

newsletter

Anadian Association for Physical Anthropology Association pour Anthropologie Physique au Anada

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ANNOUNCEMENTS

- The Wenner-Gren Foundation for Anthropological Research, Inc., has provided a grant-in-aid to our president, Dr. Emöke Szathmary (McMaster), for the specific purpose of improving the CAPA/AAPC Newsletter. Beginning with the next number the Newsletter will be taking on a more professional appearance. It will be issued in a regular journal format and will be typeset rather than typewritten. The editorial board hopes that this change will result in a larger subscription base so that the Newsletter can eventually become self-supporting. In future, contributors should follow the Wistar Institute Guide for Authors, which appears from time to time in the American Journal of Physical Anthropology. Papers not in the Wistar style will be returned for re-typing.
- Dr. Jamshed Mavalwala (Toronto) has been elected president of the International Dermatoglyphics Association (as of July, 1978), for a term of 4 years. This is the first time that a Canadian physical anthropologist has functioned as the president of the IDA. Dr. Mavalwala, who had previously been the secretary of the IDA from 1972-78, is also the youngest president the association has yet had. He has just authored Dermatoglyphics--An International Bibliography and edited Dermatoglyphics--An International Perspective. Both volumes were published by Mouton (Holland).
- Your help is needed in locating the following persons, who appear on the CAPA/AAPC membership list but are without current correct addresses: Rharteris, J.; Droessler, J. B.; Hreczko, T. A.; Ireland, J.; Kettel, D. W.; Kolar, J.; Ralph, S. S.; McDonald, J. A.; and Roth, E. Please send address information to Dr. N. S. Ossenberg, secretary-treasurer, Department of Anatomy, Queen's University, Hamilton, Ont., K7L 3N6.

■ The new logo for the Newsletter was designed by Anna Malynycz and submitted by F. J. Melbye (Toronto). The artist is a graduate of the University of Toronto. On behalf of the Association's membership, the editorial board wishes to extend our warm thanks to Ms. Malynycz for her concept.

The Newsletter accepts letters, short articles, book reviews and other materials relevant to physical anthropology and its sister disciplines. Authors may submit their manuscripts to any member of the editorial board:

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The Newsletter is an official publication of the Canadian Association for Physical Anthropology/l'Association pour l'Anthropologie physique au Canada, and is published in February, July, and October of each year. Membership inquiries and address corrections should be sent to Dr. N. S. Ossenberg, Department of Anatomy, Queen's University, Hamilton, Ont. K7L 3N6

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TEACHING FORUM

SKELETAL BIOLOGY

(Ed. note--Teaching Forum is about courses, programs, and instructional media. This issue features a description of Erindale College's osteology course by its instructor, F. Jerome Melbye.)

Anthropology 334 (Skeletal Biology) is for third-year students who have completed an introductory course in physical anthropology. It is also open to other students who possess sufficient background in biology and related subjects.

The course runs 26 weeks. It meets for three hours once a week, and usually consists of an hour of lecture and two hours of lab exercises. Organizationally, the course is divided into four segments with an exam at the end of each segment. The first seven weeks are devoted to normal skeletal anatomy based primarily on a combination of Grant's and Gray's anatomy texts. Students are required to familiarize themselves completely with skeletal gross anatomy. This is often considered to be the most difficult part of the course because it requires rote memorization. The next four weeks are devoted to metrical analysis. Students learn the definitions and practical pitfalls of osteometry. They are introduced both to 'classical' measures and the 'new' osteometric techniques (cf. Howell, 1973). This section includes a lecture and lab on odontology. The exam at the end of this section is a bell-ringer, but notebooks are permitted. This encourages students to keep neat and complete notebooks.

The third segment of the course is six weeks in length and includes such subjects as morphological variation and sex/age determination. Coverage includes both 'classical' variation (e.g., brow-ridges, form of orbit, etc.) and the 'new' discrete traits. There is also a lab and lecture on bone histology in this section. The final part of the course is five weeks long, and its object is to talk about how bones are analyzed. Lectures cover paleopathology, paleodemography, field excavation techniques, and statistical manipulations for the determination of population relationships.

