

CURRICULUM VITAE

A. Gerson Greenburg, M.D., Ph.D., F.A.C.S.

Professional Address: Medical Director
TEI Biologics, Inc.
7 Elkins Street
Boston, MA
Email: aggreenburg@teibio.com

Education: S. B. University of Chicago, 1959
M.D. University of Chicago, 1963
Ph.D. Northwestern University, 1972
Industrial Engineering/Management Sciences
*Dissertation: Medical Decision Modeling: A Concept of Information
Decision Structure from the Vantage of the Physician Decision Maker*

Honorary Degrees: M.A. Brown University, Ad Eundem, 1987

**Post-Graduate
Medical Training:** University of Chicago Hospitals and Clinics

1963 - 1964 Intern - Straight Surgery
1964 - 1965 Junior Assistant Resident - Surgery
1967 - 1968 Senior Assistant Resident - Surgery, and NIH Trainee
1968 - 1970 Resident and Senior Resident - Surgery, and NIH Trainee

1968 - 1970 Northwestern University
Trainee in Bio-Medical Engineering

1970 - 1971 Michael Reese Hospital and Medical Center
Senior Resident in Surgery

1971 University of Illinois Hospitals
Senior Resident in Surgery

1971 Veterans Administration West Side Hospital
Administrative Chief Resident

Licensure: Rhode Island #6975

Board Certification: Diplomate, American Board of Surgery, May 23, 1973
Certificate #19494

Current Appointments: TEI Biologics

1/2009 – Present Medical Director

5/2006 – 12/2008 Biopure Corporation
Vice President, Medical Affairs

7/2006 - Present Brown University School of Medicine
Professor Emeritus

Past Appointments:

2003 - 2006 The Miriam Hospital
Chief, Clinical Quality Management
1986 - 2005 Surgeon-in-Chief
1/88 - 6/99 Program Director, Transitional Residency Program
1995 - 2005 Governor
1998 - 2006 Medical Director, Case Management

7/2006 - Present Brown University School of Medicine
Professor Emeritus
9/86 - 2006 Professor of Surgery

1994 - 1997 Hemosol, Inc., Toronto, Canada
Medical Director
1988 - 2006 Member, Scientific Advisory Board

10/88 - 6/93 Brown University School of Medicine
Chairman (Acting), Department of Surgery
10/88 - 6/93 Program Director, Integrated Surgical Residency

7/83 - 9/86 University of California, San Diego, CA
Professor of Surgery
7/77 - 7/83 Associate Professor of Surgery
2/73 - 7/77 Assistant Professor of Surgery

1/73 - 8/86 Veterans Administration Medical Center, San Diego, CA
Staff Physician, and Chief, Surgical Intensive Care Unit
7/83 - 8/86 Chief, General Surgery
6/84 - 7/85 Acting Chief, Surgical Services

1/72 - 1/73 University of Illinois School of Medicine, Chicago, IL
Assistant Professor of Surgery

1/72 - 1/73 West Side Veterans Administration Hospital
Director, Surgical Education

1/72 - 1/73 Chicago Reed Mental Health Center
Attending Surgeon

Special Appointments:

1960	<u>University of Chicago</u> USPHS Medical Student Summer Fellowship, Department of Surgery
1961	Teaching Assistant, Gross Anatomy
1959-1963	Research Assistant, Department of Surgery (Dr. Peter Moulder)
1963	<u>Glasgow Royal Infirmary, Glasgow, Scotland</u> Research Assistant, Department of Surgery (Dr. William H. Bain)
1968 - 1969	<u>Northwestern University</u> Staff Physician, Student Health Services
1971	<u>University of Illinois School of Medicine</u> Instructor, Department of Surgery
1971	<u>Cook County Hospital</u> Special Fellow, Trauma Unit
1971 - 1972	<u>Illinois Institute of Technology</u> Adjunct Associate Professor of Humanities, Science Information Program
1976	<u>National Science Foundation</u> Invited Reviewer, Division of Advanced Productivity, Research & Technology
1976	Invited Reviewer, Division of Applied Research Engineering and Applied Science
1980	<u>A.A.M.C</u> Member, Group on Medical Education
1978, 80, 81 & 88	<u>American Board of Surgery</u> Guest Examiner
1980 - 1984	<u>American College of Surgeons</u> Affiliate Faculty, Advanced Trauma Life Support
1985 - 1989	Instructor, Advanced Trauma Life Support
2002	Audio Companion, SESAP II, Fluid & Electrolytes
1/89	<u>American Association of Blood Banks, Airlie, Virginia</u> Invited Participant, Think Tank - Research Opportunities in Transfusion Medicine
3/88 - 1997	<u>Health Care Review, Inc., Providence, Rhode Island</u> Chair, Surgical Review Committee
1994	<u>Rhode Island Department of Health, Providence, Rhode Island</u> Ad Hoc Committee Rules & Regulations for Licensing of Hospitals (RE: Section 34)
1992 - Present	<u>International Society of Artificial Cells & Immobilization Biotechnology</u> Member, International Scientific Committee on Blood Substitutes

