 1997.
69. Jahromi A, Watson RWG, Parodo J, Rotstein OD, **Marshall JC**: Adrenergic stimulation inhibits neutrophil apoptosis and functional activity. Surgical Infection Society, Pittsburgh PA, May 1997.
70. Watson RWG, Rotstein OD, Parodo J, Bitar R, **Marshall JC**: Regulation of neutrophil apoptosis by interleukin-1 $\beta$  converting enzyme (ICE) dependent IL-1 $\beta$  expression. Interscience Conference on Antimicrobial Agents and Chemotherapy, Toronto, Ontario, Oct. 1, 1997.
71. Jimenez M, McGilvray I, Watson RWG, Lu Z, **Marshall JC**, Rotstein OD: Role of the MAP kinases in neutrophil activation and apoptosis. Surgical Forum. American College of Surgeons, Chicago, IL, Oct. 13, 1997.
72. Watson RWG, Walsh M, Parodo J, Bitar R, Rotstein OD, **Marshall JC**: Interleukin 1 $\beta$  converting enzyme (ICE/caspase-1) regulates the expression of HL-60 apoptosis through processing of IL-1 $\beta$ . Society for Leukocyte Biology, Baltimore MD, Dec. 5, 1997.

73. Jimenez MF, McKenna C, Salazar R, Steinberg M, Foster D, Granton J, Demajo W, **Marshall JC**. The pressure-adjusted heart rate (PAR): A simple and valid descriptor of the cardiovascular dysfunction of MODS. Society of Critical Care Medicine, San Antonio TX, Feb 6, 1998.
74. Watson RWG, Rotstein OD, Parodo J, **Marshall JC**: Fas-mediated neutrophil apoptosis is mediated by thiol-dependent caspase activation. FASEB, San Francisco, April 19, 1998.
75. Hackam DJ, Christou NV, Khaliq Y, Duffy DR, Vaughn D, **Marshall JC**, Rotstein OD: Bioavailability of oral ciprofloxacin in early post-surgical patients. Surgical Infection Society, New, NY, April 30, 1998.
76. Heyland DK, Cook DJ, **Marshall J**, Heule M, Guslits B, Lang J, Jaeschke R, for the Canadian Critical Care Trials Group: The clinical utility of invasive diagnostic techniques in the setting of ventilator-associated pneumonia. 28th Educational and Scientific Symposium of the Society of Critical Care Medicine, San Francisco CA, Jan. 26, 1999.
77. Taneja R, Li Y, Parodo J, **Marshall JC**: Delayed neutrophil apoptosis in sepsis is associated with reduced caspase-3 activity. 19th International Symposium on Intensive Care and Emergency Medicine, Brussels, Belgium, March 16, 1999.
78. Foster D, Steinberg M, Cook D, Granton J, **Marshall J** : The impact of eligibility criteria on enrollment in ICU sepsis trials. 19th International Symposium on Intensive Care and Emergency Medicine, Brussels, Belgium, March 16, 1999.
79. Li Y, Taneja R, Parodo J, Rotstein OD, **Marshall JC**: IL-1 $\beta$  inhibits neutrophil apoptosis through differential activation of survival genes. FASEB, Washington, DC, April 20, 1999.
80. Taneja R, Li Y, Parodo J, **Marshall JC**: Regulation of neutrophil apoptosis in the systemic inflammatory response syndrome (SIRS). American Thoracic Society International Conference, San Diego CA, April 27, 1999.
81. Taneja R, Kapus A, Li Y, Parodo J, **Marshall JC**: Involvement of caspase-9 in constitutive neutrophil (PMN) programmed cell death (apoptosis). Society for Leukocyte Biology, Annual Meeting, Cambridge UK, Sept 23, 1999
82. Taneja R, Kapus A, Li, Y, Parodo J, **Marshall JC**: Delayed neutrophil (PMN) apoptosis is associated with increased mitochondrial membrane potential and preservation of cytochrome c in experimental and clinical sepsis. 29th Educational and Scientific Symposium, Society of Critical Care Medicine, Orlando FL, Feb 15, 2000
83. Rotstein D, Taneja R, Parodo J, **Marshall JC**: Phagocytosis of *Candida albicans* induces apoptosis of human neutrophils. Surgical Infection Society, Providence, Rhode Island, April 28, 2000.
84. **Marshall JC**, Panacek EA, Teoh L, Barchuk W: Modelling organ dysfunction as a risk

factor, outcome, and measure of biologic effect in sepsis: Results of the MONARCS trial. Society of Critical Care Medicine, 20th International Educational and Scientific Symposium, San Francisco, CA, Feb 14, 2001.

85. Jia S-H, Parodo J, Li Y, Fan L, **Marshall JC**: Pre-B cell enhancing factor (PBEF) inhibits apoptosis in inflammatory neutrophils (PMN). Society for Leukocyte Biology 35th Annual Meeting, Maui HI, Nov 8-11, 2001.

(Truncated in 2001)

### **Other Presentations**

Update in General Surgery, University of Toronto, Toronto, Ontario, Apr 1992. The maze of new antibiotics 1992: What to use in the septic patient this year?

Update in General Surgery, University of Toronto, Toronto, Ontario, Apr 1993. (1) Sepsis, SIRS, MODS: What's in a name?, (2) Gastrointestinal fistulae.

Gallie Day, Department of Surgery, University of Toronto, Toronto, Ontario, May 1993. The liver as an effector of immune dysfunction in critical illness.

Update in General Surgery, University of Toronto, Toronto, Ontario, Apr 25, 1997. Guidelines for the management of sepsis and septic shock.