In addition, a project is assigned in order to allow students to acquaint themselves with the vast literature of skeletal biology. Although the projects are individually narrow in scope, they are broad in terms of available information. Students are assigned projects on a 'first come, first served' basis. This is necessary to ensure that library resources are available (and to avoid the boredom of reading 20 papers on syphilis). Projects based on an 'archaeologically defined people' are almost always the most difficult. The people may vary greatly in terms of available data, and successful completion of the project requires familiarity with both the archaeological and the osteological literature. For the most part, other project types are straightforward. They usually involve the exploration of etiology and variability, comparison of living and skeletalized specimens, and brief discussion of appearance in skeletal populations. Suggested topics for projects include the following:

1. The identification and distribution of specific pathology; e.g.:

trauma syphilis 1eprosy mutilation trephination arthritis multiple myeloma attrition and abscess

cleft palate tumours

cranial deformation

The origin and distribution of specific variation, e.g.:

septal aperture mandibular torus Carabelli's Cusp squatting facets shovel-shaped incisors head shape fossa of Allen accessory sutural bones spondylolysis molar cusp pattern

3. An evaluation of methods of:

sexing the bones of the pelvic girdle sexing the skull and mandible determining age at death (infracranial bones) determining age at death (skull and teeth) detecting microevolutionary changes.

- 4. Burial practices of a specific, archaeologically defined people.
- 5. Palaeodemography of a specific, archaeologically defined people.
- 6. Palaeopathology of a specific, archaeologically defined people.

Some References

Required texts for this course are Anderson (1969), Bass (1971) and Brothwell (1963).

Acsádi, G and J. Nemeskéri

History of human life span and mortality. Akadémiai Kiadó, 1970 Budapest.

Anderson, J. E.

The human skeleton (Second Edition). National Museum of Man. 1969 Ottawa.

Armelagos, G. J.; J. H. Mielke and J. Winter

Bibliography of human paleopathology. Research Reports Number 8, 1971 Department of Anthropology, University of Massachusetts.

Bass, W. M.

Human osteology: a laboratory and field manual of the human 1971 skeleton. Missouri Archaeological Society.

Brass, W.

Biological aspects of demography. Taylor and Francis Ltd. 1971

Brothwell, D. R.

Digging up bones: The excavation, treatment and study of human skeletal remains. British Museum (Natural History).

1963 Dental anthropology. Pergamon Press.

1968 Skeletal biology of earlier human populations. Pergamon Press.

Brothwell, D. R. and E. Higgs

1969 Science in archaeology. Thames and Hudson.

Brothwell, D. R. and A. T. Sandison

Diseases in antiquity: a survey of the diseases, injuries and surgery of early populations. Chas. C. Thomas.

Chapin, R. E.

1971 The study of animal bones from archaeological sites. Seminar Press.

Comas, J.

1960 Manual of physical anthropology. Chas. C. Thomas.

Cornwall, I. W.

1956 Bones for the archaeologist. Phoenix House.

Dahlberg, A. A.

1971 Dental morphology and evolution. University of Chicago Press.

El-Najjar, M. Y. and K. R. McWilliams

1978 Forensic anthropology: The structure, morphology, and variation of human bone and dentition. Charles C. Thomas.

Finnegan, M. and M. A. Faust

Bibliography of human and non-human non-metric variations.

Research Reports No. 14, Department of Anthropology, University of Massachusetts.

Gruneberg, H.

1963 The pathology of development. John Wiley.

Howells, W. W.

1973 Cranial variation in man. Papers of the Peabody Museum of Archaeology and Ethnology. Harvard University, Vol. 67.

Jarcho, Saul

1966 Human palaeopathology. Yale University Press.

Kraus, B. S., R. E. Jordan, and L. Abrams

1969 Dental anatomy and occlusion. Williams and Wilkins Co.

Krogman, W. M.

1962 The human skeleton in forensic medicine. Chas. C. Thomas.

Montagu, M. F. A.

1960 Introduction to physical anthropology (Third Edition). Chas. C. Thomas.

Morse, Dan

1969 Ancient disease in the midwest. Illinois State Museum.

Olivier, G.

1969 Practical anthropology. Chas. C. Thomas.

Pales, Leon

1930 Paléopathologie et pathologie comparative. Masson.

Schmid, Elisabeth

1972 Atlas of animal bones: for prehistorians, archaeologists and quaternary geologists. Elsevier Publishing Company.

Scott, J. H. and N. B. B. Symons

1961 Introduction to dental anatomy. E. & S. Livingstone Ltd.

Stewart, T. D.

