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The journal Human Biology was founded 75 years ago by Raymond Pearl, an eminent biologist and Professor of Biometry and Vital Statistics at Johns Hopkins University. In celebration of the 75th anniversary of the founding of this journal, I was asked by the editorial board to prepare a brief history of Human Biology. In the 1989 special issue titled “Foundations of Anthropological Genetics,” Gabriel W. Lasker had compiled an earlier historical account of the journal. Additional comments about the circumstances surrounding his acceptance of the editorship of Human Biology in 1953 and early years of his editorship are discussed in Chapter 12 of Lasker’s memoirs, Happenings and Hearsay (Lasker 1999). In this review of the history of Human Biology I place greater emphasis on the periods that I know best, that is, from 1988 to the present, when I was either the editor-in-chief or the consulting editor. I have also provided (1) a time line of the significant events associated with 75 years of publication of this distinguished journal and (2) an analysis of the changes in topical coverage and focus from 1929 to the present.

Editors Past and Present

Since its founding, Human Biology has had nine editors (see the time line in Table 1). These editors served for varying durations, from 35 years by Gabriel W. Lasker to 11 years each by Raymond Pearl and Michael H. Crawford, to Francis E. Johnston, who was appointed editor-in-chief but did not edit a single issue of the journal (Lasker 1989). After his appointment to the editorship, Johnston went on a sabbatical to the United Kingdom and in his place, Barry Bogin (Associate Editor) edited the journal for the entire year.

Following Raymond Pearl’s sudden death in 1940, his widow assumed the reigns of managing editor while Lowell J. Reid served as editor-in-chief for six years. In 1946, Charles Paine Windsor (a biostatistician) succeeded Reid and edited the journal from 1946 to April 4, 1951, when he died unexpectedly. In 1952, William G. Cochran became editor, but because of financial exigency, in the following year he suspended publication of the journal. Lasker assumed the

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KEY TERMS: JOURNAL HISTORY.
Table 1. Time Line of the Significant Events in the History of *Human Biology*: 1929–2004

<table>
<thead>
<tr>
<th>Date</th>
<th>Events</th>
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<tbody>
<tr>
<td>1929</td>
<td>Raymond Pearl (Professor of Biometry and Vital Statistics, School of Hygiene and Public Health, Johns Hopkins University) founds the journal and becomes its first editor.</td>
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<tr>
<td>1929</td>
<td>Warwick and York Inc. (Baltimore) publishes volumes 1 and 2.</td>
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<td>1940</td>
<td>Pearl dies suddenly. His wife (Maud DeWitt Pearl) becomes the managing editor and Lowell J. Read becomes editor.</td>
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<td>1946</td>
<td>Charles P. Windsor (a biostatistician) assumes the editorship.</td>
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<tr>
<td>1952</td>
<td>William G. Cochran (a biostatistician) becomes editor.</td>
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<tr>
<td>1953</td>
<td>Journal suspends publication of articles.</td>
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<tr>
<td>1953</td>
<td>Gabriel W. Lasker (physical anthropologist in the Department of Anatomy, Wayne State University Medical School) assumes editorship.</td>
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<td>1953</td>
<td>Five Associate Editors named: Josef Brozek, Bentley Glass, Donald Mainland, James Spuhler, and William L. Straus Jr.</td>
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<td>1954</td>
<td>Wayne State University Press becomes the publisher of the journal.</td>
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<td>1962</td>
<td>Formal affiliation is established with the British Society for the Study of Human Biology (SSHB).</td>
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<td>1962</td>
<td>James Tanner is named co-editor.</td>
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<td>1974</td>
<td>Human Biology Council (HBC) becomes the sponsor of <em>Human Biology</em>.</td>
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<td>1987</td>
<td>Executive Committee of the Human Biology Council names Francis E. Johnston editor.</td>
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<td>1987</td>
<td>Commercial press Alan R. Liss Inc. unsuccessfully attempts to buy out <em>Human Biology</em> from Wayne State University Press.</td>
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<td>1988</td>
<td>The Human Biology Council establishes a new journal, the <em>American Journal of Human Biology</em>.</td>
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<td>1995</td>
<td>Direction of the journal changes from general human biology to anthropological genetics.</td>
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<td>1995</td>
<td>American Association of Anthropological Genetics (AAAG) becomes the official sponsor of <em>Human Biology</em>.</td>
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<td>1999</td>
<td>Michael H. Crawford steps down as editor-in-chief.</td>
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<td>1999</td>
<td>Committee of AAAG and Wayne State University Press appoint Dennis H. O'Rourke (University of Utah) as editor-in-chief.</td>
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<tr>
<td>2003</td>
<td>Sarah Williams-Blangero (Southwest Foundation for Biomedical Research) is appointed editor-in-chief, after Dennis O'Rourke steps down.</td>
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editorship of the journal in 1953 and set it on a solid financial foundation by securing grants from the Wenner–Gren Foundation for Anthropological Research and the National Science Foundation to underwrite the publication and purchase of the journal. Ownership of the journal was transferred from Johns Hopkins University Press to Wayne State University Press in 1954.

