

CURRICULUM VITAE

Name: Maria S. Cole

Address: Department of Institutional Effectiveness and Accreditation
Kansas City University of Medicine & Biosciences
1750 Independence Blvd.
Kansas City, MO 64106-1453

Current Position:

Executive Director of Academic & Institutional Research (October 2008 – present)
Associate Professor, Anatomy
Kansas City University of Medicine & Biosciences
College of Osteopathic Medicine
Kansas City, MO 64124-2395

Previous positions:

Interim Director of Institutional Effectiveness (March 2011-September 2012)
Accreditation Liaison Officer (March 2011-September 2012)

Education:

- 1985 Bachelor of Arts, Summa Cum Laude (College Scholars)
University of Tennessee, Knoxville
- 1986 Department of Anthropology, State University of
New York at Binghamton, transferred to:
- 1997 Department of Anatomical Sciences
PhD, State University of New York at Stony Brook
- 2005 Harvard Macy Institute (Fellow)
- 2012 - Masters in Medical Education Leadership, University of New
England, predicted graduation May 2014

Research Interests:

Related to medical education and institutional research: use of educational technology in medical education; peer review of teaching; assessment and outcomes, use of human patient simulators in medical education, and use of team teaching and other innovative methodologies as part of our integrated curriculum

Professional Affiliations:

Missouri Equality Award consultant evaluator, 2009-present

Academic Quality Improvement Program (AQIP)/Commissions on Institutions of Higher Education of the North Central Association of Colleges and Schools, Consultant/Evaluator, 2010-Present

Program to Evaluate and Advance Quality (PEAQ)/Commissions on Institutions of Higher Education of the North Central Association of Colleges and Schools, Consultant/Evaluator, 2010-Present

Commission on Osteopathic College Accreditation (COCA), Consultant/Evaluator, 2012-present

Women Executives in Science and Healthcare, 2009-present

American Osteopathic Association, 1997 - present

American Association of Colleges of Osteopathic Medicine, 1997 - present

Central Group on Education Affairs (AAMC, 2000 - present

Association of Institutional Research 2010- present

Missouri Association of Osteopathic Physicians & Surgeons, 1997 - present

American Association of Anatomists, 1997 - present

International Association of Medical Science Educators, 1997 - present

Invited Reviewer:

Journal of the American Osteopathic Association

Journal of Human Evolution

Journal of Oral Rehabilitation

Teaching Experience:

1985-1986 Teaching assistant, Department of Anthropology State University of New York at Binghamton

1987 Instructor in Human Microscopic Anatomy, Department of Anatomical Sciences, SUNY-Stony Brook

1988-1991 Instructor in Human Gross Anatomy, Department of Anatomical Sciences, SUNY-Stony Brook

- 1992-1993 Lecturer in Human Gross Anatomy, Department of Surgery, School of Medicine Yale University
- 1995 Instructor in Human Anatomy, Histology and Physiology, Catonsville Community College, Catonsville, Maryland
- 1996-1997 Instructor in Human Anatomy, Histology and Physiology, Baltimore Community College, Baltimore, MD
- 1996-1997 Instructor in Human Gross Anatomy, School of Medicine, Howard University
- 1996-1997 Instructor in General Anatomical Sciences, School of Dental Medicine, Howard University
- 1996-1997 Instructor in Musculoskeletal Anatomy, School of Allied Health, Howard University
- 1996-1997 Instructor in Basic Human Anatomy, School of Allied Health, Howard University
- 1997 - 1999 Assistant Professor of Anatomy, teaching in Cell Biology, Gross Anatomy, and co-coordinator of Histology, UHS-COM
- 1997-1998 Lecturer, Department of Basic Medical Sciences, UMKC School of Medicine
- 2000 Assistant Professor of Anatomy, Section Director, Foundations of Medicine, UHS-COM
- 2001-2007 Assistant/Associate Professor of Anatomy, Section Director, Reproductive, KCUMB-COM
- 2004-2006 Associate Professor of Anatomy, lecturer KCUMB Summer Learning Enhancement Program
- 2006 Course director, Human Gross Anatomy, College of Biosciences, KCUMB
- 2006-present Lecturer, Department of Basic Medical Sciences, UMKC School of Medicine, Neuroscience section
- 2007 - 2009 Associate Professor of Anatomy, Section Director, Renal, KCUMB-COM
- 2010- present Introduction to Statistics (elective)
Dysmorphology (elective)
- 2011 - 2013 Director of Embryology, Human Structure Function I-IV, Department of Basic Medical Sciences, UMKC School of Medicine