1947 Hrdlicka's practical anthropometry (Third Edition). Wistar Institute.

1970 Personal identification in mass disasters. Smithsonian Institution.

Stewart, T. D. and Mildred Trotter

Basic readings on the identification of human skeletons: estimation of age. Wenner-Gren Foundation.

Trueta, J.

1968 Studies of the development and decay of the human frame. Heinemann.

Ubelaker, D. H.

1978 Human skeletal remains: excavation, analysis, interpretation. Aldine.

Weinmann, J. P. and H. Sicher

Bone and bones; fundamentals of bone biology (Second Edition). Henry Kimpton.

Wells, Calvin

1964 Bones, bodies and disease. Thames and Hudson.

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BOOK REVIEWS

LIVING NEW WORLD MONKEYS (PLATYRRHINI), WITH AN INTRODUCTION TO PRIMATES. Vol. 1. By Philip Hershkovitz.

University of Chicago Press, Chicago and London, 1977. XIV + 1117 pp., 520 figs. and 7 color pls., 111 tbls., app., addendum, 3 indices. U.S. \$75.00 (cloth).

This monograph is the first fruit of a projected three-volume enterprise that will harvest Philip Hershkovitz' 30 years of research experience with New World primates. The proportions of this undertaking are formidable; vol. 1 was begun 12 years before its publication date, and it clearly exhibits the author's intention to be precise in detail and definitive in execution.

Living New World Primates is best classified as an encyclopedia for the practising morphologist and taxonomist, and one should keep this in mind when considering it for personal use or library purchase. The work is divided into three unequal parts. The first and shortest, entitled "History and Evolutionary Biology," is evidently intended as a general introduction to the series and is principally concerned with major primate characteristics. A simple but accurate objection to its form and content is that the promise contained in the section heading is not fulfilled. Very little mention is made of primate origins or diversification, while unnecessary stress is given to such tired subjects as LeGros Clark's evolutionary trends and what is wrong with them. The final chapter on locomotion is interesting and less typologically oriented than the preceding ones, but suffers from a lengthy and rather obtuse criticism of biometrical studies. The contributions by Oxnard and others scarcely deserve epithets like "sterile, futile, and unrealistic," however much one disagrees with their procedures or analyses.

The second part is a select comparative anatomy of the primates, with emphasis on New World forms. Chosen hard and soft features are described in exuberant detail; most discussions include comparisons to non-primate mammals and excellent literature reviews. Selection of anatomical features was obviously predicated on putative taxonomic importance. For example, 21 of the 43 chapters in this part are concerned with craniodental morphology, while only one is devoted to the visual apparatus. Nonetheless, this section of Hershkovitz' monograph, which runs to nearly 250 pages, is a rich mine of data and morphological interpretation for the systematically inclined. The reader will also find very useful discussions of such topics as "monkey rickets" and parasites, and a much improved and expanded version of the author's theory of metachromism. The quality of the hundreds of line drawings that accompany this and other sections varies from above average to superb. In fact, it is surprising to find such lavish artwork in a recent non-medical anatomy text, given the high price of good artistic help. The photographic illustrations are not so well chosen in some instances. Chapter 29, "Atlas of Tupaiid and Primate Skulls," is a rogue's gallery of low-magnification photos that do not always permit one to find the anatomical minutiae mentioned in the descriptions.

The third part, which constitutes nearly two-thirds of the text, is an exhaustive review of callitrichid and callimiconid systematics. Each species or species-group is separately profiled, with chief attention given to distribution, identification keys, discrimination of sub-species, and synonymic history. Also included are topics of more general interest, such as known habits and reproductive biology. It is quite clear that very little that is relevant to marmoset biology has escaped the author's scrutiny. The monograph's encyclopedic function is augmented by a gazeteer of collecting localities and informative subject, author and biotic indices.

This volume will be followed by equivalent treatments of living cebids and fossil platyrrhines. Together, they will represent a badly-needed replacement for vols. III-V of the late W. C. Osman Hill's <u>Primates</u>. These parts of Hill's monumental work were published in the period 1957-1962, before the explosion of interest in non-human primates, and are thus already a part of the antique primatological literature.

I must defend, rather than lament, the cost of <u>Living New World Primates</u>. This is a book produced according to the old standards: excellent paper, magnificent illustrations, and large, uncrowded type. For those of us who care, it is a welcome relief from the robbery of paying similar amounts for cheaply-made trade items published in catchpenny offset typescript.

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