

WILLIAM P. COLEMAN, Ph.D.

Education

B.A.	1970	SUNY Buffalo, Philosophy
M.S.	1978	SUNY Buffalo, Computer Science (Statistical Science)
Ph.D.	1982	SUNY Buffalo, Computer Science (Statistical Science)
	(1979-1982)	SUNY Buffalo, Graduate Study in Mathematics
	(1984-1986)	Johns Hopkins University, Graduate Study in Mathematics

Experience in Higher Education

1996-1997	Head, Section of Mathematics, Statistics and Artificial Intelligence; Hinds Center (WHO Coordinating Center in Health Informatics), Norwalk Hospital/Yale University School of Medicine
1995-1996	Department of Anesthesiology, University of Maryland School of Medicine. Visiting Associate Professor.
1987-1995	University of Maryland Baltimore County, Associate Professor (later Research), Department of Mathematics and Statistics. Member, Graduate Faculty.
1982-1985	University of Maryland Baltimore County, Part-time Instructor, Department of Mathematics.
1982-1995	Maryland Institute for Emergency Medical Services Systems, University of Maryland. Director of Mathematical and Statistical Research.
1977-1981	SUNY Buffalo, Research Biostatistician, Department of Surgery, and the Buffalo General Hospital.

- 1976-1977 SUNY Buffalo, Research Assistant, Statistical Laboratory.
- 1970-1973 SUNY Buffalo, Teaching Assistant, Department of Philosophy (Taught 9 undergraduate courses in symbolic logic, philosophy of science and theory of knowledge).

Research Support

- A)NHLBI, NIH 1-R01-HL29280-01 "The Role of Occult Myocardial Failure in Human Shock." John H. Siegel: Principal Investigator; William P. Coleman: Coinvestigator. Funding period 1/82 - 12/86. Approximately \$200,000 per year, direct costs.
- B)HL25659 and HL29281, "Non-Invasive Evaluation of ARDS Therapy in Sepsis." John H. Siegel: Principal Investigator; William P. Coleman: Coinvestigator. 1980-1986. National Heart, Lung and Blood Institute. Approximately \$200,000 per year, direct costs.
- C)NASA - "Medical and Surgical Evaluation and Care of Illness or Injury in Space." John H. Siegel: Principal Investigator; William P. Coleman: Coinvestigator. Total Direct Costs \$255,179. 8/1/84 - 12/31/87.
- D)NASA - NAG-9-163 "Impedance Cardiography in Critical Illness and Trauma." John H. Siegel: Principal Investigator; William P. Coleman: Coinvestigator. Total Grant Costs \$120,868 including indirect costs. Funding period 8/1/86 -8/30/87.
- E)NIH - "Development and Differentiation of Airway Epithelium." Elizabeth McDowell: Principal Investigator; William P. Coleman: Coinvestigator. Total Direct Costs \$879,185 for funding period 9/86 - 6/89.
- F)University of Maryland Graduate School Baltimore. Principal Investigator: William P. Coleman "Development of Examples and Data for Simulation of Visual Cognition Using Neural Networks." \$20,000: Sept. 1990 - June 1991.
- G) Life Sciences Division, NASA. Principal Investigator: William P. Coleman. "Mathematical Biology in Support of Clinical Decisions," Average \$180,000/year total costs, March 1991-March 1997.

H) CNR-Italy. Consiglio Nazionale delle Ricerche, Comitato Scienze Biologiche e Mediche. Progetto Bilaterale (International Joint Project with US NASA Grant). "Methodi Qualitativi e Stocastici nella modellistica Biomedica." Responsabile scientifico: Marco Castagneto, Partner Straniero: William P. Coleman. 1995 - 1997.

I) Christopher Reeve Paralysis Foundation. "Analysis of Multi-Center Data in Acute Spinal cord Injury." Fred H. Geisler: Principal Investigator; William P. Coleman: Coinvestigator. Funding period 6/03 - 5/04. \$75,000, total costs.

