

CURRICULUM VITAE
Robert Andrew Walker

DATE OF BIRTH: March 6, 1958 PLACE OF BIRTH: Cumberland, Maryland, USA

TELEPHONE: (315) 568-3210 (office)

PRESENT ADDRESS:

Director of Clinical Anatomy
New York Chiropractic College
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EDUCATION:

Postdoctoral Fellow 1990-1991 Microscopic Anatomy
Department of Cell, Molecular and Structural Biology, Northwestern University
College of Medicine, Chicago, Illinois

Ph.D. Kent State University, Kent, Ohio 1989 Biomedical Sciences
(Biological Anthropology Program Committee)
Dissertation: *Assessment of Cortical Bone Dynamics and Skeletal Age at Death from Femoral Cortical Histomorphology*, Dissertation submitted to the School of Biomedical Sciences

M.A. Kent State University, Kent, Ohio 1982 Biological Anthropology
Thesis: *The Evaluation of Bone Loss and Skeletal Age at Death from Femoral Cortical Thickness and Optical Densitometry of Radiographs*, Department of Anthropology.

B.A. University of Arkansas at Fayetteville 1980 Anthropology
(with High Honors)
Honors Thesis: *Dental Pathologies, Wear, and Sexual Dimorphism at the Gold Mine Site*, Department of Anthropology.

PRESENT POSITIONS:

Director of Clinical Anatomy, from February 12, 2009 (Founding Dean of the M.S. in Clinical Anatomy Program, from September 1, 2006 to February 11, 2009.) New York Chiropractic College, Seneca Falls, New York.

Professor of Anatomy, Department of Basic Sciences, New York Chiropractic College, Seneca Falls, New York, from September 1, 1999 (Associate Professor from January 1, 1995 to August 31, 1999; Assistant Professor from January 1, 1992 to December 31, 1994.)

Director, Anatomical Gift Program, Department of Anatomy, New York Chiropractic College, Seneca Falls, New York, from September 1, 1997.

Director, New York Chiropractic College Non-transplant Anatomic Tissue Bank, Seneca Falls, New York, from September 1, 1997.

Adjunct Professor of Human Anatomy, Finger Lakes Regional EMS Council, Finger Lakes Community College, 2914 County Road 48, Canandaigua, New York 14424, from March, 1998.

PROFESSIONAL ORGANIZATIONS:

American Association for the Advancement of Science.

American Association of Anatomists.

American Anthropological Association: Biological Anthropology Section.

American Association of Clinical Anatomists.

American Association of Physical Anthropologists.

Human Biology Association.

Sigma Xi.

Human Anatomy and Physiology Society.

American Association of University Professors.

HONORS AND AWARDS:

Phi Eta Sigma, University of Arkansas, February, 1977

Alpha Lambda Delta, University of Arkansas, April, 1977

Phi Beta Kappa, University of Arkansas, April, 1980.

Outstanding Undergraduate in Anthropology, University of Arkansas, April, 1980.

Bachelor of Arts with High Honors in Anthropology, University of Arkansas, May 1980.

Dissertation Award, Department of Biological Sciences, Kent State University, April, 1987.

Official Commendation: Special Act Award, Department of the Army, U.S. Army Natick Research, Development and Engineering Center, Natick, Massachusetts, May 18, 1989.

Nominated for the Student Government Association Teacher of the Year Award 1994, by the Class of April 1997, New York Chiropractic College, June 14, 1994

Recipient of the Student Government Association Teacher of the Year Award 1995, New York Chiropractic College, June 29, 1995.

Nominated for the Student Government Association Teacher of the Year Award 1996, New York Chiropractic College, July 24, 1996.

Nominated for the NYCC Board of Trustees Faculty of the Year Award 1997, New York Chiropractic College, January 16, 1998.

Recipient, NYCC Board of Trustees Faculty of the Year Award 1998, New York Chiropractic College, May 15, 1999.

Recipient, First Annual NYCC **Excellence in Research and Scholarly Activity Award**, New York Chiropractic College, September 28, 2000.

Recipient, Daisy Marquis Jones Program of Occupational Therapy Outstanding Service Award, Keuka College, New York, November 30, 2001.

Recipient, Annual NYCC **Excellence in Research and Scholarly Activity Award**, New York
Chiropractic College, September 28, 2006.

ADMINISTRATIVE EXPERIENCE:

Field Supervisor, U.S. Army Anthropometric Survey. Headed a field team of 23 civilian and military personnel that collected biographical and height and weight data on over 25,000 U.S. Army personnel, and complete anthropometric data on nearly 9,000 individuals, July, 1987 to July, 1988.

Project Officer, Contract No. DAAK60-89-C-1001 *Anthropometric Regression Analysis and Bivariate Frequency Tables*, U.S. Army Natick Research, Development, and Engineering Center, Natick, Massachusetts, March, 1989 to March, 1990.

Project Officer, Contract No. DAAK60-86-C-0128 *Anthropometric Survey*, U.S. Army Natick Research, Development, and Engineering Center, Natick, Massachusetts, March, 1989 to October, 1989.

Project Manager, *Currency of U.S. Army Anthropometric Database*, U.S. Army Natick Research, Development, and Engineering Center, Natick, Massachusetts, March, 1989 to August, 1990.

Project Manager, *Gender and Racial Variation in U.S. Army Personnel*, U.S. Army Natick Research, Development, and Engineering Center, Natick, Massachusetts, October, 1989 to August, 1990.

Coordinator of Anatomy, New York Chiropractic College, Seneca Falls, New York, from September 26, 1994 to October 31, 1996.

Head, Department of Anatomy, New York Chiropractic College, from January 1, 1998 to August 31, 2003 (Acting Head, from November 1, 1996 to December 31, 1997). Department of Anatomy and Department of Physiopathology combined into the Department of Basic Sciences as of September 1, 2003.

Head, Department of Basic Sciences, New York Chiropractic College, Seneca Falls, New York, September 1, 2003 to August 31, 2006. (Acting head from February 7, 2003 to August 31, 2003.)

