

CURRICULUM VITAE

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Date of Birth: August 19, 1941
Place of Birth: Brooklyn, New York

Education:

1955-1958 Brooklyn Technical High School
1958-1962 B.S. New York University College of Engineering
1962-1966 M.D. New York University School of Medicine

Postdoctoral Training:

Internship and Residencies:

1966-1967 Internship, New York University, Bellevue Hospital Medical Center (Surgical)
1967-1968 Residency, New York University, Bellevue Hospital Medical Center (Surgical)
1968-1974 Orthopaedic Residency, Combined Orthopaedic Program, Harvard Medical School, Boston, MA

Research/Clinical Fellowships:

1968-1969 Orthopaedic Research Fellow, Massachusetts General Hospital, Boston, MA
1969-1970 Clinical Research Fellow, Children's Hospital, Boston, MA
1969-1970 Research Fellow, Orthopaedic Surgery, Harvard Medical School, Boston, MA
1969-1970 Visiting Associate, Department of Mechanical and Metallurgical Engineering, Massachusetts Institute of Technology, Cambridge, MA
01-04/1972 Traveling Fellow at Basel, Switzerland, A-O Group O.R.I.F.
1974 Cave Traveling Fellowship-Gait Analysis, Rancho Los Amigos Hospital, University of Southern California, Los Angeles, Cal.
Shriner's Crippled Children's Hospital, University California, San Francisco, Cal.

Licensure and Certification:

7/67-7/69 New York Medical License No. 099420
7/68-7/86 Massachusetts License Registration No. 31224
Oct. 1976 American Board of Orthopaedic Surgery
7/86-12/98 Ohio Medical License No. 53517
11/98-pres New York Medical License No. 212549

Academic Appointments:

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|------------|---|
| 1974-1978 | Instructor in Orthopaedic Surgery, Harvard Medical School, Boston, MA |
| 1974-1986 | Lecturer-Visiting Staff Member, Mass. Institute of Technology, Boston, MA |
| 1979-1982 | Assist. Professor of Orthopaedic Surgery, Harvard Medical School, Boston, MA |
| 1979-1982 | Harvard Medical School Admissions Committee |
| 1982-1986 | Associate Prof. of Orthopaedic Surgery, Harvard Medical School, Boston, MA |
| 1986-1999 | Judson C. Wilson Professor and Chief of Orthopaedic Surgery, The Ohio State University, Columbus, OH |
| 1986-1999 | Adjunct Professor, The Ohio State University, School of Veterinary Medicine, Columbus, OH |
| 1987-1998 | Committee on Academic Standing, The Ohio State University, College of Medicine, Columbus, OH |
| 1988-1990 | Research Computing Advisory Committee, The Ohio State University |
| 1988-1990 | Advisory Committee for Research & Academic Affairs, College of Medicine, The Ohio State University |
| 1989 | Search Committee, Chairman of Biomedical Engineering, The Ohio State University |
| 1993 | Search Committee, Chairman of Physical Medicine and Rehabilitation, The Ohio State University |
| 1993-96 | Promotion and Tenure Advisory Committee, The Ohio State University, College of Medicine, Columbus, OH |
| 1993-1999 | Adjunct Professor, Graduate Faculty, Biomedical Engineering, The Ohio State University |
| 1997-pres. | Board of Directors, The Ohio State University Institute for Ergonomics, founding member |
| 1997-1999 | Frank J. Kloenne Chair in Orthopaedic Surgery, The Ohio State University |
| 1999-pres. | Adjunct Professor, Graduate Faculty, Industrial and Systems Engineering, The Ohio State University |
| 1999-pres. | Professor of Clinical Orthopaedic Surgery, Albert Einstein College of Medicine |
| 2005-pres. | Adjunct Prof. of Orthopaedic Surgery, New York Downstate Medical Center |

Hospital Appointments:

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|------------|---|
| 1974-1978 | Clinical Staff Instructor, Peter Bent Brigham Hospital, Boston, MA |
| 1974-1978 | Clinical Staff Instructor, Children's Hospital Medical Center, Boston, MA |
| 1979-1986 | Associate in Orthopaedic Surgery, Children's Hospital Medical Center, Boston, MA |
| 1979-1986 | Associate in Orthopaedic Surgery, Peter Bent Brigham Hospital, Boston, MA |
| 1980-1984 | Director, Rehabilitation Services, Brigham and Women's Hospital, Boston, MA |
| 1983-1986 | Associate in Orthopaedics, Kennedy Memorial Hospital, Brighton, MA |
| 1983-1986 | Associate in Orthopaedics, Monrath Nursing Home, Groton, MA |
| 1986-1999 | Chief Division Orthopaedic Surgery, The Ohio State University Hospital, Columbus, OH |
| 1986-1998 | Attending Staff, Columbus Children's Hospital |
| 1986-1998 | Operating Room Committee, Ohio State University Hospital |
| 1998-pres. | Chief, Division of Pediatric Orthopaedics, Beth Israel Medical Center, NY, NY |
| 2000-pres. | Medical Staff, Blythedale Children's Hospital, Valhalla, NY |
| 2001-2002 | Acting Chairman, Dept. of Orthopaedics, Long Island College Hospital, Brooklyn, NY |
| 2005-pres. | Chairman, QI Committee, Dept. of Orthopaedics, Beth Israel Medical Center, NY, NY |
| 2006-pres. | Chairman, QI Committee, Dept. of Orthopaedics, Long Island College Hospital, Brooklyn, NY |
| 2007-pres. | Chairman, Peri-operative QI Committee, Beth Israel Medical Center, NY, NY |

Other Professional Positions and Major Visiting Appointments:

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| 1974-1986 | Lecturer, Department of Mechanical Engineering, Massachusetts Institute of Technology, Cambridge, MA |
| 1974-1986 | Staff Member, Joint Massachusetts Institute of Technology, Harvard University-Rehabilitation Engineering Center |
| 1974-1986 | Research Member, Harvard/Massachusetts Institute of Technology, Division of Health Sciences |
| 1974-1986 | Director, Gait Analysis Laboratory, Children's Hospital Medical Center, Boston, MA |
| 1974-1986 | Veterans Administration Hospital, Orthopaedic Staff |
| 1976-1986 | Director, Orthopaedics, Wrentham State School, Wrentham, MA |
| 1986-1998 | Director, Gait Analysis Laboratory, Ohio State University, Columbus, Oh |
| 2001-pres. | Director, Gait Analysis Laboratory. LAMM Institute, Long Island College Hospital, Brooklyn, N.Y. |

Awards and Honors:

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| 1961 | Tau Beta Pi - Engineering Honor Society |
| 1964 | Experiment in International Living - Nigeria |
| 1965 | Experiment in International Living - Sweden |
| 1966 | Public Health Service Award - Columbia, South America |
| 1968 | Experiment in International Living - India |
| 1978 | Albert E. Klinket Award - Foot Society Award |
| 1979 | Otto E. Aufranc Hip Society Award |
| 1982 | Otto E. Aufranc Hip Society Award |
| 1984 | United Cerebral Palsy Research and Educational Foundation Inc., Sidney Farber Memorial Research Award |
| 1987 | Visiting Professor and Guest Lecturer, National University of Singapore |
| 1989 | United Cerebral Palsy Research and Educational Foundation, Inc., Isabelle and Leonard H. Goldenson Award For Research in Medicine and Technology Relating to Cerebral Palsy |
| 1990 | Richmond Cerebral Palsy Center Award Nominee, presented at the 1990 Annual Meeting, October |
| 1990 | Visiting Professor/Guest Lecturer, Greece Academy of Cerebral Palsy and Developmental Medicine, Athens, Greece, February |
| 1992-pres | Fellow, American Inst. for Medical and Biological Engineering |
| 1992 | Visiting Professor and Guest Speaker, European Symposium on Clinical Gait Analysis, Zurich, Switzerland, April |
| 1993 | Vienna Award For Physical Medicine: Marras, Parnianpour, Ferguson, Kim, Crowell, Simon. Title: Quantification and Classification of Low Back Disorders Based on Trunk Motion. |
| 2004 | Top Doctors NY Metro Area – Castle Connolly, Ltd. |
| 2004-2005 | America Top Physicians - Consumer Research Council of America |
| 2005 | Top Doctors NY Metro Area – Castle Connolly, Ltd |
| 2005 | Mark W. Allum Award, Distinguished Guest & Lecturer, 2005 American College of Veterinary Surgeons Symposium, San Diego, Cal. |
| 2005-2006 | Best Doctors in America |