J) ICCP (The International Campaign for Cures of spinal cord injury Paralysis), with funding from Christopher Reeve Paralysis Foundation (CRPF) and International Collaboration On Repair Discoveries (ICORD). William P. Coleman, Principal Investigator. \$60,000. 3/1/06-2/29/07

Publications

Refereed Articles

50. John D. Steeves, Dan Lammertse, Armin Curt, James Fawcett, Mark Tuszynski, John Ditunno, Peter Ellaway, Michael Fehlings, James Guest, Naomi Kleitman, Perry Bartlett, Andrew Blight, Volker Dietz, Bruce Dobkin, Robert Grossman, Deborah Short, Masaya Nakamura, William Coleman, Manuel Gaviria, Alain Privat. Guidelines for the conduct of clinical trials for spinal cord injury (SCI) as developed by the ICCP Panel: Clinical trial outcome measures. Spinal Cord 45, 206 - 221 (01 Mar 2007)

49. James W. Fawcett, Armin Curt, William P. Coleman, John D. Steeves, Mark Tuszynski, Dan Lammertse, Perry Bartlett, Andrew Blight, Volker Dietz, John Ditunno, Bruce Dobkin, Leif Havton, Peter Ellaway, Michael Fehlings, Manuel Gaviria, Robert Grossman, James Guest, Leif Havton, Naomi Kleitman, Masaya Nakamura, Alain Privat. Guidelines for the conduct of clinical trials for spinal cord injury (SCI) as developed by the ICCP Panel: Spontaneous recovery after spinal cord injury and statistical power needed for therapeutic clinical trials. Spinal Cord 45, 190 - 205 (01 Mar 2007)

48. Oleson, C.V., Burns, A.S., Ditunno, J.F., Geisler, F.H., and Coleman, W.P. Prognostic Value of Pinprick Preservation in Motor Complete, Sensory Incomplete Spinal Cord Injury. Arch Phys Med Rehabil 86:988-92.

47. Coleman, WP, Geisler, FH. Injury severity as primary predictor of outcome in acute spinal cord injury: retrospective results from a large multi-center clinical trial. *The Spine Journal*, 2003;4(4), 373-378.
46. Geisler, FH, Coleman, WP, Dorsey, FC, Grieco, G, Poonian, D: Recruitment and early care after acute spinal cord injury. *Spine*, 2001;26((24S)):58-67.
45. Geisler, FH, Coleman, WP, Dorsey, FC, Grieco, G, Poonian, D: Measurement and recovery after acute spinal cord injury. *Spine*, 2001;26((24S)):68-86.
44. Geisler, FH, Coleman, WP, Dorsey, FC, Grieco, G, Poonian, D: A multi-center trial of GM-1 Ganglioside in acute spinal cord injury. *Spine*. 2001;26((24S)):87-98.
43. Coleman, WP, Benzel, E, Cahill, DW, Ducker, T, Geisler, F, Green, B, Gropper, MR, Goffin, J, Madsen, PW, Maiman, DJ, Ondra, SL, Rosner, M, Sasso, R, Trost, G, and Zeidman, S: A Critical Appraisal of the Reporting of the NASCIS II and III Studies of MPSS in Acute Spinal Cord Injury. *Journal of Spinal Disorders*, 13(3), pp. 185-199, 2000.
42. De Gaetano, A., Castagneto, M., Mingrone, G., Coleman, W.P., Sganga, G., Tataranni, P.A., Gangeri, G., and Greco, A.V.: PC-based differential model fitting as support for clinical research. *International Journal of Clinical Monitoring and Computing*, 11(1), pp. 35-42, 1994.
41. De Gaetano, A., Coleman, W.P., Pizzi, R., Tomasella, E., Castagneto, M., and Greco, A.V.: Hydra: a C-Language environment for real-time DOS multitasking at the bedside. *International Journal of Clinical Monitoring and Computing*, 10(3), pp. 147-154, 1993.
40. Coleman, W.P., Siegel, J.H., Giovannini, I., Sanford, D.P., De Gaetano, A.: Computational logic: a method for formal analysis of the ICU knowledge base. *International Journal of Clinical Monitoring and Computing*, 10(1), 67-79, 1993.
39. Geisler, F.H., Dorsey, F.C., and Coleman, W.P. GM-1 ganglioside: motor recovery after human spinal cord injury in a randomized, placebo-controlled trial. In Roger P. Simon, editor, *Excitatory Amino Acids*, pages 255-260, Thieme Medical Publishers, New York, 1992.
38. Geisler, F.H., Dorsey, F.C., and Coleman, W.P.: GM-1 ganglioside in human spinal cord injury. *Journal of Neurotrauma*, 9, Supplement 2:381-389, 1992.

