Curriculum vitae and scientific works of Professor Fiorenzo Facchini

Fiorenzo Facchini was born in Porretta Terme (Bologna, Italy), on 11 November 1929. He got a Degree in Natural Sciences at the University of Bologna, and held positions as volunteer, extraordinary and ordinary Assistant Professor at the Anthropology Institute of the same University. In 1968 he habilitated in Anthropology; he has then been teaching Biometry and Anthropometry from 1969 to 1971, and Anthropology from 1971 to 1975 at the University of Bologna. He obtained in 1975 the chair of Anthropology at the University of Modena and in 1978 was called to the same chair at the University of Bologna. From 1971 to 1994 he has been the Director of the Institute of Anthropology, and later became head of the area of Anthropology in the Department of Experimental Evolutionistic Biology.

For several years he has been teaching Cultural Anthropology to students for the Bachelor's Degree in Social Service, and for the Degree in Social Service, and teacher of Ethic Rules and Professional Deontology in the School for Nursing Directors of the University of Bologna.

From 2003 to 2006 he has been teaching Socio-Anthropology in the Faculty of Education Sciences of the University of Bolzano-Bressanone.

From 1985 to 2006 he has been teaching Human Paleontology in the Specialization School of Archaeology in Bologna.

From 1971 to 2003 he has been in charge of the Museum of Anthropology in Bologna, which has been renovated under his direction in 1991. He has been a founder and a President of the Istituto Petroniano Studi Sociali Emilia e Romagna (IPSSER) since 1973.

He has coordinated PhD Courses in Anthropological Sciences, (among the Universities of Ferrara and Parma), from the 4th to the 17th cycles.

He retired from work on November 2005.

He is now Emeritus Professor of Anthropology at the University of Bologna (since 2007).

He is a Catholic priest of the Dioceses of Bologna. Over the time, he has been assigned various pastoral tasks, and has been for several years Episcopal Vicar for culture, school, and university. He is currently Sector coordinator of the *Veritatis Splendor* Institute, and chaplain for the AMCI (Italian Catholic Medical Association). He is also Apostolic Protonotary (since 2005).

He is Member of several Scientific Societies, both in Italy and abroad, including the Societé Scientifique de Bruxelles, the Colombian Institute of Anthropology, the Associazione Antropologica Italiana, the European Anthropological Association, the American Association for the Advancement of Sciences, the New York Academy of Sciences, the International Association of Human Biologists. He is a former President of the Associazione Antropologica Italiana and Member of the Governing Council of the Istituto Italiano di Antropologia. He is a Member *ad honorem* of the Società Italiana di

Antropologia ed Etnologia. He has been a Corresponding Member of the Accademia delle Scienze di Bologna since 1986, and became a Full Member in 2001; he is an Honorary Member of the Croatian Anthropology Society (2000), a doctor honoris causa of the Institute of History and Ethnology of the Academy of Sciences of Kazakhstan (1996), a Full Member of the Academy of Natural Sciences of Kazakhstan; he received an Al-Farabi gold medal from the same Academy, is Honorary professor of the Kainar University of Alma Ata (1999). He is a Member of the International Committee of the Prehistoric Anthropology of the Principality of Monaco. He is a Member of the Scientific Committee of the International Foundation Nova Spes. Hi is a Member of the Permanent Council for Italy of the International Institute for the study of man.

He was assigned the Lunigiana Prize for Scientific Publishing (1999), the International Prize "Fabio Frassetto" for Physical Anthropology in 2002 by the Accademia dei Lincei, the SEFIR Prize 2008 (for the research area "Science and Faith").

He has been an invited speaker to Conferences and Meetings both at the Italian and at the international level, organized by various institutions: the Collège de France, the Accademia dei Lincei, the Pontifical Academy of Sciences, the Pontifical Academy of Life, the Maragall Foundation in Barcelona, the University of Malta, the Charles V University of Prague, the Kainar University of Alma Ata, the University of Caen, the Pontifical Athenaeum Regina Apostolorum, the Pontifical University of the Holy Cross, the Pontifical Gregorian University, the Société d'Anthropologie of Paris, the International School of Anthropology of Zagreb, the European Anthropological Association, the Union Internationale des Sciences Préhistoriques et Protohistoriques, the Musée d'Anthropologie préhistorique de Monaco, the Unesco, the Catholic University of Braga (Portugal), the University of Barcelona. In particular he talked in the Round Table discussion about brain and mind, held at the Pontifical Academy of Sciences (25 Oct. 1988, Proceedings, 1992). He has been invited at the Plenary Session of the Pontifical Academy of Sciences 22-25 Oct. 1996; he was speaker at the Plenary Session of the Pontifical Academy of Sciences on "Scientific Insights into the evolution of the Universe and of life" (31 Oct. - 4 Nov. 2008).

