A TRIBUTE TO JOHANNA FAULHABER KAMMAN (1911-2000)

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I am pleased to have the honor of offering an overview and commentary on the contributions of Professor Johanna Faulhaber to the field of physical anthropology and specifically auxology. My perspective is somewhat different, being an American who has had the food fortune to do some field research in Mexico and who has many colleagues in Mexico. This overview and commentary is offered from two perspectives, personal and academic.

I had the good fortune of knowing Professor Faulhaber and her family personally. She treated me kindly and as one of her own, and strongly encouraged me to pursue my interests in the study of child growth and nutrition in Mexico, specifically Oaxaca (Malina et al., 1972, see also Malina, 2002). This has since expanded to studies of growth, physical activity and physical fitness in other areas of Mexico as well as a follow-up study of two of the communities in Oaxaca which were studied initially in 1968 and 1972.

From an anthropological perspective, Professor Faulhaber's publications provided me with a broad view of physical anthropology in Mexico. My first exposure was shortly after I began field work in Oaxaca in the summer of 1968 where I learned of her monograph with Professor Comas, Somatometria de los Indios Triques de Oaxaca, Mexico (Comas and Faulhaber, 1965). Although I did not have the opportunity to meet Professor Comas personally, I was aware of his extensive research in Mexico through my major professor, Dr. Wilton M.

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Krogman, who prepared the introduction to the English edition of Professor Comas' Manual of Physical Anthropology (Comas, 1957).

Shortly after my initial fieldwork in Oaxaca, Professor Faulhaber's comprehensive chapter on the "Anthropometry of Living Indians" was published in the *Handbook of Middle American Indians* (Faulhaber, 1970). This is perhaps the most extensive summary of anthropometric data for indigenous populations of Mexico published to date.

Although there are other papers and monographs by Professor Faulhaber, these two extensive contributions provided for me and for my students a sound basis in understanding the morphology of indigenous adults in Mexico. The research is comprehensive and provides an excellent introduction to the historical depth and richness of physical anthropology research with living populations in Mexico. They indeed opened my eyes to the broad panorama of variation in Mexico.

In addition to studies of adults, Professor Faulhaber has done extensive research on the growth and maturity status of middle class Mexican children. This research is a cornerstone for the study of growth and maturation in Mexico and, to some extent, in other areas of Latin America. Two key monographs are summaries of her mixedlongitudinal studies of children and adolescents carried out in the 1960s and 1970s (Faulhaber, 1976, 1989). The focus of the research is middle class children in the Federal District. The data provide an estimate of growth status and also of growth rate and the adolescent spurt, and indicate a tendency towards earlier maturation, i.e., earlier estimated ages at menarche and peak height velocity, in Mexican adolescents compared to European and United States samples. This trend has since been verified in other Latin American populations. Professor Faulhaber's paper at the 1982 International Auxology meetings in Brussels provides a summary of the adolescent data (Faulhaber, 1984).

The growth research of Professor Faulhaber is often mentioned in concert with the contributions of Dr. Rafael Ramos Galvan. His monograph (Ramos Galván, 1975) provides an extensive summary of the anthropometric characteristics of infants, children and adolescents in the Federal District. Dr. Ramos Galvan brought a largely clinical pediatric perspective to normal growth with a focus primarily on growth status.

The research of Professor Faulhaber provides a major baseline for the growth status of middle class children in the Federal District in the 1960s and 1970s, in contrast to the more specialized mixed-longitudinal sample of Dr. Ramos Galvan, which was drawn from his private pediatric practice. Indeed, compared to the sample of Dr. Ramos Galvan, the middle class children and adolescents studied by Professor Faulhaber are consistently shorter and lighter, and provide a sample that is more typical of the middle class Mexican population. Only recently have urban children in several areas of Mexico (Sonora, Veracruz, Federal District, Peña Reyes *et al.*, 2002; Siegel, 1999) caught-up in height and weight to the sample of Dr. Ramos Galvan. Hence, the middle class sample of Professor Faulhaber from the 1960s and 1970s provides an excellent baseline for evaluating secular trends in the growth status of Mexican children.

Professor Faulhaber's recent monograph, co-authored with her daughter (Faulhaber and Sáenz, 1994) summarizes the results of a cross-sectional survey of more than 2 000 males and females 14-18 years of age at a 1990-1991 exposition on science and sport. The data provide a valuable complement to her earlier research in providing data on anthropometric characteristics for later adolescence. This sample is unique in that the majority of adolescents indicated regular participation in physical activity, specifically in the context of sport. And at present, there is a major public health focus on the need for further study of physical activity in children and adolescents (see Malina, 2001).