- 1995 - 1998 Labat-Anderson, Inc., Arlington, VA
Research Advisor
- 1995 - 1999 Brown University
Advisory Board: Promoting Cancer Prevention in Primary Care, Dr. Goldstein, P.I.
- 4/94 National Institutes of Health
Member, Ad Hoc Study Section, NHLBI, Hemoglobin-Based Oxygen Carriers;
Mechanisms of Toxicity
- 3/95 Consultant/Panel Member, Special Emphasis Panel, Specialized Centers of Research in
Transfusion Biology & Medicine
- 6/2000 Consultant/Panel Member, Special Emphasis Panel, Specialized Centers of Research in
Transfusion Biology & Medicine
- 3/2006 Chair, NHLBI , Working Group: Basic Science Focus on Blood Substitutes
- 1/2007 Consultant / Panel Member, Program Project Grant Review Panel
- 1995 - 1999 Naval Research & Development Command
Ad Hoc Reviewer
- 1988 - 2006 Member, Steering Committee FOCUS
Functional Outcome in Cardiovascular Patients Undergoing Surgical Hip Fracture Repair
Study Chairman: Jeffrey L. Carson, M.D.
- 2004 - 2006 VHA Northeast CEO Work Group for Clinical Excellence
Executive Council Member
- 2003 - Present International Society of Blood Substitutes
President
- 2005 Sponsor, Xth International Society of Blood Substitutes Conference
June 12-15, 2005 - Providence, Rhode Island
- 2006 Trial Advisory Board

Restore Effective SURvival in Shock

A trial sponsored by U S Navy, NMRC with support from the U S Army, the U S Air
Force and the U S Congress
- 2008 Trial Advisory Board

OpRESUS U S Navy

Editorial Appointments:

- 1999-2000 Co-Editor, with Robert J. Fitzgibbons, Jr., M.D., Nyhus & Condon Hernia 5th Edition
- Journal of Surgical Research
- 1979 - 1985 Editorial Board
- 1982 - 1983 Associate Editor for Research Reviews
- 1983 - 1987 Associate Editor
- Other
- 2006 Guest Editor Special Issue From the 10th International Symposium on Blood Substitutes Artificial Cells, Blood Substitutes, and Biotechnology Volume 34: 2006

EDITORIAL BOARDS:

- 1978 - Present Current Surgery
- 1981 - 1986 Surgical Product News
- 1984 - 1997 Journal of Clinical Monitoring
- 1998 - Present Journal of Clinical Monitoring & Computing
- 1985 - 1994 Journal of Critical Care Medicine
- 1989 - Present Biomaterials, Artificial Cells and Artificial Organs
- 1991 - 1994 The Surgical Resident
- 1995 - Present The Journal of Trauma
- 2008 – Present Hernia

AD HOC REVIEWER:

- 1990 - Present Archives of Surgery
- 1990 - Present Journal of Trauma
- 1990 - Present Academic Medicine
- 1990 - Present Transfusion
- 1971 - Present Journal of the Association of Computing Machinery
- 1995 - Present Shock
- 2006 – Present Annals of Surgery
- 2006 – Present Artificial Organs
- 2006 – Present International Journal of Medical Robotics and Computer Assisted Surgery
- 2006 – Present Journal of the American College of Surgeons
- 2006 – Present The American Journal of Surgery
- 2007 – Present BBA Proteins and Protenomics
- 2008 – Present Hernia