37. Geisler, F.H., Dorsey, F.C., Coleman, W.P.: Recovery of motor function after spinal cord injury - a randomized, placebo-controlled trial with GM-1 ganglioside. *The New England Journal of Medicine*, 324(26):1829-1838, June 27 1991.
36. Coleman, W.P.: Computational logic of network processes. In Martin D. Fraser, editor, *Advances in Control Networks and Large Scale Parallel Distributed Processing Models*, pages 319-352, Ablex Publishing Co., Norwood, NJ, 1991.
35. Coleman, W.P.: A logic for cognitive modeling: interim report. In R. J. Uttamsingh and A. M. Wildberger, eds, *Artificial Intelligence and Simulation*, pp 119-121, The Society for Computer Simulation, San Diego, 1991.
34. Coleman, W.P.: Logical models of objects and of processes. In Alan Rutan, editor, *24th Annual Simulation Symposium*, pages 276-282, IEEE Computer Society Press, Los Alamitos, CA, 1991.
33. Coleman, W.P., Sanford, D.P., DeGaetano, A., Geisler, F.: Logical structure of neurobiological information processing. In Naveed Sherwani, editor, *Computing in the 90's*, pages 406-411, Springer Verlag, New York. *Lecture Notes in Computer Science*, no. 507, 1991.
32. Coleman, W.P.: Aspects of computation. In *Proceedings: ACM Computer Science Conference*, pages 71-77, Association for Computing Machinery, 1991.
31. Coleman, W.P.: Logical modeling for development of neural prosthesis, II: synthesis of motor programs. In J. Bezdek and K. Ford, editors, *4th International Conference on Industrial & Engineering Applications of Artificial Intelligence and Expert Systems*, pp 355-364, University of Tennessee Space Inst, Tullahoma TN, 1991.
30. Coleman, W.P.: Logical modeling for development of neural prosthesis, I: higher visual processing. In W. G. Vogt and M. H. Mickle, eds, *Modeling and Simulation, Volume 23*, Instrument Society of America, 1991.
29. Coleman, W.P., Sanford, D.P., De Gaetano, A., Geisler, F.H.: Modularity of neural network architecture. In M. Caudill, ed, *IJCNN-90-Wash-DC: International Joint Conference on Neural Networks*, Washington DC, pp. 51-54, Lawrence Erlbaum Associates, Hillsdale, NJ, 1990.

28. Coleman, W.P., Siegel, J.H., Giovannini, I., De Gaetano, A., Goodarzi, S., Tacchino, R.M., Sganga, G.: Probability and the patient state space. *International Journal of Clinical Monitoring and Computing*, 7:201-215, 1990.
27. Chiarla, C., Giovannini, I., Siegel, J.H., Boldrini, G., Coleman, W.P., Castagneto, M.: Relationship of plasma cholesterol level to doses of branch-chain amino acids in sepsis. *Critical Care Medicine*, 18(1):32-36, 1990.
26. McDowell, E., Coleman, W., DeSanti, A., Newkirk, C., Strum, J.: Development of the conducting airway epithelium in fetal syrian golden hamsters during normal and diabetic pregnancies. *The Anatomical Record*, 227:111-123, 1990.
25. Geisler, F.H., Dorsey, F.C., Coleman, W.P.: GM-1 gangliosides in the treatment of spinal cord injury: report of preliminary data analysis. *Acta Neurobiologiae Experimentalis* 50(4-5):421-427, 1990.
24. Coleman, W.P., Sanford, D.P., DeGaetano, A., Geisler, F.: Functional models of neurobiological processes. *Mathematical and Computer Modeling* 14:317-321, 1990.
23. Coleman, W.P., Sanford, D.P., DeGaetano, A.: Syntax and semantics of languages for medical information processing. In: S. Buus, (ed), 15th Annual Northeast Bioengineering Conference, IEEE, pp. 189-190, 1989.
22. Pittiruti, M., Siegel, J.H., Sganga, G., Coleman, B., Wiles, C.E., Placko, R.: Determinants of urea nitrogen production in sepsis: muscle catabolism, total parenteral nutrition, and hepatic clearance of amino acids. *Arch. Surg.*, 124:362-372, 1989.
21. Coleman, W.P.: Automata and topoi as models of processes. In: *Modeling and Simulation*, Instrument Society of America, Vogt, W. G. Vogt and M. H. Mickle (eds.) volume 20, part I, pp. 229-235, 1989.
20. Chiarla, C., Giovannini, I., Siegel, J.H., Coleman, W.P., Boldrini, G., Castagneto, M.: A simple method for rapid estimate of pulmonary venous admixture. *Angiology*, December 39(12):1030-1035, 1988.