Lasker continued to serve as editor for an unprecedented period of time,
from 1953 to 1988. As I learned much later, an editorship requires a tremendous investment of time, at a cost to one’s own research. I once asked Lasker why he continued serving as editor for all of those years. He explained to me that, although he was a physical anthropologist, his primary appointment was in the Department of Anatomy at Wayne State University. He believed that by editing one of the top journals in the field, he could keep up with the developments in the field and have some effect on its direction. For 35 years, Lasker gently guided Human Biology and had considerable intellectual impact on the field. In particular, he assisted the overthrow of the concept of typological race and the preoccupation of physical anthropologists with racial classification. In its stead, Lasker promoted a focus on human variation and its evolutionary causes. He was particularly kind to young and non-U.S. authors by helping them with the writing style of their articles and the vagaries of the English language and even instructing many of them on how to best analyze and present their research data.

In 1987, the publications committee of the Human Biology Council reached a decision that it was time to replace Gabriel Lasker with a younger editor, and Francis Johnston was appointed. Johnston complained to the Human Biology Council about the difficulties of dealing with the director of Wayne State University Press. This friction precipitated an attempted buyout of the journal by a commercial press, Alan R. Liss Inc. Wayne State University Press refused the offer, and the Human Biology Council disassociated itself from the Press and created a new journal, the American Journal of Human Biology. With the establishment of this new journal, Human Biology was left without an editor or an editorial board, and it had no academic or financial sponsorship by a professional organization. The 1988 volume of the journal did not list either an editor-in-chief or an official editorial board; it merely listed the names of scholars who contributed to its publication.

In the fall of 1988, I was approached by a committee consisting of Gabriel W. Lasker, Michael Little (a former editorial board member), and Alice Nigoghosian (associate director of Wayne State University Press) and offered the editorship of the journal. As a graduate student at the University of Washington, I had spent many hours in the stacks of Suzzallo Library, reading back issues of Human Biology. Because this journal played a pivotal role in my maturation as a scholar, I did not want to see it disappear off the bookshelves. After a series of meetings and discussions, I accepted the editorship, but with several provisos. First, I wanted the focus of the journal to be modified from general human biology to anthropological genetics in the broadest sense. By this, I meant that the journal would continue publishing articles on growth, demography, disease, morphology, and behavior—but only from a genetic perspective. Second, I wanted the journal to become more international in its publications and readership. In this way, the journal would establish its own academic and topical niche and would not directly compete with the American Journal of Human Biology. In addition, I felt that the large number of institutional subscriptions to the journal assured its financial survivorship during a period when most university libraries
were downsizing their collections. Libraries were less likely to discontinue a
journal that dated back to 1929, whereas a new journal faced a major challenge
of building up institutional subscriptions at a time when commercial presses were
buying out university-subsidized journals and raising the costs of institutional
subscriptions to astronomic levels.

