CURRICULUM VITAE

Jack T. Stern

Personal Information:

Birth Date and Place: January 18, 1942, Chicago, IL Married: March 26, 1967 Children: 2

Present Position:

Distinguished Teaching Professor Emeritus, Department of Anatomical Sciences

School of Medicine Health Sciences Center Stony Brook University Stony Brook, NY 11794-8081

Previous Positions:

Teaching Assistant, University of Chicago, 1963-1969.
Instructor, Department of Anatomy, University of Chicago, 1969-1970.
Volunteer Instructor of Anatomy, Chicago Public High School for Metropolitan Study, Spring, 1970.
Assistant Professor, Department of Anatomy, University of Chicago, 1970-1973.
Associate Professor, Department of Anatomical Sciences, Stony Brook University, 1973 - 1981.
Associate Professor of Orthopaedic Surgery (Anatomy), Stony Brook University, 1979-1986.
Professor, Department of Anatomical Sciences, Stony Brook University, 1981-2001
Professor (Joint), Department of Orthopaedics, Stony Brook University, 1986-2015
Co-Chair, Department of Anatomical Sciences, Stony Brook University, 1988-1989.
Acting Chair, Department of Anatomical Sciences, Stony Brook University, 1989-1990.
Chair, Department of Anatomical Sciences, Stony Brook University, 1989-1990.
Chair, Department of Anatomical Sciences, Stony Brook University, 1980-2006.
Distinguished Teaching Professor, Department of Anatomical Sciences, Stony Brook University, 1900-2006.
Distinguished Teaching Professor, Department of Anatomical Sciences, Stony Brook University, 1900-2006.

Education:

University of Michigan	1959-1962
University of Chicago, School of Medicine	1962-1964

University of Chicago, Dept. of Anatomy 1964-1969 (Ph.D., August 1969)

Society Memberships:

American Association of Physical Anthropologists American Association of Anatomists American Association for the Advancement of Science American Association of Clinical Anatomists

Honors:

James B. Angel Scholar (University of Michigan) Phi Beta Kappa (University of Michigan) National Science Foundation Graduate Fellowship, 1966-1969. Schweppe Foundation Research Fellowship, 1972-1974 (resigned) USPHS Research Career Development Award, 1973-1974 (resigned). Citation for Excellence in Teaching by the Graduating Class, School of Medicine, Stony Brook University, 1980, 1983, 1988, 1990, 1991, 1992, 1993, 1994, 1996, 1997, 1998, 2000, 2001, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2014 Alpha Omega Alpha (School of Medicine, Stony Brook University), 1990 Aesculapius Award for Excellence in Teaching, School of Medicine, Stony Brook University, 1993 President's Award for Excellence in Teaching, Stony Brook University, 1999 Chancellor's Award for Excellence in Teaching, State University of New York, 1999 Invited Speaker, AOA Induction Ceremony, Stony Brook University School of Medicine, 2013

Service:

Associate Editor, American Journal of Physical Anthropology, 1981-1986.
Associate Editor, Anatomical Record, 1972-1980.
Member of the Subcommittee for Anthropology and Primatology of the International
Anatomical Nomenclature Committee, 1980-1981.
Publications Committee, American Association of Anatomists, 1990-1991.
USMLE Step I Applied Anatomy Task Force, National Board of Medical Examiners, 1996- 1997
Participating Lecturer in Mini Med School, School of Medicine, Stony Brook University, 2000, 2001
NBME Anatomy Subject Exam Reviewer, 2008

Committees (Stony Brook University):

Departmental Graduate Committee, 1974-1977. School of Medicine Admissions Committee, 1977-1979, 1993-1994. School of Basic Health Sciences Steering Committee, 1979.