Professional Service:

- 1990-1992 Editorial assistant, Journal of Human Evolution
- 1991-1992 Forensic consultant, Suffolk County Medical Examiner
- 1999 Consultant, Americas Magazine
- 2005 – 2006 Item writer for National Board of Osteopathic Medical Examiners
- 2005- present Reviewer, Scholarship in Teaching Awards Program, Case Western Reserve University
- 2007- present Reviewer KCUMB Intramural grant proposals
- 2007- present Peer reviewer AACOM
- 2007- present Peer reviewer CGEA
- 2008 – present Missouri Quality Award examiner
- 2009–present AQIP and PEAQ reviewer for Higher Learning Commission – North Central Association
- 2010-present KCUMB Core Competency liaison for AACOM
- 2011- present Reviewer, Frontiers Pilot & Collaborative Studies Program, University of Kansas Medical Center
- 2011- present Commission on Osteopathic College Accrediation, consultant evaluator

Field Experience:

- 1984 -1985 Laboratory preparation of archeological materials from the Columbia Reservoir Project, University of Tennessee
- 1988 Field crewmember, Stony Brook Paleontology Expedition, Crazy Mountains Basin, Montana
- 1994-1995 Department of Anthropology, United States National Museum

Honors and Awards:

- 1981 Fredrick H. Bonham Scholarship, University of Tennessee
- 1981-1985 Andrew D. Holt Scholarship, University of Tennessee

- 1986-1988 Graduate Council Fellowship, SUNY - Stony Brook
- 1990-1991 Graduate Student Organization Award for Excellence in Teaching, SUNY - Stony Brook
- 1991 President's Award for Excellence in Teaching
- 1993-94 Predoctoral Fellowship, Division of Mammals United States National Museum
- 2003 UHS-COM Faculty publication award, with Dr. David L. McWhorter (Forester JP, McWhorter DL and MS Cole. The Relationship Between Undergraduate Curriculum and Medical Student Performance in Gross Anatomy and Histology. J. Clinical Anat., 15: 160-164).
- 2004 UHS-COM 11th Annual Research Day award for faculty poster presentation (Cole, MS and TM Cole III. Craniofacial Morphology in Human Progeroid Syndrome).
- 2004 Harvard-Macy Program for Health Science Educators
- 2004 Missouri Governor's Award for Excellence in Teaching

Research Funding:

- 1986-1987 Department of Anatomical Sciences Research and Travel Award, SUNY Stony Brook
- 1991
- 1987-1988 Graduate Student Organization Travel Grant, SUNY - Stony Brook
- 1990
- 1990 Sigma XI Travel Grant, SUNY - Stony Brook
- 1990 Sigma Xi Grant-in-Aid of Research
- 1991 Theodore Roosevelt Memorial Fund Research Award, American Museum of Natural History
- 1991 Thomas J. Dee Fund Research Award, Field Museum of Natural History
- 1991 Collection Study Grant, United States National Museum
- 1991 National Science Foundation Dissertation Improvement Grant
- 1993 Predoctoral Fellowship, United States National Museum.

- 1994 Nebraska State Historical Society - Quantitative Morphological Analysis of Central Plains Skeletal Material
- 1994 United States National Museum of Natural History - Collections Studies Improvement Grant for Examination of Central Plains Skeletal Samples and Development of a Comprehensive Data Base (with D. Owsley)
- 1995 Panhandle Plains Historical Society - Investigation and Tribal Identification of Human Skeletal Remains (with D. Owsley)
- 1996 United States National Museum of Natural History - Collections Studies Improvement Grant for Analysis of Southern Plains Skeletal Material (with D. Owsley)
- 2000-03 Collaborator (NSF ITR-BCS0219194), Portable Laboratory for High-Resolution Digital Imaging of Craniofacial Structures awarded to T.M. Cole, Ph.D. and C. Rinaldi, Ph.D., University of Missouri- Kansas City.
- 2006-2007 Preproposal for Capacity Building Research Equipment: Mobile 3-Dimensional Imaging Laboratory using NextEngine's Desktop 3D Scanner and Solid Works (with K Wright) to Missouri Office of Economic Development. *Not funded*
- 2006-2007 Preproposal for Research Equipment: MPA – Multipurpose Near Infrared Spectrometer (with B Wright and K Wright) to Missouri Office of Economic Development. *Not funded*
- 2008 “Beyond Depression” Kansas Care Foundation of Greater Kansas City, May 2008, \$50,000 funded to Wohlford-Wessels, M.P., (M Cole , Project manager).
- 2009 “Beyond Depression, Phase II” Kansas Care Foundation of Greater Kansas City, *Submitted March 2009, \$60,000*