19. Chiarla, C., Siegel, J.H., Kidd, S., Coleman, B., Mora, R., Tacchino, R., Placko, R., Gum, M., Wiles, C.E. III, Belzberg, H., Rivkind, A.: Inhibition of post-traumatic septic proteolysis and ureagenesis and stimulation of hepatic acute phase protein production by branched chain amino acid TPN. *J. Trauma*, 28(8):1145-1172, 1988.
18. McDowell, E.M., Ben, T., Coleman, B., Chang, Seung, S., Newkirk, C., DeLuca, L.M.: Effects of retinoic acid on the growth and morphology of hamster tracheal epithelial cells in primary culture. *Virchows Archiv. B*, 54:38-51, 1987.
17. Lanser, M.E., Brown, G.E., Mora, R., Coleman, B., Siegel, J.H.: Trauma serum suppresses superoxide production by normal neutrophils. *Arch. Surg.*, 121:157-162, 1986.
16. Sganga, G., Siegel, J.H., Brown, G., Coleman, B., Wiles, C.E. III, Belzberg, H., Wedel, S., Placko, R.: Reprioritization of hepatic plasma protein release in trauma and sepsis. *Arch. Surg.*, 120:187-199, 1985.
15. Sganga, G., Siegel, J.H., Coleman, B., Giovannini, I., Boldrini, G., Pittiruti, M.: The physiological meaning of the respiratory index in various types of critical illness. *Circ. Shock*, 17:179-193, 1985.
14. Lanser, M.E., Mao, P., Brown, G., Coleman, B., Siegel, J.H.: Serum-mediated depression of neutrophil chemiluminescence following blunt trauma. *Annals of Surgery*, 202:111-118, 1985.
13. Pittiruti, M., Siegel, J.H., Sganga, G., Coleman, B., Wiles, C.E. III, Belzberg, H., Wedel, S., Placko, R.: Increased dependence on leucine in post-traumatic sepsis: leucine/tyrosine clearance ratio as indicator of hepatic impairment in septic multiple organ failure. *Surgery*, 98(3):378-387, 1985.
12. McDowell, E.M., Newkirk, C., Coleman, B.: Development of hamster tracheal epithelium I. A quantitative morphological study in the fetus. *Anat. Record*, 213:429-447, 1985.
11. McDowell, E.M., Newkirk, C., Coleman, B.: Development of hamster tracheal epithelium II. Cell proliferation in the fetus. *Anat. Record*, 213:448-456, 1985.
10. Coleman, B., McDowell, E.M.: Development of hamster tracheal epithelium III. Illustration of statistical methods for proportional data in biology. *Anat. Record*, 213:457-463, 1985.