REVIEWER:

- 1980 - 2006 Computer Reviews
- 1971 - 1972 Bulletin of American College of Surgeons

Military Service:

- 1965 - 1967 United States Air Force, 820 Medical Group SAC
Active Duty, Captain; Chief, General Surgery
Received Strategic Air Command Letter of Commendation

Awards and Prizes:

- 1969 Second Honorable Mention, SAMA-UTMB Scientific Forum
- 1972 Certificate of Merit - AEndotoxic Shock - A Current Concept of Therapy, American Medical Association Scientific Exhibit, Section of General Surgery, San Francisco, CA
- 1973 Honorable Mention, Florida Medical Association Scientific Exhibit
- 1979 Outstanding Clinical Teaching Professor, UCSD Surgical Residents and Interns
- 1992 Outstanding Clinical Teaching Professor, Brown University Surgical Residents & Interns
- 1999 I.S. Ravdin Lecture in the Basic Sciences in Surgery: Red Cell Substitutes; past, present & future. American College of Surgeons, Clinical Congress, San Francisco
- 2002 Profiled Reviewer – Computing Reviews, November, 2002:
- 2005 The Miriam Hospital Charles C. J. Carpenter Outstanding Physician of the Year
- 2007 Honorary Professorship Peking Union Medical College Peking, China
Honorary Professorship Northwest University Xi'an, China
Distinguished Scientist/Achievement Award, Chinese Academy of Medical Sciences

Memberships:

- 1968 - 1980 Association for Computer Machinery
- 1970 - 1976 Society for Computer Medicine (Charter)
- 1971 - 1974 Society for Advanced Medical Systems
- 1973 - Present Association for Academic Surgery
- 1974 - 2004 American Gastroenterological Association
- 1974 - 1986 Society of General Surgeons, San Diego, CA
- 1974 - 1986 Association of Veterans Administration Surgeons
- 1975 Fellow, American College of Surgeons
- 1975 - Present Society of University Surgeons
- 1976 - 2006 Society of Critical Care Medicine
- 1977 - Present American Association for the Surgery of Trauma
- 1979 - Present Societe Internationale de Chirurgie, U.S. Chapter
- 1981 - Present Pacific Coast Surgical Association
- 1981 - 2006 Warren H. Cole Society
- 1983 - 1986 A. Baird Hastings Society
- 1983 - 2006 Surgical Infection Society
- 1983 - 1992 History of Science Society
- 1984 - 2008t Shock Society
- 1986 - 2006 Providence Surgical Society
- 1991 - 2006 ACS, RI Chapter, Providence Surgical Society
- 1986 - 2006 Society for Surgery of the Alimentary Tract
- 1988 - 2006 Surgery Biology Club III
- 1989 - Present American Surgical Association
- 1990 - 1996 New England Surgical Society
- 1991 - 2006 World Association of Hepatopancreatobiliary Surgery
- 1992 - Present International Society of Artificial Cells and Immobilization Bio-Technology
- 1995 - Present The Halsted Society

National Organizations:

1976 - 1978 Association for Academic Surgery
Program Committee
1978 - 1980 Chair, Education Committee

1978 - 1981 Society for Computer Medicine
Curriculum Subcommittee

1978 - 1980 Society of University Surgeons
Education Committee
1981 - 1984 Chair, Education Committee
1981 - 1984 Executive Committee

1984 - 1986 Association of VA Surgeons
Executive Committee
1984 - 1985 Chair, Program Committee
1985 - 1986 Chair, Nominating Committee

1986 - 1994 National Board of Medical Examiners
Surgery Test Committee
1988 - 1994 Chair, Surgery Test Committee
1991 - 1996 Chair, USMLE Step 2 Committee
1995 Nominating Committee
1996 Visiting Scholar
1997 Ad Hoc Reviewer - Medical Education Research Fund
1999 Interdisciplinary Committee, Step 2
2000

