

BIOS FOR SPOKESPEOPLE

Professor Giuseppe Cornaglia, ESCMID President, Professor of Microbiology, Department of Pathology, Verona University

Professor Cornaglia is the current President of ESCMID, a post he has held since April 2007. He graduated in Medicine and Surgery from the University of Sassari, Italy, and since 2005 has been Associate Professor of Microbiology in the Department of Pathology, Verona University where he also sits on the Board of Directors.

Professor Cornaglia has co-ordinated the activities of the Italian Surveillance Group for Antimicrobial Resistance (ISGAR), including the creation of a national database of antimicrobial susceptibility data. Since 1999 he is also the leader of the Italian chapter of the Alliance for the Prudent Use of Antibiotics (APUA).

He was awarded a Ph.D in Public Health at the Catholic University of Trnava in Slovakia where he is also a Visiting Associate Professor. Professor Cornaglia was a key organiser of a meeting on the Role of Research in Combating Antibiotic Resistance in conjunction with the European Commission and Italian Ministries of Research and Health. In 1997 with Professor Jacques Acar he founded the European Study Group for Antimicrobial Resistance Surveillance (ESGARS) as part of ESCMID and is currently Chairman of the Study Group.

Dr Rino Rappuoli, ESCMID Excellence Awardee 2011 , Global Head of Vaccines Research for Novartis Vaccines & Diagnostics, Siena, Italy

Rino Rappuoli, PhD, is Global Head of Vaccines Research at Novartis Vaccines and Diagnostics, based in Siena, Italy. He earned his PhD in Biological Sciences at the University of Siena and has served as a visiting scientist at Rockefeller University in New York and Harvard Medical School in Boston. Dr. Rappuoli is a member of European Molecular Biology Organization and foreign associate of the American National Academy of Sciences and has published more than 450 works in peer-reviewed journals.

Dr. Rappuoli introduced several novel scientific concepts, the names of which became popular. Examples are the concept that bacterial toxins can be detoxified by manipulation of their genes (**genetic detoxification, 1987**), the concept that microbes are better studied in the context of the cells they interact with instead of artificial laboratory conditions (**cellular microbiology, 1996**), the use of genomes to develop new vaccines (**reverse vaccinology, 2000**), the observation that the genome of a species (**pangenome, 2005**) is larger than the genome of an organism of the same species.

Several molecules he worked with became part of licensed vaccines. Dr. Rappuoli characterized a molecule, **CRM197**, that today is the most widely used carrier for vaccines against *H. influenzae*, *N. meningitidis* and pneumococcus vaccines, and is used multiple times to vaccinate most children of the globe. Then he developed a **vaccine against pertussis** by engineering *B. pertussis* to produce a non toxic pertussis toxin antigen. This was the first rationally designed molecule approved for human use. Later he developed the first **conjugate vaccine against meningococcus C** that eliminated the disease in the UK in 2000. He pioneered the use of genomic information for vaccine development (reverse vaccinology). The first genome-derived vaccine against **meningococcus B** is now in Phase III clinical trials, several others are in earlier stages of development. Finally, in 1997 he obtained the regulatory approval for **MF59**, the first vaccine adjuvant approved for human use after the approval of aluminium salts in the 1920s. MF59 is now being used in many other experimental vaccines, the most advanced of which is a vaccine against pandemic influenza.

Professor Didier Raoult, ESCMID Executive Committee Member, Professor at Marseille School of Medicine and Director of the Clinical Microbiology Laboratory for the University Hospitals

Since 1994 Professor Raoult has been Head of the Department of Clinical Microbiology at Marseille School of Medicine and is Director of the Clinical Microbiology Laboratory for the University Hospitals. Professor Raoult is Editor-in-Chief of *CMI* which is ESCMID's official peer-reviewed scientific journal. He sits on the editorial boards of a number of scientific and medical publications, including *The Lancet Infectious Diseases*, and has received awards from the French Foundation for Research, ESCMID and the French Tropical Medicine Foundation. He was founder and Director of the French National Reference Centre for Rickettsial Diseases in Marseille and of the WHO Collaborative Centre for Rickettsial Diseases.

Professor Raoult is a member of the ESCMID Executive Committee, ESCMID Excellence Awardee 2002 and Fellow of the Infectious Diseases Society of America.