CURRICULUM VITAE

Fritz Sieber PhD

Professor Department of Pediatrics Division of Hematology and Oncology - Pediatrics

OFFICE ADDRESS:

MACC Fund Research Center 8701 Watertown Plank Rd Milwaukee, WI 53226

EDUCATION:

- 1966 Present Matura, Kantonsschule Zug
- 1971 Present Dipl Natw ETH (MS), Swiss Federal Institute of Technology, Zürich.
- 1976 Present Dr sc nat ETH (PhD), Swiss Federal Institute of Technology, Zürich.

POSTGRADUATE TRAINING AND FELLOWSHIP APPOINTMENTS:

1976 - 1979 Swiss National Science Foundation Fellow, Department of Biology, The Johns Hopkins University, Baltimore, MD

MILITARY SERVICE:

1966 - 1976 Swiss Army, Field Artillery, Gunner, Corporal, 2nd Lieutenant, 1st Lieutenant

FACULTY APPOINTMENTS:

- 1979 1985 Assistant Professor of Medicine, The Johns Hopkins University School of Medicine, Baltimore,
- 1980 1985 Assistant Professor of Oncology, The Johns Hopkins University School of Medicine, Baltimore, MD
- 1985 1990 Associate Professor of Pediatrics (Hematology/Oncology), Medical Col-lege of Wisconsin, Milwaukee, WI
- 1986 Present Joint appointments in Department of Cell Biology, Neurobiology & Anatomy, Department of Microbiology & Molecular Genetics, WI
- 1990 1992 Professor of Pediatrics (Hematology/Oncology), Medical College of Wisconsin, Milwaukee, WI
- 1992 Present Professor of Pediatrics & Medicine (Cancer and Blood Diseases) with Tenure, Medical College of Wisconsin, Milwaukee, WI

HOSPITAL AND CLINICAL ADMINISTRATIVE APPOINTMENTS:

- 1987 Present Doctoral Staff, Children's Hospital of Wisconsin, Milwaukee, WI
- 2010 Present Chair, Steering Committee, Postdoctoral Training Program, Children's Research Institute, WI

AWARDS AND HONORS:

- 1966 Present Willy Beusch-Prize, Zug
- 1976 Present Swiss National Science Foundation Fellowship
- 1977 Present Swiss National Science Foundation Fellowship
- 1978 Present Scholarship for Advanced Young Scientists from Swiss National Science Foundation
- 1980 Present Hubert E and Anne E Rogers Award
- 1984 Present Leukemia Society of America Scholar
- 1987 Present Frederick Stohlman Memorial Award of the Leukemia Society of America
- 1991 Present 20th Annual Meeting of the International Society for Experimental Hematology, Parma, Italy, July 21-25. Paper recognized as "Most Cited Experimental Hematology Article"

1998 - Present 27th Annual Meeting of the International Society for Experimental Hematology, Vancouver, Canada, August 1-5. Two papers recognized as "Top 30 (top 2%) Publications Published in Experimental Hematology Between 1990 and 1998"

MEMBERSHIPS IN HONORARY AND PROFESSIONAL SOCIETIES:

- 1974 Present Union of Swiss Societies of Experimental Biology
- 1974 Present New York Academy of Sciences
- 1975 Present International Society for Differentiation
- 1978 Present American Association for the Advancement of Science
- 1978 Present American Society for Cell Biology
- 1979 Present International Society for Experimental Hematology
- 1980 Present International Society of Developmental Biologists
- 1980 Present Society of General Physiologist
- 1981 Present American Society of Hematology
- 1982 Present Society for Analytical Cytology
- 1982 Present American Federation for Clinical Research
- 1982 Present International Society for Experimental Hematology Member, Organizing Committee (Annual Meeting)
- 1982 Present International Society for Experimental Hematology Session Chairman
- 1983 Present American Society of Hematology Session Chairman
- 1983 Present International Association for Comparative Research on Leukemia and Related Diseases
- 1985 Present American Society for Photobiology
- 1986 Present Pediatric Oncology Group/Children's Oncology Group
- 1987 Present American Association for Cancer Research
- 1990 Present International Photodynamic Association
- 1991 Present International Society for Experimental Hematology Co-organizer and co-chairman (Satellite Symposium on Photobiology and Photomedicine)
- 1993 Present International Society for Hematotherapy & Graft Engineering
- 1994 Present American Society for Photobiology Session Chairman
- 1997 Present American Society for Photobiology Symposium Organizer
- 1997 Present American Chemical Society
- 2007 Present International Photodynamic Association Scientific Committee (11th World Congress)
- 2007 Present International Photodynamic Association Session Chair (11th World Congress)