### **RESEARCH FUNDING**

Marshall JC: Dalhousie Medical Research Foundation (\$9,816 1988 - 1989)

Marshall JC: Canadian Surgical Research Fund, CAGS (\$10,000 1988 - 1989)

Determination of the incidence and natural history of clinically significant bleeding from gastroduodenal stress ulceration and nosocomial pneumonia, in ICU patients not receiving stress ulcer prophylaxis. (Canadian Critical Care Trials Group), Fuller H, Cook D, Lacroix J, Marshall JC, Noseworthy T: Ontario Ministry of Health (\$165,000 1990 - 1991)

Selective decontamination of the digestive tract in multiple trauma. Pagliarello J, Marshall JC, Hull R, Todd T: Roussel Incorporated (\$20,000 1990 - 1992)

Mechanisms and immunologic consequences of gastrointestinal colonization in critical illness. Marshall JC: University of Toronto, Dean's Fund (\$9,200 1990 - 1992)

The role of gut liver axis in the pathogenesis of multiple organ failure. Marshall JC, Rotstein OD:

Physicians Services Incorporated Foundation (\$210,000 1990 - 1994)

Fluconazole treatment of candidemia. DeMajo WJ, Marshall JC: Pfizer Incorporated (\$2,000 1991 - 1992)

The effects of SDD on the cytokine response following multiple trauma. Marshall JC: Roussel Incorporated (\$25,000 1991 - 1992)

Ciprofloxacin versus Ceftazidime in the management of nosocomial pneumonia: Multi-centre study. Marshall JC, Rotstein OD: Miles Incorporated (\$18,000 1991 - 1992)

A randomized controlled trial to compare the efficacy and safety of low molecular weight heparin (Enoxaparin) to unfractionated heparin (Calciparin) in the prevention of thromboembolic events following colorectal surgery. McLeod R, Atkinson K, Burnstein M, Burul C, Geerts W, Gregoire R, Marshall JC, Ross TM, Silverman R, Taylor BR: Rhone-Poulenc Rorer (\$60,000 1991 - 1994)

Ciprofloxacin-metronidazole versus Imipenem in the treatment of intra-abdominal infection: Multi-centre study. Rotstein OD, Marshall JC: Miles Incorporated (\$50,000 1991 - 1992)

Interleukin-1 receptor antagonist in the treatment of sepsis syndrome: Multi-centre study. Marshall JC, Rotstein OD, DeMajo WJ: Synergen Incorporated (\$110,000 1992)

Transfusion requirements in critical care. Hebert P, Wells G, Marshall JC, Pagliarello J, Tweeddale M: Canadian Red Cross: Physicians Services Incorporated Foundation (\$80,000 1993 - 1994)

A study to evaluate the safety and efficacy of human recombinant interleukin-1 receptor antagonist (IL-1ra) in increasing survival in patients with severe sepsis: A randomized double-blind, placebo controlled, multicentre trial. Marshall JC, De Majo W, Rotstein OD: Synergen Incorporated (\$150,000 1993 - 1994)

Transfusion requirements in critical care. Hebert PC, Wells G, Pagliarello G, Marshall JC, Martin C, Tweeddale M, Blajchman M: Medical Research Council of Canada (\$393,000 1994 - 1997)

A novel, liver-dependent immunoregulatory cascade: Biochemical and functional characterization and relevance to acquired immune dysfunction in critical illness. Marshall JC: Canadian Liver Foundation (\$90,000 1994 - 1996)

A controlled trial of scheduled replacement of peripheral arterial catheters in intensive care units. Conly JM, Houston P, Lazar N, Marshall JC: National Health Research and Development Program (\$82,000 1995 - 1996)

MAK 195 F Monoclonal antibody to tumor necrosis factor in the treatment of the hyperinflammatory response syndrome. Multi Center Trial; Marshall JC, Principal Investigator for Canada and Member, Clinical Evaluation Committee: Knoll Pharmaceutical Ltd (\$140,000

1995 - 1999)

Point of care testing for inflammatory mediators in the ICU. Walker PM, Romaschin A, Marshall JC: Spectral Inc. (\$60,000 1995 - 1996)

A prospective randomized trial of 10% povidone-iodine vs. 0.5% tincture of chlorhexidine for prevention of infection associated with central venous catheters. Conly J, Boiteau P, Houston P, Lazar N, Marshall J, McGear A: Physicians Services Incorporated Foundation (\$60,000 1995 - 1996)

Acidified enteral feeds in the critically ill patient. Heyland DK, Cook DJ, Fuller H, Marshall J, Rutledge F, Leasa D, Johnson R, Stollery D, Hall R, Peters S, Fox G: Medical Research Council of Canada (\$98,000 1995 - 1996)

Platelet activating factor receptor antagonist in the treatment of acute pancreatitis. Marshall JC: British Biotech Inc. (\$36,000 1995 - 1998)

A phase 2 study to determine the safety, pharmacokinetics, and effective dose range and dosing duration for recombinant activated protein C (rAPC) in severe sepsis. Multicentre trial. Marshall, JC: Eli Lilly Ltd. (\$64,000 1996 - 1997)

A multicenter, double-blind, randomized, placebo-controlled study of Filgrastim in the treatment of patients with pneumonia and severe sepsis. Marshall JC: Amgen Inc. (\$60,000 1996 - 1998)

Inhibition of TNF-and Fas-triggered death signals in inflammatory neutrophils. A mechanism for the systemic inflammatory response syndrome. Marshall JC: Physicians Services Incorporated Foundation (\$138,000 1996 - 1998)

The Canadian Sepsis Registry: A pilot project. Marshall JC, Christou NV: Bayer Canada Ltd. (\$10,000, 1997-8)

A Phase II Study of multiple dose safety, tolerability, pharmacokinetics, and pharmacodynamics of PMX-622 in patients with severe SIRS and evidence of infection. Novartis Pharmaceuticals Corporation (\$100,000, 1998-2000)

The Multicentre Endotoxin Detection in Critical Illness (MEDIC) Study: An evaluation of a novel assay for the detection of endotoxemia in critically ill patients. Sepsis Inc. (\$700,000, 1998-2000).

Regulation of neutrophil programmed cell death (apoptosis) in clinical and experimental inflammation. Medical Research Council of Canada (\$270,000, 1999-2002)

A phase III study of recombinant human Tissue Factor Pathway Inhibitor in Sepsis. Chiron Ltd.