9. Giovannini, I., Boldrini, G., Castagneto, M., Sganga, G., Tramutola, G., Siegel, J.H., Coleman, W., Castiglioni, G.C.: Cardiorespiratory patterns in liver cirrhosis and hepatic encephalopathy. *Acta Medica Romana*, 23:61-68, 1985.
8. Nanni, G., Siegel, J.H., Coleman, B., Fader, P., Castiglione, R.: Increased lipid fuel dependence in the critically ill septic patient. *J. Trauma*, 24(1):14-30, 1984.
7. Siegel, J.H., Giovannini, I., Coleman, B., Cerra, F.B., Nespoli, A.: Pathologic synergistic modulation of the cardiovascular, respiratory and metabolic response to injury by cirrhosis and/or sepsis: a manifestation of a common metabolic defect?. *Arch. Surg.*, 117:225-238, 1982.
6. Siegel, J.H., Giovannini, I., Coleman, B., Cerra, F.B., Nespoli, A.: Death after portal decompressive surgery. Physiologic state, metabolic adequacy and the sequence of development of the physiologic determinants of survival. *Arch. Surg.*, 116(10):1330-1341, 1981.
5. Karwande, S.V., Cerra, F.B., Giovannini, I., Coleman, B., Siegel, J.H., Border, J.R.: Are there reliable predictors of cardiac index? *Surgical Forum*, Vol. XXXI, pp. 26-28, 1980.
4. Siegel, J.H., Cerra, F.B., Moody, E.A., Shetye, M., Coleman, B., Garr, L., Shubert, M., Browne, D., Keane, J.S.: The effect on survival of critically ill and injured patients of an ICU teaching service organized about a computer-based physiologic CARE system. *J. Trauma*, 20(7):558-579, 1980.
3. Cerra, F.B., Siegel, J.H., Coleman, B., Border, J.R., McMenemy, R.H.: Septic autocannibalism: a failure of exogenous nutritional support. *Annals of Surgery*, 192(4):570-580, 1980.
2. Siegel, J.H., Giovannini, I., Coleman, B.: Ventilation:perfusion maldistribution secondary to the hyperdynamic cardiovascular state as the major cause of increased pulmonary shunting in human sepsis. *J. Trauma*, 19(6):432-460, 1979.
1. Siegel, J.H., Cerra, F.B., Coleman, B., Giovannini, I., Border, J.R., McMenemy, R.: Physiologic and metabolic correlations in human sepsis. *Surgery*, 86(2):163-193, 1979.

Review Articles

14. Coleman, W.P.: Inferential Statistics. In: S. Linberg, editor, Expediting Drug and Biologics Development, 2nd edition, Parexel International, 1999.
13. Coleman, W.P.: Inferential Statistics. In: S. Linberg, editor, Expediting Drug and Biologics Development, Parexel International, 1995.
12. Coleman, W.P.: The hospital: the next step. In: R. Pizzi, editor, Informatics in Surgery, XXVI World Congress of the International College of Surgeons, Springer-Verlag, (Keynote Address) 1989.
11. Coleman, W.P., De Gaetano, A., Pizzi, R.: Topology of medical dynamical systems. In R Pizzi, editor, Informatics in Surgery, XXVI World Congress of the International College of Surgeons, Springer-Verlag, (Invited Review) 1989.
10. De Gaetano, A., Coleman, W.P., Pizzi, R., Goodarzi, S.: Measure of sets of fractal dimension. Proceedings, Informatics in Surgery, XXVI World Congress of the International College of Surgeons. Springer-Verlag, (in press) 1989.
9. Siegel, J.H., Vary, T.C., Rivkind, A., Bilik, R., Coleman, B., Tall, B.E., Morris, J.G.: Abnormal metabolic control in the septic multiple organ failure syndrome: pharmacotherapy for altered fuel control mechanisms. Proceedings - Second Vienna Shock Forum, G. Schlag, H. Redl (eds.), Alan R. Liss, New York. Progress in Clinical and Biological Research 308:535-543, 1989.
8. Coleman, B., Siegel, J.H.: Statistical treatment of clinical data. In J.H. Siegel editor, Trauma: Emergency Surgery and Critical Care. Churchill Livingstone, New York, 1987, pp. 97-121.
7. Siegel, J.H., Coleman, B., Nikias, C.L., et al.: Computer applications to trauma patient evaluation and care. In R A. Cowley, A. Conn, C.M. Dunham, editors, Trauma Care (Vol II, Medical Management). J.B. Lippincott Company, Pennsylvania, 1987, pp. 98-130.
6. Siegel, J.H., Coleman, B.: Computers in the care of the critically ill patient. In Livia Berardi, editor, Urologic Clinics of North America. W.B. Saunders Company, Pennsylvania, 13(1):101-118, 1986.

5. Coleman, B.: Methodology in clinical research. In Proceedings of the 7th International Congress of Logic, Methodology and Philosophy of Science, 1983.
4. Coleman, B., Siegel, J.H.: Statistical interpretation. In: R.M. Peters, E.E. Peacock, J.R. Benfield, editors, Scientific Management of Surgical Patients. Little, Brown and Company, Boston, 1983, pp. 445-480.
3. Coleman, B.: Significance of free insulin concentrations in diabetes mellitus. J. Pediatrics, 102(5):800, May 1983 (Letter).
2. Siegel, J.H., Giovannini, I., Cerra, F.B., Border, J.R., Coleman, B.: Sepsis: An acquired disease of intermediary metabolism with hemodynamic consequences. The Critical Care Monitor 1(3):1, 1981.
1. Siegel, J.H., Cerra, F.B., Border, J.R., Coleman, B., Anbar, M., McMenemy, R.H.: The human response to sepsis: A physiologic manifestation of disordered metabolic control. In R A. Cowley, B.F. Trump, editors, Pathophysiology of Shock, Anoxia and Ischemia. Williams and Wilkins Company, Baltimore, 1981.