1985 - 2002 American College of Surgeons
Pre- and Post-Operative Care Committee
1988 - 1994 Executive Committee, Pre- and Post-Operative Care Committee
1988 - 1990 Vice Chair, Pre- and Post-Operative Care Committee
1990 - 1994 Chair, Pre- and Post-Operative Care Committee
1992 - Present Committee on Education
1993 - 2004 Liaison Member, ACS to ASA
1994 - 2004 Senior Member, Pre- and Post-Operative Care Committee
1994 - 2004 Committee on Continuing Education
2001 - 2002 Vice Chair, Committee on Continuing Education
1994 - 2006t Advisor/Consultant, Board of Governors
1996 - 2006 Delegate to CAP Task Force: Transfusion Reaction Guidelines
1996 - 2002 ASC Subcommittee on Managed Care Guidelines Concerning LOS (consultant)
1996 - 2002 Governors Committee on Ambulatory Surgical Care (Consultant)
1999 - 2002 Co-Chair, Committee #4, SESAP 11

Local Committees:

1991 Rhode Island Medical Society
CME Committee

1987 - 1997 Health Care Review, Inc.
Chair, Surgery Evaluation Committee

Lifespan

12/95 - 2006 Educational Advisory Committee
1999 - 2006 Clinical Improvement Committee

Brown University

1994 - 2004 Chair, Continuing Medical Education Committee

VHA Northeast CEO Work Group for Clinical Excellence

2003 - 2006 Member: CEOWG Oversight Committee

Past Local Committees:

VA Medical Center Committees

1973 - 1974 Search Committee, Acting Chief of Staff, Ambulatory Care
1973 - 1979 Chair, Ad Hoc Committee for Computer Requirements
1975 - 1977 Quality Assurance Committee
1980 - 1981 Dean's Committee
1982 - 1986 Laboratory and Transfusion Committee
1982 - 1986 Chair, Laboratory and Transfusion Committee
1982 - 1983 Quality Assurance Council
1984 - 1985 Clinical Advisory Group
1984 - 1985 Clinical Executive Board
1984 - 1985 Dean's Committee
1984 - 1986 Medical Ethics Committee, Consultation Service
1984 - 1985 Research and Development Committee
1984 - 1986 Chair, ADP Advisory Committee

University of California, San Diego

1980 - 1981 Committee on Academic Personnel
1981 - 1982 Vice Chair, Committee on Academic Personnel
1984 - 1986 Dean's Advisory Committee for Continuing Medical Education
1984 - 1985 Health Sciences Subcommittee of the Committee on Research
1984 - 1985 Academic Senate, Committee on Research, Health Sciences Committee
1985 - 1986 Academic Senate, Committee on Computing

SCHOOL OF MEDICINE

1974 Co-Chair, Systems and Procedure Committee, University Hospital
1974 - 1981 ICM Committee
1974 Student Affairs Committee
1975 - 1976 Chair, Student Affairs Committee
1975 - 1977 Standing and Promotions Committee
1975-9, 81, 82-86 Internship Advisory Committee
1975 - 1977 Building Advisory Committee, School of Medicine, Food Service Building
1975 - 1981 ICM Executive Committee
1982 - 1985 Committee on Investigation in Human Subjects
1984 - 1986 Medical Ethics Committee, Educational Programs Subcommittee
1985 - 1986 Faculty Council: Committee on Educational Policy

DEPARTMENT OF SURGERY

1981 - 1984	Resident Research Committee
1983 - 1985	Finance Subcommittee
1983 - 1985	Curriculum Committee
1984 - 1985	Resident Review Committee

PUBLICATIONS:

1. Greenburg, A.G., and Beal, D.D. Obstruction of the superior vena cava with 28 year survival. *Ann Thor Surg* 1:4, 1965.
2. Greenburg, A.G., and Moulder, P.V. Temperature coefficients for PCO₂ and pH in whole blood. *Arch Surg* 91:867, 1965.
3. Greenburg, A.G., Daicoff, G.R., Toporoff, S.J., and Moulder, P.V. Lethal pulmonary embolus. *Surgical Forum* 16:184, 1965.
4. Daicoff, G.R., Ranniger, K., Greenburg, A.G., Rams, J.J. and Moulder, P.V. Diagnosis and management of massive pulmonary embolism. *Circulation* 32:11-73, 1965.
5. Moulder, P.V., Eichelberger, L.E., Rams, J.J., and Greenburg, A.G. Water, nitrogen and electrolyte distribution in the right and left ventricular walls and the interventricular septum of normal canine hearts. *Circ Res* 19:662, 1966.
6. Greenburg, A.G., and Kittle, C.F. The effects of acute changes in acid-base status on coronary flow. *Surgery* 64:315, 1968.
7. Greenburg, A.G., Atwood, J.A., and Kittle, C.F. The hemodynamic effects of tromethamine in hypercarbia and asphyxia. *Ann Surg* 99:344, 1969.
8. Greenburg, A.G., Wu, G., Dreisin, R., and Kittle, C.F. Pulmonary recirculation, effects on arterial oxygen saturation. *Arch Surg* 99:344, 1969.
9. Greenburg, A.G. Isoproterenol, acid-base status and hemodynamics. *Texas Rep Biol Med* 27:919, 1969.
10. Rosi, P.S., Yokochi, H., Deller, S., Quinn, M., Greenburg, A.G., Rabin, S., Blatt, S., Lewis, F.J., and Jacobs, J.E. Non-invasive automatic patient monitoring. *Surgical Forum* 20:234, 1969.
11. Greenburg, A.G., Dreisin, R., Wu, G., and Kittle, C.F. Isoproterenol hemodynamics and acid-base alterations. *Arch Surg* 99:744, 1969.
12. Goldberg, M., Greenburg, A.G., and Werner, D.J. An outpatient medical record information system. *Proc San Diego Biomedical Symp*, pp103, 1970.
13. Greenburg, A.G., El-Etr, A., and Kittle, C.F. Pulmonary hemodynamics during acute unilateral bronchial occlusion. Review of *Surgery* 27:289, 1970.
14. Goldberg, M., Greenburg, A.G., Werner, D.J., and Haring, O.M. Analysis and design of a medical record summary sheet system. *Proc of the 23rd Annual Conference on Engineering in Medicine and Biology*, pp2, 1970.
15. Goldberg, M., Greenburg, A.G., Werner, D.J., Krulee, G.K., and Yeager, L.B. Features of a medical record information system. Results of a survey. *J Amer College Health Assoc* 19:212, 1970.
16. Greenburg, A.G., Goldberg, M., Werner, D.J., Janda, K.E., and Haring, O.M. Medical summaries from computerized data bases. *Proc 10th San Diego Bio-Medical Symp*, pp.189, February, 1971.
17. Werner, D.J., Greenburg, A.G., and Goldberg, M. An analysis of decision making and information requirements in an outpatient clinic environment. *Proc of the 34th Annual Meeting, Amer Soc for Information Sciences (ASIS)* pp41, 1971.
18. Greenburg, A.G., Goldberg, M., Werner, D.J., Schumer, W., and Nyhus, L.M. The computers role in the design of medical information systems. *Proc of the Technical Conference, IEEE, 2nd US Solo Computer Exhibit*, pp121, June, 1972.
19. Greenburg, A.G., and Schumer, W. A comparison of canine and primate circulation and metabolic response to graded hemorrhagic shock. In Medical Primatology, 1971, selected papers from the *3rd Conf on Experimental Medicine and Surgery in Primates*, Lyon, France, June, 1972. Part II: Surgery, Transplantation, Oral Medicine, Neurophysiology and Psychology. Goldsmith and Moor-Janowski (Eds), pp40.
20. Oppenheim, M., Delaney, F.M., Goldberg, M., Schumer, W., and Greenburg, A.G. Simulation model to evaluate the role of a multiphasic screening unit in the health care delivery system. *Proc 6th Simulation Conf*, pp91, 1973.