He is a Founding Member of GRANDI (Groupement d'Anthropologie didactique) (2000), which operates mainly in the countries whose language is Spanish, French or Italian; he was Member of the Scientific Committee of the online magazine "Antropo", published by GRANDI in the three above mentioned languages.

He is Member of the Editorial Board of several publications, including Human evolution, Journal of Anthropological Sciences, Caryologia, Bulletin du Musée d'Anthropologie Préhistorique de Monaco.

He has organized several Scientific Conferences. Quoting only some of the most recent ones: September 2000, International Conference on "Science and knowledge: Toward which rationality?", as part of the Teachers Jubilee; in 2003 the Meeting promoted by the University and by the Dioceses of Bologna on "An Environment for Man;" in November 2006 an International Symposium on the Neanderthal Man, in which he also acted as Editor for the publication of the Acts; an International Seminary on Complexity and Evolution, held in Bologna by the *Veritatis Splendor* Institute.

He has been in charge of Operational Units of various projects of the CNR (Italian National Research Council), including the "Biological Archive" Finalized Project of the Italian Public Instruction Ministry (MURST). He has been coordinator of national programs known as "ex-40%" (1998, 2000, 2002) with the participation of eight research groups about the evolution of human population in Italy. He has been coordinator of an international research project about modernization in Kazakhstan (MIUS, FIRB, 2003), in collaboration with the Institute of Nutrition of Kazakhstan, the Laboratory of Anthropology of the Institute of History and Ethnology of the Academy of Sciences of Kazakhstan and with the Central State Museum of Kazakhstan.

The research areas of Fiorenzo Facchini are Anthropology of the living populations, Palaeoanthropology, and Palaeobiology. Regarding the living population, he dealt with subjects like human growth, genetic polymorphisms, and human adaptation. Growth has been studied in several research projects, using also the longitudinal method, in particular in the prepuberal and puberal, about which he evidenced peculiar behaviors at the somatometric and physiometric level, with an accent to the phenomenon of the secular trend. A good number of blood groups polymorphisms, of serum and of enzymes have been studied, regarding different populations. Such studies have recently been widened to cover DNA polymorphisms regarding European and Asian populations. A particular attention has been devoted to the adaptation to high altitudes in Central Asia populations (Kazakhs, Uyghurs, Kyrgyz) living in four regions of Kazakhstan and Kirgyzstan. For this purpose, Prof. Facchini coordinated two expeditions: in Kazakhstan in 1993 and in Kirgyzstan in 1994. The results of those researches, published in international peer revew journals, suggest that human adaptation in those populations are not due to genetic selection, but happened during the development.

Researches on the biology of Central Asia populations carried out at the DNA level variations that place them in the middle between the Europoid and the Mongolian strain.

The research on modernization in Kazakhstan, which has been completed for the data collection part (2002-2005), has been carried on on a champion of population of 5000 people of age between 7 and 18 years, in Kazakhstan; it dealts with anthropological, nutritional, physiological, and epidemiological aspects, with regard to the urban and rural environment, and to the main ethnic groups (Kazakhs, Russians). Part of the results have been published on international journals.

Regarding Paleoanthropology, Prof. Facchini studied several archaeological remains of ancient populations in the Emilia-Romagna region,

ranging from the Neolithic to the Medieval Age. He did the same also for other countries (Mexico, Colombia, Chad, Morocco, Croatia, and Kazakhstan). A particular attention has been devoted to the behavior of prehistoric man, characterized by planning and symbolization, both of which he denoted as being the essential elements of culture. He introduced the distinction between the functional and social symbolism, and the one related to art and spirituality, i.e. the spiritual symbolism. Expressions of social and functional symbolism can be found from the early phases of humanity, and have been important as adaptive strategies. He also dealt in several works with the religious sense in prehistory. Regarding the influence of culture in prehistory, he proposed the possible areas of a Cultural Palaeoanthropology.

Together with the contribution of culture to the evolutionary success of humanity, Fiorenzo Facchini stressed the particular relation with the environment that man carries on through culture, in prehistory and also at the present time. This led him to define culture as the "human ecological niche."