EDITORSHIPS/EDITORIAL BOARDS/JOURNAL REVIEWS:

Editorship

- 1987 1992 Cancer Therapy and Control
- 1997 2002 Cancer Research, Therapy & Control

Editorial Board

- 1992 2002 Cancer Research, Therapy & Control
- 2006 Present Chemical Biology

Journal Review

- 1985 Present Journal of Photochemistry & Photobiology
- 1985 Present International Immunopharmacology
- 1985 Present Technology in Cancer Research and Treatment
- 1985 Present Acta Pharmacologica Sinica
- 1985 Present Blood
- 1985 Present Cancer Research
- 1985 Present Experimental Hematology
- 1985 Present Bone Marrow Transplantation
- 1985 Present Photochemistry and Photobiology
- 1985 Present Transfusion
- 1985 Present Proceedings of the National Academy of Sciences USA
- 1985 Present British Journal of Cancer
- 1985 Present Transplantation
- 1985 Present Leukemia Research, Biochimica et Biophysica Acta
- 1985 Present Radiation and Environmental Biophysics

- 1985 Present Laboratory Investigation
- 1985 Present International Journal of Radiation Biology
- 1985 Present Archives of Biochemistry and Biophysics
- 1985 Present Clinical Cancer Research
- 1985 Present International Journal of Cancer
- 1985 Present Cancer Detection and Prevention
- 1985 Present Anatomical Record
- 1985 Present Biology of Blood and Marrow Transplantation
- 1985 Present Free Radical Biology and Medicine
- 1985 Present Molecular Cancer Therapeutics

LOCAL/REGIONAL APPOINTED LEADERSHIP AND COMMITTEE POSITIONS:

Member, Peer Review Committee, American Heart Association-Wisconsin Affiliate Board member and chairman Special Gifts Committee, American Cancer Society-Milwaukee

NATIONAL ELECTED/APPOINTED LEADERSHIP AND COMMITTEE POSITIONS:

- 1985 1988 Ad hoc member, Experimental Therapeutics Study Section, NIH
- 1985 1986 Ad hoc reviewer, Veterans Administration
- 1987 Member, Organizing Committee, Leukemia Society of America 4th Annual Meeting
- 1990 Ad hoc reviewer, American Red Cross
- 1992 Ad hoc reviewer, Alberta Heritage Foundation for Medical Research
- 1994 Member, Special Emphasis Review Panel, National Heart, Lung, and Blood Institute
- 1994 Organizer, Symposium "Advances in Photodynamic Therapy and the Fluorescence Detection of Small Tumors"
- 1995 Experimental Therapeutics-1 Study Section, NIH
- 1996 Ad hoc reviewer, Veterans Administration
- 1997 Ad hoc reviewer, Medical Research Council of Canada
- 1998 Ad hoc reviewer, Hematology Study Section, NIH
- 2000 Member, Special Emphasis Review Panel, Experimental Therapeutics-2 Study Section, NIH

INVITED LECTURES/WORKSHOPS/PRESENTATIONS:

Local

Symposium "Advances in Photodynamic Therapy and the Fluorescence Detection of Small Tumors", Children' Hospital of Wisconsin, Milwaukee, WI, 09/19/1994 - Present

Symposium CENTRII 2009, Center for Medical Countermeasures Against Radiological Terrorism, Milwaukee, WI, 04/01/2009 - Present

Nephrology Section, Department of Medicine, Medical College of Wisconsin, Milwaukee, WI, 04/20/2010 - Present

Regional

The Upjohn Company, Kalamazoo, MI, 03/06/1985 - Present

Wisconsin Dermatological Society, 10/11/1986 - Present

Leukemia Society of America-Wisconsin, 06/15/1988 - Present

Wayne State University, Detroit, MI, 03/20/1989 - Present

Therapeutic Immunology Inc, Minneapolis, MN, 03/26/1990 - Present

Symposium on Photochemical Blood Sterilization, 21st Annual Meeting of the American Society for Photobiology, Chicago, IL, 06/29/1993 - Present

