CURRICULUM VITAE BIOGRAPHICAL



Name: John Alston Kellum, Jr. Birthdate:March 9, 1962

Home Address: 5541 Hampton Street Birthplace: Boston, MA

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University of Pittsburgh School of Medicine

Department of Critical Care Medicine

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EDUCATION AND TRAINING

<u>Undergraduate</u>

1980-1984 University of Toledo B.A., 1984

Toledo, OH Pre-Med, Psychology

Graduate

1984-1988 Medical College of Ohio at Toledo M.D., 1988

Toledo, OH

1993-1994 University of Pittsburgh Coursework towards MPH

Graduate School of Public Health (biostatistics, epidemiology)

Pittsburgh PA

Postgraduate

Internship/Residency 1988-1991 University of Rochester Strong Memorial & Affiliated Hospitals (Internal Medicine) Rochester, NY Rudolph J. Napodano, M.D.

1991-1992 University of Rochester Chief Resident The Genesee Hospital (Internal Medicine)

Rochester, NY Rudolph J. Napodano, M.D.

1992-1994 University of Pittsburgh Medical Center

Presbyterian University Hospital

Pittsburgh, PA

Fellowship (Critical Care Medicine) David Powner, M.D. Ake Grenvik, M.D.

APPOINTMENTS AND POSITIONS

Academic

University of Rochester 1991-1992 Instructor Department of Medicine

> The Genesee Hospital Rochester, NY

1994-2000 University of Pittsburgh Assistant Professor School of Medicine (Primary Appointment)

> Department of Anesthesiology Division of Critical Care Medicine

Pittsburgh, PA

1996-2001 University of Pittsburgh Assistant Professor

(Secondary Appointment) School of Medicine Department of Medicine

Pittsburgh, PA

2000-2002 University of Pittsburgh Associate Professor School of Medicine

> Department of Anesthesiology Division of Critical Care Medicine

Pittsburgh, PA

(Primary Appointment)

2001-Present University of Pittsburgh

Associate Professor School of Medicine (Secondary Appointment)

Department of Medicine

Pittsburgh, PA

2002-2005 University of Pittsburgh

School of Medicine

Associate Professor (Primary Appointment)

Department of Critical Care Medicine

Pittsburgh, PA

2005-Present University of Pittsburgh Professor

School of Medicine

Department of Critical Care Medicine

Pittsburgh, PA

(Primary Appointment)

Non Academic

1983-1984	University of Toledo Toledo, OH	Teaching Assistant Department of Chemistry
1989-1992	Rochester General Hospital Rochester, NY	Per Diem - Staff Physician Emergency Department
1990-1992	The Genesee Hospital University of Rochester Rochester, NY	Per Diem - Staff Physician Emergency Department
1991-1992	Park Ridge Medical Center University of Rochester Rochester, NY	Per Diem - Staff Physician Medical ICU
1993-1994	Westmoreland Hospital Greensburg, PA	Intensivist Medical/Surgical ICU
1993-1994	St. Francis Central Hospital Pittsburgh, PA	Per Diem - Staff Physician Surgical ICU
1993-1994	Jefferson Hospital Pittsburgh, PA	Per Diem - Staff Physician Emergency Department
1993-1994	Washington Hospital Washington, PA	Per Diem - Staff Physician Surgical ICU
1994-Present	University of Pittsburgh Medical Cente Pittsburgh, PA	Critical Care Staff Intensivist - Liver Transplant ICU Cardiothoracic ICU

CERTIFICATION AND LICENSURE

Specialty Certification

National Board of Medical Examiners	Certification #362242	7/89
American Board of Internal Medicine Expires 12/31/2015	Certification #136519	9/91, 11/02
American Board of Internal Medicine - Expires 12/31/2015	ССМ	11/95, 5/05
Advanced Trauma Life Support (ATLS Advanced Cardiac Life Support (ACLS Instructor, Fundamental Critical Care S	S)	8/92 9/93 5/97

Medical Licensure

NY Inactive

PA Active - 2005

MEMBERSHIPS IN PROFESSIONAL AND SCIENTIFIC SOCIETIES

Society of Critical Care Medicine (SCCM) Member 1992-1999

> Fellow 1999-Present

American College of Physicians (ACP) Member 1992-1998

Fellow 1998-Present

American College of Chest Physicians (ACCP) Affiliate Member 1992-1996

> Fellow 1996-Present

American Thoracic Society (ATS) Member 1996-1997

Long Range Planning Committee, Critical Care Assembly

Member 1997-1998 Advisory Group for the Program Review Committee Member 2000-Present

Advisory Group for the International Conference Committee Member 2000-Present

HONORS

Graduated Cum Laude from the University of Toledo 1984

Medical School Clinical Honors: 1986-1988

General Internal Medicine

Endocrinology Rheumatology

Chief Resident, University of Rochester 1991-1992

Resident Oral Presentation: SCCM 3/94

Resident Oral Presentation: ACCP 11/94

MCCTP Outstanding Clinical Teacher 1994-1995 MCCTP Outstanding Clinician 1994-1995

Fellow, American College of Chest Physicians 4/96 Fellow, American College of Physicians 12/98 MCCTP Faculty of the Year

1998-1999 Fellow, American College of Critical Care Medicine (FCCM) 9/99

Board Member, CCM Test Committee, Am Board of Int Med 2005-2011

PUBLICATIONS

Refereed Articles

- 1. <u>Kellum JA</u>, Bellomo R, Kramer DJ, Pinsky MR. Hepatic anion flux during acute endotoxemia. J Appl Physiol 78(6):2212-2217, 1995.
- 2. <u>Kellum JA</u>, Kramer DJ, Pinsky MR. Strong Ion Gap: A Methodology for Exploring Unexplained Anions. Journal of Critical Care 10 (2): 51-55, 1995.
- 3. Bellomo R, Kellum JA, Pinsky MR. Transvisceral Lactate Fluxes During Early Endotoxemia. Chest 110: 198-204, 1996.
- 4. <u>Kellum JA</u>, Decker JM. The Immune System: Relation to Sepsis and Multiple Organ Failure. AACN Clin Issues 7: 339-350, 1996.
- 5. <u>Kellum JA</u>, Bellomo R, Kramer DJ, Pinsky MR. Splanchnic Buffering of Metabolic Acid During Early Endotoxemia. J Crit Care 12 (1): 7-12, 1997.
- 6. Lee KH, Tan P, Rico P, Delgado E, <u>Kellum JA</u>, Pinsky MR. Low levels of nitric oxide as contaminant in hospital compressed air: Physiologic significance? Crit Care Med 25 (7): 1143-1146, 1997.
- 7. <u>Kellum JA</u>, Kramer DJ, Lee K, Mankad S, Bellomo R, Pinsky MR. Release of lactate by the lung in acute lung injury. Chest 111:5 1301-1305, 1997.
- 8. Kellum JA. Endotoxin and renal blood flow. Blood Purif. 15:286-291, 1997.
- 9. Kellum JA. Diuretics in Acute Renal Failure: Protective or Deleterious. Blood Purif 15: 319-322, 1997.
- 10. <u>Kellum JA</u>. The use of diuretics and dopamine in acute renal failure: a systematic review of the evidence. Crit Care 1:53-59, 1997.
- 11. <u>Kellum JA</u>, Johnson JP, Kramer D, Palevsky P, Brady JJ, Pinsky MR. Diffusive Versus Convective Therapy: Effects on Mediators of Inflammation in Patients with Severe Systemic Inflammatory Response Syndrome. Crit Care Med 26: 1995-2000, 1998.
- 12. <u>Kellum JA</u>, Bellomo R, Kramer DJ, Pinsky MR. Etiology of Metabolic Acidosis During Saline Resuscitation in Endotoxemia. Shock 9 (5): 364-368, 1998.
- 13. Kellum JA. Use of diuretics in the acute care setting. Kidney Int 53 (S66): 67-70, 1998.
- 14. <u>Kellum JA</u>. Metabolic acidosis in the critically ill: Lessons from physical chemistry. Kidney Int 53 (S66): 81-86, 1998.
- 15. Bellomo R, Kellum JA, Wisniewski S, Pinsky MR: Effects of Norepinephrine on Renal Vascular Resistance and Renal Blood Flow in Normal and Endotoxemic Dogs. Am J Resp Crit Care Med 159:1186-92, 1999.
- 16. <u>Kellum JA</u>. Immunomodulation in Sepsis: The Role of Hemofiltration. Minerva Anestesiol 65 (6): 410-418, June, 1999.
- 17. Hayhoe M, Bellomo R, Liu G, Kellum JA, McNicol L, Buxton B. The role of the splanchnic circulation in acid-base balance during cardio-pulmonary bypass. Crit Care Med 27(12): 2671-2677, 1999.
- Tanigawa K, Bellomo R, <u>Kellum JA</u>, Kim YM, Zar H, Lancaster JR Jr, Pinsky MR, Ondulick B. Nitric Oxide Metabolism in Canine Sepsis: Relation to Regional Blood Flow. J Crit Care 14 (4): 186-190, 1999.
- 19. <u>Kellum JA</u>, Rico P, Garuba A, Pinsky MR. Accuracy of pHi and PC02 gap for detecting mesenteric hypoperfusion in acute canine endotoxemia. Crit Care Med 28:462-466, 2000.