A phase III study of recombinant platelet-activating factor acetylhydrolase in severe sepsis and septic shock. Icos Ltd. \$20,000

The ENHANCE trial: An open label study of recombinant human activated protein C in severe sepsis. Eli Lilly Inc. 2001-2002; \$95,000

CCURE: Critical care from cell to society Canadian Foundation for Innovation; Dr. A. Slutsky PI (\$4,600,000; 2002 - 2007)

A multinational observational study of procalcitonin in ICU patients with presumed or confirmed pneumonia and requiring mechanical ventilation using the Lumitest PCT assay. BRAHMS Diagnostica LLC \$36,000

Efficacy and safety of drotrecogin alpha activated in adult patients with early severe sepsis who are at lower risk of death. Eli Lilly & Co. \$50,000

A randomized double-blind placebo-controlled trial of prophylactic heparin in patients with severe sepsis and higher disease severity who are undergoing treatment with drotrecogin alpha (activated) \$80,000

The AATICC Trial: Appropriate antimicrobial therapy in critical care - a pilot study. Physician's Services Incorporated Foundation (\$82,500, 2002-2003)

Novel mechanisms of prolonged neutrophil survival in human sepsis: A bedside-to-bench approach. Canadian Institutes for Health Research (\$108,713/year, 2003-2008)

A double-blind, placebo-controlled study of E5564, a lipid antagonist, administered by twice daily intravenous infusions in patients with severe sepsis Eisai Research Institute of Boston Inc \$60,000

Sepsis Research in Canada: "From bench to bed side" (Dr. Olivier Lesur, PI) Canadian Institutes of Health Research New Frontiers Program Development Grant, \$35,000 2002-2004

A prospective observational study of acute major organ system failure in septic patients GlaxoSmithKline \$12,000

Clinically important DVT's in the ICU survey (Dr. Deborah Cook, PI) The Leonard Foundation \$15,000

Endotoxin measurements in early sepsis patients using the endotoxin activity assay (EAA) and the limulus amoebocyte lysate (LAL) assay: Method comparison study. GlaxoSmithKline \$113,700

Re-engineering the Canadian Critical Care Trials Group (PI's Dr. D.J. Cook, Dr. J. Marshall) Canadian Institutes of Health Research Workshop Grant. \$52,500, 2005

International collaborative research development proposal - age of blood study (PI Dr. Paul Hébert) Canadian Institutes of Health Research, Development Planning Grant \$25,000, 2005-2006.

PROphylaxis of thromboEmbolism in critical care trial (PI Dr. Deborah Cook) \$4,880,347, 2005-2009

The Canadian Critical Care Trials Group: Building a sustainable national network for critical care research. CIHR Team Grant Competition Development Grant, \$10,000 (Declined)

The Consent Study: A Multicentre, Observational Study of Recruitment in Adult Intensive Care Units across Canada. (Dr. Karen Burns, PI). Canadian Institutes of Health Research \$73,041/year, 2008-2010.

Towards RECOVER: Long-Term Outcomes and Needs Assessment in ICU Survivors of Prolonged Mechanical Ventilation and their Caregivers. (Drs. Jill Cameron, Margaret Herridge, PIs) Canadian Institutes of Health Research \$100,000, 2008-2009

Age of blood evaluation (ABLE) trial in the resuscitation of critically ill patients (PI Dr. Jacques Lacroix) Canadian Institutes of Health Research \$2,927,294, 2008-2011

Characterization of a novel, caspase-8-dependent survival pathway in inflammatory neutrophils. Canadian Institutes of Health Research (\$100,277/year, 2009-2014)

The RECOVER Program: Phase I Towards RECOVER – Outcomes and needs assessment in survivors of prolonged mechanical ventilation and their caregivers. (Co-investigator; PI Herridge MS, Cameron JI) Canadian Institutes of Health Research (\$704,367, 2009-2013)

Influenza-and H1N1-Related Critical Illness - Demand and Capacity in the Health Care System: the Canadian ICU Flu Study (Co-investigator; PIs Drs. Robert Fowler, Philippe Juvet) Canadian Institutes of Health Research; \$597,681 2009-2011.

The Collaborative H1N1 Adjuvant Therapy (CHAT) Trial: Rosuvastatin versus placebo as adjuvant therapy for severe H1N1 infection. (Principle Investigator) Physicians' Services Incorporated Foundation; \$42,500, 2009-2010.

The Collaborative H1N1 Adjuvant Therapy (CHAT) Trial: Rosuvastatin versus placebo as adjuvant therapy for severe H1N1 infection. (Principle Investigator; Co-investigator Dr. Karen Burns) Canadian Institutes of Health Research; \$200,000, 2010-2011.

The Collaborative H1N1 Adjuvant Therapy (CHAT) Trial: Rosuvastatin versus placebo as adjuvant therapy for severe H1N1 infection. (Principle Investigator; Co-Investigator Dr. Karen Burns) Public Health Agency of Canada; \$88,000, 2009 -2010.

EPITEC - Epidemiology of ThromboEmbolism in Critical care. (Co-investigator, PI Dr. Deborah Cook) Canadian Institutes of Health Research; \$30,000 2010/2011

The efficacy, cost-effectiveness and ecological impact of Selective Decontamination of the Digestive tract in critically ill patients treated in the Intensive Care Unit (The SuDDICU study) PHASE 2- An exploratory study of the perceived risks, benefits and barriers to the use of SDD in Canadian critical care units. (Co-investigator; PI Dr. Brian Cuthbertson) Canadian Institutes of



Health Research; \$66,000 2010/2011.

Weaning and Variability Evaluation (WAVE)- a multicenter evaluation of altered heart rate and respiratory rate variability to predict extubation failure (Co-investigator; PI Dr. Andrew Seely) Canadian Institutes of Health Research; \$98,245 2010/2011.

Planning Meeting for the PREEDICT Study. (Co-investigator; PI Christian M) Canadian Institutes of Health Research (\$23,842, 2011-2012)

SONRIS: Sepsis Outcomes National Registry to Improve Survival. (Co-investigator; PI Boyd J) Canadian Institutes of Health Research (\$600,000, 2010 – 2013)

Animals, Humans, and the Continuity of Evidence: A Study of Clinical Translation (Co-investigator, PIs Jonathan Kimmelman and Dean A Fergusson) Canadian Institutes of Health Research; \$273,952, 2011/2014.

Pandemic Preparedness in the Interpandemic Period: ISARIC, InFACT and the Global Response to Emerging Infectious Disease Threats (Principle Investigator). Canadian Institutes of Health Research; \$25,000. (2011 – 2012)

Cellular Immunotherapy for Septic Shock (CISS): A phase 1 trial (Co-investigator, PI McIntyre L) Canadian Institutes of Health Research; \$366,811 (2012-2014)

A pilot randomized controlled trial to evaluate the efficacy of unfractionated heparin in septic shock. (Co-investigator, PIs Zarychanski R, Fergusson DA) Canadian Institutes of Health Research; \$100,000 (2011-2013)

Cellular and molecular mechanisms of prolonged neutrophil-mediated inflammation in trauma and sepsis: The role of PBEF/Nampt/visfatin. (Principle Investigator) Physicians' Services Incorporated Foundation; \$169,500 (2012-2014)

PROSPECT: Probiotics: Prevention of Severe Pneumonia and Endotracheal Colonization Trial (PROSPECT): A Pilot Trial. (Co-investigator; PI Cook DJ) Canadian Institutes of Health Research; \$223,231 (2013 – 2015)

Cellular and molecular mechanisms of prolonged neutrophil survival in sepsis and trauma: The role of PBEF/Nampt/visfatin. (Principle Investigator) Physicians' Services Incorporated Foundation \$169,536 (2015-2017)

Development of a decision rule for discharging patients following colorectal surgery based on post-operative serum C reactive protein and/or procalcitonin levels. (Co-investigator; PI McLeod RS) Canadian Institutes of Health Research. \$358,402 (2014-2015)

Bacteremia Antibiotic Length Actually Needed for Clinical Effectiveness (BALANCE): A Randomized Controlled Clinical Trial (Co-investigator; PI Daneman N) Canadian Institutes of Health Research \$100,000 2015-2016.