Fourth Great Lakes PDT Conference, Detroit, MI, 05/06/1995 - Present

University of Wisconsin-Madison, School of Pharmacy, Madison, WI, 10/24/1997 - Present

University of Wisconsin-Madison, School of Engineering, Wisconsin Center for Space Automation and Robotics, Madison, WI, 02/12/1998 - Present

National

Upstate Medical Center, Syracuse, NY, 02/12/1985 - Present

Memorial Sloan-Kettering Cancer Center, New York, NY, 01/14/1986 - Present

Developmental and Clinical Investigation Program, Sloan-Kettering Institute, New York, NY, 02/13/1986 - Present

Eastman-Kodak Company, Rochester, NY, 07/07/1986 - Present

First International Workshop on Bone Marrow Purging, Orlando, FL, 02/13/1987 - Present

Photodynamic Therapy Conference, Marina del Rey, CA, 02/17/1987 - Present

The New York Blood Center, New York, NY, 03/05/1987 - Present

Third National Leukemia Society of America Symposium, San Diego, CA, 03/19/1987 - Present

St. Jude Children's Research Hospital, Memphis, TN, 10/09/1987 - Present

Conference on New Directions in Photodynamic Therapy, Cambridge, MA, 10/29/1987 - Present

Eastman Pharmaceuticals, Great Valley, PA, 04/06/1988 - Present

Sterling Research Group, Malvern, PA, 07/20/1988 - Present

4th International Symposium on Autologous Bone Marrow Transplantation, Houston, TX, 08/20/1988 - Present

Advances in Photochemotherapy, Boston, MA, 09/07/1988 - Present

Sterling Research Group, Malvern, PA, 10/27/1988 - Present

31st Annual Meeting, American Society of Hematology, Atlanta, GA, 12/05/1988 - Present

SPIE Think Tank on the Future of Photodynamic Therapy, San Diego, CA, 01/20/1990 - Present

The James Graham Brown Cancer Center, University of Louisville, Louisville, KY, 10/04/1990 - Present

Symposium on the Photoinactivation of Viruses and Cells for Medical Applications, 19th Annual Meeting of the American Society for Photobiology, San Antonio, TX, 06/24/1991 - Present

6th Annual Meeting of the Clinical Immunology Society, Arlington, VA, 11/02/1991 - Present

Symposium on DNA Cleavage and Viral Inactivation, American Chemical Society Regional Meeting, Cincinnati, OH, 05/27/1992 - Present

Symposium on the Sterilization of Blood by Light, 20th Annual Meeting of the American Society for Photobiology, Marco Island, FL, 06/24/1992 - Present

4th International on Bone Marrow Purging and Processing, Orlando, FL, 09/17/1993 - Present

The Temple University Cancer Center, Philadelphia, PA, 02/10/1994 - Present

Space Technology and Applications International Forum, Albuquerque, NM, 01/11/1996 - Present

Workshop "Photopheresis: Paradigms and Mechanisms", 25th Annual Meeting of the American Society for Photobiology, St. Louis, MO, 07/05/1997 - Present

Symposium "New Developments in Extracorporeal Photochemotherapy" 25th Annual Meeting of the American Society for Photobiology, St. Louis, MO, 07/09/1997 - Present

National Cancer Institute, Rockville, MD, 08/12/2003 - Present

Photonics West, BiOS 2005, Optical Methods for Tumor Treatment and Detection: Mechanisms and Techniques in Photodynamic Therapy. San Jose, CA, 01/22/2005 - Present

International

Autologous Bone Marrow Transplant Meeting, Parma, Italy, 07/09/1985 - Present

Second International Symposium on Detection and Treatment of Minimal Residual Disease in Leukemia, Rotterdam, The Netherlands, 11/07/1985 - Present

Quadra Logic Technologies and University of British Columbia, Vancouver, BC, Canada, 01/05/1989 - Present

18th Annual Meeting, International Society for Experimental Hematology, Paris, France, 07/20/1989 - Present

Annual Meeting, American Society for Photobiology, Vancouver, BC, 06/20/1990 - Present