Appointments, Promotions and Tenure Committee, School of Basic Health Sciences, 1980. Senator, Medical School Senate, 1979-1982. Curriculum Committee, School of Medicine, 1980-1983, 1991- 2006 (Chair, 2000-2003) Medical Scientist Training Program Committee, School of Medicine, 1980-1982. Graduate Council Fellowship Committee, 1981-1983. Committee on Admission to Advanced Standing, School of Medicine, 1982-1997 Institutional Animal Care and Use Committee, 1983-2001 Search Committee for Chairperson of Computer Sciences, 1983-1985. Search Committee for Chairperson of Physiology and Biophysics, 1984-1985. Vice-Provost's Committee on Laboratory Animal Resources, 1987-1988. Co-Director, Doctoral Program in Anthropological Sciences, 1987-89. Institutional Self-Study Committee on Medical School Governance, 1988. Scholars for Medicine Admissions and Steering Committee, 1988-1997 Search Committee for Chairperson of Radiology, 1990. Admissions Committee for Combined M.D./Oral Surgery Residency Program, 1989-1991. Search Committee for Chairperson of Surgery, 1990-1991 Dean's Advisory Committee on Budget, School of Medicine, 1991. Chairperson of Workgroup on Staffing of Dean's Office, 1992. Executive Committee, Interdepartmental Doctoral Program in Anthropological Sciences, 1992-2006 Internal Advisory Board, Institute for the Conservation of Tropical Environments, 1992-2001 Chair, Subcommittee on the Basic Science Departments, LCME-mandated School of Medicine Self-Study, 1995. Search Committee for Associate Dean for Administration, School of Medicine, 1996 Search Committee for Chairperson of Surgery, 1996 Selection Committee for the Chancellor's/President's Excellence in Teaching Awards, 1999, 2000, 2005, 2007 President's Task Force on Student Experience, 1999-2000 DLAR Advisory Committee, 2000–2006 Selection Committee for the Distinguished Teaching Professorship, 2001, 2002, 2004 Co-Chair, Subcommittee on the Educational Program, LCME-mandated School of Medicine Self-Study, 2001-2002 Ray of Light Awards Nominating Committee, 2006 Appointments, Promotions & Tenure Committee, School of Medicine, 2007-2010 Chair, Subcommittee on Faculty, LCME-mandated School of Medicine Self-Study, 2009-2011. Member, Subcommittee on Curriculum, LCME-mandated School of Medicine Self-Study, 2009-2011.

Teaching Experience:

Human gross anatomy (Medical and Graduate) Human embryology (Medical and Graduate) Surgical Anatomy (Medical) Animal Mechanics (Graduate) Human and Primate Evolution (Graduate)

Research Activities:

Cardiopulmonary research, Department of Surgery, University of Chicago, Summer, 1963. Physical anthropological and paleontological studies in South Africa, Summer, 1965.

Comparative primate anatomy and functional morphology, emphasizing electromyography, 1965-present.

Mathematical models of gross muscle function, 1969-present.

Electromyographic studies of nonhuman primate locomotion, 1974-present.

- In vivo measurement of bone strain in primates, 1977-present.
- Electromyographic studies in humans during rapid and complex motor behaviors, from the perspectives of evolution and of assessing reconstructive orthopedic surgery, 1979-present.

Functional analysis of fossil hominid postcranial remains, 1981-present.

Research Grants:

- 1970 General Research Support Grant, University of Chicago, "Theory of Muscular Function," \$2,500.
- 1970 Wenner-Gren Foundation for Anthropological Research, "Publication of Monograph on Cebid Monkeys," \$1,500.
- 1970 General Research Support Grant (PHS-FR-5367), University of Chicago, Publication of Monograph on Cebid Monkeys," \$1,000.
- 1971 National Science Foundation (GB 29296), P.I., "Theory of Muscular Function and Evolution," \$16,100.
- 1972 Schweppe Foundation Research Fellowship, \$10,000/annum for three years. (Resigned after year two).
- 1973 USPHS Research Career Development Award, 1K04 NS 70415-01, Salary/annum for five years. (Resigned after year one).
- 1974 National Science Foundation Research Grant, (B043258), P.I., "Muscular Function and Evolution," \$11,000.
- 1977 National Science Foundation Research Grant, (BNS 7683114A), P.I., "Experimental Studies on Primate Locomotion," \$99,987.
- 1977 Biomedical Research Support Grant (N.I.H.), Stony Brook University "Purchase and Maintenance of Chimpanzee," Co-investigator under Dr. R. Susman, \$5,490.
- 1979 Biomedical Research Support Grant, (N.I.H.), Stony Brook University "Salary for Parttime Animal Trainer," \$1,213.
- 1980 National Science Foundation Research Grant (BNS 7924070), P.I., "Experimental Studies on Primate Locomotion", \$134,505.
- 1982 National Science Foundation Research Grant (BNS 8119664), P.I., "Experimental Studies on Primate Locomotion", \$134,968.