- 20. Powner DJ, Rogers PL, Kellum JA. Compensations for Teaching in Critical Care. Crit Care Med 28: 1612-1615, 2000.
- 21. Kellum JA. Recent Advances in Acid-Base Physiology Applied to Critical Care. Intensivmed 37: 541-548, 2000.
- 22. Bellomo R, <u>Kellum JA</u>, Gandhi C, Pinsky MR: The effect of intensive plasma water exchange by hemofiltration on hemodynamics and soluble mediates in canine endotoxemia. Am J Resp Crit Care Med 161: 1429-1436, 2000.
- 23. Dishart MK, <u>Kellum JA</u>. An Evaluation of Pharmacologic Strategies for the Prevention and Treatment of Acute Renal Failure (ARF). Drugs 59: 79-91, 2000.
- 24. Powner DJ, <u>Kellum JA</u>, Darby JM. Fluid, electrolyte, and metabolism of organ donors. Prog Transplant 10(2): 88-94, 2000.
- 25. ALKharfy KM, <u>Kellum JA</u>, Matzke G. Unintended Immunomodulation: Part I. Effect of Common Clinical Conditions on Cytokine Biosynthesis. Shock, 13: 333-345, 2000.
- 26. ALKharfy KM, <u>Kellum JA</u>, Matzke G. Unintended Immunomodulation: Part II. Effects of Pharmacological Agents on Cytokine Activity. Shock, 13: 346-360, 2000.
- 27. Powner DJ, Kellum JA. Maintaining acid-base balance in organ donors. Prog Transplant 10(2):98-103, 2000.
- 28. Kellum JA. Determinants of Blood pH in Health and Disease. Crit Care 4:6-14, 2000.
- 29. <u>Kellum JA</u>, Rieker JP, Power M, Powner DJ. Teaching Critical Appraisal During Critical Care Fellowship Training: A Foundation For Evidence Based Critical Care Medicine. Crit Care Med 28(8): 3067-3069, 2000.
- 30. Subramanian S, Kellum JA: Limiting harm in the ICU. Minerva Anestesiol 66(5): 324-332, 2000.
- 31. <u>Kellum JA</u>, Leblanc M. Acute renal failure in critically ill people: Effects of treatment. BMJ/ACP Clinical Evidence 3:374-380, 2000.
- 32. AlKharfy KM, <u>Kellum JA</u>, Frye RF, Matzke GR. Effect of ceftazidime administration on systemic cytokine concentrations in rats. Antimicrob Agents Chemother. 44(11):3217-3219, 2000.
- 33. Venkataraman R, Kellum JA. Novel approaches to the treatment of acute renal failure. Expert Opin Investig Drugs 9(11): 2579-2592, 2000.
- 34. Kellum JA, Leblanc M. Acute renal failure in critically ill people. BMJ/ACP Clinical Evidence 4:446-452, 2000.
- 35. Powner DJ, <u>Kellum JA</u>. Declining Critical Care Research Publications by United States Authors: A 10 Year Survey. Acad Med 2001, 76 (12): 1261-1263
- 36. Powner DJ, <u>Kellum JA</u>, Darby JM. Concepts of the strong-ion difference applied to large volume resuscitation. J Intensive Care Med 16: 169-176, 2001.
- 37. <u>Kellum JA</u>, Decker JM. The Use of Dopamine in Acute Renal Failure: A Meta-Analysis. Crit Care Med 29 (8): 1526-1531, 2001.
- 38. Kellum JA, Leblanc M. Acute Renal Failure. Clin Evid 6: 634-648, 2001.
- 39. Kellum JA. Fluid resuscitation and hyperchloremic acidosis in experimental sepsis: Improved survival and acid-base balance with Hextend compared with saline. Crit Care Med 30: 300-305, 2002.
- 40. Kellum JA, Angus DC, Johnson JP, Leblanc M, Griffin M, Ramakrishnan N, Linde-Zwirble WT: Continuous versus intermittent renal replacement therapy: A meta-analysis. Intensive Care Med 28: 29-37, 2002.

- 41. Kellum JA, Leblanc M, Venkataraman R. Acute renal failure. Clin Evid. 7: 164-167, 2002
- 42. Tan PSK, Gene F, Delgado E, <u>Kellum JA</u>, Pinsky MR. Nitric Oxide Contamination of Hospital Compressed Air Improves Gas Exchange in Patients with Acute Lung Injury. Intensive Care Med 28 (8): 1064-1072, 2002.
- 43. <u>Kellum JA</u>, Mehta R, Angus DC, Palevsky P, Ronco C, for the ADQI Workgroup. The First International Consensus Conference on Continuous Renal Replacement Therapy. Kidney Int 62: 1855-63 2002.
- 44. Subramanian S, Venkataraman R, <u>Kellum JA</u>. Influence of Dialysis Membranes on Outcomes in Acute Renal Failure: A Meta-Analysis. Kidney Int 62: 1819-23, 2002.
- 45. <u>Kellum JA</u>, Dishart MK. Effect of hemofiltration filter adsorption on circulating IL-6 levels in septic rats. Crit Care 6(5): 429-433, 2002.
- 46. Venkataraman R, Kellum JA, Song MC, Fink MP. Resuscitation with Ringer's Ethyl Pyruvate Solution Prolongs Survival and Modulates Plasma Cytokine and Nitrite/Nitrate Concentrations in a Rat Model of Lipopolysaccharide-Induced Shock. Shock 18 (6): 507-512, 2002.
- 47. Venkataraman R, Kellum JA, Palevsky P Dosing patterns for Continuous Renal Replacement Therapy at a Large Academic Medical Center in the United States. J Crit Care 17(4): 246-250, 2002.
- 48. Ronco C, Bellomo R, <u>Kellum JA</u>. Continuous Renal Replacement Therapy: Opinions and Evidence. Adv Ren Replace Ther 9 (4): 229-244, 2002.
- 49. Kellum JA, Bellomo R, Mehta R, Ronco C. Blood Purification in Non-Renal Critical Illness. Blood Purif 21:6-13, 2003.
- 50. Venkataraman R, Subramanian S, <u>Kellum JA</u>. Extracorporeal blood purification in severe sepsis. Crit Care 7(2): 139-145, 2003.
- 51. Venkataraman R, Kellum JA. Novel approaches to the treatment of acute renal failure. Expert Opin Investig Drugs 12 (8): 1353-66, 2003.
- 52. Winchester JF, Kellum JA, Ronco C, Brady JA, Quartararo PJ, Salsberg JA, Levin NW. Sorbents in acute renal failure and the systemic inflammatory response syndrome. Blood Purif. 21(1):79-84, 2003.
- 53. <u>Kellum JA</u>, Song M, Venkataraman R. Effect of Hyperchloremic Acidosis on Arterial Pressure and Circulating Inflammatory Molecules in Experimental Sepsis. Chest 125 (1): 243-248, 2004.
- 54. Kellum JA, Leblanc M, Venkataraman R. Acute Renal Failure. Clin Evid 9: 175-178, 2003
- 55. Kellum JA, Angus DC. Genetic variation and risk of sepsis. Minerva Anestesiol 69 (4): 245-253, 2003.
- 56. Song M, Kellum JA, Kaldas H, Fink MP. Evidence that Glutathione Depletion is a Mechanism Responsible for the Anti-inflammatory Effects of Ethyl Pyruvate in Cultured LPS-stimulated RAW 264.7 Cells. J Pharmacol Exp Ther 308 (1): 307-316, 2004.
- 57. Kellum JA, Song M, Venkataraman R. Hemoadsorption Removes TNF, IL-6 and IL-10, Reduces NFκB DNA binding and Improves Short-Term Survival in Lethal Endotoxemia. Crit Care Med 32(2): 801-805, 2004.
- 58. Bellomo R, <u>Kellum JA</u>, Ronco C. Defining acute renal failure: physiological principles. Intensive Care Med 30 (1): 33-37, 2004.
- 59. Venkataraman R, Song M, Lynas R, <u>Kellum JA</u>. Hemoadsorption to Improve Organ Recovery from Brain-Dead Organ Donors: A Novel Therapy for a Novel Indication? Blood Purif 22(1): 143-149, 2004
- 60. <u>Kellum JA</u>, Song M, Li J. Lactic, and hydrochloric acids induce different patterns of inflammatory response in LPS-stimulated RAW 264.7 cells. Am J Physiol Regul Integr Comp Physiol 286 (4): R686-692, 2004.

