3/15/20

NAME BERNARD ANTHONY WOOD

PRESENT APPOINTMENT

University Professor of Human Origins and
Professor of Human Evolutionary Anatomy
The George Washington University

Center for the Advanced Study of Human Paleobiology
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DATE OF BIRTH 17 April 1945

EDUCATION

COLLEGE/ UNIVERSITY: The Middlesex Hospital Medical School, The University of London (1963-1969)

QUALIFICATIONS

1966	BSc (First-class Honors) in Anatomy, The University of London
1969	MB BS (Honors in Pathology), The University of London
1971	Registered as a Medical Practitioner
1973	Registered Teacher The University of London
1974	Licensed Teacher of Anatomy
1975	PhD The University of London
1996	DSc The University of London
2007	Honorary Fellowship of The Royal College of Surgeons of England

EMPLOYMENT

1971-73	Assistant Lecturer, Department of Anatomy, The Middlesex Hospital Medical School
1973-74	Lecturer, Department of Anatomy, Charing Cross Hospital Medical School
1974-75	Lecturer, Department of Anatomy, The Middlesex Hospital Medical School
1975-1978	Senior Lecturer, Department of Anatomy, The Middlesex Hospital Medical School
1977	Visiting Professor, Department of Prehistory and Anthropology, Australian National University, Canberra
1978-82	Reader in Anatomy, The University of London, at The Middlesex Hospital Medical School
1979	Visiting Professor, North Eastern Ohio Universities College of Medicine, Kent State University, Ohio, USA
1982-85	S A Courtauld Professor of Anatomy, The University of London, at The Middlesex Hospital Medical School
1985-97	Derby Professor of Anatomy, The University of Liverpool
1986-96	Head, Department of Human Anatomy and Cell Biology, The University of Liverpool
1996-97	Dean, Faculty of Medicine, The University of Liverpool
1996-	Visiting Professor, University College London
1997-	Henry R. Luce Professor of Human Origins, and Professor of Human Evolutionary Anatomy, George Washington University
	Adjunct Senior Scientist, National Museum of Natural History, Smithsonian Institution
	Visiting Professor, University of the Witwatersrand and The University of Liverpool
2006-	University Professor of Human Origins, George Washington University
2014-	Honorary Professor, University of Kent

TEACHING AND EXAMINING

PhD Students

1982	CHRISTOPHER DEAN	'The comparative anatomy of the hominoid cranial base' (University of London)
	SUSAN ABBOTT	'A comparative study of tooth root morphology in the great apes, modern man and early hominids' (University of London)
1986	SAM LUBOGA	'Morphometric variation in the cranial base and facial skeleton of higher primates with special reference to modern humans' (Makerere University)
	RAJANI THIRANAGAMA	'Comparative anatomy of the forelimb veins in humans and non-human primates' (University of London)
1987	CHRISTINE RUNNION	'An assessment of postnatal cranial development in pongids using the hemispherical projection method' (University of Liverpool)
	ANDREW CHAMBERLAIN	'A taxonomic review and phylogenetic analysis of *Homo habilis*' (University of London)
1991	STEPHEN GOODER	'A phylogenetic and vicariance analysis of some African forest mammals' (University of Liverpool)
	YU LI	'Growth patterns and biomechanical characteristics of human limbs' (University of Liverpool)
	CHRISTOPHER WOOD	'The masticatory morphology of the 'robust' australopithecines: an investigation into dietary adaptation using Paradigm Analysis' (University of Liverpool)
1997	MARK COLLARD	'Morphological evolution of the extant hominoids and papionins: implications for palaeoanthropological cladistics' (University of Liverpool)
1999	SALLY GIBBS	'Comparative soft tissue morphology of the extant hominoidea, including man' (University of Liverpool)
2000	SARAH ELTON	'Ecomorphology and evolutionary biology of African cercopithecoids: providing and ecological context for hominin evolution' (University of Cambridge)