Establishing Feasibility & Safety of Providing Critical Care for Patients with Ebola through design of a simulated Ebola Treatment Centre (Co-investigator; PI Fowler RA) Canadian Institutes of Health Research \$249,973 2015-2016.

Crystalloid FLUID Choices for Resuscitation of Hospitalized Patients: A Pragmatic Cluster Cross Over Pilot Trial (Co-investigator; PI McIntyre LL) Canadian Institutes of Health Research \$99,504 2015-2016.

Regulation of Neutrophil (PMN) Inflammatory Function by Caspase-8 Phosphorylation. Canadian Institutes of Health Research (Principle Investigator) \$676,584 2016-2021

Bacteremia Antibiotic Length Actually Needed for Clinical Effectiveness (BALANCE): A Randomized Controlled Clinical Trial (Co-Investigator; PI Nick Daneman) \$2,010,635 2016-2021

PROSPECT: Probiotics to Prevent Severe Pneumonia and Endotracheal Colonization Trial Canadian Institutes of Health Research (Co-Investigator; PI Jennie Johnstone) \$1,272,893 2016-2019

The SuDDICU study- A study of the impact of preventative antibiotics (SDD) on patient outcome and antibiotic resistance in the critically ill in intensive care CIHR SPOR Competition on Innovative Clinical Trial Designs (Co-Investigator; PI Brian Cuthbertson) \$2,999,929 2017-2021

REVISE: Re-Evaluating the Inhibition of Stress Erosions in the ICU Canadian Institutes of Health Research (Co-Investigator; PI Gordon Guyatt) \$1,935,832 2017-2021

Permissive hypotension to reduce organ injury - The OVATION-65 trial Canadian Institutes of Health Research (Co-Investigator; PI Francois Lamontagne) \$15,000 2017-2018

Cellular Immunotherapy for Septic Shock (CISS): A Phase II Trial Canadian Institutes of Health Research (Co-Investigator; PI Lauralyn McIntyre) \$100,000 2017-2018

The Antimicrobial Resistance in Intensive Care (AMRIC) Network: A global surveillance network to monitor the role of the ICU environment in the emergence of AMR; Phase I Joint Programming Initiative on Antimicrobial Resistance (Principle Investigator) \$75,000 2017-2018

Core Outcome Set Development for Effectiveness Trials of Interventions to Prevent or Treat Delirium (Del-COrS) Canadian Institutes of Health Research (Co-Investigator; PI Louise Rose) \$271,576 2017-2020

Role of XAF1 and MAP kinase-activated protein kinase-2 in necrosome signaling Canadian Institutes of Health Research (Co-Investigator; PI Subash Sad) \$835,570 2017-2022

Developing a framework for the ethical design and conduct of pragmatic trials to improve the quality and value of health care systems and practices Canadian Institutes of Health Research (Co-Investigator; PI Monica Taljaard) \$780,300 2017-2021

Heparin anticoagulation to improve outcomes in septic shock: The HALO International Phase II Trial Canadian Institutes of Health Research (Co-Investigator; PI Ryan Zarychanski) \$631,125 2017-2020.

The Canadian Adaptive Platform Trial in Intensive Care (CAPTIC) program. Canadian Institutes of Health Research SPOR Innovative Clinical Trials Program (Principle Investigator) \$1,497,200 2018-2022

Role of Active Deresuscitation After Resuscitation (RADAR): A randomized controlled pilot trial. (Principle Investigator) Canadian Institutes of Health Research \$382,500 2019 – 2021

The International Forum for Acute Care Trialists (InFACT): Shaping the next decade of global acute care research collaboration. Canadian Institutes of Health Research Planning and Dissemination grant. \$15,000 2020

ATTACC (Anti Thrombotic Therapy to Ameliorate Complications of COVID-19): A randomized international, multi-centre, adaptive, controlled clinical trial. Principal applicants: Ryan Zarychanski Patrick Lawler, Ewan Goligher, Robert Rosenson R, Jose Nicolau, Jorge Escobedo, Co-Applicants: Angus D, Berry S, Bradbury C, Carrier M, Farkouh M, Fergusson DA, Fowler R, Galanaud JP, Granton J, Gross P, Houston BL, Husain M, Kahn S, Kumar A, Le Gal G, **Marshall J**, McDonald E, Murthy S, Tagalakis V, Turgeon AF Canadian Institute of Health Research (CIHR); \$3,573,336; 2020

Anticoagulation and Convalescent Plasma ICU Trials in REMAP-CAP (2020-2021) Principal applicants Dr. Alexis F Turgeon Dr. Bojan Paunovic Dr. Ryan Zarychanski. Co-Applicants: Dr. D. Arnold Docteur P. Bégin Dr. J. Callum Dr. M. Carrier Docteur M. Chasse Dr. D. Cook Dr. N. Daneman Madame S. Debigaré Dr. D. Devine Dr. S. English Dr. D. Fergusson Dr. R. Fowler, Docteur M. Germain Dr. E. Goligher Dr. B. Houston Dr. A. Kumar Dr. F. Lamontagne Docteur F. Lauzier Dr. P. Lawler Dr. S. Lothar, Dr. **J. Marshall** Dr. L. Moore Dr. S. Murthy Docteur N. Robitaille, Dr. A. Tinmouth. Canadian Institutes of Health Research. \$2,176,566.