- 61. Powner DJ, Darby JM, Kellum JA. Proposed treatment guidelines for donor care. Prog Transplant 14(1): 16-26, 2004
- 62. Winchester JF, Silberzweig J, Ronco C, Kuntsevich V, Levine D, Parker T, <u>Kellum JA</u>, Salsberg JA, Quartararo P, Levin NW. Sorbents in acute renal failure and end-stage renal disease: middle molecule and cytokine removal. Blood Purif 22 (1): 73-77, 2004.
- 63. Kellum JA, Song M, Li J. Extracellular acidosis and the immune response: clinical and physiologic implications. Crit Care 8: 331-336, 2004.
- 64. Bellomo R, Ronco C, <u>Kellum JA</u>, Mehta RL, Palevsky P. The Second International Consensus Conference of the Acute Dialysis Quality Initiative Group: Acute Renal Failure: Definition, Outcome Measures, Animal Models, Fluid Therapy and Information Technology Needs. Crit Care 8: R204-R212, 2004.
- 65. Kaplan LJ, <u>Kellum JA</u>. Initial pH, base deficit, lactate, anion gap, strong ion difference and strong ion gap predicts outcome from major vascular injury. Crit Care Med 32 (5): 1120-1124, 2004.
- 66. Uchino S, Doig GS, Bellomo R, Morimatsu H, Morgera S, Schetz M, Tan I, Bouman C, Macedo E, Gibney N, Tolwani A, Ronco C, <u>Kellum JA</u>. Diuretics and Mortality in Acute Renal Failure. Crit Care Med 32 (8): 1669-1677, 2004.
- 67. Song M, Winchester J, Albright RL, Capponi VJ, Choquette MD, <u>Kellum JA.</u> Cytokine removal with a novel adsorbent polymer. Blood Purif 22: 428-434, 2004.
- 68. Kellum JA, Leblanc M, Venkataraman R. Acute Renal Failure: Clinical Evidence 2004; 11: 214-217.
- 69. Venkataraman R, Palevsky P, <u>Kellum JA.</u> Adequacy of Dialysis in Acute Renal Failure. Seminars in Nephrology 25: 120-124, March 2005.
- 70. Story DA, <u>Kellum JA</u>. Acid-base balance revisited: Stewart and strong ions. Seminars in Anesthesia: Perioperative Medicine and Pain. 24: 9-16, 2005
- 71. Venkataraman R, <u>Kellum JA</u>. Acute renal failure in the critically ill. Current Opinion in Anaesthesiology 18 (2): 117-122, 2005.
- 72. Uchino S, <u>Kellum JA</u>, Bellomo R, Doig G, Morimatsu H, Morgera S, Schetz M, Tan I, Bouman C, Macedo E, Gibney N, Tolwani A, Ronco C for the Beginning and Ending Supportive Therapy for the Kidney (BEST) Investigators. Acute Renal Failure in Critically III Patients: A multinational, multicenter study. JAMA 294 (8) 813-818, Aug 2005.
- 73. Uchino S, Bellomo R, Morimatsu H, Morgera S, Schetz M, Tan I, Bouman C, Macedo E, Gibney N. Tolwani A, Doig GS, Oudemans van Straaten H, Ronco C, <u>Kellum JA</u>: Beginning and Ending Supportive Therapy for the Kidney (BEST Kidney) Investigators. External validation of severity scoring systems for acute renal failure using a multinational database. Crit Care Med 33 (9): 1961-7, 2005.
- 74. Ricci Z, Bellomo R, Baldwin I, <u>Kellum J</u>. Management of fluid balance in CRRT: A technical approach. International Journal of Artificial Organs 28 (8): 765-776, 2005.
- 75. <u>Kellum JA</u>: Clinical Review: Reunification of Acid-Base Physiology. Critical Care 9 (5): 500-507, October 2005 (Epublished August 2005).
- 76. <u>Kellum JA</u> and Venkataraman R. Timing of Initiation of Renal Replacement Therapy in Acute Renal Failure. ICU Management 5 (Winter): 20, 2005.

- 77. Song M, Kellum JA: Interleukin-6. Crit Care Med 33 (12-Suppl): S463-465, 2006.
- 78. Killeen ME, Englert JA, Stolz DB, Song M, Han Y, Delude RL, <u>Kellum JA</u>, Fink MP: The phase 2 enzyme inducers ethacrynic acid DL-sulforaphane and oltipraz, inhibit LPS-induced HMGB1 secretion by RAW 264.7 cells. J Pharmacol Exp Ther 316 (3): 1070-1079, 2006.
- 79. Dremsizov T, Clermont G, <u>Kellum JA</u>, Kalassian KG, Fine MJ, Angus DC. Severe Sepsis in Community-Acquired Pneumonia: When does it happen and do SIRS criteria help predict course? Chest, In press 2006.
- 80. Gunnerson KJ, Saul M, He S, <u>Kellum, JA</u>. Lactate vs Non-Lactate Metabolic Acidosis: A Retrospective Outcome Evaluation of Critically III Patients. Critical Care 2006; 10: R22 (E published, Feb 10, 2006)
- 81. Hoste E, Clermont G, Kersten A, Venkataraman R, Angus DC, DeBacquer D, <u>Kellum JA</u>. RIFLE criteria for acute kidney injury are associated with hospital mortality in critically ill patients: a cohort analysis. Critical Care 2006; 10: R73-

- 1. <u>Kellum JA</u>, Bellomo R. Gut Metabolism and Anion Flux. In Pinsky MR (ed), <u>Update in Intensive Care and Emergency Medicine</u>, Vol. 23 The Splanchnic Circulation. Springer-Verlag, Heidelberg. pp 14-26, 1995.
- 2. <u>Kellum JA</u>, Mazariegos GV. Transplantation. In Shoemaker PK, Grenvik A. <u>Pocket Companion to Textbook of Critical Care</u>, W.B. Saunders Co, Philadelphia, PA. Chapter 12, pp 613-655, 1996.
- 3. <u>Kellum JA</u>. Acidosis in the Critically III. Interpretation and Significance. (Proceedings of the 10th Postgraduate Course in Critical Care Medicine, Trieste, Italy November 13-19, 1995). In Gullo A (ed) <u>Anaesthesia, Pain, Intensive Care, and Emergency Medicine</u>. Springer-Verlag, Heidelberg. pp 799-810, 1996.
- 4. <u>Kellum JA</u>, Kramer DJ. Water, Electrolyte, and Acid-Base Balance in Hepatic Cirrhosis. In Park G, Pinsky MR (eds) <u>Critical Care Management: Case Studies--Tricks and Traps</u>, W.B. Saunders Company, LTD, London, England, pp 124-128, 1997.
- 5. <u>Kellum JA</u>, Devita M, Lombard JJ, Grenvik A. Ethical and Legal Considerations. In Weil MH (ed) <u>CPR:</u> <u>Resuscitation of the Arrested Heart</u>, WB Saunders Company, Philadelphia 1999; Chapter 20 pp 274-295.
- 6. <u>Kellum JA</u>. Rationale for Hemodynamic Monitoring. In Pinsky MR (ed), <u>Update in Intensive Care and Emergency Medicine Vol. 27 Clinical Applications</u>. Springer-Verlag, Heidelberg. pp 103-112,1996.
- 7. <u>Kellum JA</u>, Kramer DJ, Lee K, Mankad S, Bellomo R, Pinsky MR. Release of lactate by the lung in acute lung injury. In <u>Advances in Experimental Medicine and Biology: Oxygen Transport to Tissue XVIII</u> Nemoto EM, LaManna JC (eds) Vol 411: 281-285, 1997.
- 8. <u>Kellum JA</u>, Bellomo R, Kramer DJ, Pinsky MR. Fixed Acid Uptake by Visceral Organs During Early Endotoxemia. <u>Advances in Experimental Medicine and Biology</u> 411:275-279, 1997. In <u>Advances in Experimental Medicine and Biology: Oxygen Transport to Tissue XVIII</u> Nemoto EM, LaManna JC (eds) Vol 411: 275-279, 1997.
- 9. <u>Kellum JA</u>, Garuba AK. Pharmacologic Therapy in Acute Renal Failure: The Role of Diuretics. In Ronco C, Bellomo R (eds), <u>Critical Care Nephrology</u>. Kluwer Academic Publishers, Dordrecht, The Netherlands, 1998; Section 18, Chapter 4; pp. 1155-1159.
- 10. Brady JJ, <u>Kellum JA</u>. The Liver in Kidney Disease. In Ronco C, Bellomo R (eds), <u>Critical Care Nephrology</u>. Kluwer Academic Publishers, Dordrecht, The Netherlands, 1998; Section 14, Chapter 3, pp 941-947.
- 11. Leblanc M, <u>Kellum JA</u>. Biochemical and Biophysical Principles of Hydrogen Ion Regulation. In Ronco C, Bellomo R (eds), <u>Critical Care Nephrology</u>. Kluwer Academic Publishers, Dordrecht, The Netherlands, 1998; Section 5, Chapter 1; pp 261-277.
- 12. <u>Kellum JA</u>. Lactic acidosis: tissue hypoxia and other causes. Simposio Mostra Anestesia Rianimazione E Terapia Intensiva Springer-Verlag Heidelberg, pp 98-101, 1997.
- 13. <u>Kellum JA</u>. New Insights in acid-base physiology applied to critical care. Current Opinion in Critical Care 3: 414-419, 1997.
- 14. <u>Kellum JA</u>. Recent advances in acid-base physiology applied to critical care. In Vincent JL (ed.), <u>Yearbook of Intensive Care and Emergency Medicine</u>. Springer-Verlag Heidelberg, 1998; pp 579-587.
- 15. <u>Kellum JA</u>. Limiting organ injury in the critically ill. In Braschi A, Gattinoni L, Pesenti A, Raimondi F (eds), <u>Simposio Mostra Anestesia Rianimazione E Terapia Intensiva</u>, Springer-Verlag, Milano Italy, 1998; pp 11-17
- 16. <u>Kellum JA</u>. Primum non nocere and the meaning of modern critical care. Current Opinion in Critical Care 4: 1998, 4:400-405.