2003	FELICITAS BIDLACK	'The temporal resolution of stable isotope analyses in the dental enamel of mammalian herbivores' (Co-advisor) (George Washington University)
2004	ROBERT McCARTHY	'Constraints on primate craniofacial growth and architecture' (Co-advisor) (George Washington University)
2007	PAUL CONSTANTINO	'Primate masticatory adaptations to fracture-resistant foods' (George Washington University)
2008	MATT SKINNER	'Enamel-dentine junction morphology of extant hominoid and fossil hominin lower molars' (George Washington University)
2009	LISA NEVELL	'Hominin cranial base evolution and genes implicated in basioccipital development' (George Washington University)
2011	RUI DIOGO	'Origin, homologies and evolution of primate head, neck, pectoral and upper limb muscles and the use of myological characters to investigate the phylogenetic relationships within the primate clade' (George Washington University)
2013	KES SCHROER	'The role of extant primate models for interpreting premolar crown variation in fossil hominins' (George Washington University)
2015	JENNIFER BAKER	'From comparative genomics to synthetic biology: Can ancestral sequence reconstruction approaches provide a window to study the past?' (George Washington University)
2015	DAVID PATTERSON	'Ecosystem Evolution and Hominin Ecology between 2.0 and 1.4 Ma at East Turkana, northern Kenya' (George Washington University)
2017	CHRISANDRA KUFELDT	'Reconstructing trees from teeth: Exploring evolutionary relationships in extant primates using dental microstructure' (George Washington University)
2018	VANCE POWELL	'Patterns of Variance and Covariance in Anthropoid Limb Proportions: Implications for Interpreting the Hominin Fossil Record' (George Washington University)
2019	EVE BOYLE	'Beyond the skull: Identifying potential correlates of diet in the primate torso' (George Washington University)

Post-doctoral Supervision

Susan Abbott, Shara Bailey, Andrew Barr, Laura Bishop, Andrew Chamberlain, Mark Collard, Craig Engleman, Adam Gordon, Mark Grabowski, Ashley Hammond, Michael Lague, Varsha Pilbrow, Brian Richmond, Gary Schwartz, David Strait, Alan Turner, Hilde Uytterschaut, Graham Wilson, and Chris Wood.

Examining

Past: Universities of Belfast, Bristol, Cambridge, Leeds, Leicester, London, Oxford, Dundee, Durham, Malta, New England (NSW), Newcastle, Queen's Belfast, Sheffield and Wales (Cardiff); Royal College of Surgeons of England, Royal College of Physicians and Surgeons of Glasgow, and the Royal College of Surgeons, Edinburgh, etc..

LEARNED SOCIETIES

MEMBER	American Association of Physical Anthropologists Palaeontological Association
FELLOW	Royal Anthropological Institute
HONORARY FELLOW	Anatomical Society of Great Britain and Ireland Royal College of Surgeons of England

MEDALS Kroon
The Finnish Society of Sciences and Letters

PROFESSIONAL INVOLVEMENT

CURRENT Editorial Advisory Board: 'Journal of Anatomy'

Associate Editor: 'Evolutionary Anthropology'

PAST President: Primate Society of Great Britain and Ireland (1986-89)

President: The Anatomical Society of Great Britain and Ireland (1996-97)

Vice-President: Royal Anthropological Institute (1989-92)

UK Science and Engineering Research Council: Chairman, Science-based Archaeology Committee (1986-94)

UK Natural Environment Research Council: Chairman, Science-based Archaeology Strategy Group (1994-96)

Member, UK Natural Environment Research Council Earth Sciences-Science and Technology Board (1994-96)

UK Higher Education Funding Council - 1996 Research Assessment Exercise - Basic Medical Sciences Assessment Panel

Secretary of The British Association of Clinical Anatomists (1986-90)

Program Secretary: The Anatomical Society of Great Britain and Ireland (1980-83)

The Wellcome Trust: Bioarchaeology Panel (1995-2000)

Royal Liverpool and Broadgreen National
Health Service Trust: Non-Executive Director (1994-96)

Liverpool Health Authority: Non-Executive Director (1996-97)

Advisory Board: 'PRISM' Arizona State University (1997-2007)

RESEARCH INTERESTS

My primary research interests are directed towards understanding the evolution of higher primates and in particular the hominin lineage, or clade. 'Hominins' is an informal term that applies to all the components of the lineage that separated from one, or more, of the African apes between five and eight million years ago, and which persists as *Homo sapiens*. The aim of hominin evolutionary biology is to develop an understanding of both the processes that shaped hominin evolution, and of the hominins themselves, notably their adaptions, together with their behavioral implications and ecological contexts.

The initial task in this long-term strategy has been the identification and characterization of taxa within the early hominin fossil record. Problems posed during this study have stimulated a series of research programs, undertaken alone or together with colleagues. These have included:-

i) an examination of the changes occurring in the tarsal bones during hominin evolution;
ii) a survey of patterns of sexual dimorphism in the higher primate skeleton;
iii) attempts to define and separate intraspecific shape differences from the differences in shape which occur between species;
iv) an analysis of cranial base variation in extant apes and fossil hominoids;
v) an examination of the relationship between tooth size and body mass in primates;
vi) an assessment of the dental variability in living and fossil populations;
vii) an analysis of tooth crown microstructure and the dynamics of enamel development in fossil hominins;
viii) an examination of tooth root morphology in primates; and
ix) a revision of hominin taxonomy.