In the palaeobiological field he studied in particular the skeletal indicators of age, sex, and activity, both from the methodological point of vew, and studying ancient populations, evidencing, in skeletal morphology, characteristics that can be put in relation with physical activity, pathologies, or practices of ethnological interest (*cribra*, injuries, and cranial trepanation). Recently he studied some symbolic expressions of Neanderthalians of Krapina.

Fiorenzo Facchini also dealt with more general types of problems, regarding the relation between evolution and creation; he stressed the need for differentiated approaches, to avoid confusion and misunderstandings. An article he wrote for the *Osservatore Romano* (16 January 2006), dealing with the relations between Science and Intelligent Design, has been quoted by the *New York Times* and by several scholars at the international level. He was speaker on this subject in numerous national and international Conferences.

The results of his researches have been documented in more than 400 publications on national and international journals, including the American Journal of Physical Anthropology, the American Journal of Human Biology, Human Biology, the Annals of Human Biology, the American Journal of Human Genetics, Homo, the International Journal of Osteoarchaeology, the Anthropologischer Anzeiger, the Journal of Physiological Anthropology, Human Heredity, Collegium Antropologicum, Bulletin et Mémoires de la Societé d'Anthropologie de Paris, L'Anthropologie, Comptes rendus de l'Academie des Sciences, the International Journal of Food Sciences and Nutrition.

He published or edited several books, some of them aimed at high-level scientific popularization. A number of them are quoted below:

- *Il cammino dell'evoluzione umana* (I ed. 1985; II ed. 1994). Translated in Croatian.
- Antropologia (Evoluzione, Uomo, Ambiente). Utet, Torino, pp.600 (I ed. 1988; II ed. 1995).

- L'Uomo. Introduzione alla Paleoantropologia (with a preface by Yves Coppens), Jaca Book, Milan, 1991. Translated in French, Spanish, German, Japanese.
- La religiosità nella preistoria (with B. Vandermeersch, J. Kozlowsky, M. Gimbutas), Jaca Book, Milan, 1991. Translated in Croatian.
- Premesse per una Paleoantropologia culturale. Jaca Book, Milan, 1992.
- Paleoantropologia e Preistoria. Dizionario enciclopedico (with A. Beltran and A. Broglio) (more than 800 entries, with original contributions of Italian and international scholars). Jaca Book, Milan, 1993.
- The first humans and their cultural manifestations (ed), Colloquia VII and VIII XIII Intern. Congress UISPP, Forlì 8-14 Sep. 1996. Abaco, Forlì.
- Evoluzione umana e cultura. La Scuola, Brescia, 1999.
- Miti e riti della preistoria. (with P. Magnani), Jaca Book, Milan, 2000.
- Scienza e conoscenza verso un nuovo umanesimo (ed.), Acts of the Convegno internazionale su "Scienza e conoscenza: verso quale razionalità?", Bologna, Sep. 2000. Compositori, Bologna, 2000.
- Origini dell'uomo ed evoluzione culturale. Profili scientifici, filosofici, religiosi. Jaca Book, Milan, 2002.
- Un ambiente per l'uomo (ed.), Edizioni Dehoniane, Bologna, 2005.
- *E l'uomo venne sulla terra*. S. Paolo, Cinisello Balsamo, 2005. Translated in Spanish.
- Le origini dell'uomo e l'evoluzione culturale. Jaca Book, Milan, 2006. Translated in French, German, Croatian, Spanish.
- *L'avventura dell'uomo*. S. Paolo, Cinisello Balsamo, 2006. Translated in Polish.
- Popoli della Yurta. Dalla preistoria alla modernità. (ed.), Jaca Book, Milan, 2008.
- Le sfide dell'evoluzione. In armonia tra scienza e fede. Jaca Book, Milan, 2008. French translation with an introduction by Mgr. G. Ravasi).
- La lunga storia di Neandertal (F. Facchini and M.G. Belcastro eds.), Jaca Book, Milan, 2009
- Complessità, Evoluzione, Uomo (ed.), Jaca Book, Milan, 2011.

For scientific popularization he wrote four volumes: *Una giornata con Homo habilis*; *Una giornata con Homo erectus*; *Una giornata con i Neandertaliani*; *Una giornata con Homo sapiens* (Jaca Book, Milan, 2002-2003). Translated in French and English.