Major Committee Assignments

National and Regional:

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| 1978-1981 | New England Regional Rehabilitation Advisory Board, Chairman, Bioengineering Committee |
| 1979-1982 | Harvard Medical School Admissions Committee |
| 1979-1986 | Board of Directors, Rehabilitation Engineering Society of North America |
| 1979-1986 | Co-Director, Subcommittee Gait Analysis, American Academy for Cerebral Palsy and Developmental Medicine |
| 1980-1986 | State of Massachusetts Committee Devices for the Handicapped |
| 1981-1986 | Brigham and Women's Hospital, Long Range Planning Committee |
| 1982-1986 | Bay State P.S.R.O, Rehabilitation |
| 1982-1986 | N.I.H. - Musculo-skeletal Study Section |
| 1983-1986 | American Academy of Orthopaedics, New England Regional Membership Committee |
| 1983-1989 | American Academy of Orthopaedics-Basic Science Committee, Chairman 1986-89 |
| 1984-1988 | Pediatric Orthopaedic Society of North America, Ad hoc-Computer Committee, Chairman |
| 1984-1992 | N.I.H. - Small Business Special Study Section |
| 1985-1991 | Presidential National Advisory Board on Technology and the Disabled, The Secretary of Health and Human Services, Washington, D.C |
| 1986-1989 | National Research Council, National Academy of Sciences Committee on Space Biology and Medicine |
| 1988-1990 | Research Computing Advisory Committee, The Ohio State University |
| 1988-1994 | American Academy of Orthopaedic Science, Committee Audio Visual Educ. Program Committee Member, Orthopaedic Research Society |
| 1989-1990 | American Academy of Orthopaedic Science, Committee on Bioengineering |
| 1989-1991 | Priorities For Treatment of Children With Spastic Diplegia, Shriners Hospital For Crippled Children, POSNA , and AAOS, Charlottesville, VA, November |
| 1994 | Assistive Technology Advisory Panel, American Medical Assn. |
| 1994-1997 | Task Force to Increase the Basic Science Education in Orthopaedic Residencies, American Academy of Orthopaedic Surgeons |
| 1995-1998 | Medical Leadership Council, Healthcare Advisory Board, Associate Member |
| 1995-2001 | American Academy of Orthopaedic Science, Clinical Outcomes Committee |
| 1997-2000 | Research Advisory Board (RAB), Shriners Hospitals for Children (SHC) |
| 1999-2000 | American Academy of Orthopaedic Science, Task Force Orthopaedic Research for the next Decade, Chairman – Committee on Ergonomics |

Editorial Boards/Reviewer:

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| 1974-pres. | Journal of Bone and Joint Surgery - Reviewer |
| 1978-pres. | Journal of Biomechanics - Reviewer |
| 1979-pres. | Journal of Prosthetics and Orthotics - Reviewer |
| 1979-pres. | I.E.E.E. Journal - Reviewer |
| 1979-pres. | Journal of Rehabilitation Research and Development - Editorial Board |
| 1980-pres. | Journal of Biomechanical Engineering - Reviewer |
| 1983-pres. | Journal of Orthopaedic Research - Reviewer |
| 1988-1991 | American Journal of Physical Medicine and Rehabilitation, Editorial Board |
| 1989-present | Clinical Orthopaedics and Related Research - Reviewer |
| 1992-1995 | Gait and Posture - International Editorial Board |
| 1993-1996 | Journal of the Amer. Academy of Orthopaedic Surgeons, Editorial Review Bd. |
| 1993-pres. | Foot and Ankle, Reviewer |

Memberships, Offices and Committee Assignments in Professional Societies:

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| 1978-1986 | New England Regional Advisory Council for Rehabilitation |
| 1977-pres. | American Society of Biomechanics - Founding Member |
| 1978-pres. | Amer. Acad. for Cerebral Palsy and Developmental Medicine (AACPDMD) |
| 1979-pres. | American Academy of Orthopaedic Surgeons (AAOS) |
| 1980-pres. | Rehabilitation Engineering Society of N. America (RESNA) - Founding Member |
| 1980-pres. | Pediatric Orthopaedic Society of North America |
| 1983-1986 | AAOS, Admissions Committee and Regional Admissions Committees |
| 1983-1985 | RESNA Treasurer |
| 1983-1986 | Easter Seals Research Foundation, Board of Trustees |
| 1983-1989 | AAOS Chairman, Basic Science Committee |
| 1984-1986 | AAOS Editor and Executive Officer of F.O.C.U.S. (Computer special interest group) |
| 1985-1987 | RESNA President |
| 1986-1998 | American Congress of Rehabilitation Medicine |
| 1986-1998 | Columbus Surgical Society |
| 1987-pres. | Academic Orthopaedic Society |
| 1987-1988 | Easter Seals Research Foundation, Vice Chairman Board of Trustees |
| 1988-1991 | AAOS Committee on Biomedical Engineering |
| 1988-1984 | AAOS Committee on Audio Visual Education |
| 1988-1999. | Ohio Orthopaedic Society |
| 1989-1991 | Easter Seals Research Foundation, Chairman, Board of Trustees |
| 1992-1996 | AACPDM Ad Hoc Committee on Gait |
| 1993-pres. | Mid-America Orthopaedic Association |
| 1994-pres. | American Orthopaedic Foot and Ankle Society (AOFAS) |
| 1994-pres. | AAOS Joint Task Force on Orthopaedic Basic Science Education |
| 1995-pres. | American Orthopaedic Association (AOA) |
| 1996-1997 | AOA Zimmer Award Judge |
| 1996-1999 | AOFAS Postgraduate Testing Committee |
| 1997-2003 | AAOS Committee on Outcome Studies |
| 1999-2000 | AAOS, Special Ad Hoc Committee, AAOS Research Agenda Update, Chair-Panel on Workplace Injuries and Ergonomics |

Major Clinical/Research Interests:

1. Clinical Pediatric Orthopaedics
2. Clinical Orthopaedic Foot & Ankle
3. Human Locomotion (mechanics and neurological control in health and disease)
4. Evaluation of Human Function (mechanics and neurological control in health and disease)
5. Orthopaedic Biomechanics
6. Rehabilitation Engineering

Teaching Experience:

- 1974-1986 Attending Physician, Orthopaedic Service, Brigham and Women's Hospital (P.B.B.H.)
- 1974-1986 Attending Physician, Orthopaedic Service, Children's Hospital Medical Center.
- 1974-1986 Lecturer - Harvard University Orthopaedic Combined Residency Program, Basic Science Lecture Series
- 1974-1986 Lecturer - American Academy of Orthopaedic Surgeons, numerous courses on Orthopaedics and Biomechanics
- 1975-1978 Lecturer/Co-organizer - Harvard University Continuing Education Lecture Series, Biomechanics for Orthopaedic Surgeons Course
- 1976-1979 Lecturer-Harvard University Undergraduate Teaching Series, Dept. of Anatomy
- 1976-1986 Lecturer-Harvard University Medical School Teaching Program, Orthopaedic Lecture Series
- 1976-1980 Lecturer-Simmons College, Orthopaedic Teaching Lecture Series
- 1976-1986 Thesis Advisor - (a) Massachusetts Institute of Technology, undergraduate research opportunities program and Master and Ph.D. thesis in Mechanical Engineering, Electrical Engineering and Aeronautical Engineering Departments. Thesis Advisor - (b) Harvard University, undergraduate school of applied mechanics Thesis Advisor - (c) Harvard-M.I.T. Health Science and Technology Program, M.D. and Bioengineering programs
- 1977-1986 Lecturer-Worcester Medical School, Department of Orthopaedics, Conducted yearly course on Orthopaedic Biomechanics
- 1979-1986 Lecturer/Co-organizer-Combined Harvard, Tufts, and Boston University Orthopaedic Program, Yearly Prosthetic and Orthotics Course
- 1979-1986 Organizer and sole lecturer-Harvard Orthopaedic Program bi-yearly course: Clinical Gait Evaluation in Normal and Pathological Disorders
- 1979-1983 Lecturer- Harvard University, Continuing Education Lecture Series (Brigham and Women's Hospital) Course on Back Pain.
- 1979-1983 Lecturer - Harvard University, Continuing Education Lecture Series (Brigham and Women's Hospital) Department of Radiology, Course on Radiology of the Musculo-skeletal System.
- 1979-1986 Organizer and Sole Lecturer-Yearly Interagency Conference on Rehabilitation Engineering, Gait Analysis Workshop
- 1980 Organizer and Lecturer-Gordon Research Conference, Session: Current and Future State of Human Gait Evaluation.
- 1980 Organizer/Sole Lecturer-International Society of Prosthetic and Orthotics, Gait Analysis Workshop
- 1981 Lecturer -American Academy for Orthopaedic Surgeons Meeting "Education for Educators", Gait Evaluation of Neuromuscular Diseases
- 1983-1986 Organizer/Lecturer, Instructor - Gait Analysis, American Academy for Cerebral Palsy and Developmental Medicine.
- 1984-1986 Invited Speaker - Gordon Research Conference, Pattern Recognition and Its Use in Gait Analysis.
- 1986-1997 Judson C. Wilson Professor Orthopaedic Surgery, The Ohio State University School of Medicine.
- 1987-1998 Annual Lecturer-Ohio State University, College of Veterinary Medicine Internal Fixation of Fractures and Non-Unions
- 1988 Invited Speaker, I.S.P.O., Milan, Italy.
- 1988 Lecturer-Engineering Society, December.
- 1988 Program Chairman and Lecturer-Rehabilitation Technology Conference, Columbus, Ohio, September.
- 1988 Program Director, Insall-Burstein Total Knee Replacement Course, Columbus, Ohio, October.

- 1989 Presenter -American Academy of Orthopaedic Sciences Symposium, "Measurement of Human Function", Las Vegas, Nevada, February.
- 1990 Guest Presenter-"New Approaches and Controversies in the Treatment of Cerebral Palsy", American Academy of Orthopaedic Surgeons Conference, San Francisco, CA, May.
- 1990 Lecturer-"Diabetes Mellitus: Emergent Lower Extremity Lesions", Second Annual Postgraduate Endocrine Update: Endocrine Emergencies, Ohio State University Center for Continuing Medical Education, Columbus, OH,
- 1991 Guest presenter-"Controversies in Pediatric Orthopaedics", Pediatric Specialty Day, Annual A.A.O.S. Meeting, March, Anaheim, CA.
- 1992 Key Note Speaker, "Clinical Gait Analysis: State of the Art, Prospectives", European Symposium on Clinical Gait Analysis, April, Zurich, Switzerland.
- 1993 Invited Speaker, "QUAWDS": Qualitative Analysis of Walking Disorders", National Science Foundation Workshop on Computer Assisted Surgery, Washington, DC.
- 1993 Invited Speaker, "Artificial Intelligence and Smart Devices for Human Gait Analysis", Shriner's Workshop on Human Motion Analysis, San Diego, CA,
- 1994 Invited Speaker, "The CORE Curriculum", Musculoskeletal Basic Science Instruction Symposium, A.O.S., Cambridge, MA, October.
- 1994 Invited Speaker, Harvard Medical School, Course on Cerebral Palsy: A Primary Care Approach. Spaulding Rehab. Hospital, Boston, MA, November.
- 1995 Guest Faculty and Presenter, 12th Annual Interpretation of Gait Analysis Data, Children's Hospital and Health Center, San Diego, CA, November.
- 1996 Visiting Professor, Allegheny General Hospital, Pittsburgh, PA, May.
- 1996 Guest Speaker, Senior Resident Thesis Day, Univ. of MI, Ann Arbor, MI, June.
- 1996 Guest Faculty and Presenter, 13th Annual Interpretation of Gait Analysis Data, Children's Hospital and Health Center, San Diego, CA, October.
- 1997 Invited Speaker - Shriners Workshop on Human Motion Analysis: Technical Advances and Clinical Applications. Chicago, IL. October 29, 1997.
- 1997 Kosair Lectureship, Visiting Professor, Shriners Hospital for Children, Lexington, KY, October.
- 1997 Invited speaker, Central Ohio Diabetes Association 34th Annual Diabetes Symposium, "Protecting the Feet", November.
- 1998 Guest Faculty and Presenter, 14th Annual Interpretation of Gait Analysis Data, Children's Hospital and Health Center, San Diego, CA, October.
- 1998 Guest Speaker, Louisiana Orthopaedic Association, New Orleans, LA, Nov.19-21.
- 1999 Visiting Professor, Department of Orthopaedics Univ. of Penn. and Philadelphia Orthopaedic Society, Phil., PA, Jan.
- 1999 Guest Speaker, Senior Orthopaedic Resident Thesis Day, Yale University, New Haven, Conn., June.
- 1999 Guest Faculty and Presenter, 12th Annual Interpretation of Gait Analysis Data, Children's Hospital and Health Center, San Diego, CA, October.
- 2000 Invited Speaker – IEEE / Shriners Workshop on Human Gait Analysis: Technical Advances and Clinical Applications. Chicago, IL. July.
- 2001 Keynote Speaker, International Society of Biomechanics XVIIIth Congress, Zurich, Switzerland, July 8-13