Abstracts

22. Coleman, WP, Geisler, FH. Mild Injury Categories with Favorable Prognosis in Acute Spinal Cord Injury. American Association of Neurological Surgeons. Submitted, 2003.
21. Geisler, FH, Coleman WP. Can the Sygen Multi-center Data Confirm NASCIS-3? Cervical Spine Research Society. 2003.
20. Coleman, WP, Geisler, FH. Injury severity as primary predictor of outcome in acute spinal cord injury: retrospective results from a large multi-center clinical trial. National Association of Spinal Surgery; Cervical Spine Research Society. 2003.
19. Geisler, FH, Coleman WP. Timing of Surgical Decompression for severe acute spinal cord injury: retrospective results from a large multi-center clinical trial. National Association of Spinal Surgery; Cervical Spine Research Society. 2003.
18. Coleman, W.P.: Clinical Trials and Logical Structure in the Event Space. International Journal of Clinical Monitoring and Computing, 12(3), 1995.

17. Coleman, W.P. and De Gaetano, A.: A tutorial on discriminant analysis, linear logistic model, and Bayesian analysis. *International Journal of Clinical Monitoring and Computing*, 11(3),194, 1994.
16. Coleman, W.P., and Yankosky, G.W.: A simulation of a neuron. *Proceedings of the IFAC Symposium on Modeling and Control in Biomedical Systems*, Galveston TX 27-30 March, 1994. Pp. 509-10. Ed: B.W. Patterson. University of Texas Medical Branch, Galveston, TX.
15. Coleman, W.P., De Gaetano, A., Brugnoli, P., Gui, D. Giovannini, I., Castagneto, M. and Siegel, J.H.: *Mathematical Techniques for Investigating Respiratory Control*. *Proceedings of the IFAC Symposium on Modeling and Control in Biomedical Systems*, Galveston TX 27-30 March, 1994. Pp. 550-1. Ed: B.W. Patterson. University of Texas Medical Branch, Galveston, TX.
14. Coleman, W.P., De Gaetano, A., Castagneto, M., Mingrone, G., Greco, A.V. and Siegel, J.H.: A theoretical design for investigating leucine metabolism. *Proceedings of the IFAC Symposium on Modeling and Control in Biomedical Systems*, Galveston TX 27-30 March, 1994. Pp. 362-3. Ed: B.W. Patterson. University of Texas Medical Branch, Galveston, TX.
13. De Gaetano, A., Mingrone, G., Coleman, W.P., Castagneto, M., Raguso, P.A., Tataranni, A.V., and Greco, A.V.: Minimal modelling of glucose kinetics by NONMEM estimation. *Proceedings of the IFAC Symposium on Modeling and Control in Biomedical Systems*, Galveston TX 27-30 March, 1994. Pp 265-6. Ed: B.W. Patterson. University of Texas Medical Branch, Galveston, TX.
12. Coleman, W.P.: *Mathematical Equations and Clinical Practice*. *International Journal of Clinical Monitoring and Computing*, 10(3),190-191, 1993.
11. Coleman, W.P.: *Compartmental and Stochastic Models*. *International Journal of Clinical Monitoring and Computing*, 9(3), 1992.
10. Coleman, W.P., and Geisler, F.H. Preliminary work on a logical formalism for recognition and motion-planning in neural and artificial implementations. 22nd NINDS/NIDCD Neural Prosthesis Workshop, October 1991. Poster Presentation.
9. Coleman, W.P.: About 'About'. (Abstract of talk presented at Spring Meeting of the Association for Symbolic Logic, 1991).