Director, Anatomical Gift Program, Department of Anatomy, New York Chiropractic College, Seneca Falls, New York, from September 1, 1997:
Secured agreement with Simmons Institute of Syracuse, New York for preparation and transportation of cadavers, which will save at least \$12,500 per annum for the college.
Continuing to seek new and additional sources of cadavers.
53 institutions with cadaver programs contacted.
Secured Human Tissue/Non-Transplant Anatomic Bank License for the college.

Prepared donor forms for distribution to funeral directors throughout the state to increase direct NYCC donations.
Mass mailing of donor forms to over 400 upstate New York funeral homes.

Secured membership for NYCC in the Associated Medical Schools of New York Anatomical Committee, assuring NYCC of legal standing with medical, dental, osteopathic, and podiatric schools regarding cadaver donation and utilization, as well as securing NYCC a steady source of cadavers for the anatomy program.

Director of Clinical Anatomy, from February 12, 2009 (Founding Dean of the M.S. in Clinical Anatomy Program, from September 1, 2006 to February 11, 2009) New York Chiropractic College, Seneca Falls, New York.

TEACHING EXPERIENCE:

Instructor, Human Osteology, Northwest Arkansas Archaeological Society, University of Arkansas, Fayetteville, Arkansas, 1979 to 1980.

Graduate Assistantship: academic advisor for undergraduates, Office of the Dean of the College of Arts and Sciences, Kent State University, 1982 to 1984.

Field Instructor of Archeology, Staas Site, Cuyahoga County, Ohio, under the auspices of the Cleveland Museum of Natural History, 1986 to 1987.

Instructor, Human Gross Anatomy and Embryology, Northeast Ohio Universities College of Medicine, Rootstown, Ohio, 1986 to 1987.

Instructor, Introduction to Physical Anthropology, Department of Sociology and Anthropology, Kent State University, Kent, Ohio, 1987.

Course Coordinator, Microanatomy for Dental Students, Department of Cell, Molecular, and Structural Biology, Northwestern University Medical School, Chicago, Illinois, August, 1990 to December, 1991.

Laboratory Instructor, Microanatomy for Medical Students, Department of Cell, Molecular, and Structural Biology, Northwestern University Medical School, Chicago, Illinois, Spring, 1991.

Tutorial Instructor, Microanatomy for Dental Students, Department of Cell, Molecular, and Structural Biology, Northwestern University Medical School, Chicago, Illinois, June to August, 1991.

Professor, Department of Basic Sciences, New York Chiropractic College, Seneca Falls, New York, from September, 1999. Associate Professor, January, 1995 to August, 1999. Assistant Professor, Anatomy, January, 1992 to December, 1994. Includes instruction in three courses: Gross Anatomy One (osteology, back, thorax), Gross Anatomy Two (upper and lower extremities, pelvis and perineum), and Gross Anatomy Three (abdomen, head and neck). All are lecture and laboratory courses.

Teaching Duties at New York Chiropractic College have included:

Doctor of Chiropractic Program:

Lead Instructor, Gross Anatomy One Lecture, April, 1992 to August, 1996.

Lead Instructor and Course Coordinator, Gross Anatomy One Laboratory, January, 1992 to August, 1996.

Lead Instructor and Course Coordinator, Gross Anatomy One, Combined Laboratory and Lecture Course, September, 1996 to present.

Lead Instructor, Gross Anatomy Two Lecture, April, 1992 to August, 1993.

Laboratory Faculty, Gross Anatomy Two Laboratory, January, 1992 to present.

Laboratory Faculty, Gross Anatomy Three Laboratory, January, 1992 to present.

Tutorial Instructor, Histology, Winter Trimester, 1993.

Tutorial Instructor, Gross Anatomy Three, Spring Trimester, 1993.

Tutorial Instructor, Gross Anatomy Two Laboratory, Fall Trimester, 1994.

Temporary Lead Instructor, Gross Anatomy Three Laboratory, Fall Trimester, 1994.

Temporary Lead Instructor, Gross Anatomy Two, July and August, 1995.

Lecturer, Research Methods, 1997 to 2005.

Lead Instructor, Advanced Arthrology, from May, 2002.

Lead Instructor, Forensic Osteology, from May, 2002.

Lecturer, Histology, from September, 2002 to September, 2008.

Master of Science in Clinical Anatomy Program:

Lead Instructor, Special Topics in Gross Anatomy, from September, 2007.

Lead Instructor, Special Topics in Histology, from September, 2007.

Lead Instructor, Advanced Special Dissection, from September, 2007.

Director of Thesis Research, from September, 2007.

M.S. In Clinical Anatomy Student Director:

Kathy Dooley, D.C., from September, 2007.

Jenette Ball, D.C., from September, 2008.

Laboratory Instructor, Gross Anatomy for Paramedic Students, Finger Lakes Regional EMS Council under the auspices of Finger Lakes Community College, from March, 1998.

RESEARCH POSITIONS:

Graduate Assistant, Department of Sociology and Anthropology, Kent State University, 1980 to 1982.

Laboratory Assistant, NSF Grant BNS-7912514, Paleobiology of the Pliocene Hominidae from Hadar, Ethiopia: An Anatomical, Biomechanical and Morphometric Analysis. Kent State University, 1982.

Research Assistant, NSF Grant BNS-8408126, Analysis of Non-metric Craniodental Traits in Living and Fossil Hominoids. Kent State University, 1984 to 1986.

Research Anthropologist, U.S. Army Natick Research, Development, and Engineering Center, Natick, Massachusetts, July, 1987 to August, 1990.

Postdoctoral Fellow, Northwestern University Medical School, Department of Cell, Molecular, and Structural Biology, August, 1990 to December, 1991.

Professor of Anatomy, Department of Basic Sciences, New York Chiropractic College, Seneca Falls, New York, from September 1, 1999. Associate Professor, from January, 1995 to August, 1999. Assistant Professor from January, 1992 to December, 1994.