HOST RESPONSE MEDIATORS IN CORONAVIRUS (COVID-19) INFECTION – IS THERE A PROTECTIVE EFFECT OF LOSARTAN ON OUTCOMES OF CORONAVIRUS INFECTION? (ARBs CORONA II) Principal Investigators: Jim Russell Co-investigators John Boyd, Kevin Burns, Matthew Cheng, Rob Fowler, John Granton, Greg Haljan, Nathaniel Hawkins, Nadia Kahn, Anand Kumar, Francois Lamontagne, Terry Lee, Todd Lee, Adeera Levin, **John Marshall**, Allison McGeer, Srinivas Murthy, Anita Paleplu, David Patrick, Santiago Perez, Patriceon, Simon Piston, Oleksa Rewa, Steve Reynolds, Keith Walley, Brent Winston. INTERNATIONAL: Du Bin, Michael Harhay, Petch Wacharasint. Canadian Institutes of Health Research. \$3,456,541.

The Randomized Embedded Multifactorial Adaptive Platform Trial in Community-acquired Pneumonia (REMAP-CAP): Building an International Research Response to Variant COVID-19 Principal Applicant **John Marshall** Canadian Institutes of Health Research 2021-2022; \$1 million.

## **HONOURS AND AWARDS RECEIVED**

3 Year Fellowship, Lalia Chase Foundation. 1985

Davis and Geck Award, McGill Surgical Research Seminar. 1986

Surgical Infection Society, Resident/Fellows Research Award. 1987

Royal College of Physicians and Surgeons of Canada, Medalist in Surgery. 1989

Toronto Hospital Award for Excellence in Teaching, Undergraduate Medical Education and Surgery. 1994

WH Anderson Award for Excellence in Educational Program Development. The Toronto Hospital. 1995

Lister Prize, Department of Surgery, University of Toronto 1999

Undergraduate Teaching Award, Institute of Medical Sciences, University of Toronto 2004

John Marshall Award, MSICU, Toronto General Hospital, 2005

Charles H. Tator Surgeon-Scientist Mentoring Award, Department of Surgery, University of Toronto 2007

Honorary Fellow, Colombian Association of Surgeons 2008

Honorary Member, Intensive Care Society of the Czech Republic 2009

Jameel Ali Award for Continuing Medical Education, St. Michael's Hospital, 2012

Honorary Member, Academia Colombiana de Medicina Crítica, 2014

Squires-Hyland Teaching Award, St. Michael's Hospital 2015

CIHR/Canadian Critical Care Society Distinguished Lecturer Award 2018

Keenan Legacy Award, Keenan Research Centre for Biomedical Science 2018

Unity Health Chair in Trauma Research 2020

## **PROFESSIONAL ACTIVITIES**

## **Editorial Responsibilities**

<b>Sepsis</b>	Editor-in-Chief, 1996-2002
<b>Critical Care Medicine</b>	Associate Editor, 2016 -
<b>Critical Care</b>	Member, Editorial Board, 1996- Associate Editor, Sepsis, 2014 –
<b>Shock</b>	Member, Editorial Board, 1996-
<b>Current Opinion in Critical Care</b>	Section Editor, Gastrointestinal System, 1997-2002 Section Editor, The Surgical Patient, 2004 - 2006 Editorial Board Member, 2001-
<b>Advances in Sepsis</b>	Editorial Board Member, 2000 - 2007
<b>Drug Discovery Today</b>	Editorial Board Member, 2004 –
<b>Journal of Critical Care</b>	Editorial Board Member, 2009 - 2017
<b>Journal of Organ Dysfunctions</b>	Editorial Board Member, 2005 –
<b>Journal of the American College of Surgeons</b>	Editorial Board Member, 2006 -
<b>Journal of Patient Safety</b>	Editorial Board Member, 2007 – 2013
<b>ICU Management</b>	Editorial board member, 2014 -

## **Invited Editorial Reviewer**

Alimentary Pharmacology and Therapeutics  
American Journal of Gastroenterology  
American Journal of Infection Control  
American Journal of Obstetrics and Gynecology  
American Journal of Pathology  
American Journal of Physiology: Cell Physiology  
American Journal of Physiology: Endocrinology and Metabolism  
American Journal of Respiratory and Critical Care Medicine  
American Journal of Respiratory, Cell and Molecular Biology  
Anaesthesia & Analgesia  
Annals of Surgery  
Antioxidants and Redox Signaling  
Apoptosis  
Archives of Diseases in Childhood  
Archives of Surgery  
Arthritis and Rheumatism  
Biological Reviews in Nursing  
Biomarkers  
Biomed Central Pediatrics  
Blood  
Blood Purification  
BMC Medicine  
BMC Infectious Diseases  
BMJ  
Bone Marrow Transplantation

British Journal of Surgery  
Canadian Journal of Anesthesia  
Canadian Journal of Surgery  
Chemotherapy  
Chest  
Circulation  
Clinica Chimica Acta  
Clinical Chemistry and Laboratory Medicine  
Clinical Infectious Disease  
Clinical Microbiology and Infection  
CMAJ  
Critical Care  
Critical Care Medicine  
Cytokine  
Diabetologia  
Digestive Diseases and Sciences  
EMBO Molecular Medicine  
European Journal of Clinical Microbiology and Infectious Disease  
European Journal of Clinical Nutrition  
European Respiratory Journal  
Expert Opinion in Investigational Drugs  
FASEB Journal  
FEBS Journal  
Food and Chemical Toxicology  
Future Medicinal Chemistry  
Gene Therapy  
Genes and Nutrition  
Genomic Medicine  
Gut  
Immunological Investigations  
Indian Journal of Urology  
Influenza and Other Respiratory Viruses  
Intensive Care Medicine  
International Journal of Biochemistry and Cell Biology  
International Journal of Experimental Pathology  
International Journal of Immunogenetics  
International Journal of Infectious Diseases  
JAMA  
Journal of the American College of Surgeons  
Journal of Antimicrobial Chemotherapy  
Journal of Applied Physiology  
Journal of Biological Chemistry  
Journal of Clinical Immunology  
Journal of Critical Care  
Journal of Immunology  
Journal of Infection  
Journal of Infectious Diseases