KCUMB College of Bioscience Thesis Committees:

- 2006 *Infertility and the Role of NK Cells*. Nicole Harris. Committee member
- 2006 *Craniosynostosis: Crouzon and Pfeffier Syndromes, Treatment and Research*. Ashley Koon. Committee chair.
- 2007 *The Association between Maternal Diet and Anencephaly*. Rachel Whitehead. Committee member.
- 2008 *The Early Detection and Treatment of Cleft Lip and Palate*. Jennifer Krangle. Committee chair.

2008 *A Comparative Study on the Use of the Gonadotropin-Releasing Hormone Agonists, Buserelin and Deslorelin, for Ovulation Induction and Gestation in Non-Human Primates*. Hillary Adams. Committee member.

Publications (abstracts):

- 1988 Cole, TM, AB Falsetti, and MS Harrill. Relationships between body size and dental, cranial, and postcranial variables in saddle-backed tamarins. *Amer. J. Phys. Anthrop.* 75(2): 197.
- 1988 Harrill, MS and N Creel. The ambiguity of phylogeny estimates. *Amer. J. Phys. Anthrop.* 75(2): 220.
- 1988 Cole, MS, FE Grine, WL Jungers, and M Cluver. Relative growth of the skull in *Lystrosaurus*. *J. Vert. Paleo.* 8: 12A.
- 1990 Cole, MS and WL Jungers. Scaling of long bone shape in Old World Monkeys. *Amer. J. Phys. Anthrop.* 81: 206.
- 1990 Cole, MS. Patterns of cortical bone density in the distal limb segments of ungulates. *Am. Soc. Mammal. Prog.* 70: 8.
- 1990 Relative joint size scaling in *Chalicotheres* and its implications for habitual feeding postures. *J. Vert. Paleo.* 10: 19A.
- 1991 Jungers, WL and MS Cole. Relative growth and shape of the locomotor skeleton in lesser apes. *Amer. J. Phys. Anthrop.* 82: 101 (Suppl. 12).
- 1992 Postcranial scaling in the extant and fossil *Ceratomorpha*. *J. Vert. Paleo.* 12: 31A.
- 1993 Locomotor adaptations in the *Ceratomorpha*: The allometry of muscle mechanical advantage and athletic capability. *J. Vert. Paleo.* 13: 31A.
- 1993 Cole, TM and MS Cole. Regression-specific interpretations in analysis of biomechanical scaling. *Amer. J. Phys. Anthropol.* 84: 72 (Suppl. 16).
- 1994 Mechanical advantage in the *Ceratomorpha*. *Abst. J. Mammal.* 74: 21.
- 1997 Articular morphology in the *Ceratomorpha* and its relationship to habitat. *J. Vert. Paleo.* 17: 89A.
- 1998 Cole, MS and DP Domning. Locomotor and postional adaptations in the desmostylid genera *Desmostylus* and *Paleoparadoxia*. *J. Vert. Paleo.* 18(3): 35A
- 1999 Cole MS and DL McWhorter. The Effects of Undergraduate Curriculum on Medical Student performance. *Suppl. J. Clinical Anatomy*, 35.

- 2003 Cole, MS and TM Cole III. Craniofacial Morphology in Human Progeroid Syndrome. Poster presentation, 2nd Annual Kansas City Life Sciences Research Day, 27 March 2003, p.52.
- 2004 Cole, MS, Cole, TM and J Richtsmeier, Craniofacial Dymorphology in Wiedemann-Rautenstrauch Syndrome. Journal of the American Cleft Palate Craniofacial Association, 61: 89.
- 2012 Cole, TM, Cole, MS and DL. Cunningham, Exploratory multivariate analysis of shape in commingled fossil assemblages. J. Physical Anthro., submitted.