8. Coleman, W.P.: Models of computational processes. (Abstract of talk presented at Spring Meeting of the Association for Symbolic Logic, 1989). Journal of Symbolic Logic, 55(1):437, March 1990.
7. Coleman, W.P.: Models of sequential and neural computation. 1990-1991 Annual Meeting of the Association of the Symbolic Logic 1990.
6. Coleman, W.P.: Algebraic characterization of stochastic processes arising in biochemical kinetics. Abstracts submitted to the American Mathematical Society, 10(1):110, January 1989.
5. Chiarla, C., Giovannini, I., Siegel, J.H., Boldrini, G., Coleman, B., Castagneto, M.: Effects of branched chain enriched amino acid solutions in sepsis. Clinical Nutrition 7:66 (special supplement August 1988).
4. Coleman, B., Siegel, J.H., Kazarinoff, N.D.: Auto-correlation techniques in delineating the physiology of juvenile onset diabetic patients. Abstr. Am. Math Soc. 4(1):110, 1983.
3. Siegel, J.H., De Gaetano, A., Chiara, O., Padolino, P., Nespoli, A., Giovannini, I., Coleman, B.: A physiologic approach to the quantification of survival prognosis in human sepsis. Circ. Shock 10(3):258-259, 1983.
2. Linberg, S.E., Coleman, B., LaMonica, C.R., Reedy, E.A., Siegel, J.H.: Further insight into the observed hypokalemia following multiple trauma in man. Circ. Shock 10(3):255-256, 1983.
1. Siegel, J.H., Fabian, M., Smith, R.B., Coleman, B., Vandermark, K., Nikias, C.L., Scott, P.D.: The beneficial effect of potassium cardioplegia in modifying hypothermic oxidative metabolism and in rewarming ventricular arrhythmias. Proceedings of the Joint Surgical Conference of the International Cardiovascular Society, San Francisco, September 1979.

NIH Reviewing

2004-	Member, NINDS NSD-K Study Section.
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Editorial

1990-1998	Editorial Board, International Journal of Clinical Monitoring and Computing.
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1991-1992	Guest Editor: Special Issue DESIGNS FOR COMPUTER ASSISTED DECISION SUPPORT of the International Journal of Clinical Monitoring and Computing.
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Professional Societies

1982-1985	American Mathematical Society
1982-1985	Mathematical Association of America
1987-1989	Institute for Electrical and Electronic Engineers (IEEE)
1987-1989	IEEE Engineering in Medicine and Biology Society (EMBS)
1986-1989	(Member) IEEE P1073 Medical Information Bus Committee
1986-1989	(Chairman) IEEE P1073 Waveform Subcommittee
1987-1989	(Member) IEEE P1157 MEDIX Medical Data Interchange Committee
1987-1989	(Member) IEEE EMBS Standards Committee
1989-1990	IEEE Computer Society
1989-1990	Association for Symbolic Logic
1989-2000	International Society for Computers in Anesthesia and Intensive Care
1989-2000	Society for Computers in Anesthesia
1996-2000	(Publications Editor) Society for Computers in Anesthesia

Invited Lectures and Congresses

May 1982	Colloquium, Department of Mathematics, University of Maryland, College Park
February 1985	Presentation to members of NASA and to the French Deputy Space Minister, Goddard Space Flight Center

December 1985	Grand Rounds, Beth Israel Hospital, Harvard Medical School, Boston
May 1987	Colloquium, Department of Mathematics and Statistics, University of Maryland, Baltimore County
1987-1988	Member, Organizing Committee. Informatics in Surgery, XXVI World Congress of the International College of Surgeons, Milan
July 1988	Participant, Round Table. Informatics in Surgery, XXVI World Congress of the International College of Surgeons, Milan
July 1988	Lecture. Informatics in Surgery, XXVI World Congress of the International College of Surgeons, Milan
July 1988	Keynote Lecture. Informatics in Surgery, XXVI World Congress of the International College of Surgeons, Milan
April 1989	Colloquium, Department of Mathematics, Oberlin College
September 1989	Lecture, 10th Conference on Computers in Critical Care, Pulmonary Medicine and Anesthesia. Norwalk Hospital-Yale University School of Medicine
October 1990	Lecture, Computational Logic: a tool for analyzing the ICU knowledge base. 11th International Symposium on Information Technology in Anesthesia, Critical Care, and Cardio-Pulmonary Medicine, Erasmus University, Rotterdam, Holland
October 1990	Panel Discussion, Emerging Trends in Information Technology in the OR and the ICU. 11th International Symposium on Information Technology in Anesthesia, Critical Care, and Cardio-Pulmonary Medicine, Erasmus University, Rotterdam, Holland

