

Francesco Forastiere, MD, PhD

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Born in Modena, Italy, January 10, 1954. Resident in Via Paquale Baffi 14, Rome, Italy

ACADEMIC DEGREES

- Medical Doctor - Medical School, Catholic University - Rome, October 1978.
- Specialist in Occupational Medicine - Medical School, Catholic University - Rome, October 1982.
- Master of Sciences in Epidemiology - London School of Hygiene and Tropical Medicine - London, December 1982.
- Doctor in Philosophy (PhD) in Epidemiology and Occupational Medicine - University of Linköping - Sweden - Linköping, March 1994.

EMPLOYMENT

- 1982-1991, Researcher at the Epidemiology Unit, Lazio Regional Health Authority, Rome, Italy.
- 1991-2004, head of the Analytical Epidemiology Section of the Department of Epidemiology, Rome Health Authority, Italy.
- September 1996 - July 1997, visiting faculty member at the School of Public Health, University of California, Berkeley
- 2005 to January 2017, Director of the Etiological and Occupational Epidemiology Division, Department of Epidemiology, Lazio Region, Italy.
- February 2017- January 2018, Visiting Senior Scientist, Department of Epidemiology, Lazio Region, Italy.
- Since October 2017, Visiting Scientist at the IRIB- CNR, Palermo, Italy
- June 1, 2017- December 31, 2018, Consultant at the WHO Headquarter in Geneva on the air pollution program.
- December 1, 2017- November 30, 2018, and April 2021- February 2022, Consultant at the World Bank for the PMHE project in Lagos, Nigeria.
- June 2018- July 2020, Visiting Professor at King's College, Environmental Research Group, London
- Since September 2020, Visiting Professor at Imperial College, Environmental Research Group, London

RESEARCH EXPERIENCE

I performed clinical research on chronic respiratory disorders and asthma during my medical residency in 1978-1979. In 1980, I started my career as epidemiologist with an investigation of large epidemic of Legionella disease in Italy. With the Epidemiologic Unit of the Lazio Region in Rome, I gave my initial contribution to the development of a geographical information system for small areas analysis of mortality data. In 1983, I started to evaluate the health risks, silicosis and lung cancer, associated with silica exposure among ceramic workers. My contribution had importance for the recognition of silica as a human carcinogen (IARC, 1997). I provided a specific contribution for the recognition of strong acid mists as a human carcinogen (IARC, 1992). During the eighties and early nineties, I conducted several mortality studies of workers employed in various occupations entailing a cancer risk (farmers, taxi drivers, policemen, seamen, and filling stations attendants) with an interest in occupations with exposures to traffic exhaust. As a part of my PhD program at the University of Linköping in Sweden, I performed an evaluation of environmental and occupational factors associated with lung cancer. In 1987, I started new studies on the effect of indoor and outdoor pollution on respiratory health of children mainly evaluating the effects on respiratory symptoms, lung function and bronchial reactivity.

Since 1994, I have been the Italian Coordinator of the International Study on Asthma and Allergies in Childhood (ISAAC). The study in Italy investigated the occurrence and the risk factors for childhood asthma based on a large survey encompassing about 40,000 subjects. In addition, I have conducted studies to evaluate the effects of passive smoking exposures on asthma in children. I have been the principal investigator of a case-control study in Italy, within the IARC coordination, evaluating the role of active and passive smoking on lung cancer. Since the mid nineties, I have conducted studies on the health effects of air pollution in the general environment using time-series and case-crossover methods, the effects of silica exposure on silicosis and other autoimmune disorders, the effects of pesticide exposure on the human immune response, the role of residential radon exposure on lung cancer. I have been the coordinator of the EC Quality of Life study on air pollution and myocardial infarction (HEAPSS) and the Italian principal investigator in several EC funded projects, including ESCAPE and ELAPSE. I repeatedly served as a temporary adviser to IARC (IARC Monographs on Strong Acids Mists, Air Pollution, and Glyphosate) and WHO (Air Quality Guidelines, 2005 and 2021). I have been the coordinator of several national programs funded from the Ministry of Health for the evaluation of the role of various environmental factors. I have been Consultant of the World Bank for the Health Impact Assessment of Air Pollution in Lagos, Nigeria. I have been consultant of WHO Headquarters for the air pollution program and I have been Chair of the Scientific Committee for the First Global Conference on Air pollution, Geneva November 2018. From January 2018 to December 2021, I have been Consultant of the Health Effect Institute, Boston, USA, for the Systematic review of the health effects of traffic related air pollution.

SCIENTIFIC INTERESTS

I have been participating to several innovative European (HEAPSS, AIRGENE, ESCAPE, ENNAH, INTARESE, APHEKOM, MEDALL, MEDPARTICLES, ELAPSE) and Italian projects (EPIAIR, VIAS, PICCOLI+, EpiAmbNet) on the health impact of environmental factors on human health (air pollution, noise, radon, waste, industrial sites, heat waves). I have performed Health Impact Assessment of various environmental policies, namely passive smoking, air pollution, noise and waste treatment. In all these fields, I have been always committed to evaluate the social inequalities in the health impact of hazards and policies. Since February 2020 I have been following the Covid-19 pandemic in Italy providing support to regional and national institution to the face the public health issues.