Recent research has been directed towards:-

a) evaluating and improving methods of phylogenetic analysis;
b) improving our understanding of the relationships between dental structure and function;
c) exploring the role of sexual dimorphism and allometry in determining the nature of morphological differences within and between species;
d) tracing the evolution of tooth macrostructure and microstructure within the hominin clade;
e) identifying adaptive shifts within the hominin clade;
f) testing the efficacy of hard and soft tissue anatomy for reconstructing phylogenetic relationships:
g) the history of morphological research on the great apes;
h) history of paleoanthropology.

As well as my work in the laboratory, I have also been involved with hominin paleontological fieldwork. I was one of the original team who took part in the exploration of the region to the east of Lake Turkana (formerly Lake Rudolf); this expedition confirmed the presence of a rich vertebrate fossil site. Richard Leakey and the late Glynn Isaac jointly established the Koobi Fora Research Project to undertake fieldwork at the site, and I spent a total of eleven months in the field. The Research Project was conducted by a consortium of about forty scientists from the USA, Kenya, UK and France who were involved in the various aspects of the research program. For three years I was the Secretary of the Council of the Research Project. My responsibilities included organizing the annual scientific meetings, and the dissemination of the research results. I negotiated the publication (by Clarendon Press, Oxford) of a series of eight monographs, which present the results of the research programs.

EDUCATION AND TEACHING

Anatomy

Human Anatomy to medical, physical therapy, occupational therapy, speech therapy and nursing students for 35 years.

I was involved with the planning and implementation of the new undergraduate medical course at The University of Liverpool in 1996. This is a Problem-Based Course with very little didactic teaching and a strong emphasis on students taking responsibility for their education.

We reorganized the gross anatomy teaching area in Liverpool to form a 'Human Anatomy Resource Centre'. This includes traditional anatomy teaching material as well as computer-based learning material, which emphasize the functional anatomy of common symptoms as well as traditional regional anatomy. We cooperated with the professions allied to medicine to ensure that the Center contains material relevant to a wide range of professionals interested in continuous learning.

Anthropology

In the UK I was involved in teaching a half-year Unit in 'Human Evolution' for Senior Undergraduates. I also lectured to Schools, Colleges and Scientific Societies on 'Human Evolution'.

Since my arrival in the US in the 1997 Fall Semester I have taught the following courses:

Undergraduate
ANTH 3412: 'Introduction to Human Evolution'; ANTH 142: 'Human Evolutionary Anatomy'; ANTH 801: 'Human Evolution for Beginners'; HONS 1033: 'Your place in Nature.'

Postgraduate
Director of the Hominid Paleobiology Graduate Program at The George Washington University and teach and contribute to various courses in that program.
HOMP 6201: 'Hominin Paleobiology'; HOMP 6203 'Professionalization and Ethics'.

ADMINISTRATION

The University of London

Chair of the Committee that had oversight of all degrees awarded at The University of London outside of the main colleges. This involved degrees in Education, Sports Science, Nursing and Physical Therapy. I was a member of a five-person committee that planned and implemented the amalgamation of The Middlesex Hospital Medical School with University College London.

The University of Liverpool – Departmental

Chair of the Anatomy Department, which in 1987 subsumed the Department of Medical Cell Biology to become the Department of Human Anatomy and Cell Biology at The University of Liverpool between 1985 and 1996. In 1985 it was a relatively small department with teaching that focused on the medical and dental students and a modest research grant income of between £5K per annum. The teaching diversified and grew to around 360 FTEs (the same size as The University of Liverpool Law School), but so also did the research. The external research income averaged £1.5M in the last three years of my time as chair; the department was graded activity 5 (the next to highest grade) in the 1997 Higher Education Funding Council Research Assessment Exercise.

The University of Liverpool – University wide

I served on all of the main Faculty committees, the University Council and the Administrative Services Committee (one of the three main 'spending' committees in the University). I was also an elected member of the University Planning and Resources Committee, which distributed the University's budget.

In 1992 chaired and coordinated the team, which assembled an ultimately successful bid to the Mersey Regional Health Authority for the training of members of the professions allied to medicine, as well as successful bids to other Regional Health Authorities. Their total value was £16M at 1992 prices. The resulting School of Health Sciences was funded for 12 years and had an annual budget of £1.5M at 1992 prices. The team also coordinated the conversion of a building for the new School, at a cost of £1.4M.

