



# CUSSB 15° ANNIVERSARY

**MONDAY 27 JANUARY 2020**  
**Vita-Salute San Raffaele University**  
**11:00 - Aula Seneca (Dibit 1)**

## **REPRODUCIBILITY, SELECTIVE INFERENCE AND GENERALIZATION OF FINDINGS**

**Prof. Ron S. Kenett**

KPA Ltd and the Samuel Neaman Institute, Technion, Israel

R.A. Fisher characterized a research claim as a phenomenon that is experimentally demonstrable so that we know how to conduct an experiment which will rarely fail to give us statistically significant results. This combines a retrospective view on how the research producing the claims was conducted and a forward-looking view on how these can be reproduced and generalized. The talk will discuss the question of reproducibility of research findings, the challenge in selective inference and the generalization of findings. Topics to be covered include the P-value controversy, out of study and in-study selection bias such as selection by table and selection by figure, selection inference adjustments, generalizability of research claims with alternative representations and, presentation of a boundary of meaning (BOM). It will be shown with examples from pre-clinical and clinical research that the BOM can be tested by referring to Type S errors proposed in Gelman and Carlin (2014).

**Host and discussant: Prof. Clelia Di Serio**  
CUSSB Director, Vita-Salute San Raffaele University