Photodynamic Therapy Workshop, University of British Columbia, Vancouver, BC, 06/21/1990 - Present

Satellite Symposium on Photobiology and Photomedicine, 20th Annual Meeting of the International Society for Experimental Hematology, Parma, Italy, 07/27/1991 - Present

4th Congress of the European Society for Photobiology, Amsterdam, The Netherlands, 09/03/1991 - Present 11th International Congress on Photobiology, Kyoto, Japan, 09/10/1992 - Present

 $The rate chnologies, Inc.\ and\ McGill\ University,\ Montreal,\ Canada,\ 06/22/1998-Present$

Immunotech SA, Marseille, France, 07/15/1999 - Present

Inaugural Plenary Lecture, 9th International Conference on the Chemistry of Selenium and Tellurium (ICCST-9), Bombay, India, 02/24/2004 - Present

11th World Congress of the International Photodynamic Association. Shanghai, China, 03/31/2007 - Present

COMMITTEE SERVICE:

Medical College of Wisconsin

Photobiology/Photomedicine Committee (chair)

Computer Committee, Department of Pediatrics

Cancer Center Working Group on Photodynamic Therapy (chair)

Incentive Plan Task Force, Department of Pediatrics

Pediatrics Research Committee, Department of Pediatrics (chair)

Computer Task Force, Department of Pediatrics (chair)

Web Committee, Dept. Pediatrics

Nominations Committee, Graduate School of Biomedical Sciences

Grant reviewer for MCW Research Affairs Committee, MCW Cancer Center and Advancing a Healthier Wisconsin Program

Faculty Development Committee, Department of Medicine

Space and Equipment Committee, Department of Pediatrics

Immunology Search Committee, MCW Cancer Center

Immunology Search Committee, Department of Microbiology

PhD Thesis Committee of Gary J Bachowski

PhD Thesis Committee of James P Thomas

PhD Thesis Committee of David K Gaffney (MSTP Student)

Graduate Division Faculty Credentials Committee

Medical Scientist Training Program

Hospital

1985 - 1992 Ad hoc reviewer, Research and Publications Commit¬tee/Human Rights Review Board, Children's Hospital of Wisconsin

1992 - 2002 Member, Funding Subcommittee, Research and Publications Committee/Human Rights Review Board of Children's Hospital of Wisconsin

1992 - Present Member, IRB 2, Children's Hospital of Wisconsin

1994 - 1998 Member, Peer Review Committee, Children's Hospital Foundation

2000 - 2002 Ad hoc reviewer, Children's Hospital Foundation

2000 - 2002 Chair, Funding Subcommittee, Research and Publications Committee/ Human Rights Review Board of Children's Hospital of Wisconsin

2009 - Present Chair, Steering Committee, CRI Postdoctoral Training Program

MEDICAL COLLEGE TEACHING ACTIVITIES:

Medical Student Education

First year medical students: Histology

First year medical students: Cell and Tissue Biology

Interdisciplinary Neuroscience Program: Laboratory Research

Biochemistry 295: Readings and Research Second year medical students: Microbiology

Graduate Student Education

Anatomy 250: Advanced Cell Biology

BIBLIOGRAPHY

Refereed Journal Publications/Original Papers

- 1. **Sieber F**, Fox DJ and Ursprung H: Properties of octanoldehydrogenase from Drosophila. FEBS Letters 26:274-276, 1972.
- 2. Madhavan K, Conscience-Egli M, **Sieber F** and Ursprung H: Farnesol metabolism in Drosophila melanogaster: ontogeny and tissue distribution of oc-tanoldehydroge¬nase and aldehyde oxidase. J Insect Physiol 19:235-241, 1973.
- 3. Iscove NN, **Sieber F** and Winterhalter KH: Erythroid colony formation in cultures of mouse and human bone marrow: analysis of the requirement for erythropoietin by gel filtration and affinity chromatography on agarose-con¬canavalin-A. J Cell Physiol 83:309-320, 1974.
- 4. Iscove NN and Sieber F: Erythroid progenitors in mouse bone marrow detected by macroscopic colony