Principal Clinical and Hospital Service Responsibilities:

- 1974-1986 Member-Cerebral Palsy Clinic, Children's Hospital Medical Center., Boston, MA
- 1974-1979 Member/Director-Juvenile Rheumatoid Arthritis Clinic, Children's Hospital Medical Center, Boston, MA
- 1974-1979 Director-Growth Study Service, Children's Hospital Medical Center., Boston, MA
- 1974-1986 Director-Kinesiology, Gait Analysis Laboratory, Children's Hospital Medical Center, Boston, MA
- 1976-1986 Director-Orthopaedic Services, Wrentham State School, Wrentham, MA
- 1980-1986 Director/Member-Acute Rehabilitation Service, Brigham and Women's Hospital, Boston, MA
- 1982-1986 Associate Director of Clinical Engineering, Harvard University and Massachusetts Institute of Technology Rehabilitation Engineering Center
- 1983-1986 Orthopaedic Director-Cerebral Palsy Clinic, Children's Hospital Medical Center, Boston, MA
- 1986-1998 Chief-Division of Orthopaedic Surgery, Ohio State University, Columbus, OH
- 1986-1998 Director-Rehabilitation Engineering Research Center, Gait Analysis Laboratory, Ohio State University, Columbus, OH
- 1988-1990 Advisory Committee for Research, Academic Affairs, Ohio State University
- 1988-1998. Ohio State University, Depart. of Surgery Promotion and Tenure Committee
- 1988-1998 Ohio State University, Office of Geriatrics and Gerontology, Faculty Fellow
- 1997-1998 Ohio State University, Department of Surgery Governance, Finance, Graduate Medical Education and Practice Plan Committees
- 1998-pres. Chief, Division of Pediatric Orthopaedics, Beth Israel Medical Center, New York, NY
- 2001-2002 Acting Chairman, Dept. of Orthopaedics, Long Island College Hospital, Brooklyn, NY
- 2005-pres. Chairman, QI Committee, Dept. of Orthopaedics, Beth Israel Medical Center, NY, NY
- 2006-pres. Chairman, QI Committee, Dept. of Orthopaedics, Long Island College Hospital, Brooklyn, NY
- 2007-pres. Chairman, Peri-operative QI Committee, Beth Israel Medical Center, NY, NY

PUBLICATIONS

Weightman, B., Simon, S.R., Rose, R.M., Paul, I.L. and Radin, E.L. Environmental Fatigue Testing of Silastic Finger Joint Prosthesis. *J. Biomed. Mats. Res.* 3:15-24, 1972.

Weightman, B., Simon, S.R., Paul, I.L., Rose, R.M. and Radin, E.L. Lubrication Mechanisms of Hip Joint Replacement Prostheses. *J.Lubric. Tech.* 94:131-135, 1972.

Simon, S.R., Radin, E.L. Paul, I.L. and Rose, R.M. The Response of Joints to Impact Loading II In Vivo Behavior of Subchondral Bone. *J. Biomech.*5:267-272, 1972.