Foundations of Anthropological Genetics

When I assumed editorship of the journal in November 1988, there were
few manuscripts left in the larder. Most of the high-quality manuscripts had been
submitted to the former editor and went with him to the American Journal of
Human Biology. However, I had a sufficient number of manuscripts to fill the
first four issues of 1989 but few manuscripts for the last two issues of the year.
Kenneth Weiss, a colleague at Pennsylvania State University and a member of the
editorial board, suggested that in honor of the 60th anniversary of the founding
of the journal I consider reprinting some of the classics that graced the pages of
Human Biology. Not only would this option temporarily solve the problem of the
shortage of manuscripts, but it would also centralize under a single cover a collec-
tion of highly significant articles. Initially, I considered whether a special issue
would be of sufficient interest to the anthropological genetic readership. I decided
to select only those articles that had set the foundation for anthropological genet-
ics. This collection of articles could be made more current by the addition of
updates, written by the original authors. Given the thousands of articles that ap-
appeared in Human Biology from 1929 to 1989, a decision had to be reached about
which articles were the most significant. I contacted Gabriel Lasker, and he
agreed to assist me in the selection of the contents of the special issue. We applied
the following criteria: (1) The articles had to be based on seminal research in
anthropological genetics; (2) the research had to be widely recognized and cited;
(3) the article had to be representative of a large body of research that contributed
to evolutionary theory; (4) the publication had to withstand the test of time; that
is, no article was selected if it had been published after 1980 (Crawford and
Lasker 1989).

The classic articles that were selected included the research of a number of
pioneers in population genetics and anthropological genetics. The classics se-
lected for the special issue included research by J.B.S. Haldane (analysis of geo-
graphic variation in Europe of the ABO blood group frequencies), J.F. Crow (two
articles, one on the use of isonymy to estimate inbreeding and the other on the
use of demographic parameters to estimate the opportunity of natural selection),
J.V. Neel (reconstruction of past evolution through the study of Amazonian pop-
ulations), F.B. Livingstone (the effects of the introduction of agriculture on mos-
quito breeding and infection from malaria), J.N. Spuhler (application of Sewall
Wright’s pathway measure of inbreeding in Ramah Navajo), D.F. Roberts (demo-
graphic characteristics of the Dinka populations and their application to the un-
derstanding of evolutionary theory), A.G. Motulsky (genetic resistance to
infectious diseases in humans), M. Goodman (phylogenetic relationships of hominoids based on immunological evidence), and P.T. Thomas (the empirical evidence for monozygotic twins experiencing more similar environments). Because Haldane and Thomas had died, updates of their chapters had to be written by contemporary scientists, namely, Robert Sokal and David Hay. It was fascinating to read the updates by the original researchers many years after their articles were published and with the subsequent technological and methodological developments in their respective fields.

At the Helm (1988–2000)

In 1989 the first issues of the journal under my editorship included a number of descriptive articles on growth and physiological processes as well as some articles on anthropological genetics. Within two years, the change to the publication of articles on anthropological genetics in the broadest sense had been completed. There was some initial uncertainty associated with the editing and publication of a journal by a novice, such as me. However, my highly experienced managing editor (Mimi Braverman) established a functioning editorial office that kept the journal on schedule for almost 10 consecutive years. During that time frame, the editing process went smoothly except for the occasional glitch with an author or two. The most difficult situations involved two cases of real or alleged plagiarism. In one case, I was contacted by an author who noted that a section of his article, which had originally been published in the journal *Science*, had been plagiarized and published in *Human Biology*. After investigating these allegations, it became apparent that there had been a copyright violation, and I had to reach a solution that was acceptable to both the aggrieved scholar and the editor of *Science*. The solution consisted of a letter of apology, written by the plagiarist, and an editorial by me, elucidating what constituted plagiarism. This satisfied the editors of *Science*, and I was able to close the investigations (Crawford 1993). The second allegation of plagiarism proved to be groundless and turned out to be a ploy concocted by a reviewer to delay the publication of an article by a peer so that he could publish similar data and secure publication precedence. This was clearly a case of conflict of interest as well as a clear violation of the ethical precepts of academia.