Journal of Intensive Care  
Journal of Internal Medicine  
Journal of Leukocyte Biology  
Journal of Pathology  
Journal of Pediatrics  
Journal of Pharmaceutical Sciences  
Journal of Surgical Research  
Journal of Thrombosis and Haemostasis  
Journal of Trauma  
Journal of Vascular Surgery  
Lancet  
Lancet Global Health  
Lancet Infectious Diseases  
Leukemia and Lymphoma  
Life Sciences  
Mayo Clinic Proceedings  
Metabolism  
Microvascular Research  
Molecular Medicine  
Nature  
Nature Biotechnology  
Nature Communications  
Nature Medicine  
Nature Reviews Cardiology  
Nature Reviews Drug Discovery  
Nature Reviews Immunology  
Neurogastroenterology and Motility  
New England Journal of Medicine  
Pediatric Infectious Disease Journal  
Pediatric Research  
PLOS Biology  
PLOS Medicine  
PLOS Neglected Tropical Diseases  
PLOS One  
PLOS Pathogens  
Proceedings of the National Academy of Science USA  
Scandinavian Journal of Infectious Disease  
Science Translational Medicine  
Shock  
Surgery  
Surgical Infections  
Thorax  
Thrombosis and Haemostasis  
Thrombosis Research  
Trends in Endocrinology and Metabolism  
Trends in Molecular Medicine  
Trends in Pharmacological Sciences

Virulence

### **External Grant Reviewer**

Action Medical Research for Children, UK  
Alberta Heritage Foundation for Medical Research  
Arthritis Research Campaign  
Alborada Trust, UK  
Austrian Foundation for Medical Research  
Bayer/CBS/Héma-Québec Partnership Fund  
Canadian Surgical Research Fund  
Canadian Institutes for Health Research  
Canadian Intensive Care Foundation  
Council for Medical and Health Research of the Netherlands Organisation for Scientific Research  
Crohn's and Colitis Foundation of Canada  
Efficacy and Mechanism Evaluation Programme, UK MRC  
Estonian Science Foundation  
German Federal Ministry of Education and Research  
Health Research Board of Ireland  
Heart and Stroke Foundation of Canada  
Intensive Care Foundation, United Kingdom  
Hospital for Sick Children Foundation  
INNOVARC Direction Générale de L-offre de Soins, France  
Medical Research Council of Canada  
Medical Research Council, United Kingdom  
National Institutes of Health  
NHRDP  
NIGMS Chair, Special Interest Panel 2009  
Chair, Special Interest Panel 2011  
NSERC  
Netherlands Organisation of Health, Research and Development (ZonMw)  
Netherlands Organization for Scientific Research  
Ontario Thoracic Society  
The Physicians' Services Incorporated Foundation  
Raine Medical Research Foundation (Australia)  
Swiss National Science Foundation  
Veterans Affairs Merit Review  
Wellbeing of Women, United Kingdom  
The Wellcome Trust, Great Britain

### **Medical Research Council/CIHR**



Chair, Grant Review Committee Programme Grant - Dr. N. Christou  
 2001 - 2006 Member, Clinical Trials Committee Review Panel  
 2007 – 2009 Member, Experimental Medicine Committee Review Panel  
 2009 – 2015 Member, Clinical Investigation C Review Panel  
 2016 – Present Member Immunology and Transplantation Review Panel  
 2019 – Present Member, Clinical Trials Committee Review Panel

**Banting Foundation for Medical Research**

2000 - 2005 Grants Review Panel, Member

**Canadian Intensive Care Foundation**

2005 – Present Grants Review Panel, Member

**National Institutes of Health**

2016 Trauma P50 Research Center Review committee, Chair

**Graduate Students Supervised**

John Murdoch MD	MSc	1989-1990
Peter Chu MD	MSc	1991-1993
Avery Nathens MD	MSc/PhD	1993-1996
R. William G. Watson PhD	Post-doctoral Fellowship	1995-1997
Maria Jimenez MD	Post-surgical Fellowship	1996-1997
David Evans MD	Post-surgical Fellowship	1996-1997
Ravi Taneja MD	Post- Critical Care Fellowship	1998-1999
Yue Li MD	Post-doctoral Fellowship	1998-2000
Song Hui Jia MD	Post-doctoral fellowship	2000-2003
Fernando Spencer MD	PhD	2001-2002
Carmen Kummer MD	Post-Anesthesiology fellowship	2001-2002
Mary-Anne Aarts MD	MSc	2001-2003
Zeenat Malam BSc	MSc/PhD	2005-2011
Reem Ali MSc	PhD	2005-2007 (Incomplete)
Jennifer Tsang	PhD	2008-2013
Qiangyi Peng	PhD	2012 -2013
Florence Morriello	MSc	2012 - 2016
Jia Feng Wang	Post-doctoral fellowship	2014 – 2015
Sahil Gupta	PhD	2015 -
Jatinder Juss	Post-doctoral fellowship	2016 - 2018

**Summer Students Supervised**

Jeffrey Sutherland	1988
Robert Wadden	1989
Patrick Sin	1992
Peter Sherk	1994
Mark Walsh	1995
Afshin Jahromi	1996
Jackie Robers	1997
Amir Rouzati	1998
Dalia Rotstein	1999
Jakov Moric	2000
Kathryn Simms	2001
William Hou	2002
Jessica Keen	2003-2004
Alanna Weissman	2006, 2007
Burcu Sahin	2009
Sangyang Jia	2010
Laura Bosco	2015
Anisa Nazir	2017
Monica Lopez Dias	2021

### **Undergraduate Students Supervised**

Aaron Liu	Pharmacology	2013-2014
Sahil Gupta	Biomedical Science	2013-2015

### **External Examiner**

Dr. Frank Bloos, University of Western Ontario	PhD	1998
Dr. David Urbach, University of Toronto	MSc	1999
Dr. Richard Piper, University of Sydney	PhD	2001
Dr. Felicia Hwang, McGill University	MSc	2002
Belinda Doyle, University College, Dublin	PhD	2003
Zhihong Hu, Loyola University, Chicago	PhD	2004
Sean O'Neill, University College, Dublin	MSc	2005
Shirley Mei, University of Toronto	PhD	2008
Francois Lamontagne, McMaster University	MSc	2009
Atiqa Malik University of Toronto	MSc	2012
Ian Drennan University of Toronto	PhD Transfer	2013
Blessing Jaja University of Toronto	PhD	2014
Joshua Ramjist University of Toronto	MSc	2016
Lonneke van Vught, University of Amsterdam	PhD Cum laude	2016
Dorith Claushuis, Amsterdam UMC	PhD Cum laude	2018
Dean Gopalan, University of Kwazulu-Natal	PhD	2019
Gwen Schwartz, University of Toronto	PhD	2020