Weightman, B.O., Paul, I.L., Rose, R.M., Simon, S.R. and Radin, E.L., Comparative Study of Total Hip Replacement Prostheses. *J. Biomech.*6:299-311, 1973.

Rose, R.M., Paul, I.L., Weightman, B., Simon, S.R. and Radin, E.L., Role of Stress Enhanced Reactivity in Failure of Orthopaedic Implants. *J. Biomed. Mats. Res.*, 7:401-418, 1973.

Simon, S.R. and Radin, E.L. Lubrication and Wear of the Charnley, Charnley-Muller, and McKee Farrar Prostheses with Special Regard to the Clinical Behavior. *Proc. of Hip Soc.*, C.V. Mosby, Co., pp. 35-45, 1973.

Simon, S. R. Consideration of Early Surgical Treatment of Unstable Thoracolumbar Fractures: Orthopaedic Seminars, Rancho Los Amigos Hospital, Vol. IV, 1973.

Simon, S.R., Paul, I.L. Rose, R.M. and Radin, E.L. "Stiction-Friction" of Total Hip Prostheses and Its Relationship to Loosening. *J. Bone Joint Surg.*,57-A:2:226-229, March 1975.

Radin, E.L., Paul, I.L., Rose, R.M. and Simon, S.R. The Mechanics of Joints as it Relates to Their Degeneration. *AAOS Symposium on Osteoarthritis*, C.V. Mosby, Co., pp. 34-43, St. Louis, 1976.

Simon, S.R., Nuzzo, R.M. and Koskinen, M.F. A Comprehensive Clinical System for Four-Dimensional Motion Analysis. *Bulletin of the Hospital for Joint Disease.* 38: 1:41-44, April 1977.

Simon, S.R. New Concepts in Femoral Head Replacement: The Place of the Bateman Prosthesis in Hip Surgery. *Bulletin of the Hospital for Joint Disease*, 38:1:59-61, April 1977.

Simon, S.R., Knirk, J., Mansour, J.M., and Koskinen, M.F The Dynamics of the Center of Mass During Walking and Its Clinical Applicability. *Bulletin of Hospital for Joint Disease*, 38:2:112-116, 1977.

Wiesman, H.J., Simon, S.R., Ewald, F.C., Thomas, L.O. and Sledge, C. Total Hip Replacement With and Without Osteotomy of the Greater Trochanter. *J. Bone Joint Surg.*, 60A:2:203-210, March 1978.

Mann, R., Simon, S.R., Hagy, J. and Larsen, L.J. Role of Posterior Calf Muscles in Normal Gait. *J. Bone Joint Surg.*, 60A:4:465-472. June 1978.

Simon, S.R., Deutsch, S.D., Nuzzo, R.M., Mansour, M.J., Jackson, J.L., Koskinen, M.F. and Rosenthal, R.K. Genu Recurvatum in Spastic Cerebral Palsy. *J. Bone Joint Surg.*, 60A:7:882-894, October, 1978.

Paul, I.L., Monroe, M., Abernethy, P.T., Simon, S.R. and Radin, E.L. Musculoskeletal Shock Absorption. Relative Contribution of Bone and Soft Tissues at Various Frequencies. *J. of Biomechanics*, 11:5:237.