RESEARCH INTERESTS AND GOALS:

My primary research interests are in the interactions of human and primate functional morphology, skeletal biomechanics, and the histomorphometrics of cortical bone. The focus of my research falls into two broad categories. First, I am particularly interested in the effects of age on skeletal homeostasis, and the application of age-, racial-, and gender-specific changes in bone micro- and macrostructure, and their applications to forensic age, sex, and racial identification of human skeletal remains. Second, I am involved in research on basic patterns of remodeling in the mammalian skeleton, and have established a calcified tissue microscopy laboratory within the New York Chiropractic College Anatomy Department. Current research carried out in this laboratory focuses upon the mechanisms affecting patterns of remodeling seen in cortical bone histomorphology and histomorphometry. The elucidation of these factors has applications related to human health and well-being, to human health care education, and to the forensic and archeological applications of skeletal biology.

GRANTS:

Bone Histology Research at New York Chiropractic College: A Research Proposal. Internal Grant Proposal for Research Equipment. Submitted to the Research Department at New York Chiropractic College, February 10, 1997. Approved by the College Research Committee and funded, April, 1997, Continued funding approved July, 1998 and June, 2000.

Preparation of NYCC portion of a grant to fund a Science and Technology Center for the Study of Bone Biology. From January, 2000.

ANTHROPOLOGICAL FIELD EXPERIENCE:

Excavation and dental and demographic analyses of human skeletal remains recovered from the Gold Mine site (16RI13), Richland Parish, Louisiana, 1980.

Excavation of the Staas Site, Cuyahoga County, Ohio. In conjunction with the Cleveland Museum of Natural History, 1986 to 1987.

Field Supervisor, U.S. Army Anthropometric Survey. Headed a field team of 23 civilian and military personnel that collected biographical and height and weight data on over 25,000 U.S. Army personnel, and complete anthropometric data on nearly 9,000 individuals, July, 1987 to July, 1988.

HUMAN ANATOMICAL, OSTEOLOGICAL, AND HISTOLOGICAL LABORATORY EXPERIENCE:

Dental and paleodemographic analyses of human skeletal remains recovered from the Gold Mine site (16RI13), Richland Parish, Louisiana; University of Arkansas, 1979 to 1980.

Dental analysis of human skeletal remains recovered from the U.S. Army Corps of Engineers Tombigbee Waterway Project, Mississippi; University of Arkansas, 1980.

Morphological and metric examination and analysis of human skeletal material from the Libben collection, Kent State University, 1981 to present.

Morphological and histological examination and analysis of human skeletal material from the Hamann-Todd collection, Cleveland Museum of Natural History, 1981 to present.

Morphological and dental examination of pongid and other primate skeletal material from the Hamann-Todd collection, Cleveland Museum of Natural History, 1981 to present.

Statistical and morphometric analyses of human skeletal material recovered from the Carlston Annis site (BT-5), a Green River Archaic shell midden from Kentucky, Kent State University, 1982.

Comparative biomechanical analysis of fossil hominid limb bones from Arago, France, Kent State University, 1983.

Comparative biomechanical analysis of fossil hominid limb bones from Hadar, Ethiopia, Kent State University, 1983.

Preparation and analysis of undecalcified human cortical bone thin sections and photomicrographs, Kent State University, 1984-1987.

Morphological and histological examination and analysis of human skeletal material from anatomical specimens, Kent State University, 1984 to 1989.

Morphological examination of human skeletal remains in the University of Arkansas Museum, Fayetteville, Arkansas, 1985.

Instruction in calcified tissue thin-section techniques with Jerome C. Rose, Ph.D., University of Arkansas, 1985.

Preparation of prosections, Department of Anatomy, Northeast Ohio Universities College of Medicine, 1986 to 1987.

Teaching Assistant, Human Gross Anatomy and Embryology, Northeast Ohio Universities College of Medicine, Rootstown, Ohio, 1986 to 1987.

Course Coordinator, Histology for Dental Students, Northwestern University Medical School, Chicago, Illinois, September, 1990 to December, 1991.

Laboratory Instructor, Histology for Medical Students, Northwestern University Medical School, Chicago, Illinois, Spring, 1991.

Professor of Anatomy, Department of Basic Sciences, New York Chiropractic College, Seneca Falls, New York, from September 1, 1999. Associate Professor, from January, 1995 to August, 1999. Assistant Professor from January, 1992 to December, 1994.

Investigation of age related changes in histomorphology and mass of human cortical bone, Northwestern University Medical School, Chicago, Illinois, August, 1990 to December, 1991; and New York Chiropractic College, ongoing.

Preparation and analysis of human and nonhuman mammalian undecalcified cortical bone thin sections, New York Chiropractic College Anatomy Laboratory and Kent State University Biological Anthropology Laboratory, January, 1992 to present.

Preparation and analysis of human auditory ossicle bone thin sections, New York Chiropractic College Anatomy Laboratory, August, 2005 to present.

IDENTIFICATION OF AGE, SEX, AND RACE IN HUMAN SKELETAL REMAINS:

Development of multifactorial techniques for the assessment of sex and age at death in human skeletal remains, Kent State University, 1981 to 1984.

Forensic analyses of age, sex, and race in unidentified human remains, Kent State University, 1982 to 1987 (with C. Owen Lovejoy, Ph.D., Department of Anthropology, Kent State University).

Identification of skeletal age at death from undecalcified human cortical bone thin sections and photomicrographs, Kent State University, 1984 to 1987.

Forensic analyses of age, sex, and race in unidentified human remains, U.S. Army Natick Research, Development, and Engineering Center, for Worcester County, Massachusetts, Medical Examiner's Office, 1990 (with Anthony Falsetti, Ph.D., U.S. Army Natick Research, Development and Engineering Center).

Analysis of age-related changes in cortical bone histomorphometry and cortical bone mass, New York Chiropractic College, ongoing.

Forensic identification/differentiation of human and animal bone, Seneca County Sheriff's Department, Waterloo, New York, beginning April, 1999, including:

Identification of bone as nonhuman, probably bovine metapodial, April 14, 1999. Contact at Seneca County Sheriff's Office: Deputy Sheriff Robert M. Lahr.

ANTHROPOMETRY AND HUMAN ENGINEERING EXPERIENCE:

Research Anthropologist, U.S. Army Natick Research, Development, and Engineering Center, Natick, Massachusetts, July, 1987 to August, 1990.

Field Supervisor, U.S. Army Anthropometric Survey, July, 1987 to July, 1988.