- Kellum JA. Diagnosis and Treatment of Acid-Base Disorders. In, Grenvik A, Shoemaker PK, Ayers S, Holbrook (eds). <u>Textbook of Critical Care</u>, W.B. Saunders Co, Philadelphia, PA, 1999; Chapter 76; pp 839-853.'
- Kellum JA, Ramakrishnan N, Angus D. Appraising and Using Evidence in Critical Care. In, Grenvik A, Shoemaker PK, Ayers S, Holbrook (eds). <u>Textbook of Critical Care</u>, W.B. Saunders Co, Philadelphia, PA 1999; Chapter 193; pp 2059-2069.
- 19. <u>Kellum JA</u>. ALKharfy K. Treating Immunologic Instability: A change in focus. In Vincent JL (ed.), <u>Yearbook of Intensive Care and Emergency Medicine</u>. Springer-Verlag Heidelberg, 1999; pp 28-42.
- 20. <u>Kellum JA</u>, DeVita M, Lombard JJ, Grenvik A. Ethical and Legal Considerations. In Weil M, Tang W (eds), <u>CPR: Resuscitation of the Arrested Heart</u>. WB Saunders Co, Philadelphia, PA 1999; pp 274-295.
- 21. Pinsky MR, <u>Kellum JA</u>. Acid-base Balance in Sepsis. In DeSanto NG (ed), <u>Acid-Base Balance: From Bench to Bedside</u>. Instituto Italiano per gli Studi Filosofici, Naples, 1999. (Papers from the Third GA Borelli Conference, Anacapri, Capri Islands October, 1999)
- 22. Kellum JA. Acid-base physiology in the post-Copernican era. Current Opinion in Critical Care 5: 429-435, 1999.
- 23. <u>Kellum JA</u>. The Kidney in Sepsis. In Sepsis and Organ Dysfunction: The Challenge Continues. Baue AE, Berlot G, Gullo A, Vincent JL (ed) Springer-Verlag Italia, Milano, 1999; pp 91-101.
- 24. Kaplan LJ, Bailey H, <u>Kellum J</u>. The etiology and significance of metabolic acidosis in trauma patients. Current Opinion in Critical Care 5: 458-463, 1999.
- 25. Subramanian S, <u>Kellum JA</u>. The Meaning of Lactate. In Vincent JL (ed) <u>Yearbook of Intensive Care and Emergency Medicine</u>, Springer Verlag, Berlin. pp 743-751, 2000.
- 26. Schlichtig, R. <u>Kellum JA</u>. Base Excess and Strong Ion Difference are quantitatively interchangeable. Oxygen Transport to Tissue XXII. Proceedings of the 27th annual meeting of the International Society on Oxygen Transport to Tissue. Pabst Science Publishers, Lengerich. 2000 (in press).
- 27. Subramanian S, Kellum JA. Convection or Diffusion in CRRT for Sepsis. Current Opinion in Critical Care 6: 426-430, 2000.
- 28. <u>Kellum JA</u>. Catecholamines and acute renal failure. In Holzheimer RG (ed) <u>Evidence Based Surgery.</u> W. Zuckschwerdt Verlag, Munich, 2001; pp 758-762.
- 29. <u>Kellum JA</u>. Protecting Renal Blood Flow in the ICU. In <u>Sepsis and Organ Dysfunction: The Bad and Good News on Prevention and Management</u>. Baue AE, Berlot G, Gullo A, Vincent JL (ed) Springer-Verlag Italia, Milano, 2001; pp. 53-62.
- 30. <u>Kellum JA</u>, Mehta R, Ronco C. Acute dialysis quality initiative (ADQI). In Ronco C, Bellomo R LaGreca G (eds): Blood Purification in Intensive Care. Contributions to Nephrology 2001; 132 (12): 258-265.
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- 21. <u>Kellum JA</u>. Prophylactic fenoldopam for renal protection? No, thank you, not for me—not yet at least (Editorial). Crit Care Med 33 (11): 2681-2683, 2005
- 22. <u>Kellum JA</u>. Acute renal failure, interdisciplinary knowledge and the need for standardization. (Editorial) Curr Opin Crit Care 11: 525-526, 2005
- 23. Ring T, <u>Kellum, JA</u>. Changes in Acid-Base Balance Following Bolus Infusion of 20% albumin solution in humans. (Comment Bruegger D et al. Intensive Care Med 31-1123-27 2005). Intensive Care Med

PROFESSIONAL ACTIVITIES

Teaching

University of Rochester, Genesee Hospital Emergency Lecture Series, Diagnostic Teaching Series 1991-1992 University of Rochester, Genesee Hospital Basic Skills Program - Preceptor for Medical Students 1992 University of Rochester, Genesee Hospital Teaching Attending Physician 1992 Anesthesiology/CCM Didactic Lectures University of Pittsburgh Medical Center Fourth Year Medical Students (Monthly lecture: Jul-May) 1993-2000 "Hypoxemia/Hypercarbia" Anesthesiology/CCM MCCTP Educational Lectures for CCM Fellows University of Pittsburgh Medical Center Mini Course in Advanced Acid-Base Physiology (annually) 1993-present "Molecular Biology Series" 1993-1997 "Targets of Resuscitation" 1998-present Coordinator, Clinical Research Rotation 2000-2002 Coordinator, Renal, Electrolyte, Acid-Base Lecture Series 1998-present University of Pittsburgh, School of Medicine Senior Elective: Evidence Based Medicine and Clinical Decision Making "Framing the Question" 2000-2002 Editor, University of Pittsburgh, Critical Care Medicine Journal Club 1995-2005 **Evidence-Based Medicine Training Series** Publishes reviews on the web: www.ccm.upmc.edu/education/journal_club/jc.html Anesthesia Residents (Monthly) 1996-2001 "Sepsis and Oxygen Transport" Preceptor, Second Year CCM Fellow Research Project • Bruce Akerman, M.D. 1994-1995 "The Role of Tissue Acidosis in the Development of Multi-System Organ Failure" Nav Mehta, M.D. 1995-1996 "Utility of Gastric pCO2 in the Critically III Patient" • John Brady, M.D. 1996-1997 "Diffusive Versus Convective Therapy in Sepsis" Ramesh Venkataraman, MD 2000-2001 "Metabolic acidosis and fluid resuscitation in Sepsis" Kyle Gunnerson, MD 2002-2003 "Epidemiology of metabolic acidosis in the ICU" Director, Acid-Base Course, Trieste Italy 2001

RESEARCH

1. Grants Received/Years Inclusive/Grant Number and Title/Source

Current

Federal

National Institutes of Health R01 GM61992: Genetic and inflammatory markers of sepsis (GenIMS). 5/1/01-4/30/05 \$5,968,337 PI: Derek Angus, M.D., Co-PI: John A Kellum, M.D. 25%

VA Cooperative Study Program (CSP #530)/ National Institutes of Health (NIDDK): Intensive versus Conventional Renal Support in Acute Renal Failure. Acute Renal Failure Trial Network (ATN). 1/15/04-1/14/07. \$852,840 PI: Paul Palevsky, MD; Co-I/Member, Executive Committee: John Kellum, M.D. 4%

HRSA Division of Transplantation – R38 0T01300: Hemadsorption to Improve Donor Organ Recovery (HIDonOR) 9/1/03-8/31/06 \$953,714 PI: John Kellum, M.D. 25%

National Institutes of Health R41 GM69127: A Hemadsorption Device for the Treatment of SIRS 7/01/04-6/30/05 \$100,000 20% University PI: John Kellum, M.D.

National Institutes of Health R01 HL080926: Systems Engineering of Pheresis Intervention for Sepsis 1RO1 HL080926-01 (SEPSIS) 10/1/05-9/30/10 \$7,215,038 PI: John Kellum, M.D. 30%

National Institutes of Health R01DK070910: Biological Markers of Recovery for the Kidney (BioMaRK) 12/01/05-11/30/10 PI: John Kellum, M.D. Approved for funding – Award pending.

Industry—Investigator Initiated

RenalTech International: CytoSorb Clinical Project Development. January 1, 2003 – June 31, 2005 PI: John A. Kellum, M.D. 30%

Glaxo-Smith-Kline. Coagulation Markers and Mediators in Sepsis. October 1, 2002 – September 30, 2006 Co-PI: John A. Kellum, M.D.

Industry - Clinical Trials

Eisai Medical Research Inc.: A Double-Blind, Placebo-Controlled Study of E5564, A Lipid A Antagonist, Administered by Twice Daily Intravenous Infusions in Patients with Severe Sepsis (E5564-A001-201) 2004, PI: John A. Kellum, M.D.

Chiron Corporation: A Phase 3, Multicenter, Randomized, Placebo-Controlled, Double-blind, Three-Arm Study to Evaluate the Safety and Efficacy of Tifacogin [Recombinant Tissue Factor Pathway Inhibitor] Administration in Subjects with Severe Community-Acquired Pneumonia. (TFP008A01) 2004, PI: John A. Kellum, M.D.

Completed

Foundation/Society

Laerdal Foundation for Acute Medicine. Evaluation of Continuous Veno-venous Hemofiltration in the Treatment of Systemic Inflammatory Response Syndrome. June, 1995 - May, 1996 \$7,500 PI: J Kellum, M.D.

Laerdal Foundation for Acute Medicine. Hemofiltration in Acute Lung Injury. July , 1997-June, 1998 \$10,000 PI: John Kellum, M.D.

Laerdal Foundation for Acute Medicine. Mechanisms of Immunomodulation by Hemofiltration in Experimental Sepsis. July 1, 1999 - June 30, 2000 \$10,000 PI: John A Kellum, M.D.

Industry—Investigator Initiated

Abbott Labs: Mechanisms of Immunologic Dysfunction Induced by Hyperchloremic Metabolic Acidosis in Experimental Sepsis. May 1, 2000 – Dec 31, 2001 PI: John A Kellum, M.D.

RenalTech International: Blood Purification in Experimental Sepsis. September 1, 2001 – August 31, 2003 PI: John A. Kellum, MD

Eli Lilly and Company: Using Critical Analysis Skills in Authentic Problem Solving Situations: New Web-based Interactive Case Designs For Critical Care Physicians. September 1, 2001 – August 31, 2003. PI: John A. Kellum, MD

Gambro Renal Care. Plasma Exchange Therapy in Sepsis (PETS) Trial. September 1, 2001- August 30, 2003 PI: John Kellum, M.D.

Industry—Clinical Trials

Eli Lilly and Company: "Multi-Center Phase 2 Study of Activated Protein C (EVAA) in Sepsis" PI: John Kellum (Assumed University of Pittsburgh Site PI effective 8/29/97) 1997 - 1998

Multi-Center, Phase IIb, Anti-TNF Ovine Fab (Cytotab) in Sepsis Therapeutic Antibodies Inc. PI: David Watkins, M.D., Ph.D.; Co Investigator 1997-1999

Pharmacia & Upjohn, Inc. Linezolid (PNU-100766) in the Treatment of Gram Positive Bacteremia 1997 -1999 PI: Peter Linden, MD, DMD; Co-Investigator: David Kramer, M.D., Alan Rosenbloom, M.D., John Kellum, M.D.