- Rose, R.M., Schneider, H., Ries, M., Paul, I.L., Crugnola, A., Simon, S.R. and Radin, E.L. A Method for the Quantitative Recovery of Polyethylene Wear Debris from the Simulated Service of Total Prostheses. *Journal of Wear*, 51:77-84, 1978.
- Lesh, M.D., Mansour, J.M. and Simon, S.R. A Gait Analysis Subsystem for Smoothing and Differentiation of Human Motion Data. *J. Biomech. Eng.*, 101(3):205-212, 1979.
- Shapiro, F., Glimcher, M., and Simon, S.R. Hereditary Multiple Exostosis - Anthropometric, Roentgenographic and Clinical Aspects. *J. Bone Joint Surg.*, 61A:(6):815-824, September 1979.
- Mazur, J., Schwartz, E., and Simon, S.R. Ankle Athrodesis Long-Term Follow-Up with Gait Analysis. *J. Bone Joint Surg.*, 61A: 964-975, 1979.
- Demottaz, J.D., Mazur, J.M., Thomas, W.H., Sledge, C.B. and Simon, S.R. Clinical Study of Total Ankle Replacement with Gait Analysis. *J. Bone Joint Surg.*, 61A:7:976-988, October, 1979.
- Gugenheim, J.J., Rosenthal, R.K., and Simon, S.R. Knee Flexion Deformities and Genu Recurvatum in Cerebral Palsy: Roentgenographic Findings. *Develop. Med. Child Neurol.*, 11, 563-571, October, 1979.
- Rose, R.M., Nusbaum, H.J., Schneider, H., Ries, M., Paul, I., Crugnola, A., Simon, S.R. and Radin, E.L. On the True Wear Rate of Ultrahigh Molecular Weight Polyethylene in the Total Hip Prostheses. *J. Bone Joint Surg.*, 62-A:537-549, 1979.
- Rose, R.M., Simon, S.R., On the Origins of High In Vivo Wear Rates in Polyethylene Components of Total Joint Prostheses. *Clinical Orthopaedics.*, 145:277-288, 1979.
- Walters, R., and Simon, S.R. Joint Destruction - A Sequel of Unrecognized Pin Penetration in Patients with Slipped Capital Femoral Epiphyses. In *The Hip*, W.B. Saunders, Philadelphia, pp. 145-164, 1980.
- Simon, S.R. and Mazur, J. Ankle Arthrodesis: Long Term Follow-up with Gait Analysis. [Awarded the 1978 Albert E. Klinket Award by the American Foot Society.] *Foot and Ankle*, Chapter 10, 73-92, 1980.
- Tylkowski, C., Rosenthal, R.K. and Simon, S.R., Proximal Femoral Osteotomy in Cerebral Palsy. *Clin. Ortho. and Rel. Res.*, 151: September 1980.
- Simon, S.R., Whiffen, J., and Shapiro, F. Leg-Length Discrepancies in Monoarticular and Pauciarticular Juvenile Rheumatoid Arthritis, *J. Bone Joint Surg.*, February, 1981.
- Mena, D., Mansour, J.M. and Simon, S.R. Analysis and Synthesis of Human Swing Leg Motion During Gait And Its Clinical Applications. *J. Biomech.*, 14:12, 823-832, 1981.
- Patriarco, A.G., Mann, R.W., Simon, S.R. and Mansour, J.M. An Evaluation of the Approaches of Optimization Models in the Prediction of Muscle Forces During Human Gait. *J. of Biomechanics*, 14:8:513-525, 1981.
- Simon, S.R. Clinical Applications of Kinematic Gait Measurements. *Bulletin of Prosthetics Research*, BPR 10-35, pp. 292-294, Spring, 1981.
- Simon, S.R. Foot-Floor Calculated Reaction Vector. *Bulletin of Prosthetic Research*, BPR 10-35, Spring, 1981.

- Simon, S.R., Paul, I.L., Mansour, J.M., Munroe, M. Abernathy, P.J., and Radin, E.L. Peak Dynamic Force in Human Gait. *J. Biomech.*, 14:12, 817-822, 1981.
- Mansour, J.M., Lesh, M.D., Nowak, M.D., and Simon, S.R., A Three Dimensional Multi-Segmental Analysis Of The Energetics Of Normal and Pathological Human Gait. *J. Biomech.* 15:51-59, 1982.
- Berardelli, A., Hallett, M., Kaufman, C., Fine, E., Berenberg, W. and Simon, S.R. Stretch Reflexes of Triceps Surae in Normal Man. *Journal of Neurology, Neurosurgery and Psychiatry*, 45:513-525, 1982.
- Wong, M.A., Simon, S.R., and Olshen, R.A. Statistical Analysis of Gait Patterns of Persons with Cerebral Palsy., *Statistics in Medicine*, Vol. 2, Number 3, July-September 1983.
- Burdett, R.G., Skrinar, G.S. and Simon, S.R. Comparison Mechanical Work and Metabolic Energy Consumption During Normal Gait. *Journal of Orthopaedic Research*, 1:63-72, 1983.
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