Theses & Publications (articles):

- 1985 Harrill, MS. An Analysis of Metric Trends in the Supraorbital Region of Upper Pleistocene European Hominids. Unpublished Bachelor Honors thesis. University of Tennessee, Knoxville.
- 1989 Smith, FH, JF Simek, and MS Harrill. Geographic variation in supraorbital torus reduction during the Late Pleistocene (c 80,000 - 15,000 BP). In P. Mellars and CB Stringer (Eds.): The Human Revolution: Behavioral and Biological Perspectives on the Origin of Modern Humans, pp. 172-193. Edinburgh: Edinburgh University Press.
- 1992 Jungers, WL and MS Cole. Relative growth and shape of the locomotor skeleton in lesser apes. J. Hum. Evol. 23: 93-105.
- 1994 Cole, MS and TM Cole, III. Metric variation in the supraorbital region in Northern Plains Indians. In DW Owsley and RL Jantz (Eds.): Skeletal Biology of Great Plains Indians. Washington, DC: Smithsonian University Press, pp. 209-217.
- 1997 Cole, MS. Locomotor Adaptations in the Ceratomorpha: The Effects of Body Size, Phylogeny, and Ecology. PhD dissertation. State University of New York at Stony Brook.
- 1998 Jungers, WL, Burr, DB and MS Cole. Body size and scaling of long bone geometry, bone strength, and positional behavior in cercopithecoid primates. In E Strasser (Ed.): Primate Locomotion, New York: Plenum Press.
- 2001 Forester JP, McWhorter DL and MS Cole. The Relationship Between Undergraduate Curriculum and Medical Student Performance in Gross Anatomy and Histology. J. Clinical Anat., 15: 160-164.
- 2003 Forester JP, McWhorter DL and MS Cole. Introducing Critical Appraisal of Biomedical Literature to First-Year Medical Students in Histology. Journal of the International Association of Medical Science Educators (JIAMSE), June 2003.

Manuscripts submitted for publication:

*JA Wasserman, J Fitzgerald, M Sunny, MA, M Cole, RR. Suminski, and J Dougherty,
Performance Enhancing Drug Use among Medical Students,*

Symposium and Invited Lecture Participation:

- 1989 Skeletal Biology of the Great Plains, Smithsonian Institution, Washington, DC.
- 1991 Ontogenetic Perspectives on Primate Evolutionary Biology, 60th Annual Meeting of American Association of Physical Anthropologists.
- 1992 Comparative Methods of Size Correction in Analyses of Postcranial Scaling: The Indriidae. State University of New York at Stony Brook Morphometrics Seminar Series.
- 1993 Locomotor Adaptations of the Ceratomorpha: Implications for Skeletal Design in Large Terrestrial Vertebrates. Ohio State University Department of Biology Invited Lecture.
- 1993 Paleobiology and Skeletal Design in Chalicotheres (Mammalia: Perissodactyla). Yale University Vertebrate Zoology Seminar Series.
- 1993 Natural History of the Proboscidea. State University of New York at Stony Brook, Lectures in Paleobiology.
- 1994 Postcranial Scaling in the Proboscidea: Structural Design in Large Terrestrial Vertebrates. Vertebrate Zoology Seminar Series, Unites States Museum of Natural History.
- 1997 Locomotor Adaptations of Large Terrestrial Vertebrates. The Johns Hopkins University Department of Cell Biology and Anatomy. Invited Lecture.
- 1998 Embryology and Organization of the Abdomenopelvic Cavity. University of Missouri- Kansas City, Department of Basic Medical Sciences.
- 1998 Vasculature and Innveration of the Gastrointestinal System. University of Missouri-Kansas City, Department of Basic Medical Sciences.
- 1999 Desmostylian Locomotor Adaptations - A Multivariate Analysis. Joint conference on Science and Research, Smithsonian Institution (with D. Domning)
- 1999 Locomotor and positional adaptations in the desmostylid genera Desmostylus and Paleoparadoxia. UHS-COM Research Symposium. Poster presentation.
- 1999 The Relationship Between Undergraduate Curriculum and Medical Student Performance in Gross Anatomy and Histology (with D. McWhorter). 16th Annual Scientific Session of American Association of Clinical Anatomists, Iowa City, Iowa. Poster presentation.