Publications (continued):

21. Greenburg, A.G., and Nyhus, L.M. The management of acute surgical disease of the abdomen. *Contemporary Surgery* 2:73, 1973.
22. Werner, D.J., Greenburg, A.G., and Goldberg, M. Designing rational systems. *J of Systems Management* 24:34, 1973.
23. Delany, F.M., Oppenheim, M., Goldberg, M., Schumer, W., and Greenburg, A.G. Simulation model of a multiphasic screening unit for use by a department of surgery. *Proc of Winter Simulation Conference*, pp281, 1973.
24. Greenburg, A.G. Medical decision modeling: A concept of information decision structure from the vantage of the physician decision maker. *Doctoral dissertation*, Northwestern University, Evanston, Illinois, August, 1972.
25. Goldberg, M., Greenburg, A.G., Werner, D.J., Nyhus, L.M., and Krulee, G.K. Medical summaries revisited: The design problem. *Proc of the San Diego Bio-Medical Symp*, pp192, 1973.
26. Goldberg, M., Werner, D.J., and Greenburg, A.G. Designing computerized medical information systems through simulation. *Proc of 7th Annual Simulation Symp*, pp97, 1974.
27. Greenburg, A.G., and Goldberg, M. Information utilization monitoring: A methodology for data base definition. *Proc of IFIP Medinfo 74*, Stockholm, Sweden, pp319, 1974.
28. Greenburg, A.G. The role of the computer in patient care. Chapter 4, *Surgery Annual*, Vol VI, Nyhus, L.M. (Ed), Appleton-Century-Croft, 1974.
29. Elia C., Sternberg, H.G., Greenburg, A.G., and Peskin, G.W. Stroma-free hemoglobin in the resuscitation of hemorrhagic shock. *Surgical Forum*, pp201, 1974.
30. Greenburg, A.G., Elia, C., Levine, B.A., Peskin, G.W. Hemoglobin solution and the oxyhemoglobin dissociation curve. *J of Trauma* 15:943-950, 1975.
31. McLaughlin, M.H., Peskin, G.W., Greenburg, A.G., and Salk, R.P. Topical calcium and pH effect on gastrin release and parietal cell secretion. *J Surg Res* 18:427-430, 1975.
32. Salk, R.P., Greenburg, A.G., and Peskin, G.W. The spectrum of cholangitis. *Am J Surg* 130:143-150, 1975.
33. Farris, J.M., and Greenburg, A.G. Truncal vagotomy with drainage for the elective treatment of duodenal ulcer disease. Chapter in *Controversy in Surgery*, Varco, E. (Ed), W.B. Saunders and Co., pp109, 1976.
34. Greenburg, A.G., McClure, D.K., Fink, R.M., and Goldberg, M. Evaluation of a computerized intensive care monitoring system. *Proc of the Annual San Diego Bio-Medical Symp* 14:297-302, 1975.
35. McClure, D.K., Fink, R.M., and Greenburg, A.G. Computerized patient monitoring - a critical evaluation. *Proc of the Annual San Diego Bio-Medical Symp*. 14:289, 1975.
36. Greenburg, A.G., McClure, D.K., Fink, R., Stubbs, J.A., and Peskin, G.W. Computerization of the surgical intensive care unit: Improvement of patient care via education. *Surgery* 77:799-806, 1975.
37. Greenburg, A.G., Pearl, J., Belsha, J., and Peskin, G.W. An improved stroma-free hemoglobin solution. *Surgical Forum* 26:53-55, 1975.
38. Greenburg, A.G., Frank, H., and Peskin, G.W. The left shifted oxyhemoglobin curve in the burn patient. *J of Trauma* 16:573-578, 1976.
39. Greenburg, A.G., McClure, D.K., and Goldberg, M. Definition of information needs for clinical decisions. *Proc of the 2nd Illinois Conf on Medical Information Systems*, pp30-32, Regional Health Resources Center, Urbana, IL, 1975.
40. Levine, B., Greenburg, A.G., McLaughlin, M., Peskin, G.W., and Saik, R.P. Antral gastrin regulation. *J Surg Res* 20:509, 1976.