- 1984 National Science Foundation Research Grant (BNS 8318013), P.I., "Experimental Studies on Primate Locomotion", \$154,998.
- 1986 National Science Foundation Research Grant (BNS 8519747), P.I., "Experimental Studies on Primate Locomotion", \$262,456.
- 1989 National Science Foundation Research Grant (BNS 8819621), P.I., "Experimental Studies on Primate Locomotion", \$371,248.
- 1992 National Science Foundation Research Grant (DBS 9120086), P.I., "Experimental Studies on Primate Locomotion", \$23,473.
- 1992 National Science Foundation Research Grant (SBR 9209004), P.I., "Experimental Studies on Primate Locomotion", \$275,476.
- 1995 National Science Foundation Research Grant (SBR 9507078), Co-P.I. (S. G. Larson, P.I.), "Experimental Studies on Primate Locomotion", \$300,279.
- 1997 National Science Foundation Doctoral Dissertation Improvement Award for Kamla Ahluwalia, "Gross Morphology and Bone Density in Knees of Catarrhine Primates with Different Locomotor Behaviors, \$11,701.
- 1997 Leakey Foundation Doctoral Dissertation Grant for Kamla Ahluwalia, Gross Morphology and Bone Density Patterns in Knees of Catarrhine Primates, \$5,281.
- 1997 National Science Foundation Major Research Instrumentation Grant (SBR9724225), Co-P.I. (B. Demes, P.I.), "Acquisition of a Motion Analysis Facility for the Study of Primate Locomotion at SUNY at Stony Brook", \$138,502.
- 1998 National Science Foundation Research Grant (SBR 9806291), Co-P.I. (S. G. Larson, P.I.) "Experimental Studies on Primate Locomotion", \$330,446.
- 2001 National Science Foundation Research Grant (BCS 0109331), Co-P.I. (S. G. Larson, P.I.) "Experimental Studies on Primate Locomotion", \$410,932.
- 2004 National Science Foundation Research Grant (BCS 0411489), Co-P.I. (S. G. Larson, P.I.) "Experimental Studies on Primate Locomotion", \$100,031.
- 2005 National Science Foundation Research Grant (BCS 0509190), Co-P.I. (S. G. Larson, P.I.) "Experimental Studies on Primate Locomotion", \$189,472.
- 2008 Leakey Foundation Grant, Co-P.I. (S. G. Larson, P.I.) "Quadratus Lumborum and Ilio-costalis Function and Their Influence on Lumbar Transverse Processes", \$20,000.
- 2009 National Science Foundation HOMINID Grant (BCS-0935321), Co-P.I. (S. G. Larson, P.I.) "Integrated Modeling and Experimental Assessment of Chimpanzee and Hominin Locomotion", \$1,875,761.

Books and Monographs:

- 1971 Stern JT Jr. Functional Myology of the Hip and Thigh of Cebid Monkeys and Its Implications for the Evolution of Erect Posture. Bibliotheca Primatologica. No. 14. Basel: Karger, 318 pp.
- 1973 Stern JT Jr, Oxnard CE. Primate Locomotion: Some Links with Evolution and Morphology. Primatologia, Vol. 4, lf. 11. Karger: Basel, 93 pp.

- 1988 Stern JT Jr. Essentials of Gross Anatomy. F. A. Davis, Phila., 795 pp. (English and Spanish editions).
- 1997 Stern JT Jr. Core Concepts in Anatomy. Lippincott-Raven, Philadelphia. (Japanese edition, 1998, Med. Sci. Intl., Tokyo; Chinese edition, 2001, Ho-Chi Press, Tapei; Greek edition, 2003, Parissianou Editions, Athens).
- 2005 Stern JT Jr. Core Concepts in Anatomy, 2nd edition. Published by author.
- 2012 Stern JT Jr. Core Concepts in Anatomy, 3rd edition. Published by author.

On-Line Publication:

2008 Stern, JTJr. Clinical Sidelights to *Core Concepts in Anatomy* (regularly updated) http://www.anat.sunysb.edu/ClinicalSidelights.html

Published Articles:

- 1967 Stern JT Jr, Singer R. Quantitative morphological distinctions between Bushman and Hottentot skulls: A preliminary report. S Afr Archeol Bull 22:103-111.
- 1970 Stern JT Jr. The meaning of "adaptation" and its relation to the phenomenon of natural selection. *In*: Evolutionary Biology. Vol. 4 (T. Dobzhansky, M. Hecht and W. Steer, eds.). New York: Appleton-Century- Crofts, pp. 39-66.
- 1971 Stern JT Jr. Investigations concerning the theory of "spurt" and "shunt" muscles. J Biomech 4:437-453.
- 1971 Stern JT Jr. Functional interpretation of the differences between primates with regard to the Musculus biceps femoris and Musculi vasti. *In*: Proc. 3rd Int. Congr. Primatol., Zurich. Basel: Karger, pp. 137-144.
- 1972 Stern JT Jr. Anatomical and functional specializations of the human gluteus maximus. Am J Phys Anthropol 36:315-340.
- 1974 Stern JT Jr. Biomechanical significance of the instantaneous center of rotation: the human temporomandibular joint. J Biomech 7:109.
- 1974 Stern JT Jr. Computer modeling of gross muscle dynamics. J Biomech. 7:411-428.
- 1976 Stern JT Jr. Before bipedality. Yrbk Phys Anthropol 19:59-68.
- 1977 Stern JT Jr, Wells JP, Vangor AK, Fleagle JG. Electromyography of some muscles of the upper limb in *Ateles* and *Lagothrix*. Yrbk Phys Anthropol 20:498-507.