Training in anthropometric techniques with Dr. Bruce Bradtmiller of Anthropology Research Project, Inc., Yellow Springs, Ohio, at the U.S. Army Natick Research, Development, and Engineering Center, Natick, Massachusetts, August, 1989.

Testing of fit and design criteria in U.S. Army personal clothing and protective equipment, U.S. Army Natick Research, Development, and Engineering Center, Natick, Massachusetts, August, 1988 to August, 1990.

Project Officer, Contract No. DAAK60-89-C-1001 *Anthropometric Regression Analysis and Bivariate Frequency Tables*, U.S. Army Natick Research, Development, and Engineering Center, Natick, Massachusetts, March, 1989 to March, 1990.

Project Officer, Contract No. DAAK60-86-C-0128 *Anthropometric Survey*, U.S. Army Natick Research, Development, and Engineering Center, Natick, Massachusetts, March, 1989 to October, 1989.

Project Manager, *Currency of U.S. Army Anthropometric Database*, U.S. Army Natick Research, Development, and Engineering Center, Natick, Massachusetts, March, 1989 to August, 1990.

Project Manager, *Gender and Racial Variation in U.S. Army Personnel*, U.S. Army Natick Research, Development, and Engineering Center, Natick, Massachusetts, October, 1989 to August, 1990.

MAMMALIAN COMPARATIVE ANATOMICAL, OSTEOLOGICAL, AND
HISTOLOGICAL LABORATORY EXPERIENCE:

Morphological and dental examination of pongid skeletal material from the Museum of Comparative Zoology and the Peabody Museum, Harvard University, 1984.

Morphological and dental examination of pongid skeletal material from the Smithsonian Institution, 1984-1986.

Curation of murine breeding colony, including Little (lt/lt) and Pygmy (pg/pg) strains of dwarf mice, Northwestern University Medical School, Chicago, Illinois, August, 1990 to December, 1991.

Preparations of undecalcified thin sections of murine long bone cross sections to assess effects of growth hormone on postcranial morphology, Northwestern University Medical School, Chicago, Illinois, August, 1990 to December, 1991.

Preparation of undecalcified thin sections of feline long bone cross sections to examine inter- and intrabone variation in histomorphology and histomorphometry within the mammalian appendicular skeleton, New York Chiropractic College, Seneca Falls, New York, from June, 1997.

Preparation of undecalcified thin sections of human long bone cross sections to examine inter- and intrabone variation in histomorphology and histomorphometry within the human and vertebrate appendicular skeleton, New York Chiropractic College, Seneca Falls, New York, from April, 1998.

Preparation of undecalcified thin sections of avian, mammalian and reptilian long bone cross sections to examine inter- and intrabone variation in histomorphology and histomorphometry within the vertebrate appendicular skeleton, New York Chiropractic College, Seneca Falls, New York, from June, 1998.

OTHER SCHOLARLY ACTIVITIES:

Member, Editorial Board, *The Open Anthropology Journal*, from January, 2008.

Review manuscripts for *Collegium Antropologicum*, Zagreb, Croatia.

Grant Reviewer, Consortium for Chiropractic Research, December, 1993 to date.

Grant Reviewer, National Science Foundation, January 1994 to date

Grant Reviewer, L.S.B. Leakey Foundation, January 1997 to date.

Abstract Reviewer, submissions of faculty papers for the 1998 Association of Chiropractic Colleges Educational Conference.

Chair, Poster Session: Skeletal Biology III. Annual Meeting of the American Association of Physical Anthropologists, Salt Lake City Utah, April 3, 1998.

Examination Writer, National Board Part I Basic Science Spinal Anatomy Test Committee, National Board of Chiropractic Examiners, Greeley, Colorado. April, 1998 to April, 2001.

Regional Coordinator, American Association of Clinical Anatomists, Survey of Graduate Anatomy Programs, Eastern North American Chiropractic Colleges. 1998.

Reviewer, The Head Neck, and Trunk, 6th Edition, by John H. Warfel, for Lippincott, Williams and Wilkins, June, 1999.

Abstract Reviewer, submissions of faculty papers for the 2000 Association of Chiropractic Colleges Educational Conference.

Abstract Reviewer, submissions of faculty papers for the 2004 Association of Chiropractic Colleges Educational Conference.

Paper Reviewer, submitted papers for the 2004 **Digital Human Modeling Symposium** organized by the Society of Automotive Engineers, January, 2004.

Member, American Anatomical Association's "Ask the Experts" panel, American Anatomical Association web site: <http://www.anatomy.org/i4a/faq/?pageid=509> . From January, 2004.

Review manuscripts for *Clinical Anatomy*, beginning June, 2004.

Paper Reviewer, submitted papers for the 2005 **Digital Human Modeling Symposium** organized by the Society of Automotive Engineers, March, 2005.

Abstract Reviewer, submissions of faculty papers for the 2006 Association of Chiropractic Colleges Educational Conference.

Principal author of proposal to the Office of Higher Education of New York Office of College and University Evaluation for an NYCC Master of Science in Clinical Anatomy, 2005-2006.

Review of chapter manuscript for in: **Sargis, EG, and Dagosto, M (eds.) (2008) Mammalian Evolutionary Morphology: A tribute to Eric S. Szalay, 385-426. Springer Science + Business Media B.V.**

Abstract Reviewer, submissions of faculty papers for the 2008 Association of Chiropractic Colleges Educational Conference.

WORKS IN PROGRESS:

Histomorphometric and macroscopic assessment of changes in cortical bone with age in relation to sex, parity, and nutritional status.

Sexual and Racial Variation in cortical thickness in the human postcranial skeleton.

Analysis of sexual, racial, and age-related variation in human skeletal morphology and proportions.

Histomorphological analysis of the human auditory ossicles (with T. M. Greiner).

Histomorphological variation within and among skeletal elements of individuals.

PUBLICATIONS:

Walker, R.A., and C.O. Lovejoy (1985) Radiographic Changes in the clavicle and proximal femur and their use in the determination of skeletal age at death. *American Journal of Physical Anthropology* 68:67-78.