Eli Lilly and Company: "Multi-Center Phase 3 Study of Activated Protein C (EVAAD) in Sepsis" Pl: John Kellum (University of Pittsburgh Site Pl) Co-Investigator: Carl Sirio, M.D., Peter Linden, M.D., R Cefola RPh, J Kerfonta RPh. 1998 -2000

Novartis Pharmaceuticals: PMX 622 in severe SIRS. PI: Carl Sirio (University of Pittsburgh Site PI) Co-investigators: Peter Linden, John Kellum. 1998 – 2000

Chiron Pharmaceuticals: "Multicenter, Double-Blind, Placebo-Controlled, Randomized, Phase 3 Study of Tifacogin (Recombinant Tissue Factor Pathway Inhibitor (rTFPI/SC-59735) in Severe Sepsis. December 1, 2000 – November 03, 2001 PI: John A. Kellum, M.D.

Eli Lilly and Company: A Phase II Study to Determine the Efficacy and Safety of LY315920 in Patients with Severe Sepsis (J4A-MC-EZZI 5/14/01) (Amendment (a), 8/15/01), (CTP #JK01-001) January 1, 2002 through September 26, 2002. PI: John A. Kellum, M.D.

Intramural

Department of Anesthesiology/CCM Seed Grant "Unexplained Positive Anion Gap Metabolic Acidosis in ESLD. Grant #4595.8600 July, 1993- June,1994 \$8,000 PI: John Kellum, M.D.

Department of Anesthesiology/CCM Seed Grant "Evaluation of Continuous Veno-venous Hemofiltration in the Treatment of System Inflammatory Response Syndrome" M.D. July, 1996- June, 1997 \$8,000 PI: John Kellum, M.D.

Department of Anesthesiology/CCM Seed Grant: "Effect of Hemofiltration on Immune Function in the Rat During Experimental Sepsis." January 1, 1999- December 31, 1999 \$8,000 PI: John A. Kellum, M.D. CoPI: Alan Rosenbloom, M.D.

Department of Anesthesiology/CCM Seed Grant: "Effects of hydrochloric acidosis on cytokine expression in rat alveolar macrophages" July 1, 2001 - June 30, 2002. \$8,000 PI: John A. Kellum, M.D.

2. Seminars and Invited Lectureships Related to Research

Local/Regional

- O2-95 Gut Metabolism and Systemic Acid-Base Balance. Grand Rounds-Critical Care Medicine. University of Pittsburgh Medical Center, Pittsburgh, PA
- 03-95 Ultrafiltration of Blood as an Adjunct to the Treatment of Sepsis Syndrome. Critical Care Medicine Research Conference. University of Pittsburgh Medical Center, Pittsburgh, PA
- 08-95 Release of lactate by the lung in acute lung injury. Speaker, International Society on Oxygen Transport to Tissue XVIII. Pittsburgh, PA
- 08-95 Fixed Acid Uptake by Visceral Organs During Early Endotoxemia. Speaker, International Society On Oxygen transport to Tissue XVIII. Pittsburgh, PA
- 09-96 Evidence Base Medicine. Grand Rounds-Critical Care Medicine. University of Pittsburgh Medical Center, Pittsburgh, PA
- 08-98 Acid-Base Balance in the Post-Copernican Era. Grand Rounds, Department of Medicine, Mercy Hospital, Pittsburgh, PA
- 11-98 Immunomodulation in Sepsis: The Role of Hemofiltration. Speaker, Critical Care Research Mini-Symposium. Pittsburgh, PA.
- 04-99 Immunomodulation in Sepsis: The Role of Hemofiltration? Critical Care Medicine Research Conference University of Pittsburgh Medical Center, Pittsburgh, PA
- O4-99 Continuous Renal Replacement Therapy (CRRT) vs Intermittent Hemodialysis (IHD) for Acute Renal Failure in the ICU: Does it make a difference. Grand Rounds-Critical Care Medicine University of Pittsburgh Medical Center, Pittsburgh, PA
- 06-99 CRRT vs Intermittent Hemodialysis in Patients with Renal Failure. Renal Grand Rounds Department of Medicine, University of Pittsburgh Medical Center, Pittsburgh, PA
- 08-99 Acid-Base Balance in the Post-Copernican Era. Grand Rounds, Department of Pediatrics, Mercy Hospital, Pittsburgh, PA

- 11-99 Hemodialysis: Another form of biotrauma. Speaker, Critical Care Research Mini-Symposium. Pittsburgh, PA.
- 01-00 Evidence-Based Medicine. Grand Rounds-Critical Care Medicine University of Pittsburgh Medical Center, Pittsburgh, PA
- 03-00 Effect of Dialysis Dosage on Outcome in Acute Renal Failure. Critical Care Medicine Research Conference University of Pittsburgh Medical Center, Pittsburgh, PA
- 04-00 Protecting Renal Blood Flow in the ICU. Grand Rounds-Critical Care Medicine University of Pittsburgh Medical Center, Pittsburgh, PA
- 12-00 CRRT vs. IHD: Is there a difference in outcome? Critical Care Grand Rounds. University of West Virginia. Morgantown, WV.
- 09-01 New Directions in the Treatment of Sepsis. Special Symposium. Cleveland OH.
- 02-02 Treatment Strategies to Minimize Organ Injury in Sepsis. Visiting Professor University of Rochester Medical Center, Rochester, NY
- 02-02 Acid Base Balance in the Post Copernican Era, Anesthesiology Grand Rounds University of Rochester Medical Center, Rochester, NY
- 08-02 STORMACT SABM 17th USU Surgery for Trauma-New Therapies for Combat Casualties Bethesda, MD August 23, 2002
- Univ of Pittsburgh and UPMC Delegation. Visit to USAMRMC, Ft. Detrick, Maryland Inventions to Improve Survival in Combat Casualties: Hemoadsorption to Remove Mediators of Shock and Tissue Injury: Ethyl Pyruvate. March 24, 2004

National/International

- 09-94 Systemic Acid-Base Balance and Transorgan Ion Flux. Speaker, First International Symposium on Applied Physiology of the Peripheral Circulation. Barcelona, Spain
- 11-94 Torsades de Pointes and QT Prolongation Following Administration of FK 506. Presenter, American College of Chest Physicians New Orleans, LA
- 11-95 The Interpretation and Significance of Acidosis in the Critically III. Speaker, 10th Postgraduate Course in Critical Care Medicine Anaesthesia, Pain, Intensive Care and Emergency Medicine (A.P.I.C.E.) Trieste, Italy
- 11-95 Assessment of Cardiovascular Function using Haemodynamic Monitoring. Speaker, 10th Postgraduate Course in Critical Care Medicine Anaesthesia, Pain, Intensive Care and Emergency Medicine (A.P.I.C.E.) Trieste, Italy
- 09-96 Endotoxin and renal blood flow. Speaker, Third Annual Symposium on Applied Physiology of the Peripheral Circulation. Barcelona, Spain
- 09-96 Diuretics in acute renal failure: protective or deleterious? Speaker, Third Annual Symposium on Applied Physiology of the Peripheral Circulation. Barcelona, Spain
- 11-96 Rational for Hemodyamic Monitoring. Speaker, 11th Postgraduate Course in Critical Care Medicine Anaesthesia, Pain, Intensive Care and Emergency Medicine (A.P.I.C.E.) Trieste, Italy
- O5-97 Treatment strategies to minimize the systemic impact of sepsis. Speaker, SMART (Simposio Mostra Anestesia Rianimazione e Terapia Intensiva) Milano, Italy

05-97	Tissue hypoxia: Lactate production and lactic acidosis. Speaker, SMART (Simposio Mostra Anestesia Rianimazione e Terapia Intensiva) Milano, Italy
12-97	Convective vs Diffusive Clearance. Speaker, 2 nd International Conference on Continuous Hemofiltration Therapies in the ICU, Paris, France
12-97	Round Table on Clinical Trials in Hemofiltration. Session Chairman, 2 nd International Conference on Continuous Hemofiltration Therapies in the ICU, Paris, France
01-98	Renal Support in the ICU: Is There a Better Way? Nephrology Grand Rounds. Emory University, Atlanta, GA
03-98	Fulminant Hepatic Failure: The Pittsburgh Experience. Speaker, 5th International Symposium on Intensive Care Medicine. Oporto, Portugal
03-98	Diuretics in Renal Failure: Who Are We Treating? Speaker, 5th International Symposium on Intensive Care Medicine. Oporto, Portugal
03-98	The Immune System: Relation to Sepsis and Multiple Organ Failure. Speaker, 5th International Symposium on Intensive Care Medicine. Oporto, Portugal
03-98	Treatment Strategies to Minimize Organ Injury in Sepsis. Speaker, 5th International Symposium On Intensive Care Medicine. Oporto, Portugal
03-98	Convective vs Diffusive Clearance. Speaker, Third International Conference on Continuous Renal Replacement Therapy (CRRT) San Diego, CA
03-98	Metabolic acidosis in the critically ill. 19 th International Symposium on Intensive Care and Emergency Medicine (ULB), Brussels Belgium.
03-98	Lactic acidosis. 19 th International Symposium on Intensive Care and Emergency Medicine (ULB) Brussels Belgium.
03-98	CRRT for Sepsis: Have we made any progress? Panelist, Third International Conference on Continuous Renal Replacement Therapy (CRRT) San Diego, CA
03-98	Round Table: Evidence Based Medicine. Panelist, 18th International Symposium on Intensive Care and Emergency Medicine Brussels, Belgium.
03-98	Lactate Metabolism in Sepsis. Speaker, 18th International Symposium on Intensive Care and Emergency Medicine Brussels, Belgium.
03-98	Effects of Diuretic Agents on Renal Function. Speaker, 18th International Symposium on Intensive Care and Emergency Medicine Brussels, Belgium.
03-98	Fulminant Hepatic Failure. Speaker, 18th International Symposium on Intensive Care and Emergency Medicine Brussels, Belgium.
03-98	Organ Failure in Sepsis. Speaker, 18th International Symposium on Intensive Care and Emergency Medicine Brussels, Belgium.
04-98	Mediator Clearance During CVVH. Speaker, American Thoracic Society (ATS) International Conference Chicago, IL.
04-98	Facilitator: Sepsis & O2 Delivery. American Thoracic Society (ATS) International Conference Chicago IL.