Publications (continued):

41. Saik, R.P., Greenburg, A.G., Farris, J.M., and Peskin, G.W. The practicality of the congo red test or, is your vagotomy complete? *Am J Surg* 132:139, 1976.
42. Greenburg, A.G. Assessment of completeness of vagotomy. Invited special commentary. In Surgery of the Stomach and Duodenum, 3rd Edition, Nyhus, L.M. (Ed), Little, Brown, & Co., Boston, pp301-304, 1977.
43. Greenburg, A.G., and Farris, J.M. Commentary on the jabolay drainage procedure. Invited special commentary. In Surgery of the Stomach and Duodenum, 3rd Edition, Nyhus, L.M. (Ed), Little, Brown & Co., Boston, pp743-745, 1977.
44. Greenburg, A.G., and Peskin, G.W. Monitoring in the recovery room and surgical intensive care unit. In Monitoring in Anesthesia, Saidman & Smith (Eds), Chapter 18, pp221-245, J. Wiley & Sons, 1978.
45. Saik, R.P., Greenburg, A.G., and Peskin, G.W. Cholecystectomy hazard in acute cholangitis. *J Am Med Assoc* 235:2412-2413, 1976.
46. Greenburg, A.G., McClure, D.K., Goldberg, M., and Peskin, G.W. Systems science, computers and the surgical intensive care unit. In Systems Science in Health Care, Coblenz & Walter (Eds), pp277-282, Taylor & Francis, Ltd., 1977.
47. Greenburg, A.G., Long, D.M., and Peskin, G.W. Are fluorocarbon emulsions useful blood substitutes? *Surgical Forum* 27:1-3, 1976.
48. Greenburg, A.G., Goldberg, M., McClure, D.M., Janus, C.A., and Stubbs, J.A. Systems science, simulation and the surgical intensive care unit. *Proc of the 10th Simulation Conf.*, Tampa, FL, March, 1977, pp129-137.
49. Ginsburg, K.A., Greenburg, A.G., and Peskin, G.W. The determination of P50 from small samples of whole blood. *J Surg Res* 22:143, 1977.
50. Greenburg, A.G., Schooley, M., and Peskin, G.W. Improved retention of stroma-free hemoglobin solution by chemical modification. *J Trauma*, 17:501, 1977.
51. Saik, R.P., Greenburg, A.G., Farris, J.M., and Peskin, G.W. Adequacy of vagotomy tested with congo red. *Chir Gastroenterologica* 12:1-6, 1978.
52. Greenburg, A.G., and Peskin, G.W. Oxyhemoglobin affinity in acute pancreatitis. *J Surg Res* 22:561, 1977.
53. Saik, R., Greenburg, A.G., and Peskin, G.W. A study of fundoplication disruption and deformity. *Am J Surg*, 134:19-24, 1977.
54. Greenburg, A.G., Bruegel, R., and Peskin, G.W. Surgical continuing medical education: Format and impact. *Surgery* 81:708, 1977.
55. Greenburg, A.G., Rosen, S., McClure, D.K., Coel, M., Fronek, A., Dilley, R.B., and Bernstein, E.F.. A non-invasive vascular diagnostic laboratory data base form and function. In Non-Invasive Diagnostic Techniques in Vascular Disease. Bernstein, E.G. (Ed), C.V. Mosby & Co., St. Louis, Missouri, Chapter 15, pp175-183, 1978.
56. Greenburg, A.G., and Goldberg, M. Alternative surgical intensive care unit - a new view for design. Proc Medinfo 77, Shires & Wolf (Eds), North Holland Publishers, pp437-441, 1977.
57. Greenburg, A.G. Computerization of the surgical intensive care unit - a new view for design. Proc Medinfo 77, Shires and Wolf (Eds), North Holland Publishers, pp901-905, 1977.
58. Greenburg, A.G. Evaluation of innovation. In Monitoring of Patients Under Anesthesia. Chapter 13, pp217-225, Thomas, C.C. (Ed), Springfield, Illinois, 1979.
59. Greenburg, A.G., Ginsburg, K.A., and Peskin, G.W. Preservation of stroma-free hemoglobin solution. *Surgical Forum* 28:5-7, 1977.