Meindl, R.S., C.O. Lovejoy, R.P. Mensforth, and R.A. Walker (1985) A revised method of age determination using the os pubis, with a review and tests of accuracy of other methods of pubic symphyseal aging. *American Journal of Physical Anthropology* 68:29-45.

Gordon, C.C., T. Churchill, C.E. Clauser, B. Bradtmiller, J.T. McConville, I. Tebbetts, and R.A. Walker (1989) *1988 Anthropometric Survey of U.S. Army Personnel: Summary Statistics Interim Report*. U.S. Army Natick Research, Development and Engineering Center Technical Report NATICK/TR-89/027, Natick, Massachusetts.

Gordon, C.C., T. Churchill, C.E. Clauser, B. Bradtmiller, J.T. McConville, I. Tebbetts, and R.A. Walker (1989) *1988 Anthropometric Survey of U.S. Army Personnel: Methods and Summary Statistics*. U.S. Army Natick Research, Development and Engineering Center Technical Report NATICK/TR-89/044, Natick, Massachusetts.

Cheverud, J., C.C. Gordon, R.A. Walker, C. Jacquish, L. Kohn, A. Moore, and N. Yamashita (1990) *1988 Anthropometric Survey of U.S. Army Personnel: Bivariate Frequency Tables*. U.S. Army Natick Research, Development and Engineering Center Technical Report NATICK/TR-90/031, Natick, Massachusetts.

Cheverud, J., C.C. Gordon, R.A. Walker, C. Jacquish, L. Kohn, A. Moore, and N. Yamashita (1990) *1988 Anthropometric Survey of U.S. Army Personnel: Regression Equations and Correlation Coefficients. Part 1. Statistical Techniques, Landmark, and Measurement Definitions*. U.S. Army Natick Research, Development and Engineering Center Technical Report NATICK/TR-90/032, Natick, Massachusetts.

Cheverud, J., C.C. Gordon, R.A. Walker, C. Jacquish, L. Kohn, A. Moore, and N. Yamashita (1990) *1988 Anthropometric Survey of U.S. Army Personnel: Regression Equations and Correlation Coefficients. Part 2. Simple and Partial Correlation Tables-Male*. U.S. Army Natick Research, Development and Engineering Center Technical Report NATICK/TR-90/033, Natick, Massachusetts.

- Cheverud, J., C.C. Gordon, R.A. Walker, C. Jacquish, L. Kohn, A. Moore, and N. Yamashita (1990) *1988 Anthropometric Survey of U.S. Army Personnel: Regression Equations and Correlation Coefficients. Part 3. Simple and Partial Correlation Tables-Female*. U.S. Army Natick Research, Development and Engineering Center Technical Report NATICK/TR-90/034, Natick, Massachusetts.
- Cheverud, J., C.C. Gordon, R.A. Walker, C. Jacquish, L. Kohn, A. Moore, and N. Yamashita (1990) *1988 Anthropometric Survey of U.S. Army Personnel: Regression Equations and Correlation Coefficients. Part 4. Bivariate Regression Tables*. U.S. Army Natick Research, Development and Engineering Center Technical Report NATICK/TR-90/035, Natick, Massachusetts.
- Cheverud, J., C.C. Gordon, R.A. Walker, C. Jacquish, L. Kohn, A. Moore, and N. Yamashita (1990) *1988 Anthropometric Survey of U.S. Army Personnel: Regression Equations and Correlation Coefficients. Part 5. Stepwise and Standard Multiple Regression Tables*. U.S. Army Natick Research, Development and Engineering Center Technical Report NATICK/TR-90/036, Natick, Massachusetts.
- Walker, R.A. (1992) Review of: *Somatotyping: Development and Application*, by J.E. Lindsay Carter and Barbara Honeyman Heath. *American Anthropologist* 94: 245-246.
- Walker, R.A. (1993) The impact of racial variation on human engineering design criteria. In: *Race, Ethnicity, and Applied Bioanthropology*, NAPA Bulletin 13: 7-21. C.C. Gordon, ed., National Association for the Practice of Anthropology, American Anthropological Association.
- Walker, R.A., C.O. Lovejoy and R.S. Meindl (1994) The histomorphological and geometric properties of human femoral cortex in individuals over 50: Implications for histomorphological determination of age-at-death. *American Journal of Human Biology* 6: 659-667.
- Walker, R.A. (2000) Properties of the cortex of the midshaft femur: Variation in three human populations (2000) *Homo: Journal of Comparative Human Biology* 51: 180-199.
- Walker, R.A., C.O. Lovejoy, M.E. Bedford, and W. Yee (2002) *Skeletal and Developmental Anatomy for Students of Chiropractic*. F.A. Davis Company, Publishers, Philadelphia, PA.
- Greiner, T.M., M.E. Bedford, and R.A. Walker (2004) Variability in the human M. spinalis and cervicis: Frequencies and definitions. *Annals of Anatomy* 186: 185-191.
- Walker, R.A. and J.P. Grod, (2006) Functional Anatomy of the Lumbar Spine. In: Morris, CE (ed.) *Low Back Syndromes: Integrated Clinical Management*, pp. 19-62. McGraw-Hill Medical Publishing Division.
- Walker, R.A., C.O. Lovejoy, M.E. Bedford, and W. Yee (2007) *Skeletal and Developmental Anatomy, Second Edition*. Linus Publications, New York.

Walker, R.A., C.O. Lovejoy, R. Cordes (2009) Histomorphological Variation in the Appendicular Skeleton. *Open Anthropology Journal* 2: 1-35.

IN PREPARATION:

Walker, R.A. (n.d.) Variation in remodeling about the perimeter of the midshaft human femur. Manuscript to be submitted to *Open Anthropology Journal*.

PRESENTED PAPERS:

Walker, R.A. (1990) A new method of age determination from the histological structure of cortical bone with tests of previous methods. Paper presented at the 1990 Annual Meeting of the Northeastern Anthropological Association. Burlington, Vermont, March 29, 1990.

Walker, R.A. (1990) An assessment of histological age determination techniques. Paper presented at the 59th Annual Meeting of the American Association of Physical Anthropologists. Miami, Florida, April 7, 1990. (Abstract published in *American Journal of Physical Anthropology* 81: 313 [1990]).