05-98	Use of diuretics in the critically ill. Speaker, First International Course on Critical Care Nephrology Vicenza, Italy
05-98	Acid-base disorders in the critically ill. Speaker, First International Course on Critical Care Vicenza, Italy.
05-98	Metablic Alteration in Sepsis. Speaker, SMART (Simposio Mostra Anestesia Rianimazione e Terapia Intensiva) Milano, Italy.
05-98	Role of Conservative Therapy in ARF. Speaker, SMART (Simposio Mostra Anestesia Rianimazione e Terapia Intensiva) Milano, Italy.
05-98	Diagnosis and monitoring of splanchnic hypoperfusion. Speaker, SMART (Simposio Mostra Anestesia Rianimazione e Terapia Intensiva) Milano, Italy.
09-98	Acute Renal Failure in the Critically III Patient. Speaker, Advances in Continuous Renal Replacement Therapy (CRRT). Chicago, IL.
09-98	CRRT vs Intermittent Hemodialysis. Speaker, Advances in Continuous Renal Replacement Therapy (CRRT). Chicago, IL.
09-98	Nonrenal Indications for CRRT. Speaker, Advances in Continuous Renal Replacement Therapy (CRRT). Chicago, IL.
09-98	Who What Where and How: CRRT Programs in Cleveland and Pittsburgh. Speaker, Advances in Continuous Renal Replacement Therapy (CRRT). Chicago, IL.
03-99	Hepatic Failure: The Pittsburgh Experience. 19 th International Symposium on Intensive Care and Emergency Medicine. Brussels Congress Center, Belgium
03-99	Metabolic Acidosis in the Critically III. 19 th International Symposium on Intensive Care and Emergency Medicine Brussels Congress Center, Belgium
03-99	Lactic Acidosis. 19 th International Symposium on Intensive Care and Emergency Medicine. Brussels Congress Center, Belgium
03-99	Principles of gastric tonometry. 19 th International Symposium on Intensive Care and Emergency Medicine. Brussels Congress Center, Belgium
03-99	Diuretics in acute renal failure. 19 th International Symposium on Intensive Care and Emergency Medicine. Brussels Congress Center, Belgium
03-99	Hemofiltration in control of systemic inflammation. 19 th International Symposium on Intensive Care and Emergency Medicine. Brussels Congress Center, Belgium
04-99	A Physical-Chemical Basis to Acid-Base Analysis—the Concept. Speaker, American Thoracic Society (ATS) International Conference. San Diego, CA.
04-99	Metabolic Acidosis in the Critically III. "Meet the Professor" Session, American Thoracic Society (ATS) International Conference. San Diego, CA
05-99	What is the role of hemofiltration in the control of systemic inflammation? 10 th Simposio Mostra Anestesia Rianimazione e Terapia Intensiva. Milano, Italy
05-99	Blood volume replacement Session Chairmen: P. Dellinger, J. Kellum. 10 th Simposio Mostra Anestesia Rianimazione e Terapia Intensiva. Milano, Italy

05-99	Acid Base Balance - Session Chairmen: L. Gattinoni, J. Kellum. An Alternative Approach to Acid Base Balance Asessment. 10 th Simposio Mostra Anestesia Rianimazione e Terapia Intensiva. Milano, Italy
11-99	The Kidney in Sepsis. 14th Postgraduate Course in Critical Care Medicine Anaesthesia, Pain, Intensive Care and Emergency Medicine (A.P.I.C.E.) Trieste, Italy
11-99	Continuous renal replacement therapy (CRRT) - Session Chairmen: J. Kellum. Continuous Venovenous Hemofiltration in Sepsis.10th Postgraduate Course in Critical Care Medicine Anaesthesia, Pain, Intensive Care and Emergency Medicine (A.P.I.C.E.) Trieste, Italy
02-00	Gastric Tonometry: What does it mean? Do we really know? VI Simposium Internacional de Cuidados Intensivos Oporto, Portugal
02-00	Continuous vs intermittent renal replacement therapy: Is there a difference in survival? VI Simposium Internacional de Cuidados Intensivos Oporto, Portugal
02-00	Corticotherapy in septic shock (Debate). VI Simposium Internacional de Cuidados Intensivos Oporto, Portugal
02-00	Appraising and using evidence in Critical Care. VI Simposium Internacional de Cuidados Intensivos Oporto, Portugal
02-00	The use of vasoactive medications in septic patients. VI Simposium Internacional de Cuidados Intensivos Oporto, Portugal
03-00	Continuous Renal Replacement Therapy. American Nephrology Nurses' Association - Long Island Chapter -Annual Hemodialysis Conference, Long Island, NY.
03-00	A Fresh look at electrolytes. 20 th International Symposium on Intensive Care and Emergency Medicine Brussels, Belgium
03-00	Gastric Tonometry. 20 th International Symposium on Intensive Care and Emergency Medicine Brussels, Belgium
03-00	Continuous vs Intermittent Renal Replacement:Difference in Outcome? 20 th International Symposium on Intensive Care and Emergency Medicine Brussels, Belgium
03-00	Nosocomial Pneumonia (Moderator). 20 th International Symposium on Intensive Care and Emergency Medicine Brussels, Belgium
03-00	Pro/Con Debate: Albumin infusion should be abandoned (Moderator). 20 th International Symposium on Intensive Care and Emergency Medicine Brussels, Belgium
03-00	Intoxications (Moderator). 20 th International Symposium on Intensive Care and Emergency Medicine Brussels, Belgium
03-00	Pro/Con Debate: Evidence Based Medicine (Pro). 20 th International Symposium on Intensive Care and Emergency Medicine Brussels, Belgium
03-00	Metabolic Acidosis. 20 th International Symposium on Intensive Care and Emergency Medicine Brussels, Belgium
05-00	Physiology of body fluids management Simposio Mostra Anestesia Rianimazione e Terapia Intensiva (SMART) Milano, Italy
05-00	Treatment strategies to minimize organ injury in sepsis Simposio Mostra Anestesia Rianimazione e Terapia Intensiva (SMART) Milano, Italy

- 05-00 The Pulmonary-Splanchnic Axis in Critical Illness 96th International Conference ATS, Toronto,ON, Canada
- 08-00 Co-Director, Consensus Conference on CRRT, Acute Dialysis Quality Initiative (ADQI), New York, NY.
- 09-00 Visiting Professor: Prevention and Treatment of ARF, Renal Replacement Therapy in ARF. University of Toronto, St Michael Hospital, Toronto ON, Canada.
- 10-00 The Evidence Base for Interventions in Critical Care 2nd Current Controversies in Anaesthesia and Peri-operative Medicine. Dingle, Co. Kerry, Ireland.
- 10-00 The Genetics of Sepsis 2nd Current Controversies in Anaestheia and Peri-operative Medicine. Dingle, Co. Kerry, Ireland.
- 10-00 Synchronizing Care in ICU with CRRT 'Orchestrating' Care when Kidney Disease is a Secondary Diagnosis. Division of Nursing Education, Department of Nursing North Shore University Hospital, Long Island Jewish Health System, New York.
- 10-00 Continuous Renal Replacement Therapy Medical Grand Rounds, Medical College of Pennsylvania, Philadelphia, PA
- 10-00 CRRT vs IHD: Does it make a difference? Renal Grand Rounds, University of Pennsylvania Hospital, Philadelphia, PA
- 10-00 CRRT vs IHD. National Kidney Foundation, Inner-City Grand Rounds, Philadelphia, PA
- 10-00 Limiting Organ Injury in the Critically III. Medical Grand Rounds, Temple University Philadelphia, PA
- 10-00 Acute Renal Failure in the ICU. Renal Grand Rounds. Temple University Philadelphia, PA
- 10-00 Blood Purification in Sepsis. Renal Grand Rounds, Thomas Jefferson University Philadelphia, PA
- 11-00 Key factors modulating renal reserve. 15th Postgraduate Course in Critical Care Medicine Anaesthesia, Pain, Intensive Care and Emergency Medicine (A.P.I.C.E.) Trieste, Italy
- 11-00 Fluid and electrolyte management during hemofiltration. 15th Postgraduate Course in Critical Care Medicine Anaesthesia, Pain, Intensive Care and Emergency Medicine (A.P.I.C.E.) Trieste, Italy
- 11-00 Renal compensation of acid-base disorders. 15th Postgraduate Course in Critical Care Medicine Anaesthesia, Pain, Intensive Care and Emergency Medicine (A.P.I.C.E.) Trieste, Italy
- 11-00 Mixed acid-base disorders. 15th Postgraduate Course in Critical Care Medicine Anaesthesia, Pain, Intensive Care and Emergency Medicine (A.P.I.C.E.) Trieste, Italy
- 01-01 CRRT vs. IHD: Is there a difference in outcome? State of the art lecture: Dept of Critical Care. Rush Presbyterian Hospital. Chicago, III.
- 01-01 Acid-base Balance in the Post-Copernican Era. Critical Care Grand Rounds. Rush Presbyterian Hospital. Chicago, Ill.
- 02-01 Moderator: Acid-base balance: New Heights and new approaches to analysis. Society of Critical Care Medicine (SCCM) 30th International Educational & Scientific Symposium. San Francisco, CA.

02-01	Moderator: Professor Walk Rounds: Poster Session. Society of Critical Care Medicine (SCCM) 30 th
	International Educational & Scientific Symposium. San Francisco, CA.