October 1990	Senior Authors' Panel, Clinical Computerization - Priorities and Methodologies 11th International Symposium on Information Technology in Anesthesia, Critical Care, and Cardio-Pulmonary Medicine, Erasmus University, Rotterdam, Holland
October 1991	1 hour tutorial, Computational Logic: A Method for Formal Analysis of the ICU Knowledge Base. 12th International Symposium on Computer Assisted Decision Support & Data Base Management in Anesthesia, Intensive Care and Cardiopulmonary Medicine, Erasmus University, Rotterdam, Holland
October 1991	Lecture, Computational Logic: A Method for Formal Analysis of the ICU Knowledge Base. 12th Annual Vanderbilt Conference on Computers in Anesthesia, Fish Camp CA.
1991-1992	Organizing Committee, Lecture, Panel, Panel Chairman. 13th International Symposium on Information Technology in Anesthesia, Critical Care, and Cardio-Pulmonary Medicine, Erasmus University, Rotterdam, Holland
May 1993	Lecture. Riunione Annuale Gruppo Aperto per la Terapia Intensiva Chirurgica: Update in Trauma Surgery and Intensive Care.
June 1993	1 hour lecture. C.N.R. Centro di Studio per la Fisopatologia dello Shock.
January 1994	1 hour lecture. C.N.R. Centro di Studio per la Fisopatologia dello Shock.
April 1994	2 Lectures. Prakash Memorial Symposium. 14th International Symposium on Information Technology in Anesthesia, Critical Care, and Cardio-Pulmonary Medicine, Erasmus University, Rotterdam, Holland
1994-1995	Organizing Committee, Lecture. 15th International Symposium on Information Technology in Anesthesia, Critical Care, and Cardio-Pulmonary Medicine, Philadelphia

1995-1996	Organizing Committee, Lecture. 16th International Symposium on Information Technology in Anesthesia, Critical Care, and Cardio-Pulmonary Medicine, Erasmus University, Rotterdam, Holland
1996	Panelist, "Discussion Facilitator." Norwalk Hospital, WHO, Koop Foundation Workshop on Impact of Information Infrastructure on Global Health.
1996	Invited Lecture, Drug Information Association Meeting on Safety Monitoring in Clinical Trials, Gaithersburg MD.
1996	Invited Lecture, Drug Information Association Meeting on Target Oriented Development of Drugs and Biologics, Gaithersburg MD.
November 1996	Invited participant at the Expert Consultation Meeting, Telecommunications in Health and Healthcare for Latin America and the Caribbean, held by the Pan American Health Organization. Also participated in Workgroup 3B: Needs Assessment
1997	Invited Lecture, Drug Information Association Meeting on Statistical Issues: Multiplicity in Clinical Trials, Hilton Head NC.
April 1997	Organizing Committee, Lecture. 17th International Symposium on Information Technology in Anesthesia, Critical Care, and Cardio-Pulmonary Medicine, Yale University.
1997	Organizing Committee. 18th Meeting, Society for Computers in Anesthesia
November 1997	Invited Lecture, Drug Information Association Meeting on Target Oriented Development of Drugs and Biologics, Gaithersburg MD.
1998	Organizing Committee. 19th Meeting, Society for Computers in Anesthesia
1999	Organizing Committee. 20th Meeting, Society for Computers in Anesthesia

1999	Faculty Member. Mathematical Modeling in Medicine and Biology. Termoli, Italy.
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Industrial Consulting

1991-1998	Fidia Pharmaceutical Corporation
1993-1995	Linberg Research
1993-1995	Univax Biologics
1994-	ImmuCell Corporation
1995-1996	Collaborative Clinical Research Incorporated
1995-2000	Dey Laboratories
1995-1996	Interferon Research
1996-1997	Roberts Pharmaceuticals
1996-1997	Jansen Laboratories
1996-2002	Cato Research
2000	Yamanouchi USA
2000	Symbollon Corp.
2001-2002	Roche Molecular Systems
2002-2003	Chicago Institute for Neurosurgery and Neuroresearch
2003-2004	Chiesi Pharmaceuticals USA
2003-2004	Naval Medical Research Center
2003-2004	Biopure Corporation
2004-2005	BioSciCon
2004-	Avigen Corporation
2006-	Novartis, Inc.