Sia Bolourani, Elmezzi Graduate School  
of Molecular Medicine, Northwell NY

PhD 2021

## **COMMITTEE INVOLVEMENT**

### **Dalhousie University, Faculty of Medicine**

1988 - 1989 Committee to Review Community Health and Epidemiology, Member

1989 - 1990 Promotions and Tenure Committee, Member

1989 - 1990 Research Committee, Member

1989 - 1990 Search Committee, Head Community Health and Epidemiology, Member

1989 - 1990 Division of General Surgery Research Committee, Member

### **University of Toronto, Faculty of Medicine**

Critical Care Medicine Training Program Committee,  
Associate Director, Surgery and Co-chair, Research Committee  
1994 – 2004

Critical Care Medicine Training Program Committee  
Chair, Research Committee, 1999-2004

Expert Panel on Infection Control, Review Committee, Member  
1997 – 2005

Decanal Promotions Committee, Faculty of Medicine  
2007 - 2010

### **Department of Surgery, University of Toronto**

Research Committee, Division of General Surgery, Member  
1990 – 2000

Research Committee, Department of Surgery, Member  
1995 - Present

Promotions Committee, Department of Surgery, Member  
2000 - 2007

## **Hospital Committees**

Search Committee, Head of Microbiology, Victoria General Hospital, Halifax, Nova Scotia, 1987 – 1988

Clinical Appraisal Committee, Victoria General Hospital, Halifax, Nova Scotia, Member 1987 – 1990

Infection Control Committee, Victoria General Hospital, Halifax, Nova Scotia, Member 1987 – 1990

Intensive Care Unit Committee, Victoria General Hospital, Halifax, Nova Scotia, Member 1988 – 1990

Mortality and Morbidity Committee, Victoria General Hospital, Halifax, Nova Scotia, Member 1988 – 1990

Animal Care Committee, Toronto Hospital, Toronto, Ontario, Member 1991 – 1995

Infection Control Committee, Toronto Hospital, Toronto, Ontario, Member 1992 - Present

Pharmacy and Therapeutics Committee, Toronto Hospital, Toronto, Ontario, Member - Present

Nutrition Review Committee, The Toronto Hospital, Toronto, Ontario, Member - Present

## **EXTERNAL ORGANIZATIONS AND COMMITTEES**

### **3rd International Conference in the Immune Consequences of Trauma, Shock, and Sepsis.**

1994 Organizing Committee Member,  
E. Faist - Chair

### **4th International Conference in the Immune Consequences of Trauma, Shock, and Sepsis**

1995 – 1997 Organizing Committee Member,  
E. Faist - Chair

### **5th International Conference on the Immune Consequences of Trauma, Shock, and Sepsis**

1998 – 2000 Organizing Committee Member,  
E. Faist – Chair

**6<sup>th</sup> International Conference on the Immune Consequences of Trauma, Shock, and Sepsis**  
2002 -2004      Organizing Committee, Member

**7<sup>th</sup> International Conference on Trauma, Shock, Inflammation, and Sepsis**  
2004 – 2007      Organizing Committee, Member

**8<sup>th</sup> International Conference on Trauma, Shock, Inflammation, and Sepsis**  
2007 – 2010      Organizing Committee, Member

**7th World Congress of Intensive and Critical Care Medicine**

1995 – 1997      Organizing Committee Member  
B. Kirk - Chair

**ACCP/SCCM Panel on Definitions of Sepsis and Multiple Organ Failure**

Aug 1991      Consensus Panel Member,  
R. Bone - Chair

**American College of Surgeons**

2009 – 2014      Member, Surgical Forum Committee

**Bayer Fellowship in Surgical Infectious Diseases**

1995 - 1999      Coordinator

**Brussels Roundtable on the Immune Response in Critical Illness**

1999      Co-chair (with Prof. J. Cohen, England)

**CMA Advisory Panel:**

1996 - 1997      Guidelines for Red Blood Cells and Plasma Transfusion, Member

**Canadian Association of General Surgeons**

1993 - 1996      Research Committee, Member  
1996 - 1999      Research Committee, Chair

### **Canadian Critical Care Society**

1992 - 1994 Surgical Representative

### **Canadian Critical Care Trials Group**

1989 - Present Member  
1998 - 2004 Scientific Executive Committee, Member  
2005 – 2012 Chair  
2013 – Present Past-chair

### **Canadian Infectious Disease Society**

1995 - Present Clinical Trials Committee, Member

### **Center for Sepsis Control and Care, University of Jena, Jena Germany.**

2010 – Present Member, Scientific Advisory Board  
2016 – Present International chair, Scientific Advisory Board

### **European/American Panel on the Design of Clinical Trials for Sepsis**

Mar 1994 Consensus Panel Member, JL Vincent/WJ Sibbald – Chairs

### **Global Sepsis Alliance**

September 2010 – present Member, Executive Committee

### **Industry - Academia Involvement**

1994 – 2001 Member, Clinical Evaluation Committee, MONARCS Trial, Knoll Pharmaceuticals  
1995 - 1997 International Advisory Panel on IL-10, Sepsis/Critical Care, Schering Plough Inc., Member  
1995 - 1996 Advisory Panel on Critical Care Medicine, Bayer Inc., Member  
1995 - 1997 Advisory Panel on Surgical Infections, Bayer Inc., Member  
1996 - 1999 Advisory Panel on Septic Shock, Glaxo-Wellcome Inc., Member  
1996 – 2006 Advisory Panel on Sepsis, Eli Lilly Inc.  
1997 – 1999 Advisory Panel on Sepsis, Bayer Inc.

1997 - 2000	Advisory Panel on Sepsis, Novartis Pharmaceuticals
1997 - 1998	Advisory Panel on Sepsis and ARDS, Transcend Therapeutics
1998 - 2001	Advisory Panel on Sepsis, Knoll Pharmaceuticals
1999 - 2003	Advisory Panel on SIRS, Daiichi Pharmaceuticals
2000 -2002	Advisory Panel on Sepsis, Chiron Ltd
2000 – 2004	Advisory Panel on Sepsis, Takeda Ltd
2000 - 2003	Steering Committee Member, Phase III Clinical Trial of rhPAF-AH in Sepsis, Icos Corporation
2001 - 2007	Advisory Panel on Sepsis, Baxter Healthcare
2001 - 2009	Advisory Panel on Sepsis, GlaxoSmithKline
2001 - 2011	Advisory Panel on Sepsis, Eisai Inc.
2001 – 2003	Advisory Panel on Sepsis, Centocor Ltd.
2003 - 2004	Advisory panel on Sepsis, Boehringer Ingelheim Ltd.
2003 - Present	Advisory Panel on Sepsis, Exponential Biotherapeutics
2003 – 2004	Member, Data Safety Monitoring Board, Iseganin study, Intrabiotics
2004 – 2005	Advisory Panel on Sepsis, Critical Therapeutics Inc.
2004 –2005	Advisory Panel on Critical Care, Edwards Lifesciences Inc.
2005 – 2006	Advisory Panel on Sepsis, Leo-Pharma
2005 – 2007	Advisory Panel on Sepsis, Hutchinson Technologies
2006 – 2008	Advisory Panel on Sepsis, Becton-Dickinson
2006 – 2007	Advisory Panel on Sepsis, Astra-Zeneca
2006	Advisory Panel on Sepsis, Wyeth Pharmaceuticals
2006 – Present	Member, Clinical Evaluation Committee, Eisai Pharmaceuticals
2006 – 2010	Member Data Safety Monitoring Board, Leo-Pharma