Publications (continued):

60. Greenburg, A.G., Adachi, W., McClure, D.K., Laehead, R.A., and Peskin, G.W. Computerized drug dosing in renal failure. A real problem and a practical solution. *J Trauma* 18:308, 1978.
61. Wilson, D.M., Kripke, D.F., McClure, D.K. and Greenburg, A.G. Ultradian cardiac rhythms in surgical intensive care patients. *Psychosomatic Med* 39:432-35, 1977.
62. Greenburg, A.G. Forward to air contamination control in hospitals. Joseph R. Luciano, Plenum Publishing Co., 1977.
63. Saik, R.P., Greenburg, A.G., Weisenfeld, N.A., Kripke, D.F., and Peskin, G.W. Rhythms in serum gastrin. *J Surg Res* 24:380, 1978.
64. Peskin, G.W., Greenburg, A.G., and Saik, R.P. Expanding indications for parathyroidectomy in the elderly female. *Am J Surg* 136:45, 1978.
65. Long, D.M., Greenburg, A.G., Multer, F., et al. Tumor imaging with x-rays using macrophage uptake of radiopaque fluorocarbon emulsions. *Surgery* 84:104, 1978.
66. Greenburg, A.G., Saik, R.P., and Peskin, G.W. Wound dehiscence: Pathophysiology and prevention. *Arch of Surg* 114:143, 1979.
67. Greenburg, A.G. Computer storage, retrieval and analysis of angiographic and physiologic data. In The Investigation of Vascular Disorders. Nicolaidis, A.N., & Yao, J.S.T. (Eds), pp 567-581, Churchill-Livingstone, London, 1981.
68. Greenburg, A.G., McClure, D.K., Janus, C.A., and Stubbs, J.A. Nursing intervention scoring system: A concept for management, research and communication. In Lecture Notes in Medical Informatics, Lindberg & Reichertz (Eds), Medical Informatics, Europe 78, Springer-Verlag, pp728-738, 1978.
69. Creaghe, S., Peskin, G.W., Greenburg, A.G., and Saik, R.P. Effect of vagotomy on gastric tissue prostaglandin. *Surgical Forum* 29:44-45, 1978.
70. Greenburg, A.G., Schooley, M., Ginsburg, K.A., and Peskin, G.W. Pyridoxalated SFHS in resuscitation of hemorrhagic shock. *Surgical Forum* 29:44-45, 1978.
71. Sharts, C.M., Reese, H.R., Ginsburg, K.A., Multer, F.K., Nielson, M.D., Greenburg, A.G., Peskin, G.W., and Long, D.M. The solubility of oxygen in aqueous fluorocarbon emulsions. *J Fluorine Chem* 11:637-641, 1978.
72. Endrich, B., Greenburg, A.G., Intaglietta, M., and Peskin, G.W. Fluorocarbon emulsions as blood replacement fluid: Influence on the omental micro-circulation. *J Surg Res* 26:185, 1979.
73. Creaghe, S.B., Greenburg, A.G., Brown, D., Peskin, G.W., and Saik, R.P. Vagotomy and the antral AG-cell. *J Surg Res* 26:528-531, 1979.
74. Greenburg, A.G., Hayshi, R., Krupenas, I., Reese, H., and Peskin, G.W. Intravascular persistence and oxygen delivery of pyridoxalated stroma-free hemoglobin during gradations of hypotention. *Surgery* 86:13-16, 1979.
75. Greenburg, A.G., Saik, R.P., and Peskin, G.W. Expanded indications for preperitoneal hernia repair: The high risk patient. *Am J Surg* 138:149-153, 1979.
76. Endrich, B., Newman, M.M., Greenburg, A.G., Intaglietta, M., and Peskin, G.W. Fluorocarbon emulsions as a synthetic blood substitute: Effects on microvascular hemodynamics in the rabbit omentum. *J Surg Res* 29:516-526, 1980.
77. Greenburg, A.G., and Saik, R.P. Intraoperative and postoperative testing for completeness of vagotomy. *Surg Annuals*, pp289-300, 1980.
78. Greenburg, A.G., Civetta, J., and Barnhill, G. Neglected components of intensive care. *J Surg Res* 26:494-498, 1979.
79. Cantanzarite, V., and Greenburg, A.G. Neurologist: A computer program for diagnosis of neurology. *Proc of the IEEE*, Computer application in medical care, pp64-71, 1979.

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