- formation in culture. Exp Hematol 3:32-43, 1975.
- 5. **Sieber F**: Chromatography of human urinary erythropoietin and granulocyte co-lony stimulating factor on insolubilized phytohaemagglutinin. Biochim Bio-phys Acta 496:146-154, 1977.
- 6. Sieber-Blum M, **Sieber F** and Yamada KM: Cellular fibronectin promotes development of quail neural crest cells in vitro. Exp Cell Res 133:285-295, 1981.
- 7. **Sieber F**, Meagher RC and Spivak JL: Differential sensitivity of mouse hematopoietic stem cells to merocyanine 540. Differentiation 19:65-67, 1981.
- 8. **Sieber F** and Roseman S: Quantitative analysis of intercellular adhesive specificity in freshly explanted and cultured cells. J Cell Biol 90:55-62, 1981.
- 9. **Sieber F**, Stuart RK and Spivak JL: Tumor-promoting phorbol esters stimulate myelopoiesis and suppress erythropoiesis in cultures of mouse bone marrow cells. Proc Natl Acad Sci USA 78:4402-4406, 1981.
- 10. Sieber-Blum M and **Sieber F**: Tumor-promoting phorbol esters promote melanogenesis and prevent expression of the adrenergic phenotype in quail neural crest cells. Differentiation 20:117-123, 1981.
- 11. Kuhlenschmidt MS, Schmell E, Slife CW, Kuhlenschmidt TB, **Sieber F**, Lee, YC and Roseman S: Studies on the intercellular adhesion of rat and chicken hepatocytes: conditions affecting cell-cell specificity. J Biol Chem 257:3157-3164, 1982.
- 12. **Sieber F** and Sharkis SJ: Modulation of murine erythropoiesis in vitro by syngeneic thymocytes: interactions of enhancing and suppressing subpopulations with fluorescent anti-theta antibody and polyamino acids. Blood 60:845-849, 1982.
- 13. Meagher RC, **Sieber F** and Spivak JL: Suppression of hematopoietic progenitor cell proliferation by ethanol and acetaldehyde. N Engl J Med 307:845-849, 1982.
- 14. Dover GJ, Chan T and **Sieber F**: Fetal Hemoglobin production in cultures of primitive and mature human erythroid progenitors. Differentiation affects the quantity of fetal hemoglobin produced per cell not the number of fetal hemoglobin-containing cells. Blood 61:1242-1246, 1983.
- 15. Meagher RC, **Sieber F** and Spivak JL: Susceptibility to merocyanine 540-mediated photosensitization: a differentiation marker on murine hematopoietic progenitor cells. J Cell Physiol 116:118-124, 1983.
- 16. LaRussa VF, **Sieber F**, Sensenbrenner LL and Sharkis SJ: Effects of neuraminidase on the regulation of erythropoiesis. Blood 63:784-788, 1984.
- 17. Sieber-Blum M. and **Sieber F**.: Heterogeneity among early quail neural crest cells. Develop Brain Res 14:241-246, 1984.
- 18. **Sieber F**, Spivak JL and Sutcliffe AM: Selective killing of leukemic cells by mero¬cyanine 540-mediated photosensitization. Proc Natl Acad Sci USA 81:7584-7587, 1984.
- 19. **Sieber F** and Sieber-Blum M: Dye-mediated photosensitization of murine neuroblastoma cells. Cancer Res 46:2072-2076, 1986.
- 20. **Sieber F**, Rao S, Rowley SD and Sieber-Blum M: Dye-mediated photolysis of human neuroblastoma cells: Implications for autologous bone marrow transplantation. Blood 68:32-36, 1986.
- 21. Levine RF, Spivak JL, Meagher RC and **Sieber F**: Effect of ethanol on thrombopoiesis. Br J Haematol 62:345-354, 1986.
- 22. **Sieber F**, Stuart RK, Rowley SD, Sharkis SJ and Sensenbrenner LL: Dye-mediated photolysis of normal and neoplastic hematopoietic cells. Leukemia Res 11:43-49, 1987.
- 23. **Sieber F**.: Elimination of residual tumor cells from autologous bone marrow grafts by dye-mediated photolysis: preclinical data. Photochem Photobiol 46:71-76, 1987.
- 24. Kalyanaraman B, Feix JB, **Sieber F**, Thomas JP and Girotti AW: Photodynamic action of merocyanine 540 on artificial and natural cell membranes: Involvement of singlet molecular oxygen. Proc Natl Acad Sci USA 84:2999-3003, 1987.
- 25. **Sieber F**, O'Brien JM, Krueger GJ, Schober SL, Burns WH, Sharkis SJ and Sensenbrenner LL: Antiviral activity of merocyanine 540. Photochem Photobiol 46:707-711, 1987.
- 26. **Sieber F**, Krueger GJ, O'Brien JM, Schober SL, Sensenbrenner LL and Sharkis SJ: Inactivation of Friend erythroleukemia virus and Friend virus-transformed cells by merocyanine 540-mediated photosensitization. Blood 73:345-350, 1989.
- 27. O'Brien JM and **Sieber F**: Mutagenicity of merocyanine 540-mediated photosensitization. Exp Hematol 17:166-170, 1989.
- 28. **Sieber F** and Krueger GJ: Photodynamic therapy and bone marrow transplantation. Sem Hematol 26:35-39, 1989.
- 29. Gaffney DK, Schober SL and **Sieber F**: Merocyanine 540-sensitized photoinactivation of leukemia cells: Role of oxygen and effects on plasma membrane integrity and mitochondrial respiration. Exp Hematol