- 02-01 Physical-Chemical Approach to Acid-Base Society of Critical Care Medicine (SCCM) 30th International Educational & Scientific Symposium. San Francisco, CA.
- 02-01 Preliminary Results of the SCCM/ASN consensus conference on CRRT. Society of Critical Care Medicine (SCCM) 30th International Educational & Scientific Symposium. San Francisco, CA.
- 03-01 Acute Renal Failure in the ICU. State of the Art VII, American Thoracic Society. San Juan, Puerto Rico.
- 03-01 The Acute Dialysis Quality Initiative (ADQI) Sixth International Conference on CRRT (Continuous Renal Replacement Therapies) San Diego, CA
- 03-01 Workshop: Vasopressor Use in the ICU: Principles and Pitfalls Sixth International Conference on CRRT (Continuous Renal Replacement Therapies) San Diego, CA
- 05-01 Acid Base: New Concepts in Principles of Hydrogen Ion Regulation. 13th International Intensive Care Symposium. Istanbul, Turkey.
- 05-01 Sepsis Immunomodulation: Immunomodulation in Sepsis. 13th International Intensive Care Symposium. Istanbul, Turkey.
- 05-01 Use of diuretics in the critically ill. 2nd International Course on Critical Care Nephrology Vicenza, Italy
- 05-01 Acute Dialysis Quality Initiative. 2nd International Course on Critical Care Nephrology Vicenza, Italy
- 05-01 Lactic Acidosis 10th International Symposium on Intensive Care Medicine. Bled, Slovenia
- 05-01 Evidence-Based Medicine in the ICU 10th International Symposium on Intensive Care Medicine. Bled, Slovenia
- 05-01 Gastric Tonometry 10th International Symposium on Intensive Care Medicine. Bled, Slovenia
- 05-01 Limiting Organ Injury in the ICU 10th International Symposium on Intensive Care Medicine. Bled, Slovenia
- 10-01 Acute Renal insufficiency. VIII Uruguayan Congress of Intensive Care. Montevideo, Uruguay
- 10-01 The use of diuretics. VIII Uruguayan Congress of Intensive Care. Montevideo, Uruguay
- 10-01 Metabolic and electrolyte disorders in critically ill patients. VIII Uruguayan Congress of Intensive Care. Montevideo, Uruguay
- 10-01 Metabolic acidosis. VIII Uruguayan Congress of Intensive Care. Montevideo, Uruguay
- 10-01 Evidence Based Medicine Workshop The 8th World Congress of Intensive and Critical Care Medicine (WCICCM). Sydney, Australia
- 10-01 Metabolic acidosis: Good or Bad? Satellite meeting of the 8th WCICCM Cairns, Australia
- 10-01 Pro-con debate. Con: It is time to Abandon Gastric Tonometry. Satellite meeting of the 8th WCICCM Cairns, Australia
- 11-01 Convection or diffusion: the evidence. International Symposium on Critical Care Nephrology. Melbourne, Australia.

- 11-01 Pro-con debate. Pro: Physical Chemical Approach to Acid-base. International Symposium on Critical Care Nephrology. Melbourne, Australia.
- 11-01 Pro-con debate. Con: The use of diuretics in acute renal failure. International Symposium on Critical Care Nephrology. Melbourne, Australia.
- 02-02 Renal Failure in the ICU. VII Clinical State of the Art (SOTA) Course, American Thoracic Society, San Diego, CA
- 03-02 Recognition and Management of Electrolyte and Acid Base Disorders: A Case Based Approach (Workshop) Seventh International Conference on Continuous Renal Replacement Therapies (CRRT) 2002 San Diego, CA
- 03-02 Pathophysiology of the Critically III Patient (Moderator) Seventh International Conference on Continuous Renal Replacement Therapies (CRRT) 2002 San Diego, CA
- 03-02 Emerging Research in Extracorporeal Support (Mini Symposia): Effects of Acid Base Balance on Immune Function) Seventh International Conference on Continuous Renal Replacement Therapies (CRRT) 2002 San Diego, CA
- 03-02 Continuous/intermittent renal replacement treatment: Any impact on outcome? 22nd International Symposium on Intensive Care and Emergency Medicine. Brussels, Belgium
- 03-02 Prevention and treatment of renal failure. 22nd International Symposium on Intensive Care and Emergency Medicine. Brussels, Belgium
- 03-02 Acidosis: Good or Bad? 22nd International Symposium on Intensive Care and Emergency Medicine Brussels, Belgium
- 05-02 Consensus Definition for Acute Renal Failure. ADQI Consensus Conference, Vicenza, Italy.
- 05-02 Dopamine in Acute Renal Failure. Simposio Mostra Anestesia Rianimazione e Terapia Intensiva (SMART) Milano, Italy
- 05-02 Markers, Mediators and Genetic Determinants in Sepsis. LANDMARKS IN SEPSIS. Simposio Mostra Anestesia Rianimazione e Terapia Intensiva (SMART) Milano, Italy
- 05-02 High Flow Hemofiltration for Sepsis Therapy. Simposio Mostra Anestesia Rianimazione e Terapia Intensiva (SMART) Milano, Italy
- 05-02 The Strong Ion Difference: The Final Solution? Simposio Mostra Anestesia Rianimazione e Terapia Intensiva (SMART) Milano, Italy.
- 06-02 Key Note Address: Advances in Sepsis. Intensive Care Society of Ireland, Londonderry, Ireland.
- 06-02 Acute Renal Failure in the ICU. Intensive Care Society of Ireland, Londonderry, Ireland.
- 07-02 State of art: Vasoactive agents in unstable septic patients. 1st International Einstein-Pittsburgh Symposium of Critical Care Medicine, Sao Paulo, Brazil
- 07-02 Evidence-based volume replacement in shock patients. 1st International Einstein-Pittsburgh Symposium of Critical Care Medicine, Sao Paulo, Brazil
- 07-02 Gastric tonometry as a marker of tissue perfusion in critically ill patients. 1st International Einstein-Pittsburgh Symposium of Critical Care Medicine, Sao Paulo, Brazil

- 07-02 Metabolic acidosis in sepsis. 1st International Einstein-Pittsburgh Symposium of Critical Care Medicine, Sao Paulo, Brazil
- 07-02 Use of diuretics and dopamine in acute renal failure. 1st International Einstein-Pittsburgh Symposium of Critical Care Medicine, Sao Paulo, Brazil
- 10-02 Fourth Current Controversies in Anaesthesia and Peri-Operative Medicine Dingle, Ireland October 2-6, 2002
- 12-02 Intensive Care Society. State of the Art Meeting/Riverside Nurses Meeting 2002 London/Windsor, England December 10-13, 2002 Roundtable Optimisation: Give and Take "Insights from Genetics: What studies tell us; What targets are there?
- 01-03 Prevention and Treatment of Acute Renal Failure: What Works and What Doesn't. Renal Replacement Therapy (Moderator: H Corwin) Society of Critical Care Medicine, San Antonio, TX
- 01-03 Unwitting Immunomodulation in the ICU. Clinical Immunology: Immunomodulation (Moderator: E Abraham) Society of Critical Care Medicine, San Antonio, TX
- 01-03Synthetic Colloids. Resuscitation: Fluid Therapy (Moderator: JL Vincent) Society of Critical Care Medicine, San Antonio, TX
- 01-03 Metabolic Acidosis: Impact on Outcome. Acid Base (Moderator: J Kellum) Society of Critical Care Medicine, San Antonio, TX
- 01-03 Synthetic Colloids. Resuscitation: Fluid Therapy. (Moderator: JL Vincent) Society of Critical Care Medicine, San Antonio, TX
- 01-03 Metabolic Acidosis: Impact on Outcome. Acid Base (Moderator J Kellum) Society of Critical Care Medicine, San Antonio, TX
- 01-03 Cytokine Elimination by Apheresis. Sepsis: New Developments Related to Lipopolysaccharide and Other Microbial Products. Society of Critical Care Medicine, San Antonio, TX.
- 03-03 Defining Acute Renal Failure: The RIFLE Criteria Session I, Patient Characteristics Eighth International Conference on Continuous Renal Replacement Therapies (CRRT) San Diego, CA
- 03-03 CRRT vs IHD: A Meta Analysis of Trials. Session III, Technique Characteristics Eighth International Conference on Continuous Renal Replacement Therapies (CRRT) San Diego, CA
- 04-03 National Kidney Foundation 2003 Clinical Meeting, Dallas, TX April 2-6, 2003
 - Assessing Kidney Function in the Patient with Acute Kidney Failure. Session 229 Acute Kidney Failure
- 04-03 National Dutch Intensive Care Congress, Arnhem, NETHERLANDS, April 8-13, 2003
 - State of the Art Lecture: Acid Base Physiology for the ICU (4/10)
 - State of the Art Lecture: Evidence Based Medicine: Its relevance for the ICU
- 04-03 IV Congreso 2003, Cartagena, Columbia, April 23-25, 2003
 - Acidosis metabolica como marcador funcional de estado critico
 - CVVH en sepsis experimental
 - Tecnicas novedosas para purificacion sanguinea usando hemoadsorcion
 - El pulmon como la fuente de acido lactico

04-03 III Latin American Congress on Acute Renal Failure, Montevideo, Uruguay April 29 – May 1, 2003

- Protection of the Ischemic Kidney
- Panel: Replacement Therapy in ARF Patients
- Panel: Critical Nephrology: A New Specialty?
- Lecture: ADQI Consensus

05-03 XIV Congresso SMART, Milano Italy May 29-30, 2003

- Algorithms for hyponatremia correction in pediatric and adult patients. Session Hyponatremia in the Perioperative Patient Genetic polymorphism and sepsis Session – Sepsis: Perspectives & Promises for Clinical Practice
- Extracorporeal removal and support in sepsis. Session Sepsis: Perspectives & Promises for Clinical Practice.
- The role of albumin in homeostasis. Session Albumin replacement: a waste of money?
- Fulminant Hepatic Failure. Session Hepatic failure

06-03 ISN-ERA/EDTA World Congress of Nephrology – Satellite Symposium on ARF Ghent, Belgium June 13-15, 2003

• What is the correct definition of ARF?