- 1979 Susman RL, Stern JT Jr. Telemetered electromyography of flexor digitorum profundus and flexor digitorum superficialis in *Pan troglodytes* and implications for interpretation of the O.H. 7 hand. Am J Phys Anthropol 50:565-574.
- 1979 Jouffroy FK, Jungers WL, Stern JT Jr. Tele-electromyographie des divers faisceau du muscle quadriceps femoris au cours de la locomotion chez un Lemurien de Madagascar (*Lemur fulvus*). C R Acad Sci, Paris, Ser D 288:1627-1630.
- 1979 Paré, EB, Schwartz JM, Stern JT Jr. Electromyographic and anatomical study of the human tensor fasciae latae muscle. *In*: Proc 4th Congr Int Soc Electrophysiol Kinesiol (August, 1979, Boston), pp. 52-53.
- 1980 Stern JT Jr, Wells JP, Jungers WL, Vangor AK, Fleagle JG. An electromyographic study of the pectoralis major in atelines and *Hylobates*, with special reference to the evolution of the pars clavicularis. Am J Phys Anthropol 52:13-26.
- 1980 Jungers WL, Stern JT Jr. Telemetered electromyography of forelimb muscle chains in gibbons (*Hylobates lar*). Science 208:617-618.
- 1980 Jungers WL, Jouffroy FK, Stern JT Jr. Gross structure and function of the quadriceps femoris in *Lemur fulvus*: An analysis based on telemetered electromyography. J Morph 164:287-299.
- 1980 Stern JT Jr, Wells JP, Jungers WL, Vangor AK. An electromyographic study of serratus anterior in atelines and *Alouatta*: implications for hominid evolution. Am J Phys Anthropol 52:323-334.
- 1980 Stern JT Jr, Paré EB, Schwartz JM. New perspectives on muscle use during locomotion: electromyographic studies of rapid and complex behaviors. J Am Osteop Assoc 80:287-291.
- 1980 Susman RL, Stern JT Jr. EMG of the interosseous and lumbrical muscles in the chimpanzee (*Pan troglodytes*) hand during locomotion. Am J Anat 157:389-398.
- 1981 Stern JT Jr, Susman RL. Electromyography of gluteal muscles in *Hylobates*, *Pongo*, and *Pan*: implications for the evolution of hominid bipedality. Am J Phys Anthropol 55:153-166.
- 1981 Fleagle JG, Stern JT Jr, Jungers WL, Susman RL, Vangor AK, Wells JP. Climbing: A biomechanical link with brachiation and with bipedalism. *In*: Vertebrate Locomotion (M. H. Day, ed.). Sympos Zool Soc London, No. 48. London: Academic Press, pp. 359-375.
- 1981 Jungers WL, Stern JT Jr. Preliminary electromyographic analysis of brachiation in gibbon and spider monkey. Int J Primatol 2:19-33.

- 1981 Paré EB, Stern JT Jr, Schwartz JM. Functional differentiation within the tensor fasciae latae: a telemetered electromyographic analysis of its locomotor roles. J Bone Jt Surg 63A:1457-1471.
- 1982 Konstant W, Stern JT Jr, Fleagle JG, Jungers WL. The function of the subclavius muscle in a nonhuman primate, the spider monkey (*Ateles*). Folia Primatol 38:170-182.
- 1982 Susman RL, Jungers WL, Stern JT Jr. The functional morphology of the accessory interosseous muscle in the gibbon hand: determination of the locomotor and manipulatory compromises. J Anat (Lond) 134:111-120.
- 1982 Susman RL, Stern JT Jr. Functional morphology of *Homo habilis*. Science 217:931-934.
- 1983 Stern JT Jr, Susman RL. Locomotor anatomy of *Australopithecus afarensis*. Am J Phys Anthropol 60:279-317.
- 1983 Jungers WL, Stern JT Jr. Body proportions, skeletal allometry and locomotion in the Hadar hominids: a reply to Wolpoff. J Hum Evol 12:673-684.
- 1983 Jungers WL, Stern JT Jr, Jouffroy FK. Functional morphology of the quadriceps femoris in primates: a comparative anatomical and experimental analysis. Ann Sci Nat, Zool, Paris, Se. 13, 5:101-116.
- 1983 Reeser LA., Susman RL, Stern JT Jr. Electromyographic studies of the human foot: experimental approaches to hominoid evolution. Foot Ankle, 3:391-407.
- 1984 Jungers WL, Stern JT Jr. Kinesiological aspects of brachiation in gibbons. *In*: The Lesser Apes: Evolutionary and Behavioural Biology. (Preuschoft H, Chivers D, Brockelman N, Creel N, eds.). Edinburgh: Edinburgh U Press, pp. 119-134.
- 1984 Susman RL, Stern JT Jr, Jungers WL. Arboreality and bipedality in the Hadar hominids. Folia Primatol 43:113-156.
- 1985 Susman RL, Stern JT Jr, Jungers WL. Locomotor adaptations in the Hadar hominids. *In*: Ancestors: The Hard Evidence. (Delson E, ed.), Alan R Liss, New York, pp. 184-192.
- 1986 Larson SG, Stern JT Jr. EMG of scapulohumeral muscles in the chimpanzee during reaching and "arboreal" locomotion. Am J Anat 176:171-190.
- 1987 Larson SG, Stern JT Jr. EMG of chimpanzee shoulder muscles during knucklewalking: problems of terrestrial locomotion in a suspensory adapted primate. J Zool (Lond) 212:629-655.