Shifts in Topical Foci

In the first issue of *Human Biology*, Pearl outlined the central mission of the new journal as “a medium for the publication of results of original research in all fields of human biology, including physical and general anthropology, anthropometry, vital statistics, human heredity, and eugenics, prehistory, human anatomy, sociology, constitutional pathology, and psychobiology” (Pearl, 1929, p. 1). The first issue of the first volume was primarily focused on studies of
human constitution and disease. It included articles by T. Wingate Todd (morphology of African Americans), Charles B. Davenport (race and mental capacity), and Raymond Pearl (method for studying the relationship between constitution and disease). The editorial board of the first issue included Charles Davenport (psychologist) and anthropologists Ales Hrdlicka (Smithsonian Institution) and Clark Wissler (American Museum of Natural History). The first volume of the journal contained a broad mélange of topics, from William K. Gregory’s article on hominid phylogeny to Melville Herskovits’s thoughts on social selection in American blacks and the formation of human “types.” During the first year, articles were written by eminent scientists, such as demographer A.J. Lotka (the spread of generations), geneticist Laurence H. Snyder (blood groups and racial classification), physical anthropologist Earnest A. Hooton (functional theories of primate evolution), and anatomist Adolph H. Schultz (the anatomy of primates). Irene Barnes published a landmark article in volume 1, demonstrating that skin pigmentation in humans was not inherited by blending, nor was it Mendelian in nature; instead it was caused by multiple factors. Thus issue 3 of the first volume contained an early attempt at applying quantitative genetics to complex phenotypes.

The tables of contents of issues of Human Biology reflect the interests and underlying scientific philosophies of its editors. During the first decade of Raymond Pearl’s editorship, a strong emphasis was placed on demography; almost 25% of the articles that graced the pages of the journal were on some facet of demography. Other topics that were disproportionately covered during the first decade, 1929–1938, included human constitution, racial types and disease, growth and development, and osteology and anatomy. Articles on these topics continued to be published in the journal until Pearl’s death in 1941. However, demography and growth remained primary staples of Human Biology until my editorship in 1989.

Articles on racial taxonomy, constitutional types and disease, osteology and anatomy were common fare during the first decade of the journal. At that time there was preoccupation by the genetics community with the study of twins, and 19 articles appeared on various facets of twin research. In the early 1940s, several innovative articles appeared in Human Biology on blood group genetics, including the study by Haldane of the geographic distribution of the ABO blood group system in Europe. This article anticipated the more statistically sophisticated synthetic gene mapping methods of Cavalli-Sforza, developed in the 1980s. In addition, Candela’s classic article on the use of Rhesus blood group variation in Europe to document gene flow from Central Asia appeared in a 1942 issue of the journal. Except for these classics, few articles on genetics were featured in the journal during the first two decades of its gestation.

During World War II, the number of articles published per issue was reduced to 2 or 3, with the average size of an issue being approximately 80 pages. With the shortages of the war, the page count for the yearly volume dipped to a total of 318 pages for 4 issues in 1944. In contrast, during the period of 1929–
1938, an issue of *Human Biology* contained on average more than 6.2 articles plus notes. In the following decade the average size of the issues shrunk to 4.3 articles, and the number of articles on demography was reduced to 11% in 1949–1958 and 13% in 1959–1968. The entire combined volume for 1946–1947 contained only 13 articles and 269 pages, with the prominent section on Recent Literature, featured in all issues since 1929, excised from the journal. Wartime issues of *Human Biology* contained articles that reflected the war effort and the availability of recruits for study.

During Charles Windsor's editorship (1946–1950), there was a significant increase in the number of statistical and methodological articles that appeared in *Human Biology*. During a three-year span, nine articles were published by luminaries such as Lotka, Tuckey, and Windsor on various statistical approaches to data. Windsor, who was a biostatistician, was able to attract first-rate statisticians to contribute significant articles to the journal. When Windsor unexpectedly died in 1951, he was succeeded by William C. Cochran, another biostatistician from Johns Hopkins University. However, in 1953 Cochran suspended the publication of the journal because of financial reasons.