Internationally, Professor Faulhaber was in many ways an ambassador for Mexican physical anthropology and especially in the auxology community. She also had an interest in the sport science community as evidenced in her pivotal role in the study of Olympic athletes carried out at the 1968 Olympic Games in Mexico City. Professor Faulhaber was involved in the first two scientific seminars leading up to the Olympic Games project (July 1967 and March 1968). It is puzzling as to why she was not involved in the third scientific seminar after the Games (June 1969), and even more puzzling why she was not included among the co-authors of the monograph summarizing the results (De Garay *et al.*, 1974). I leave this to students of the history of physical anthropology and sport science in Mexico to decipher this puzzle! Unfortunately, the data for the athletes at the

1968 Olympic Games are reported in only a descriptive manner and not in a more analytic and anthropological perspective, except, perhaps, for a brief summary of several genetic markers.

In one of our discussions, Professor Faulhaber indicated to me that she had a set of the anthropometric data from the athletes surveyed at the Mexico City Olympic Games, although I am not aware if she did any analyses subsequent to the monograph edited by De Garay et al. (1974). I was able to utilize some of the data from the 1968 Olympic Games, specifically the data for Olympic athletes under 18 years of age. The samples of athletes at the 1968, 1972 (Munich) and 1976 (Montreal) Olympic Games included a reasonable number under 18 years of age which permitted a summary of the growth characteristics of elite adolescent athletes (Malina et al., 1984).

In summary, the extensive research of Professor Faulhaber and that of her students and collaborators, illustrates the dynamic nature of auxology in the broader framework of Mexican physical anthropology and the dynamic nature of the study of indigenous communities in Mexico. The field of physical anthropology in Mexico is very active due in large part to the legacy of Professor Faulhaber, and I am pleased to be a part of it, albeit a small part. As she is special to all of you, especially her family, she is also special to me and to my students. Thank you for the opportunity to share these thoughts with you.

REFERENCES

COMAS, J.

1957 Manual of Physical Anthropology, C. C. Thomas, Springfield, Il.

Comas, J. and J. Faulhaber

1965 Somatometría de los Indios Triques de Oaxaca, México, Universidad Nacional Autónoma de México, Instituto de Investigaciones Históricas, Sección de Antropología, México, D.F.

FAULHABER, J.

1970 Anthropometry of living Indians, T. D. Stewart (ed.), *Handbook of Middle American Indians*, vol. 9, Physical Anthropology, University of Texas Press, Austin: 82-104.

- 1976 Investigación longitudinal del crecimiento, Colección Científica, 26, INAH, México.
- Body size and maturation in Mexico, J. Borms, R. Hauspie, A. Sand, C. Susanne, and M. Hebbelinck (eds.), *Human Growth and Development*, Plenum, New York: 163-171.
- 1989 Crecimiento: somatometría de la adolescencia, Universidad Nacional Autónoma de México, Instituto de Investigaciones Antropológicas, Mexico, D.F.

FAULHABER, J. AND M. E. SÁENZ F.

1994 Terminando de crecer en México: antropometría de subadultos, Universidad Nacional Autónoma de México, Instituto de Investigaciones Antropológicas, México, D.F.

GARAY DE, A. L., L. LEVINE AND J. E. L. CARTER (EDS.)

1974 Genetic and Anthropological Studies of Olympic Athletes, Academic Press, New York.

MALINA, R. M.

- 2001 Physical activity and fitness: Pathways from childhood to adulthood, American Journal of Human Biology, 13: 162-172.
- Having fun-ajock in two worlds: kinesiology and anthropology, A. S. Ryan (ed.), A Guide to Careers in Physical Anthropology, Bergin and Garvey, Westport, CT: 189-217.

Malina, R. M., H. A. Selby, L. J. Swartz

1972 Estatura, peso y circunferencia del brazo en una muestra transversal de niños zapotecos de 6 a 14 años, *Anales de Antropología*, 9: 143-155.

Malina, R. M., B. B. Little, C. Bouchard, J. E. L. Carter, P. C. R. Hughes, D. Kunze and L. Ahmed

1984 Growth status of olympic athletes less than 18 years of age: young athletes at the Mexico City, Munich, and Montreal Olympic Games, J. E. L. Carter (ed.), *Physical Structure of Olympic Athletes. Part II. Kinanthropometry of Olympic Athletes*, S. Karger, Basel: 183-201.

Peña Reyes, M. E., E. E. Cárdenas Barahona, M. B. Cahuich, A. Barragán, and R. M. Malina

2002 Growth status of children 6-12 years of age from two different geographic regions of Mexico, *Annals of Human Biology*, 29: in press.

RAMOS GALVÁN, R.

1975 Somatometría pediátrica: estudio semilongitudinal en niños de la ciudad de México, Archivos de Investigación Médica, 6 (sup. 1): 83-396.

SIEGEL, S. R.

1999 Patterns of sport participation and physical activity in urban Mexican youth, Doctoral dissertation, Michigan State University, East Lansing, Michigan.