- 1989 Larson SG, Stern JT Jr. The role of supraspinatus in the quadrupedal locomotion of vervets (*Cercopithecus aethiops*): implications for interpretation of humeral morphology. Am J Phys Anthrop 79:369-377.
- 1989 Larson SG, Stern JT Jr. The role of propulsive muscles of the shoulder during quadrupedalism in vervet monkeys (*Cercopithecus aethiops*): implications for neural control of locomotion in primates. J Motor Behav 21:457-472.
- 1989 Madariaga J, Duboys EB, Stern JT. Use of contralateral rectus femoris flap: an alternative for covering exposed femoral vessels of the thigh. J Surg Oncol 41:206-209.
- 1990 Jouffroy FK, Stern JT Jr. Telemetered EMG study of the antigravity versus propulsive action of knee and elbow muscles in the (*Nycticebus coucang*). *In*: Gravity, Posture and Locomotion in Primates. (Jouffroy FK, Stack MH, Niemitz C, eds.), II Sedicesimo, Firenze, pp. 221-236.
- 1990 Stern JT Jr, Jungers WL. The capitular joint of the first rib in primates: a re-evaluation of the proposed link to locomotion. Am J Phys Anthropol 82:431-440.
- 1991 Larson SG, Stern JT Jr. EMG of serratus anterior and trapezius in the chimpanzee: scapular rotators revisited. Am J Phys Anthropol 85:71-84.
- 1991 Stern JT Jr, Susman RL. "Total Morphological Pattern" versus the "Magic Trait": conflicting approaches to the study of early hominid bipedalism. *In*: Origine(s) de la Bipedédie chez les Hominidés (Coppens Y, Senut B, eds.). Cahiers de Paléontologie, Editions du CNRS, Paris, pp. 99-111.
- 1991 Susman RL, Stern JT Jr. Locomotor behavior of early hominids: epistemology and fossil evidence. *In*: Origine(s) de la Bipedédie chez les Hominidés (Coppens Y, Senut B, eds.). Cahiers de Paléontologie, Editions du CNRS, Paris, pp. 121-131.
- 1992 Larson SG, Stern JT Jr. Further evidence for the role of supraspinatus in quadrupedal monkeys. Am J Phys Anthropol 87:359-363.
- 1993 Stern JT Jr, Larson SG.. Electromyographic study of the obturator muscles in nonhuman primates: implications for interpreting the obturator externus groove of the femur. J Hum Evol 24:403-427.
- 1993 Jungers WL, Meldrum DJ, Stern JT Jr. The functional and evolutionary significance of the human peroneus tertius muscle. J Hum Evol 25:377-386.
- 1994 Schmitt D, Larson SG, Stern JT Jr. Serratus ventralis function in vervet monkeys (*Cercopithecus aethiops*): are primate quadrupeds unique? J Zool (Lond) 232:215-230.

- 1994 Demes B, Larson SG, Stern JT Jr, Jungers WL, A. R. Biknevicius, D. Schmitt The kinetics of primate quadrupedalism: "hindlimb drive" reconsidered. J Hum Evol 26:353-374
- 1994 Wall CE, Larson SG, Stern JT Jr. EMG of the digastric muscle in gibbon and orangutan: functional consequences of the loss of anterior digastric in orangutans. Am J Phys Anthropol 94:549-567.
- 1995 Stern JT Jr, Jungers WL, Susman RL. Quantifying phalangeal curvature: an empirical comparison of alternative methods. Am J Phys Anthropol 97:1-10.
- 1998 Demes B, Stern JT Jr, Hausman MR, Larson SG, McLeod KJ, Rubin CT. Patterns of strain in the macaque ulna during functional activity. Am J Phys Anthropol 106:87-100.
- 1999 Stern JT Jr. The cost of bent-knee bent-hip bipedal gait. A reply to Crompton *et al.* J Hum Evol 36:567-570.
- 1999 Jouffroy FK, Stern JT Jr, Medina MF, Larson SG. Function and cytochemical characteristics of postural limb muscles of the rhesus monkey: a telemetered EMG and immunofluorescence study. Folia Primatol 70:235-253.
- 2000 Stern JT Jr. Climbing to the top: a personal memoir of *Australopithecus afarensis*. Evol Anthropol 9: 113-133.
- 2001 Stern JT Jr, Larson SG. Telemetered electromyography of the supinators and pronators of the forearm in gibbons and chimpanzees: implications for the fundamental positional adaptation of hominoids. Am J Phys Anthropol 115:253-268.
- 2001 Demes B, Qin YX, Stern JT Jr, Larson SG, Rubin CT. Patterns of strain in the macaque tibia during functional activity. Am J Phys Anthropol 116:257-65
- 2002 Larson SG, Stern JTJr. Forearm rotation and the "origin of the hominoid lifestyle": Response to Sarmiento [Letter]. Am J Phys Anthropol 119:95.
- 2004 Stern JT Jr, Demes B, Kerrigan DC. Modelling human walking as an inverted pendulum of varying length. In *Shaping Primate Evolution*, F Anapol, RZ German, NG Jablonski, eds., Cambridge U Press, Cambridge, pp. 297-333.
- 2006 Larson SG, Stern JTJr. Maintenance of above-branch balance during primate arboreal quadrupedalism: coordinated use of forearm rotators and tail motion. Am J Phys Anthropol 129:71-81.
- 2007 Larson SG, Stern JTJr. Humeral retractor EMG during quadrupedal walking in primates. J Exp Biol 210:1204-1215.