Gabriel Ward Lasker, a physical anthropologist trained at Harvard University by Earnest Hooton, assumed the editorship of *Human Biology* in 1953. He appointed a five-member editorial board consisting of Bentley Glass, James Spuhler, Joseph Brozek, Donald Mainland, and William L. Straus. This board differed from earlier ones in that it had a strong genetic presence with Spuhler and Glass, with physical anthropology represented by Straus and Lasker. This anthropological genetic imprint was particularly noticeable during the first decade of Lasker's editorship with the publication of a number of classics in the field. In 1953 an article appeared in the journal, co-authored by James Spuhler and Clyde Kluckhohn, applying Sewall Wright's pathway method for calculating inbreeding coefficients in the Ramah Navajo population. In the following year, an article by JW. Eaton and A.J. Mayer on the social biology of high fertility among Hutterites provided a unique estimate of human fecundity, with the median family size of 10.4 children per woman at the completion of her reproductive career. In 1958, James F. Crow formulated a method to estimate the opportunities for natural selection in a population by measuring demographic parameters—fertility and mortality. In 1960, Lasker organized and published a special issue of *Human Biology* that contained several highly significant publications, including one by Arno G. Motulsky on metabolic polymorphisms and the role of infectious disease in human evolution and Frank B. Livingstone's classic article on natural selection, disease, and ongoing human evolution (see Appendix).

The 1970s and 1980s saw a plethora of articles on growth and development dominating the pages of *Human Biology*. A total of 144 articles on growth, development, and constitution, or an average of 14.4 articles on this topic in each volume, appeared in the journal from 1970 to 1979. Demography and physiology were the next most frequent topics covered during this time frame. In 1980, in an article in *Human Biology*, James F. Crow, further elaborated on the original
formulations by Crow and Mange (1965) of inbreeding through the incidence of isonymy and isonymous marriages in populations. In the three decades that followed, Lasker applied these formulations to a variety of populations (Lasker, 1977, 1985, 1988). With many of the publications on the use of isonymy appearing in *Human Biology*, the journal almost became synonymous with this approach to the study of genetic structure.

The 1980s featured major methodological breakthroughs that facilitated the direct manipulation and study of DNA. These developments in methodology are discussed in my introduction to the special issue of *Human Biology* titled “Anthropological Genetics in the 21st Century.” This methodological revolution had significant effects on anthropological genetics in the reconstruction of the human diaspora, study of human variation, and the mapping of genes associated with complex phenotypes. During the 1990s, the use of gene products, blood groups, and proteins of the blood were abandoned (often uncritically) to be replaced by the more informative DNA markers, such as mitochondrial DNA, non-recombining portions of the Y chromosomes (NRY), short tandem repeats (STRs), variable number of tandem repeats (VNTRs), and various regions of the genome that code for protein. Thus the 1990s witnessed a shift in the contents of *Human Biology*, with greater emphasis being placed on the use of DNA markers rather than gene product frequencies for the reconstruction of human population movements and the mapping of complex phenotypes.

**Special Issues of Human Biology**

Although the journal had sporadically featured a few topical special issues, when I became editor, I decided to publish at least one special issue per year. During my tenure as editor, 12 special issues were published (see Appendix). A number of these special issues were highly innovative and included coverage of cutting-edge research and methodology. In particular, the genetic-epidemiological issue edited by John Blangero and Sarah Williams-Blangero and the issue edited by Jeff Gilger and Scott Hershberger on human behavioral genetics contributed much to anthropological genetics. These special issues permitted the exploration of various anthropological genetic topics in depth and provided an opportunity to publish articles about background information to anthropological genetics (e.g., prehistory, linguistics, history, sociocultural descriptions) that might otherwise have been deemed outside the scope of the journal.