Walker, R.A. (1991) Variation in femoral cortical thickness in three human populations. Paper presented at the 60th Annual Meeting of the American Association of Physical Anthropologists, Milwaukee, Wisconsin, April 4, 1991. (Abstract published in *American Journal of Physical Anthropology*, Supplement 12: 179 [1991]).

Walker, R.A. (1991) The impact of racial variation on human engineering design criteria. Paper presented at the 90th Annual Meeting of the American Anthropological Association, Chicago, Illinois, November 20, 1991, as a part of the symposium: *Race, Ethnicity, and Applied Bioanthropology*.

Walker, R.A. (1992) Human variation, cortical bone histology, and the determination of skeletal age at death. Paper presented at the 61st Annual Meeting of the American Association of Physical Anthropologists, Las Vegas, Nevada, April 3, 1992. (Abstract published in *American Journal of Physical Anthropology*, Supplement 14: 169 [1992]).

Walker, R.A. (1993) Relationship of cross-sectional biomechanical properties of cortical bone to histomorphology in white Americans over 50. Paper presented at the 62nd Annual Meeting of the American Association of Physical Anthropologists, Toronto, Ontario, April 15, 1993. (Abstract published in *American Journal of Physical Anthropology*, Supplement 16: 202 [1993]).

Walker, R.A. (1996) Remodeling and cross-sectional geometric properties of human femoral cortical bone. Paper presented at the 65th Annual Meeting of the American Association of Physical Anthropologists, Research Triangle Park, North Carolina, April 11, 1996. (Abstract published in *American Journal of Physical Anthropology*, Supplement 22: 237 [1996]).

- Walker, R.A. (1996) Analysis of bone mass, relative strength, and histomorphology in human femoral cortical bone: an overview. Part of the poster presentation "A multidisciplinary approach to solving problems related to bipedal human locomotion," by R. Bulbulian, D. Dishman, T. Greiner, V. Sciotti, and R. Walker, presented at the National Workshop to Develop the Chiropractic Research Agenda (funded by the U.S. Health Resources and Services Administration). Washington, D.C., July 12 to 14, 1996.
- Walker, R.A. (1997) Intraindividual variation in cortical thickness and histomorphology of the midshaft femur. Paper presented at the 66th Annual Meeting of the American Association of Physical Anthropologists, St. Louis, Missouri, April 3, 1997. (Abstract published in *American Journal of Physical Anthropology*, Supplement 24: 234 [1997]).
- Walker, R.A. (1998) A survey of remodeling in the mammalian skeleton: a pilot study. Paper presented at the 67th Annual Meeting of the American Association of Physical Anthropologists, Salt Lake City, Utah, April 2, 1998. (Abstract published in *American Journal of Physical Anthropology*, Supplement 26: 224-225 [1998]).
- Greiner, T.M., M.E. Bedford and R.A. Walker (1998) Variability in the human *m. spinalis capitis et cervicis*: Frequencies and definitions. Paper presented at the 67th Annual Meeting of the American Association of Physical Anthropologists, Salt Lake City, Utah, April, 1998. (Abstract published in *American Journal of Physical Anthropology*, Supplement 26: 88 [1998]).
- Walker, R.A. (1998) Intraindividual variation in mammalian appendicular skeletal histomorphology and cross-sectional geometry. Paper presented at the First Annual NYCC Research Symposium, May 22, 1998.
- Greiner, T.M., M.E. Bedford and R.A. Walker (1998) Variability in the Human M. Spinalis Capitis et Cervicis: Frequencies and Definitions. Paper presented at the First Annual NYCC Research Symposium, May 22, 1998.
- Philomin, R., C.T.S. Philomin, R. Schassburger, T.M. Greiner and R.A. Walker (1998) Abnormal Origin of the Right Subclavian Artery. Paper presented at the First Annual NYCC Research Symposium, May 22, 1998.
- Walker, R.A. (1999) Differential limb use and remodeling in the vertebrate skeleton. Paper presented at the Second Annual NYCC Research Symposium, February 27, 1999.
- Greiner, T.M. and R.A. Walker (1999) Preliminary Analysis of Morphometric Variation in the Human Auditory Ossicles. Paper presented at the Second Annual NYCC Research Symposium, February 27, 1999.
- Walker, R.A. and C.O. Lovejoy (1999) A survey of remodeling in the vertebrate skeleton, part II. Paper presented at the 68th Annual Meeting of the American Association of Physical Anthropologists, Columbus, Ohio, April 29, 1999. (Abstract published in *American Journal of Physical Anthropology*, Supplement 28: 272 [1999]).

- Greiner, T.M. and R.A. Walker (1999) Morphometric Variation of the Human Auditory Ossicles. Paper presented at the 68th Annual Meeting of the American Association of Physical Anthropologists, San Columbus, Ohio, April 29, 1999. (Abstract published in *American Journal of Physical Anthropology*, Supplement 28: 140 [1999]).
- Walker, R.A. (2000) Variation in properties of the cortex of the midshaft femur in three human populations. Paper presented at the Third Annual NYCC Research Symposium, February 17, 2000.
- Rosenman, B. and R.A. Walker (2000) Morphology of the Australopithecine Glenohumeral Joint. Paper presented at the 69th Annual Meeting of the American Association of Physical Anthropologists, San Antonio, Texas, April, 2000. (Abstract published in *American Journal of Physical Anthropology*, Supplement 30: 265 [2000].)
- Walker, R.A., N. Mitlansky and C.O. Lovejoy (2001) Remodeling in the vertebrate skeleton: Variation in percentage haversian bone. Paper presented at the Fourth Annual New York Chiropractic College Research Symposium, January 30, 2001.
- Walker, R.A., N. Mitlansky and C.O. Lovejoy (2001) A survey of remodeling in the vertebrate skeleton, part III. Variation in percentage haversian bone. Paper presented at the 2001 Annual Meeting of the American Association of Physical Anthropologists, Kansas City, Missouri, March 29, 2001. (Abstract published in *American Journal of Physical Anthropology*, Supplement 32: 158 [2001].)
- Walker, R.A., N. Mitlyansky (2003) Variation in remodeling about the perimeter of the midshaft human femur. Paper presented at the Fourth Annual New York Chiropractic College Research Symposium, February 5, 2003.
- Walker, R.A. and N. Mitlyansky (2003) Variation in remodeling about the perimeter of the midshaft human femur. Paper presented at the 2003 Annual Meeting of the American Association of Physical Anthropologists, Tempe, Arizona, April 26, 2003. (Abstract published in *American Journal of Physical Anthropology*, Supplement 36: 218 [2003].)
- Greco, D.S., J. Young, and R.A. Walker (2005) Cadaveric and Histological Evaluation of Hip Arthroplasty. Paper presented at the Sixth Annual New York Chiropractic College Research Symposium, January 27, 2005.
- Walker, R.A., T.M. Greiner, R. Cordes (2006) Histomorphological variation in human auditory ossicles. Paper presented at the Seventh Annual New York Chiropractic College Research Symposium, January 26, 2006.
- Walker, R.A., T.M. Greiner, R. Cordes (2006) Histomorphological variation in human auditory ossicles. Paper presented at the American Association of Physical Anthropologists Annual Meeting, Fairbanks, Alaska, March 10, 2006. (Abstract published in *American Journal of Physical Anthropology*, Supplement 42: 183-184 [2006].)