- 2007 Boyer DM, Patel BA, Larson SG, Stern JT Jr. Telemetered electromyography of peroneus longus in *Varecia variegata* and *Eulemur rubriventer*: implications for the functional significance of a large peroneal process. J Hum Evol 53:119-134.
- 2009 Larson SG, Stern JT Jr. Hip extensor EMG and forelimb/hind limb weight support asymmetry in primate quadrupeds. Am J Phys Anthrop 138:343-355.
- 2010 Kingston AK, Boyer DM, Patel BA, Larson SG, Stern JTJr. Hallucal grasping in *Nycticebus coucang*: further implications for the functional significance of a large peroneal process. J Hum Evol 58:33-42.
- 2012 Patel BA, Larson SG. Stern JTJr. Electromyography of wrist and finger flexor muscles in olive baboons (*Papio anubis*). J Exp Biol 215:115-123.
- 2013 O'Neill MC, Lee L-F, Larson SG, Demes B, Stern JTJr, Umberger BR. A three-dimensional musculoskeletal model of the chimpanzee (*Pan troglodytes*) pelvis and hind limb. J Exp Biol 216:3709-3723.
- 2013 Larson SG, Stern JTJr. Rotator cuff muscle function and its relation to scapular morphology in apes. J Hum Evol 65:391-403.
- 2015 Patel BA, Larson SG, Stern JT Jr. Electromyography of crural and pedal muscles in tufted capuchin monkeys (*Sapajus apella*): Implications for hallucal grasping behavior and first metatarsal morphology in euprimates. Am J Phys Anthrop 156:553-564.
- 2015 O'Neill MC, Lee LF, Demes B, Thompson NE, Larson SG, Stern JT Jr, Umberger BR. Three-dimensional kinematics of the pelvis and hind limbs in chimpanzee (*Pan troglo-dytes*) and human bipedal walking. J Hum Evol 86:32-42.
- 2015 Patel BA, Wallace IJ, Boyer DM, Granatosky MC, Larson SG, Stern JT Jr. Distinct functional roles of primate grasping hands and feet during arboreal quadrupedal locomotion. J Hum Evol 88:79-84.
- 2016 Stern J. Surface anatomy of the trunk based on CT data. Clin Anat 29:130. (page 130)
- 2022 O'Neill MC, Demes B, Thompson NE, Larson SG, Stern JTJr, Umberger, BR. Adaptations for bipedal walking: Musculoskeletal structure and three-dimensional joint mechanics of humans and bipedal chimpanzees (Pan troglodytes). J Hum Evol 168 (July) 103195, https://authors.elsevier.com/sd/article/S0047248422000550.

Published Abstracts:

1966 Stern JT Jr, R. Singer. On the definition of "Hottentot" and "Bushman" - a preliminary report. Am J Phys Anthropol 25:215.