TEACHING EXPERIENCE

- Professor of Epidemiologic Methods at the School of Medical Statistics, University of Rome, from 1989 to 1995. Courses leading to the title of Specialist in Statistics.
- Professor of Epidemiology at the III University of Rome, Faculty of Mathematics, Physics, and Natural Sciences, 1997-1998. Courses leading to University Degree in Biology.
- Professor of Epidemiology, Catholic University Rome, Faculty of Medicine, Courses leading to Master in Epidemiology, 2002-2005
- Professor of Epidemiology, University of Bologna, Faculty of Medicine, Courses leading to Master in Epidemiology, 2003-2005
- Professor of Epidemiology, University of Turin, Faculty of Medicine, Courses leading to Master in Epidemiology, 2000-2021.

OTHER ACTIVITIES

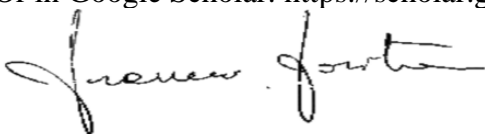
- Member of the IARC Working Group on silica carcinogenesis, 1986. Member of Working Group of the IARC Monograph on the Evaluation of The Carcinogenic Risk of Occupational Exposures to Mist and Vapours from Strong Inorganic Acids and other Compounds, 1991. Temporary adviser for WHO during the International Meeting on "Setting Priorities in Environmental Epidemiology", 1993. Expert of WHO- Europe for Update and Revision of the "Air Quality Guidelines", Hamburg,

1995 and Oslo, 1995. Temporary adviser for WHO during the International Workshop on "Health effects of ozone and nitrogen oxides in an integrated assessment of air pollution" Eastborne, June 1996. Temporary adviser for WHO during the International Workshop on "Review of Health Aspects of Air Pollution with Particulate Matter, Ozone and Nitrogen Dioxide" Bonn, Germany, January 2003. Temporary adviser for WHO for the preparation of the "Air Quality Guidelines-Global Update- 2005". Temporary adviser for WHO for the REVIHAAP and HRAPIE projects on air pollution and health (2013). Member of Working Group of the IARC Monograph on the Evaluation of The Carcinogenic Risk of Air Pollution, 2013. Member of Working Group of the IARC Monograph on the Evaluation of The Carcinogenic Risk of Pesticides, 2015. Member of the Guideline Development Group for the update of the WHO Global Air Quality Guidelines, Bonn, 2016-2021.

- Expert for the Italian Foreign Ministry for cooperation in Health Information System in Angola (1983) and Argentina (1990). In 1997 Member of the subcommittee on "Air pollutants" of the Italian 'Commissione Consultiva Tossicologica Nazionale (CCTN)'. In 1998-1999 I served as member the Italian National Cancer Committee and the Italian National Committee of Indoor Air.
- President of the Italian Epidemiology Association during 2000-2002. Since 1996, member of the American Thoracic Society, the European Respiratory Society, and of the International Society for Environmental Epidemiology. Councillor of the International Society for Environmental Epidemiology 2002-2004. Fellow of the Collegium Ramazzini.
- Associated editor of the International Journal of Epidemiology (until 2017); associate editor of Environmental Health, member of the Editorial Board of Occupational Environmental Medicine (2006-2011) and of Environmental Research. Since January 2017, Editor in Chief of the Italian Journal "Epidemiologia e Prevenzione".
- Regular scientific reviewer for the following journals: American Journal Epidemiology, American Journal Respiratory and Critical Care Medicine, Epidemiology, International Journal of Epidemiology, Occupational Environmental Medicine, European Respiratory Journal, Allergy, Journal of Epidemiology and Community Health.
- 2006 to 2010, Chairman of the standing "Environment and Health Committee" of the European Respiratory Society, with the task of coordinating the ERS advocacy activities for clean air at the European Union level.
- I have served the Court of Torino in 1985 for a case of cancer related to occupational exposure in the rubber industry; the Court of Taranto in 2012 for a case of environmental pollution from a large steel plant; the Court of Padova for a case in 2013-2014 on a Military base and cancer cases; the Court of Salerno for a case of environmental pollution from a steel plant.
- In 2016, I was chair of the International Conference of the International Society for Environmental Epidemiology (ISEE) in Rome.
- Fellow of the European Respiratory Society, 2016, recognition for excellence in contributions to research, education and clinical leadership in respiratory medicine.
- Appointed *Knight Commander* by the Italian President of the Italian Republic, 29 December 2019.

PUBLICATIONS

I have published, as author or co-author, 616 papers in the peer-reviewed scientific literature (PubMed) with H-Index of 114 and 48,836 citations (Google Scholar). Complete List of Published Work in MyBibliography: <https://www.ncbi.nlm.nih.gov/myncbi/14kkYxGzfrqQn/bibliography/public/>
Or in Google Scholar: <https://scholar.google.com/citations?hl=it&user=zxpdyH4AAAAJ>



Rome, March 7, 2022