- 18:23-26, 1990.
- 30. Smith OM and **Sieber F**: Antineoplastic and virucidal effects of merocyanine 540. Trends in Photochemistry & Photobiology 1:49-59, 1990.
- 31. O'Brien JM, Montgomery RR, Burns WH, Gaffney DK and **Sieber F**: Evaluation of merocyanine 540-sensitized photoirradiation as a means to inactivate enveloped viruses in blood products. J Lab Clin Med 116:439-447, 1990.
- 32. Gaffney DK and **Sieber F**: Merocyanine 540-sensitized photoinactivation of solu-ble and membrane-bound enzymes in L1210 leukemia cells. Cancer Res 50:7765-7769, 1990.
- 33. Gaffney DK, O'Brien JM and **Sieber F**: Modulation by thiols of the merocyanine 540-sensitized photolysis of leukemia cells, red cells, and herpes simplex virus type 1. Photochem Photobiol 53:85-92, 1991.
- 34. Smith OM, Traul DL, McOlash L and **Sieber F**: Evaluation of merocyanine 540-sensitized photoirradiation as a method for purging malarially-infected red cells from blood. J Infect Diseases 163:1312-1317, 1991.
- 35. Lum LG, Yamagami M, Giddings BR, Joshi I, Schober SL, Sensenbrenner LL and Sieber F: The immunoregulatory effects of merocyanine 540 on in vitro hu-man T and B lymphocyte functions. Blood 77:2701-2706, 1991.
- 36. Smith OM, Gaffney DK, Anderson MS, McOlash L, Schober SL and **Sieber F**: Plasma membrane properties regulating the sensitivity of leukemia, lymphoma, and solid tumor cells to merocyanine 540-sensitized photoirradiation. Exp Hematol 19:785-788, 1991.
- 37. Gaffney DK, Feix JB, Schwarz HP, Struve MF and **Sieber F**: Cholesterol content but not plasma membrane fluidity influences the susceptibility of L1210 leukemia cells to merocyanine 540-sensitized irradiation. Photochem Photobiol 54:717-723, 1991.
- 38. O'Brien JM, Singh RJ, Feix JB, Kalyanaraman B and **Sieber F**: Action spectra of the antileukemic and antiviral activities of merocyanine 540. Photochem Photobiol 54:851-854, 1991.
- 39. Itoh T, Gaffney DK, and **Sieber F**: Merocyanine 540 as a marrow purging agent: Split addition of dye in two half-doses reduces toxicity to normal hematopoietic stem cells without reducing the antineoplastic effect. Cancer Ther Contr 2:251-258, 1992.
- 40. Whelan HT, Traul DL, Przybylski C, Segura A, Thomas J, Meyer G and **Sieber F**: Interactions of merocyanine 540 with human brain tumor cells. Ped Neurol 8:117-120, 1992.
- 41. Qiu K, Traul DL and **Sieber F**: Limited cell-cycle dependence of the merocyanine 540-sensitized photoinactivation of L1210 leukemia cells. Photochem Photobiol 56:277-280, 1992.
- 42. Qiu K and **Sieber F**: Merocyanine 540-sensitized photoinactivation of leukemia cells: Effects of dose fractionation. Photochem Photobiol 56:489-493, 1992.
- 43. O'Brien JM, Gaffney DK, Wang TP and **Sieber F**: Merocyanine 540-sensitized photoinactivation of enveloped viruses in blood products: Site and mechanism of phototoxicity. Blood 80:277-285, 1992.
- 44. Smith OM, Dolan SA, Dvorak JA, Wellems TE and **Sieber F**: Mero¬cyanine 540-sensitized photoinactivation of human erythrocytes parasitized by Plasmodium fal¬ciparum. Blood 80:21-24, 1992.
- 45. Smith OM, Traul DL and **Sieber F**: Photodamaging effects of merocyanine 540 on neutrophils and HL-60 cells. Exp Hematol 20:1278-1284, 1992.
- 46. Gaffney DK and **Sieber F**: The role of serum and serum components in the merocyanine 540-sensitized photoinactivation of K562 leukemia cells. Biochim Bio-phys Acta 1117:321-325, 1992.
- 47. Smith OM, Qiu K, Witt PL, Borden EC and **Sieber F**: Merocyanine 540 and two-phase partitioning detect interferon-bser-induced plasma membrane alterations in Daudi lymphoma cells. Cancer Res Ther Contr 3:87-93, 1993.
- 48. Qiu K and Sieber F: Pharmacokinetics of merocyanine 540. Cancer Res Ther Contr 3:239-243, 1993.
- 49. Itoh T, Messner HA, Jamal N, Tweeddale M and **Sieber F**: Merocyanine 540-sensitized photoinactivation of high-grade non-Hodgkin's lymphoma cells: Potential application in autologous bone marrow transplantation. Bone Marrow Transpl 12:191-196, 1993.
- 50. Krieg M, Bilitz JM, Traul DL and **Sieber F**: Photosensitizing oxonol dyes with antineoplastic activity. Cancer Res Ther Contr 4:163-172, 1995.
- 51. Traul DL, Anderson GS, Bilitz JM, Krieg M and **Sieber F**: Potentiation of Merocyanine 540-mediated photodynamic therapy by salicylate and related drugs. Pho¬tochem Photobiol 62:790-199, 1995.
- 52. Anderson GS, Günther WHH, Searle R, Bilitz JM, Krieg M and **Sieber F**: Inactivation of photosensitizing merocyanine dyes by plasma, serum, and serum components. Photochem Photobiol 64:683-687, 1996.
- 53. Yamazaki T and Sieber F: The alkyl-lysophospholipid, ET-18-OCH3 synergistically enhances the