- 1999 General Patterns of Structural Design in Ungulates. 35th Annual North American Moose Conference, Grand Portage, Minnesota. Invited Presentation.
- 2000 Methods for Quantifying Skull Form in North American Moose (*Alces alces*), (with TM Cole III). 36th Annual North American Moose Conference, Whitehorse, Yukon. Poster presentation.
- 2000 Introducing Critical Appraisal of Biomedical Literature to First-Year Medical Students in Histology. 17th Annual American Association of Clinical Anatomists, Cambridge, England. Poster presentation.
- 2001 Effects of Body Size and Habitat on the Postcranial Skeleton of North American Moose (*Alces alces*). 37th Annual North American Moose Conference, Sugarloaf, Maine.
- 2001 Methods for Quantifying Skull Form in North American Moose (*Alces alces*), (with TM Cole III). 9th Annual UHS-Com Research Symposium.
- 2002 Craniofacial Morphology in Human Progeroid Syndrome (with TM Cole III). 10th Annual UHS-COM Research Symposium.
- 2002 Effects of Body Size and Habitat on the Postcranial Skeleton of North American Moose (*Alces alces*). 10th Annual UHS-COM Research Symposium. Poster presentation.
- 2002 Introducing Critical Appraisal of Biomedical Literature to First-Year Medical Students in Histology (with D McWhorter). 10th Annual UHS-COM Research Symposium. Poster Presentation.
- 2002 Human Progeroid Syndromes: A Review and Case Study. UHS-COM Grand Rounds. Invited presentation.
- 2003 Cole, MS and TM Cole III. Craniofacial Morphology in Human Progeroid Syndrome. Poster presentation, 2nd Annual Kansas City Life Sciences Research Day.
- 2004 Cole, MS and TM Cole III. Craniofacial Morphology in Human Progeroid Syndrome. 11th Annual UHS-COM Research Symposium, Poster presentation.
- 2004 Development of the Head & Neck and Common Craniofacial Anomalies. Embryology Board Review, Class of 2006, UHS-COM
- 2005 Development of an Interactive Tutorial on Fetal Monitoring. Poster presentation, Harvard Macy Program for Physician Educators. May 2005.
- 2005 Basic Sciences of Human Stem Cell research (with M Dudgeon). KCUMB Professionalism/Bioethics invited lecture.

- 2007 Breast Cancer, Personal Reflections on Family Experience. Invited participant and speaker, KCUMB Breast Cancer Awareness Week.
- 2007 Team teaching (with D Karius). KCUMB Faculty retreat. August 2007.
- 2008 The Science, Background and Ethical Issues of Human Embryonic Stem Cells (with R Randolph). KCUMB Bioethics program.
- 2008 Enhancing Institutional Performance through Effective Talent Management – Identifying and Mentoring Faculty Leadership (with MP Wohlford-Wessels & A Karty) presented at AACOM & AODME Annual Meeting, St. Louis, Missouri 9 April 2008.
<http://www.aacom.org/events/annualmtg/past/2008/programs/Pages/default.aspx>
- 2012 What We Learned During Development and Implementation of a Community Preceptor Faculty Development Program. Parrott S and M Cole, STFM Conference on Medical Student Education, February 2012.
- 2013 Exploratory multivariate analysis of shape in commingled fossil assemblages. Cole, T, Cole M and D Cunningham. Concepts and Realities – Humans in Time and Space: Papers in Honor of Fred Hines Smith. Invited Poster Symposium. American Assoc. Phys. Anthropologists Annual Meeting, April 2013.

University Committees and Service:

- 2012 HLC Steering Committee (vice chair)
- 2012 HLC Criterion Four: Teaching and Learning Committee (chair)
- 2012 HLC Criterion Two: Integrity Committee
- 2012 HLC Criterion Five: Resources, Planning, and Institutional Effectiveness
- 2011 COCA Self-Study Committee (Chair)
- Rank and Promotion Committee Chair, 2013 –
 Curriculum Delivery Task Force 2012-
 Graduate Programs Task Force 2012-2013
 Promotion and Graduation Committee 2010- 2013
 Student Outcomes and Assessment Committee 2011 (Chair)
 Honors and Awards Committee, 2001-2011, Chair, 2002 – 2008
 Student D.O. of the Year Committee, 2002-2009
 Admissions Committee, 2002- 2009, Chair 2007 – 2009
 Continuing Medical Education committee, 2008 – 2010
 Academic Steering Committee, 2008 - 2010
 Educational Resources/E-Learning Committee, 1997- 2008
 Research Committee, 1997-1999, 2010-2013
 Research Day Committee, 2003-2005, Chair 2004 Research Day

Graduate School Task Force, 2002-2003
Professionalism Task Force, 2006-2007, curriculum subcommittee chair
Commencement Task Force 2007-2008
Center for Clinical Competence Curriculum Task Force 2007-2008
KC Arts Fund, 2006-2007
NCA Accreditation Committee 2002-2003
Faculty Assessment Committee 2002-2004
Medical Education Research Group 2002-2004
MQA Site Visit Category leader 2007
Orientation Committee, 1997-1998
Microbiology case facilitator 1997-1999
Docs for Tots, Advisor 1997 – 2009
Alpha Phi Omega, Advisor 1999 – 2010
University Volunteer Corps, Advisor 2001 - 2010