**Establishment of the American Association of Anthropological Genetics**

In 1993 a group of anthropological geneticists began meeting informally to discuss the latest breakthroughs in molecular genetics and to determine how these methodological and analytical developments would impact on our synthetic
field. The earliest meeting was organized by Moses Schanfield at the Analytical Genetic Testing Center (AGTC) in Denver, Colorado. Primarily, faculty and graduate students from the Universities of Kansas and Utah, staff from AGTC, and a few additional scholars from other universities found their way to Denver. Representatives from the few additional universities and colleges learned about this gathering by word of mouth. The purpose of this meeting was to share, on an informal basis, our research experiences in anthropological genetics and molecular genetics. During the first meeting in Denver in 1993, an agreement was reached among the participants to organize a professional association devoted to anthropological genetics and to develop bylaws for the association. The success of this initial meeting prompted the AGTC to sponsor a reception and open house for AAAG members during the AAPA national meeting in Denver the following year. It was at the first business meeting of the AAAG, held during the 1994 AAPA meetings, that the bylaws were approved, first elections were held, and the association officers were chosen. Other “workshops” were organized and held at the Southwest Foundation for Biomedical Research in San Antonio (on genetic epidemiology), Mexico City (application of HLA to anthropological genetics), and the University of Wisconsin at Milwaukee (ethics of field research). These workshops provided a forum for discussion plus a review of the latest developments in related fields. The core of the organizers of these workshops established AAAG in part to provide the intellectual leadership for Human Biology. Wayne State University Press formalized the partnership with the AAAG as the professional organization that sponsored the journal. To get a broad view of the goals and bylaws of the AAAG, see their Web site: http://www.ac.wwu.edu/~aaag.

A New Generation of Editors

In 1999 I decided to step down and to pass the editorship to the next generation of scholars (Crawford 2000). I had learned what I could about the process of scientific publication and had accomplished most of the goals that I had set out, namely, to shift the orientation of the journal to anthropological genetics, to further internationalize the journal, and to provide a stable financial and academic backing for the journal. However, given the unique opportunity to set the stage for anthropological genetics in the 21st century, I wanted to edit the first issue of the journal of the new millennium and then hand the reigns over to the new editor.

In 1999 Dennis O’Rourke, an anthropological geneticist from the University of Utah, was selected as the new editor by a committee made up of representatives of the AAAG and Wayne State University Press. His administrative credentials were impeccable and included a term as program director at the National Science Foundation and chair of the Department of Anthropology and Associate Dean at the University of Utah. His broad academic interests, within
anthropological genetics, included the reconstruction of the peopling of the Americas through the use of ancient DNA, geographic distributions of genes through the use of synthetic gene maps, and the quantitative genetics of psychiatric conditions.

The transition to the new editorship went smoothly, with Dennis O’Rourke publishing the second issue of 2000 volume year. Through his editorship, the primary focus of the journal continued to be anthropological genetics. Brian Suarez, a distinguished genetic epidemiologist at Washington University, St. Louis, served as the associate editor of the journal. Unfortunately, O’Rourke received little support from the administration of his university with respect to release time for editing the journal and thus was torn between his extensive research program in ancient DNA and the time-consuming process of publishing six issues of the journal per year. After serving four years as editor, he decided to step down and devote more time to his research.

A committee consisting of a representative of Wayne State University Press (Alice Nigoghosian), an officer of the AAAG, and a former associate editor of the journal, Tibor Koertvelyessy, and I met to discuss a successor for Dennis O’Rourke. We agreed that the most qualified applicant was Sarah Williams-Blangero, chair of the Department of Genetics, Southwest Foundation of Biomedical Research at San Antonio. Her interests included anthropological genetics and genetic epidemiology. Her appointment was at one of the top research centers in the world for genetic epidemiology, with a unique supporting cast of anthropological geneticists and human geneticists.

The new editing team (consisting of editor Sarah Williams-Blangero and dual associate editors, Michael Mahaney and Jeff T. Williams) provides a strong biomedical dimension to Human Biology. This outstanding group will be leading this venerable journal into the 21st century with a new blend of publications in anthropological genetics and biomedical research. It is hoped that the new editing team will continue to raise the citation index and the quality of publications. The future for Human Biology looks bright as more and more talented young researchers are entering the field of anthropological genetics and require an outlet for their professional voices.

Literature Cited


**Appendix: Special Issues of Human Biology (Chronologically Arranged)**