- Merocyanine 540-mediated photoinactivation of leukemia cells: Implications for the extracorporeal purging of autologous hematopoietic stem cells. Bone Marrow Transpl 19:113-119, 1997.
- 54. Yamazaki T and **Sieber F**: Effect of hypothermia on the Merocyanine 540-mediated purging of hematopoietic cells. J Hematother 6:31-39, 1997.
- 55. Yamazaki T, Sato Y and **Sieber F**: Role of cytoprotective mechanisms in the photochemical purging of autologous bone marrow grafts. Exp Hematol 25:629-637, 1997.
- 56. Kubo Y and **Sieber F**: Photochemical purging of autologous bone marrow grafts: Assessment of damage to stem cells and the microenvironment in long-term marrow cultures. Bone Marrow Transpl 20:27-31, 1997.
- 57. Sato Y, Daziano J-P and **Sieber F**: Photochemical purging of autologous stem cell grafts: Potentiation of the antileukemic activity of Merocyanine 540 by ethacrynic acid. Cancer Res Ther Contr 5:241-251, 1998.
- 58. Indig GL, Anderson GS, Nichols MG, Barlett JA, Mellon WS and **Sieber F**: Effect of molecular structure on the performance of triarylmethane dyes as therapeutic agents for photochemical purging of autologous bone marrow grafts from residual tumor cells. J Pharm Sci 89:88-99, 2000.
- 59. Tsujino I and **Sieber F**: Genetic variability in the response of normal murine hematopoietic progenitor cells to extracorporeal photochemotherapy. Photochem Photobiol 72:810-814, 2000.
- 60. Tsujino I, Anderson GS and **Sieber F**: Post-irradiation hyperthermia selectively potentiates the Merocyanine 540-sensitized photoinactivation of small cell lung cancer cells. Photochem Photobiol 73:191-198, 2001.
- 61. Anderson GS, Miyagi K, Sampson RW and **Sieber F**: Anti-tumor effect of Merocyanine 540-mediated photochemotherapy combined with Edelfosine: Potential implications for the ex vivo purging of hematopoietic stem cell grafts from breast cancer patients. J Photochem Photobiol B: Biology 68:101-108, 2002.
- 62. Anderson GS, Tsujino I, Miyagi K, Sampson RW and **Sieber F**: Preferential inactivation of paediatric solid tumour cells by sequential exposure to Merocyanine 540-mediated photodynamic therapy and Edelfosine: Implications for the ex vivo purging of autologous haematopoietic stem cell grafts. J Photochem Photobiol B: Biology 69:87-95, 2003.
- 63. Miyagi K, Sampson RW, Sieber-Blum M and **Sieber F**: Crystal violet and Merocyanine 540 for the ex vivo purging of hematopoietic stem cell grafts. J Photo-chem Photobiol B: Biology 70:133-144, 2003.
- 64. Tsujino I, Miyagi K, Sampson RW and **Sieber F**: Potentiation of the anti-tumor effect of Merocyanine 540-mediated photodynamic therapy by amifostine and amphotericin B. Photochem Photobiol, 82:458-465, 2006.
- 65. Sieber, Muir SA, Cohen EP, North PE, Fish BL, Irving AA, Mäder M and Moulder JE: High-dose selenium for the mitigation of radiation injury: a pilot study in a rat model. Radiat Res 171:368-373, 2009.
- 66. Cunderlikova B, Vasovic V, **Sieber F**, Furre T, Nesland JM, Peng Q: Hexaminulevulinate-mediated photodynamic purging of leukemia cells from BM. Bone Mar-row Transpl, 45:1553-1561, 2010.
- 67. Cunderlikova B, Vasovic V, **Sieber F**, Furre T, Borgen E, Nesland JM, Peng Q:
 Hexaminolevulinate?mediated photodynamic purging of marrow grafts with murine breast cancer carcinoma. Bone Marrow Transpl 46:1118-1127, 2011.
- 68. **Sieber F**, Muir SA, Cohen EP, Fish BL, Mäder M, Schock AM, Althouse BJ, Moulder JE: Dietary selenium for the mitigation of radiation injury: effects of selenium dose escalation and timing of supplementation. Radiat Res 176: 366-374, 2011.