- 1970 Stern JT Jr. The mode of locomotion of man's arboreal ancestors: implications from a study of New World monkeys. Am J Phys Anthropol 33:143.
- 1970 Stern JT Jr. Evolutionary specializations of the human gluteus maximus. Anat. Rec 166:384.
- 1973 Stern JT Jr. Computer simulation of gross muscle function. Anat Rec 175:452.
- 1975 Stern JT Jr. Before bipedality. Am J Phys Anthropol 42:331.
- 1976 Stern JT Jr, J. P. Wells, A. K. Vangor. EMG of the upper limb in New World primates. Am J Phys Anthropol 44:208.
- 1977 Wells JP, Stern JT Jr. Function and evolution of pectoralis major. Am J Phys Anthropol 47:167.
- 1978 Stern JT Jr, Wells JP. Electromyographic studies on the serratus magnus of prehensiletailed cebids. Am J Phys Anthropol 48:439-440.
- 1979 Jungers WL, Stern JT Jr, Jouffroy FK. Function of forelimb "muscle chains" in *Hylobates lar*: a telemetered electromyographic approach. Am J Phys Anthropol 50:453.
- 1979 Stern JT Jr, Schwartz JM, Paré EB. Electromyographic study of the human gluteus maximus. Am J Phys Anthropol 50:484.
- 1979 Susman RL, Stern JT Jr. Telemetered electromyography of the intrinsic finger muscles in *Pan troglodytes* during locomotion. Am J Phys Anthropol 50:485.
- 1979 Wells JP, Stern JT Jr. Electromyographic clues to the adaptation of the shoulder girdle in suspensory primate forms and man. Anat Rec 193:176-177.
- 1980 Stern JT Jr, Susman RL. Telemetered EMG of the gluteal muscles in gibbon, orangutan and chimpanzee. Am J Phys Anthropol 52:283.
- 1980 Jungers WL, Stern JT Jr. Different strokes: EMG of brachiation in chimpanzee, gibbon and spider monkey. Am J Phys Anthropol 52:242.
- 1980 Jungers WL, Jouffroy FK, Stern JT Jr, Susman RL. Implications of quadriceps femoris function in nonhuman primates: a comparative electromyographic analysis. Anthropologia Contemporanea, 3:218.
- 1982 Stern JT Jr, Susman RL. The locomotor behavior of *Australopithecus afarensis*. Am J Phys Anthropol 57:232.
- 1982 Susman RL, Stern JT Jr. Functional affinities of the *Homo habilis* postcranial remains from FLK, Olduvai Gorge. Am J Phys Anthropol 57:234-235.
- 1983 Jungers WL, Stern JT Jr. Kinematic and electromyographic aspects of brachiation in *Hylobates lar*. Am J Phys Anthropol 60:211.
- 1983 Stern JT Jr, Susman RL. Functions of peroneus longus and brevis during locomotion in apes and humans. Am J Phys Anthropol 60:256-257.
- 1983 Susman RL, Stern JT Jr, Rose MD. Morphology of KNM-ER 3228 and O.H. 28 innominates from East Africa. Am J Phys Anthropol 60:259.
- 1984 Susman RL, Stern JT Jr. Further consideration of the pedal remains from Hadar. Am J Phys Anthropol 63:224.
- 1985 Stern JT Jr, Jungers WL. Body size and proportions of the locomotor skeleton in *Oreopithecus bambolii*. Am J Phys Anthropol 66:233.
- 1985 Larson SG, Stern JT Jr. Electromyography of the scapulo-humeral muscles during locomotion in the chimpanzee (*Pan troglodytes*). Am J Phys Anthropol 66:193.