Walker, R.A., C.O. Lovejoy, R. Cordes (2007) Histomorphological Variation in the Human Appendicular Skeleton. Paper presented at the Eighth Annual New York Chiropractic College Research Symposium, January 25, 2007.

Walker, R.A., C.O. Lovejoy, R. Cordes (2007) Histomorphological Variation in the Human Appendicular Skeleton. Paper presented at the American Association of Physical Anthropologists Annual Meeting, Philadelphia, PA, March 29, 2007. (Abstract published in *American Journal of Physical Anthropology*, Supplement 44: 241-242 [2007].)

Walker, R.A., C.O. Lovejoy, R. Cordes (2008) **Remodeling variation in human skeletal elements.** Paper presented at the Ninth Annual New York Chiropractic College Research Symposium, January 24, 2008.

Walker, R.A., C.O. Lovejoy, R. Cordes (2008) **Remodeling variation in human skeletal elements.** Paper presented at the American Association of Physical Anthropologists Annual Meeting, Columbus, Ohio, April 11, 2008. (Abstract published in *American Journal of Physical Anthropology*, Supplement 46: 216 [2008].)

Walker, R.A., C.O. Lovejoy, R. Cordes (2009) Histomorphological Variation in the Appendicular Skeleton Paper presented at the Tenth Annual New York Chiropractic College Research Symposium, January 29, 2009.

INVITED PRESENTED PAPER:

Walker, R.A. and T.M. Greiner (2000) Bone Histomorphometric Correlates of Biomechanics, Limb Use Patterns, and Bone Function. Invited paper presented at the 2000 Annual Meeting of the American Association of Physical Anthropologists as a part of the "Current and Future Applications of Bone Histology to Biological Anthropology" symposium. (Abstract published in *American Journal of Physical Anthropology*, Supplement 30: 313 [2000].)

INVITED LECTURES (no published abstracts):

Human femoral anatomy and bipedal locomotion. Los Angeles College of Chiropractic, Los Angeles, California, July 11, 1991.

Geographic and biological variation in the cross-sectional properties of human bone. Department of Cell, Molecular, and Structural Biology, Northwestern University Medical School, Chicago, Illinois, November 20, 1991.

Variation in cortical thickness and histomorphology of the human femur. Research Department Presentation, New York Chiropractic College, May 20, 1997.

Human cortical bone: Variations in populations and age groups in cross sectional morphology and histomorphology. Keuka College, Keuka Park, New York, November 30, 2001.

COMMUNITY SERVICE PRESENTATIONS:

Gross anatomy presentation to North Seneca Emergency Medical Technicians, New York Chiropractic College, June 21, 1995.

Gross anatomy presentation to North Seneca Emergency Medical Technicians, New York Chiropractic College, July 19, 1995.

Gross anatomy presentation to Hobart and William Smith Colleges kinesiology students, New York Chiropractic College, February 1, 1996.

Gross anatomy presentation to Finger Lakes School of Massage students, New York Chiropractic College, Spring, 1996.

Applied Osteology in Biological Anthropological Research, Public Presentation, New York Chiropractic College, June 14, 1996.

Gross anatomy presentation to Finger Lakes School of Massage students, New York Chiropractic College, July 26, 1996.

Gross anatomy presentation to Hobart and William Smith Colleges kinesiology students, New York Chiropractic College, November 22, 1996.

Participant, Faculty Development Seminar: "Effective Teaching: A Panel Discussion by the 1996 Nominees for Faculty of the Year." January 28, 1997, New York Chiropractic College.

Gross anatomy presentation to Finger Lakes School of Massage students, New York Chiropractic College, March 14, 1997.

Gross anatomy presentation to Finger Lakes School of Massage students, New York Chiropractic College, March 21, 1997.

Gross anatomy presentation for Bodyworks Massage, 115 North Main Street, North Syracuse, New York, August 15, 1997.

Gross anatomy presentation to Finger Lakes School of Massage students, New York Chiropractic College, September 12, 1997.

Gross anatomy presentations to Keuka College Occupational Therapy Students, New York Chiropractic College, October 21, 22, 1997.

Gross anatomy presentation to Hobart and William Smith Colleges kinesiology students, New York Chiropractic College, October 24, 1997.

Gross anatomy presentation to Finger Lakes School of Massage students, New York Chiropractic College, February 27, 1998.

Gross anatomy presentations to Finger Lakes Community College Paramedic Training Program, New York Chiropractic College, April 9 and 16, 1998.

Gross anatomy presentation to Finger Lakes School of Massage students, New York Chiropractic College, September 11, 1998.

Gross anatomy presentations to Keuka College Occupational Therapy Students, New York Chiropractic College, October 27, 28, 1998.

Gross anatomy presentations to Finger Lakes Community College Paramedic Training Program, New York Chiropractic College, March 1, 11 and 22, 1999.