09-03 First Annual Congress of the German Sepsis Society, Weimar, Germany September 3-6, 2003

• Prophylaxis of Renal Failure

01-04 VI International Conference on Dialysis – Advances in End Stage Renal Disease (ESRD)
Puerto Rico January 28-30, 2004

Research in ARF: Animal Models to Definitions

02-0410th Annual Conference of the Indian Society of Critical Care Medicine Mumbai, India February 19-25, 2004

- Prevention of ARF
- Blood Purification in Sepsis
- Outcome from Acute Renal Failure: Has therapy made a difference?
- Acid Base Balance in the Post-Copernican Era

02-04 33rd Critical Care Congress - Society of Critical Care Medicine (SCCM)

Orlando, FL - 8th Critical Care Refresher Course

- · Prevention and Management of ARF
- Moderator Acute Renal Failure in the ICU/ Influence of Dialysis Membranes on Outcomes in ARF
- Critical Illness Outcomes/ Renal

02-04 9th International Conference on CRRT San Diego, CA February 26-28, 2004

- Experimental Models for Sepsis, ARF, and CRRT
- Genotypes and Phenotypes: The Sepsis Story
- Panel Discussion: Mini-Symposium: Multi-Organ Dysfunction Syndrome (MODS)
- ADQI Update

3-04 24th International Symposium on Intensive Care and Emergency Medicine (ISICEM) Brussels, Belgium

- Pro/Con Debate: Con: There is still some place for low dose dopamine
- Hemodynamics in Septic Shock from Brain to Cell
- Meet the Experts: How I Use Hemofiltration
- · Acid Base and Electrolytes: Acidosis: Good or Bad?
- Renal Failure: Treatment
- Increasing Regional Blood Flow: The Kidney
- Options for Sepsis Therapy (Moderator)
- The Future: Genetic Factors Will Guide Therapy

5-04 100th International Conference, American Thoracic Society Orlando, FL May 21-24, 2004

Acute Renal Failure: New Advances in Critical Care

6-04 Third International Course on Critical Care Nephrology, Vincenza, Italy May 31-June 4, 2004

- Session 1: Epidemiology & Pathogenesis of ARF, Sepsis, and MOF
 - -Incidence and definition of ARF
- Session 9: Management of ARF and Sepsis
 - -EBT in Sepsis: The Evidence

6-04 American Society for Artificial Internal Organs (ASAIO), 50th Conference, Washington, DC June 17-19, 2004

- Symposium: "Principles: Biocompatibilty"
 - Inflammation with CPB

7-04 International Conference on Acute Circulation Failure in the ICU Amsterdam, The Netherlands July 12-13, 2004

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- International Master Class Symposium on Acute Circulatory Failure in the ICU
 - Lactic Acidosis
 - Markers of Perfusion

10-04 Second International Symposium on Critical Care Nephrology Melbourne, Australia October 5-7, 2004

Definition, Epidemiology, Pathogeneis, and Prevention of ARF:

Defining ARF – The Rile Approach

Infection and severe sepsis: is it all in the genes

Debate: Dose of CRRT in ICU

Resuscitation and the Kidney (Session Chair)

Practical aspects of managing CRRT: Success and Failure (Session Chair)

Non-hemodynamic optimization of care

Debate: Blood Purification in the ICU

New and Old Treatments for ARF

Is NAC the low-dose dopamine of this decade?

Controversies in Critical Care Nephrology

Acidemia is bad: Should we prevent it? Should we fix it?

10-04 Australian and New Zealand Intensive Care Society and Australian College of Critical Care Nurses Annual Scientific Meeting Melbourne, Australia October 8-10, 2004

Acid base implications of large volume resuscitation in the critically ill

Session: Acid-base disorders in the ICU

"Acid-base implications of large volume resuscitation in the critically ill"

Genetic susceptibility in sepsis

Session: Genetics of Sepsis

"Genetic susceptibility in sepsis"

Blood purification in non-renal critical illness

"Blood purification in non-renal critical illness"

11-04 2nd International Conference on Complexity in Acute Illness. Pittsburgh, PA Nov 7-9, 2004

Continuous Hemofiltration: A Salutary Intervention in Acute Biological Stress

12-047th German Interdisciplinary Congress on Intensive Care and Emergency Care Medicine (DIVI) Hamburg, Germany December 1-3, 2004

"Genomics and proteonomics in community acquired pneumonia: Lessons learned from the GenIMS-study"

3-05 Seventh Annual Meeting on Clincial Trials in Intensive Care (Australian and New Zealand Intensive Care Society Clinical Trials Group. Noosa, Australia March 11-13, 2005

Keynote Presentations:

"Gene and protein biomarkers in ICU and risk stratification"

"Heparin in septic shock study"

3-05 25th International Symposium on Intensive Care and Emergency Medicine, Brussels Belgium March 21-24, 2005

Epidemiology - Acute renal failure

Acidosis influences inflammation - Cellular metabolism in sepsis Genetic factors - Severe community acquired pneumonia Hemoadsorption to prevent MOF - Sepsis and MOF: Therapies in the pipeline Practical implications – Back to acid-basics Pro-Con debate: PRO: Hemofiltration in sepsis

4-05 Congress of the Society of Intensive Care Bogota, Colombia April 28-29, 2005

New Aspects of Acid-Base Balance in Critical Care Is it Beneficial to Connect Oliguric to Non-Oliguric Renal Failure High-Flow Hemofiltration

5-05 SMART Congress Milano, Italy May 10-13, 2005

Genetic control of sespsis response Assessment of metabolic acidosis: Buffer base, base excess, SID, Anion gap Blood purification in sepsis: rationale and practice

- 08-05 World Federation of Intensive Care Societies Buenos Aires, Argentina August 27-30, 2005
- 09-05 German Sepsis Society Weimar, Germany September 8-10, 2005
- 09-05 Acute Kidney Injury Network (AKIN) Amsterdam September 28-30, 2005

Co-chair, International Consensus conference on Acute Kidney Injury

Other Research-Related Activities

1983-84 Research Assistant

University of Toledo, Department of Biology, Toledo, OH

Study and Characterizing Mitochondrial Membrane Proteins

of Ascaris sum

1993-94 CCM Fellow Research Projects:

• Positive Anion Gap Acidosis in Liver Disease

Preceptor: David Kramer, M.D.

· Cellular Adhesion Molecules in Acute Rejection of Lung Allografts

Preceptor: Alan Rosenbloom, M.D.

• Ion Flux During Endotoxemia in the Dog

Preceptor: Michael Pinsky, M.D.

Editorships

Critical Care Nephrology - Section Editor, Kluwer Academic Publishers, Claudio Ronco and Rinaldo Bellomo, Eds.

- Acid-Base Disorders
- Liver/Kidney Interaction

Critical Care – Theme Editor: Acid-base Physiology in the ICU, member, editorial board. International Journal of Artificial Organs – Critical Care Section Editor Clinical Journal of the American Society of Nephrology – member, editorial board Critical Care Clinics of North America – Guest Editor, "Critical Care Nephrology," April 2005

Journal Refereeing

Anesthesiology
Chest
Chest
Critical Care Medicine
JAMA
Journal of Critical Care
American Journal of Physiology
Intensive Care Medicine

Critical Care Forum The Lancet

American Journal of Respiratory and

Critical Care Medicine

Kidney International

Research Grant and Thesis Review

National Institutes of Health (NIH)

- National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK)
- National Heart, Lung, and Blood Institute (NHLBI)

National Medical Research Council (NMRC)

- Singapore
- Australia

University of Melbourne, Australia

University of Gent, Belgium

Renal Research Institute, New York

U.S. Civilian Research & Development Foundation (CRDF)

Current Research Interests

Mechanisms of Organ Failure in Sepsis and Strategies to Reduce Organ Injury.

Acute Renal Failure

Hemofiltration in the treatment of multiple organ dysfunction and systemic inflammatory response Acid-base Balance (in Critical Illness)

Metabolic Alterations in Sepsis and Critical Illness

SERVICE

1. University/Medical School/Hospital

Member, Ethics Committee, UPMC 1994-present

Course Director, "Controversies in Medical Ethics" and 12th Annual Ira Messer Lecture, UPMC 1995

Advisor, Pharmacy Drug Use and Disease State Management Program1997-present

"Fluid Resuscitation Guidelines"

"Neuromuscular Blocking Agents in the ICU"

"ICU Sedation Practice Guidelines"

"Use of activated protein C in severe sepsis"

Member, Promotions and Reappointments Committee

Department of Critical Care Medicine (UPMC) 2002

2. Community Activities

Student-to-Student Program, Medical College of Ohio
Volunteers of America, Health Clinic Physicians
Career Day, Frick School of International Studies
Guest Lecturer, Undergraduate Physiology, Annually
2001-Present

3. National/International Consensus Conferences

Acute Dialysis Quality Initiative (ADQI)

Member, Executive Committee 2000-Present 2002-2003

Strategies for Resuscitation in Military and Civilian Trauma (STORMACT) Member 2001-Present

Seventh International Conference on Continuous Renal Replacement Therapies (CRRT)
Organizing Committee 2002

Western Australian Intensive Care Outcomes Obtained by Linkage Project (WAICOOL) Member, Steering Committee 2005

Resident On-Line ICU Task Force, SCCM 7/05-6/08