- 1986 Jungers WL, Meldrum DJ, Stern JT Jr. Evolutionary and functional significance of the human peroneus tertius muscle. Am J Phys Anthropol 69:220-221.
- 1986 Larson SG, Stern JT Jr. EMG of the subscapularis in "brachiating" primates. Am J Phys Anthropol 69:225-226.
- 1987 Stern JT Jr. Evolution of gluteal muscle function as revealed by telemetered EMG studies in apes and humans. Anat Rec 218:130A.
- 1987 Stern JT Jr, Jungers WL. Absence of a relationship between the capitular joint of the first rib and locomotor use of the upper limb. Am J Phys Anthropol 72:257.
- 1987 Larson SG, Stern JT Jr. EMG of the hamstrings in chimpanzees and orangutans. Am J Phys Anthropol 72:223.
- 1987 Shapiro LJ, Jungers WL, Stern JT Jr. Function of back and trunk muscles during bipedal walking in chimpanzee and gibbon. Am J Phys Anthropol 72:253.
- 1989 Larson SG, Stern JT Jr. The role of propulsive muscles of the shoulder during quadrupedalism in vervet monkeys. Am J Phys Anthropol 78:258-259.
- 1990 Stern JT Jr, Larson SG. Electromyographic studies of the obturator muscles in nonhuman primates. Am J Phys Anthropol 81:301.
- 1990 Larson SG, Stern JT Jr, Jungers WL. Trapezius and serratus anterior function in chimpanzee scapular rotators? Am J Phys Anthropol 81:256.
- 1990 Schmitt DO, Larson SG, Stern JT Jr. Stabilization and rotation of the scapula in vervet monkeys. Am J Phys Anthropol 81:292.
- 1991 Larson SG, Demes B, Stern JT Jr, Jungers WL. The relationship between walking speed and force distribution on the fore- and hind limbs of the orangutan. Am J Phys Anthropol suppl. 12, p. 112.
- 1991 Wall CE, Larson SG, Stern JT Jr. The role of the jaw opening muscles during mastication in the orangutan and gibbon. Am J Phys Anthropol suppl. 12, p. 180.
- 1992 Demes B, Larson SG, Stern JT, Jungers WL. The hind limb drive of primates -theoretical reconsideration and empirical examination of a widely held concept. Am J Phys Anthropol suppl. 14, p. 69.
- 1993 Stern JT Jr, Larson SG. EMG of the supinator and pronators in the gibbon and chimpanzee. Am J Phys Anthropol suppl. 16, pp. 187-188.
- 1993 Larson SG, Stern JT Jr. EMG of the forearm rotators during quadrupedal locomotion in three species of primates. Am J Phys Anthropol suppl. 16, pp. 130-131.
- 1995 Wunderlich RE, Stern JT Jr, Jungers WL. Electromyography of the dorsal interossei muscles of the human foot. Am J Phys Anthropol suppl. 20, pp. 224-225.
- 1996 Schmitt D, Stern JT Jr, Larson SG. Compliant gait in humans: implications for substrate reaction forces during australopithecine bipedalism. Am J Phys Anthropol suppl. 22, p. 209.
- 1997 Demes B, Stern JT, Rubin CT, Larson SG. Bone strain in the macaque ulna during locomotion. Am J Phys Anthropol suppl. 24, p. 101.
- 1997 Larson SG, Stern JT Jr. Forelimb muscle use during one-arm hanging and vertical climbing in chimpanzees. Am J Phys Anthropol suppl. 24, p. 152.
- 1997 Wall CE, Larson SG, Stern JT Jr. Working-side/balancing-side ratio in the superficial masseter muscle of hominoids. Am J Phys Anthropol suppl. 24, pp. 234-235.
- 1998 MacLatchy L, Wunderlich R, Stern J. Distal femora of *Morotopithecus* and *Sivapithecus*. J Vert Paleontol 18 (suppl. to no. 3):60A.

- 2001 Demes B, Qin Y-X., Stern JTJr, Larson SG, Rubin CT. Midshaft bone strain and crosssectional geometry of the macaque tibia and ulna. J. Morphol. 248:223.
- 2004 Larson, S. G. and Stern, J. T. Jr. Muscle recruitment in primates: Preliminary results on the question of neuromuscular conservation in primates. Am. J. Phys. Anthropol. suppl. 38:132.
- 2004 Larson, S. G. and Stern, J. T. Jr. Arboreal Quadrupedal Locomotion in Primates: Use of Forearm Rotators and Long Tails to Maintain Balance. J. Morph. 260:307.
- 2006 Boyer DM, Patel BA, Larson SG, Stern JTJr Electromyography of peroneus longus in *Varecia variegata* and *Eulemur rubriventor* helps in grasping primate origins. Am J Phys Anthropol suppl. 42:68.
- 2008 Kington AK, Boyer DM, Patel BA, Larson SG, Stern JT Jr. Hallucal grasping in *Nycticebus coucang*: further implications for the functional significance of a large peroneal process. Am J Phys Anthropol Suppl. 46:130.
- 2008 Larson SG, Stern JT Jr. The role of primate hip extensors in diminishing forelimb forces during quadrupedalism. Am J Phys Anthropol Suppl 46:137-138.
- 2009 Gosselin-Ildari AD, Larson SG, Stern JTJr. Chimpanzee hind limb muscle recruitment patterns during quadrupedalism and bipedalism. Am J Phys Anthropol Suppl 48:137.
- 2011 O'Neill, M. C., Larson, S. G., Demes, D., Stern, J. T. Jr. A 3D musculoskeletal model of the chimpanzee for movement analysis. Am J Phys Anthropol Suppl 52: 229.
- 2011 Patel, B., Larson, S.G., Stern, J.T. Jr. Electromyography of forearm muscles in digitigrade baboons: implications for interpreting the functional morphology of knuckle-walking features in African apes. Am J Phys Anthropol Suppl 52:235-236.
- 2012 O'Neill, MC, Demes, B, Thompson NE, Larson SG, Stern JT, Jr, Lee, LF, Umberger, BR. Chimpanzee bipedalism: Integrating experiments and musculoskeletal modeling. Am J Phys Anthropol Suppl 54:227-228.
- 2012 Patel, B.A., Larson, S.G., Stern, J.T.Jr. Electromyography of pedal and crural muscles in Cebus apella: implications for the evolution of the anthropoid foot. Am J Phys Anthropol Suppl 54: 234.
- 2012 Lee, LF, O'Neill, MC, Demes, B, LaBoda, M, Thompson, NE, Larson, SG, Stern JT, Jr., Umberger, BR. Joint kinematics in chimpanzee and human bipedal walking. J Biomech.