Appointed Dean of the Faculty of Medicine, in early 1996 and served until October of 1997, when I moved to the USA.

The George Washington University

Involved in developing the Biological Anthropology Major and the Hominid Paleobiology Doctoral Program.

1999-present: Director – Center for the Advanced Study of Hominid (now Human) Paleobiology.

1999-2008: Director of Graduate Studies - Hominid Paleobiology Graduate Program.

2003-2005: Member of the Doctoral Program Review Committee

2005-7: Member of the Honors Program Advisory Committee

2007-8: Member of the University Professor Search Committee

2007-8: Chair - Honors Program Advisory Committee

Non-University

Involvement with national UK government funding agencies (Science and Engineering Research Council; Natural Environment Research Council) and on the Bioarchaeology Panel of the Wellcome Trust. Represented paleoanthropology/bioarcheology on these organizations. Past President of the Primate Society of Great Britain and Ireland and The Anatomical Society of Great Britain and Ireland.

RESEARCH SUPPORT

External research grants

1971	$430K	Named investigator in National Science Foundation grant to the East Rudolf Research Project.
1975	£31K	Natural Environment Research Council (NERC) 'Analysis of Koobi Fora cranial remains.' Research Assistant, equipment and travel.
1977		NERC Research Studentship Award.
1978	£12.5K	Two-year extension of NERC grant.
1979	£8.5K	Grant from The Nuffield Foundation to enable the applicant to devote a year to research.

1981	£5.7K	Nuffield Foundation:- 'Face/base relationships in primate crania.' Two-year grant for collaborative research at Makerere University.
1982		Commonwealth Postgraduate Studentship.
1983		NERC Research Studentship Award.
		ASGBI Graduate Studentship.
		Commonwealth Postgraduate Studentship.
1984	£26K	NERC Research Grant: - 'Koobi Fora cranial and dental remains.' Research Assistant.
1986	£53K	The Leverhulme Trust: - 'Quantitative database and archive for Hominid research.' Research Assistant, computing and travel.
		ASGBI Graduate Studentship.
	£8.5K	The Royal Society: - 'Morphometric study of teeth from Lufeng, China.' Travel and subsistence.
1987	£54K	The Leverhulme Trust: - 'A taxonomic and phylogenetic review of Man's ancestors.' Research Assistant and travel.
		NERC Research Studentship Award.
		Academica Sinica Research Studentship Award.
1988	£38K	SERC: - 'Hominid Palaeontology Database Project.'
		MEC/Fleming Post-Doctoral Fellowship (Spain).
1989	£68K	The Leverhulme Trust: - 'Reconstruction of hominoid relationships from comparative anatomical evidence.' Research Assistant and travel.
	£5.5K	Royal Society: - Equipment.
		British Council: - Funding for five-years exchange program with Makerere University.
1990	£3.2K	British Council: - 'Acciones Integrados' (jointly with Museo Nacional de Ciencas Naturales, CSIC, Madrid).
	£116K	The Leverhulme Trust: - 'Early hominid colonization of Eurasia.' Research Assistant and Travel.
1991	£7K	The Royal Society: - 'Hylobatid molecular systematics.'
	£2.2K	British Council: - 'Acciones Integrados' (jointly with Museo Nacional de Ciencas Naturales, CSIC, Madrid).
	£2.5K	Royal Society: - Publication Grants