2007 – 2014 Member, Steering Committee, Drotrecogin alpha in septic shock (PROWESS-Shock), Eli Lilly

2007 – Present Member, Data Monitoring Committee, Artisan Pharma, Inc.

2007 Member, Sepsis Advisory Panel, Hoffman-LaRoche

2008 – Present Member, Advisory Panel, SIRSLab

2009 - 2018 Member, Steering Committee, EUPHRATES Trial, Spectral Diagnostics

2010 - 2012 Member, Advisory Panel, Idaho Technologies

2010 - 2012 Member, Sepsis Diagnostic Advisory Board, Roche Diagnostics

2016 - 2017 Member, Advisory Board, Regeneron Inc

2017 Member, Steering Committee VISION study, Bristol Myers Squibb

2018 - 2019 Member, Advisory Board for Sepsis, Baxter Corporation

2018 - Member, Advisory Board, Sphingotec Corporation

2020 - Chair, data Safety Monitoring Board AM Pharma

### **International Forum for Acute Care Trialists (InFACT)**

2008 – 2011 Acting chair

2012 - Chair, Steering Committee

### **International Sepsis Forum**

1997 - Present Member, Steering Committee

2005 - 2007 Treasurer and Chair-elect

2007 – 2009 Chair

Co-chair, 2<sup>nd</sup> Cambridge Colloquium on Outcome Measures in sepsis, 2003

Co-chair, ISF Colloquium on Biomarkers of Sepsis, October 2005



Co-chair, ISF Colloquium on Enabling Clinical Research in Severe Sepsis, October 2006

Co-chair, Sepsis 2012

Co-chair, ISF Colloquium on Outcome Measures for Clinical Research, May 2013

Co-chair, Sepsis 2014

Co-chair, ISF Colloquium on Antimicrobial Resistance, December 2016

Co-chair, Sepsis 2016

### **International Severe Acute Respiratory Infections Consortium (ISARIC)**

2011 – Present     Co-chair, Clinical Trials Working Group  
Member, Executive Committee

2013 – Present     Vice-chair

### **International Symposium of Intensive Care and Emergency Medicine**

2014 – Present     Member, Scientific Committee

### **Royal College of Physicians & Surgeons of Canada**

1994 - 2000        Test Committee on Principles of Surgery, Member

1995 - 1998        Examiner in General Surgery

1999 - 2002        Awards Committee, Royal College Medal in Surgery

2001 - 2002        Chair, Awards Committee, Royal College Medal in Surgery

### **Shock Society**

1999 - Present     International Relations Committee, Member

2001 - 2005        Councillor

2004                Chair, Shock Society/ISF Symposium on the Translational Biology of Acute  
Illness

2005-2008        Co-chair, International Shock Forum, Köln, 2008

### **Society of Critical Care Medicine**

1998 - 2000        Research Committee, Member

1998 - 2000 Founders Grant Committee, member

### **Surgical Infection Society**

1990 - 1993 Ad Hoc Committee on Relations with Industry, Member  
1996 - 1999 Scientific Studies Committee, Chair  
1999 - 2001 Recorder; Chair, Program Committee  
2006 – 2007 President-elect  
2007 – 2008 President

### **Surviving Sepsis Campaign**

2003 – Present Member, Steering Committee  
2007 – 2010 Member, Executive Committee

### **Toronto Critical Care/Trauma Symposium & Roundtable Working Group on Outcome Measures for Clinical Trials in Sepsis**

1996 Organizing Committee, Chair

### **Toronto Critical Care Medicine Symposium/Critical Care Canada Forum**

1996 Chair, Roundtable Working Group on Outcome Measures for Clinical Trials in Sepsis  
1997 Organizing Committee member and chair, Roundtable Working Group on Preclinical Models of Sepsis  
1998 Organizing Committee member, and chair, Roundtable Working Group on Redefining Entry Criteria for Sepsis Trials  
1999 Organizing Committee member, and chair, Roundtable Conference on Charting a New Direction in Sepsis Research  
2000 Organizing Committee member, and Chair, Roundtable Conference on Mediators, Measures, and Mechanisms  
2001 Organizing Committee Member, and Chair, Roundtable Conference on the Interface between Sepsis and Oncology  
2002 - Present Scientific Committee, member

## **World Federation of Societies of Intensive and Critical Care Medicine**

2009 – 2017      Member, Council  
                         Co-chair, Research committee

2013 – 2017      Secretary-general

## **World Health Organization (WHO)**

2020 - Co-chair R&D Working Group on Clinical Characterization and Management

## **MEMBERSHIPS IN MEDICAL/SCIENTIFIC ORGANIZATIONS**

American Association for the Advancement of Science  
American College of Surgeons  
American Physiological Society  
American Society for Biochemistry and Molecular Biology  
American Society for Microbiology  
American Surgical Association  
American Thoracic Society  
Association for Academic Surgery  
Canadian Academy of Health Sciences  
Canadian Association of General Surgeons  
Canadian Critical Care Society  
Canadian Critical Care Trials Group  
Canadian Infectious Disease Society  
Canadian Medical Association  
Canadian Medical Protective Association  
Canadian Surgical Biology Club  
Collegium Internationale Chirurgiae Digestivae  
European Society of Intensive Care Medicine  
International Endotoxin Society  
New York Academy of Sciences  
Shock Society  
Society for Leukocyte Biology  
Society for Surgery of the Alimentary Tract  
Society of Critical Care Medicine  
Society of University Surgeons  
Surgical Infection Society