The purpose of this interdisciplinary course is to understand why and how the evolutionary perspective is relevant for medicine, both in terms of research and practice (i.e. why we need “Evolutionary Medicine”).

• Human evolution has been slow and anatomical and physiological characteristics of our species (i.e. our bauplan) have changed very little in the last 80,000 years or so, however changing ecological contingencies have turned into risk factors for somatic disease and psychological disorders.

• Thus, for example, adaptations to the past environments including nutritional requirements, exposure to pathogens, social issues etc. have now turned into “epidemics” of autoimmune diseases, cardiovascular disease, diabetes and obesity, several forms of cancer, depression, anxiety and other psychiatric conditions.

• The workshop will highlight that understanding of evolutionary processes in medicine is not just an academic exercise, but imperative to better understand, diagnose, prevent, and treat medical conditions.
DARWIN IN MEDICINE:  
Why Evolution is relevant for research and medical practice  
April 19-23, 2022  
Erice, Sicily, ITALY

WORKSHOP ORGANIZERS

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Daniel R Wilson (Western University, USA)  
*Darwin in Medicine: Medicine in Darwin*

Frank Rühli (University of Zurich, CH)  
*Evolutionary Medicine: Contributions to present and future global challenges*

Fabio Zampieri (University of Padova, IT)  
*Darwin’s impact on medical sciences*

Paola Palanza & Stefano Parmigiani (University of Parma, IT)  
*The influence of human evolution on health and disease*

Alessia Nava (University of Kent, UK)  
*Modelling the evolution of the mother-infant dyad in ancient human populations*

Graham Rook (University College London, UK)  
*A Darwinian reformulation of the “Hygiene Hypothesis”*

James De Gregori (University of Colorado, USA)  
*Aging, somatic evolution and cancer – the inexorable link*

Philipp Mitteroecker (Universit of Wien, AT)  
*The evolution of human childbirth and obstructed labor*

Richard Bribiescas (Yale University, USA)  
*Evolutionary and Life History perspectives on health and aging in men*

Paola Romagnani (University of Florence, IT)  
*The kidney between adaptation and injury across evolution*

Caroline Blanchard (University of Hawaii, USA)  
*Sexual selection and Sex differences in disease vulnerability*

Gerhard Medicus (University of Innsbruck, AT)  
*Theory of (Medical) Psychology - Why Evolution is Crucial*

Alfonso Troisi (University of Rome-Tor Vergata, IT)  
*Evolutionary Psychiatry and the search for brain lesions: Why the Holy Grail is just wishful thinking*

Martin Brune (Ruhr University, Germany)  
*Maladaptive consequences of early childhood adversity*