1992	£128K	SERC: - 'Testing early hominid taxonomic hypothesis and evolutionary scenarios.' Research Assistant, Technician, travel and equipment.
	£173K	SERC: - 'Molar morphology and the mechanics of food breakdown in primates' (jointly with Dr R H Crompton). Two Research Assistants, equipment and travel.
1993	£55.4K	The Leverhulme Trust: - 'Molecular systematics of the gibbon' (jointly with Dr D S Jones). Research assistant and equipment.
		SERC/SBAC Research Studentship Award
1994		British Council: - Funding for five-years exchange program with Makerere University. Anatomical Society Graduate Studentship
		NERC/SBAC Research Studentship Award
		ASGBI Graduate Studentship
	£170K	NERC/SBAC: - 'The Role of bipedalism in the dispersion of the genus *Homo*: The Mechanics and Energetics of Hominid Bipedal Transport' (jointly with Dr R H Crompton and Dr M M Gunther).
	£16K	NERC/SBAC: - 'Functional morphological analysis of hominid fossil remains using 3-D reconstructions' (jointly with Dr G A Macho and Dr R H Crompton).
1995	£156K	The Leverhulme Trust: - 'Late Neogene palaeobiogeography and palaeoecology of Old World omnivores.' Research Assistant, technician and travel.
1996	£89K	The Wellcome Trust: - 'Early Hominid Homoplasy: Identification and implications.' Bioarchaeology Fellowship.
2000	$2.6M	National Science Foundation: - Principal Investigator 'IGERT: Integrative Human Evolutionary Biology.' Graduate Research Training Program.
	$75K	National Science Foundation: - Principal Investigator 'Human Evolution: Building an image database and associated materials for instructional use.' DUE Course and Curriculum Program.
2002	$2.5M	National Science Foundation: - Co PI 'Environmental Dynamics and the Evolution of Human Adaptability.' BCS- Physical Anthropology.
2007	$75K	Mather's Foundation: - PI. 'Higher Primate Database: Pilot Study.'
2008	$3.2M	National Science Foundation (DGE-0801634) "IGERT: Dynamics of behavioral shifts in human evolution" PI, **B. Wood**; Co-PIs, A.S. Brooks, P.W. Lucas, C. Sherwood, W. Graf., R. Bernstein, B.G. Richmond, S.A. Tishkoff. Period of support: 07/01/08-06/30/13.

In addition to these grants, I have made successful applications for Lectureships and Research Lectureships in the UK totaling *c*.£350K, and in the US I have been a Co-PI on grants from the NSF and the Wenner-Gren Foundation made to graduate students.

RESEARCH FELLOWSHIPS

1979-1980 Berkeley Fellowship, Gonville and Caius College, Cambridge

INVITED LECTURES AND SEMINARS

Arnott Demonstration, Royal College of Surgeons of England, London.

Invited Lecture to the Annual Meeting of the British Association for the Advancement of Science, Lancaster.

Invited Lecture to the Annual Meeting of the British Association for the Advancement of Science, Edinburgh.

Plenary lecture, VII International Symposium on Morphological Sciences, Lisbon.

Plenary lecture, Taung Diamond Jubilee Symposium, Johannesburg.

Inaugural Lecture, Centre for Human Biology, The University of Western Australia.

Plenary lecture, Wenner-Gren/Royal Swedish Academy of Sciences Symposium, Stockholm.

26th Raymond Dart Lecture, The University of the Witwatersrand and Institute for the Study of Man In Africa.

4th Robert Broom Memorial Lecture, Transvaal Museum, Pretoria.

20th West Memorial Lecture, University of Wales, Cardiff.

L.S.B. Leakey Lecture, L.S.B. Leakey Foundation, San Francisco & California Academy of Science.

Noye M. Johnson Memorial Lecture, Dartmouth College, Hanover, NH.

Distinguished Biological Anthropology Lecturer, University of Colorado at Boulder, CO.

7th Gustav Heinrich Ralph von Koenigswald Lecture, Senckenberg Museum, Frankfurt, Germany.

31st Kroon Lecture: Stichting Nederlands Museum vor Anthropologie and Praehistorie and Koninklijke Nederlandse Akademie van Wetenschappen, Amsterdam, The Netherlands.

Phillip V. Tobias Plenary Lecture, University of the Witwatersrand Medical School.

College de France, Cycles de Conferences - Paléoanthropologie du genre *Homo.*

Astor Fellowship and Lecture, University of Oxford.

Invited lectures at The University of California, Berkeley; Pittsburgh University; Indiana University; University of Witwatersrand, Johannesburg; National Museum of Natural History, Washington DC; La Trobe University, Melbourne; Australian National University, Canberra, The University of Vienna, Royal College of Surgeons of England, The Center for the Study of Human Origins, NYU, University of Colorado, Boulder, Istituto Italiano di Antropologia, Roma, Royal College of Physicians of London, , University of Toulouse, etc.,

Research Seminars at Harvard University, SUNY at Stony Brook, Michigan University, Yale University, University of Utah, Kent State University, Washington University, University of Tennessee at Knoxville, Duke University, Columbia University, Arizona State University, Rutgers University, Ohio State University, University of Arizona, Simon Fraser University, etc.in North America, and Anthropologisches Institut, Universitat Zurich, Universitè Bordeaux 1, Al Akhawayn University, Ifrane, Morocco, Ministry of Culture, Rabat, Morocco, etc. in Africa and Europe, and at the Universities of Bristol, Cambridge, Durham, Glasgow, Kent, Leeds, London, Manchester, Oxford, Sheffield, Wales, and York, etc. in the UK.