Books, Chapters, and Reviews

- 1. Iscove NN, **Sieber F** and Winterhalter K: Human urinary erythroid colony stimulating activity: assay in cultures of mouse and human bone marrow and similarity to erythropoietin on Sephadex and Concanavalin-A Sepharose. In Hemopoiesis in Culture. WA Robinson, ed. US Government Printing Office, Washington, pp 44-52, 1974.
- 2. Iscove NN, **Sieber F** and Winterhalter KH: Human urinary erythroid colony stimulating activity (E-CSA): techniques for detection in culture and chemical separations. In Hemopoiesis in Culture. WA Robinson, ed. US Government Printing Office, Washington, pp 421-423, 1974.
- 3. **Sieber F**: Erythroid colony growth in culture: effect of desialated erythropoietin, neuraminidase, dimethyl sulfoxide, and Amphotericin B. In Progress in Differen-tiation Research. N Muller-Bérat, ed. North Holland, Amsterdam, pp 521-528, 1976.
- 4. **Sieber F**: Cell-cell interactions. In Advanced Cell Biology. LM Schwartz and MM Azar, eds. Van Nostrand Reinhold, New York, pp 226-233, 1981.
- 5. Sieber F, Meagher RC and Spivak JL: Susceptibility to merocyanine 540-mediated photosensitization as a

- differentiation marker in murine hematopoietic stem cells. In Embryonic Development, Part B: Cellular Aspects. MM Burger and R Weber, eds. Alan R Liss, New York, pp 135-144, 1982.
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