Gross anatomy presentations to Keuka College Occupational Therapy Students, New York Chiropractic College, October 19, 20, 1999.

Gross anatomy presentation to Finger Lakes Community College Paramedic Training Program, New York Chiropractic College, November 5, 1999.

Gross anatomy presentation to Hobart and William Smith Colleges kinesiology students, New York Chiropractic College, November 9, 1999.

Gross anatomy presentation to Wells College students, New York Chiropractic College, January 24, 2000.

Gross anatomy presentation to Finger Lakes School of Massage students, New York Chiropractic College, February 11, 2000.

Gross anatomy presentation to Finger Lakes School of Massage students, New York Chiropractic College, February 25, 2000.

Gross anatomy presentations to Finger Lakes Community College Paramedic Training Program, New York Chiropractic College, February 28, March 9, March 20, 2000.

With Chris Sheldon: *Committee on Faculty Promotions and the Promotion Process*. Faculty Development Seminar presented to the NYCC Faculty. June 20, 2000.

Gross anatomy presentations to Keuka College Occupational Therapy Students, New York Chiropractic College, October 23, 24, 2000.

Gross anatomy presentation to the Perinton, New York Concert Band, New York Chiropractic College, December 8, 2000.

With N. Vijayashankar: Gross anatomy presentations to Finger Lakes Community College Paramedic Training Program, New York Chiropractic College, January 29, 2001.

Gross anatomy presentations to Finger Lakes Community College Paramedic Training Program, New York Chiropractic College, February 26 and March 1, 2001.

Gross anatomy presentations to Nazareth College Premed Students, New York Chiropractic College, March 4, 2001.

Gross anatomy presentations to New Visions High School Students, New York Chiropractic College, May 23, 2001.

Gross anatomy presentations to Keuka College Occupational Therapy Students, New York Chiropractic College, October 23, 24, 2001.

Gross anatomy presentation to Finger Lakes Community College Paramedic Training Program, New York Chiropractic College, November 26, 2001.

Gross anatomy presentation to Nazareth College Premed Students, New York Chiropractic College, February 9, 2002.

Gross anatomy presentation to Mexico Academy, Mexico, New York, High School students, New York Chiropractic College, February 9, 2002.

Gross anatomy presentation to Nurse's Aid students, Mexico Academy, Mexico, New York, New York Chiropractic College, March 15, 2002.

Gross anatomy presentations to New Visions High School Students, New York Chiropractic College, May 29, 2002.

Gross anatomy presentations to Keuka College Occupational Therapy Students, New York Chiropractic College, October 23, 2002.

Gross anatomy presentations to Finger Lakes Community College Paramedic Training Program, New York Chiropractic College, November 25, 2002.

Gross anatomy presentations to Finger Lakes Community College Paramedic Training Program, New York Chiropractic College, February 20 and 24, 2003.

Gross anatomy presentations to Keuka College Occupational Therapy Students, New York Chiropractic College, April 1, 2003.

Gross anatomy presentations to Onandago School of Massage Students, New York Chiropractic College, May 3, 2003.

Gross anatomy presentations to Finger Lakes Community College Paramedic Training Program, New York Chiropractic College, November 19, 2003.

Gross anatomy presentations to Finger Lakes Community College Paramedic Training Program, New York Chiropractic College, February 23 and 26, 2004.

Gross anatomy presentations to Keuka College Occupational Therapy Students, New York Chiropractic College, March 23, 2004.

Gross anatomy presentations to Perinton Concert Band, New York Chiropractic College, April 2, 2004.

Gross anatomy presentation to SUNY Oswego Anatomy and Physiology Students, New York Chiropractic College, May 11, 2004.

Gross anatomy presentation to Finger Lakes Community College Paramedic Training Program, New York Chiropractic College, February 21, 2005.

Gross anatomy presentation to Finger Lakes Community College Paramedic Training Program, New York Chiropractic College, February 24, 2005.

“Bring Your Kids to Work” tour of anatomy with presentation. New York Chiropractic College, April 21, 2005.

Gross anatomy presentations to Keuka College Occupational Therapy Students, New York Chiropractic College, April, 2005.

Gross anatomy presentation to Finger Lakes Community College Paramedic Training Program, New York Chiropractic College, November 21, 2005.

Gross anatomy presentation to South Seneca High School biology students, New York Chiropractic College, December 13, 2005.

Gross anatomy presentations to Finger Lakes Community College Paramedic Training Program, New York Chiropractic College, February 20 and 23, 2006.

Gross anatomy presentations to Keuka College Occupational Therapy Students, New York Chiropractic College, April 10, 2006.

Gross anatomy presentation to Finger Lakes Community College Paramedic Training Program, New York Chiropractic College, November 20, 2006.

Gross anatomy presentation to South Seneca High School biology students, New York Chiropractic College, December 14, 2006.

Gross anatomy presentation to Finger Lakes Community College Paramedic Training Program, New York Chiropractic College, February 19 and 21, 2007.

Gross anatomy presentations to Keuka College Occupational Therapy Students, New York Chiropractic College, April 4, 2007.

Gross anatomy presentation to Finger Lakes Community College Paramedic Training Program, New York Chiropractic College, February 18 and 21, 2008.

Gross anatomy presentations to Keuka College Occupational Therapy Students, New York Chiropractic College, April 2, 2008.

Gross anatomy presentation to Finger Lakes Community College Paramedic Training Program, New York Chiropractic College, February 16 and 19, 2009.

Gross anatomy presentations to Keuka College Occupational Therapy Students, New York Chiropractic College, March 31, 2009.

“Bring Your Kids to Work” tour of anatomy with presentation. New York Chiropractic College, April 23, 2009.

OTHER COMMUNITY SERVICE ACTIVITIES:

Local High School Student Intern:

Crystal Straight, Romulus Central School Senior Project, November 17, 1998.

Local College Student Intern:

Bart Hayes, Keuka College. Intern for week of January 25, 1999. Students shadowed me for a week to observe teaching and counseling of students.

Chistian Gutierrez, Keuka College. Intern for month of January, 2004. Student worked in the gross anatomy lab, observing laboratory sessions with the students in the D.C. program, and assisting the laboratory technician, Carl Jagos, with his work