Tackling Complexity in Medicine and Public Health Using Large Databases

October 22nd – October 25th
San Raffaele Pisana, Rome
## Essentials of Large Databases (Day 1)

- **Course Overview** - K. Ornstein
- **Diagnostic and Procedure Coding** - B. Liu *(Exercise)*
- **Algorithms for Comorbidities and Risk Scores** - N. Egorova *(Exercise)*
- **Data Linkages** - K. Ornstein

19:00 *Keynote Address* S. Vella
   *More Data, More Health: The Role of Large Databases in Research and Development*

20:00 *Reception*

### End of Day I

## Essentials of Large Databases (Day II)

- **Comparison of US and European Healthcare** - K. Ornstein
- **Harmonization of Variables** - N. Egorova *(Exercise)*
- **Geospatial Data** - B. Liu *(Exercise)*
- **Misclassification and Bias Using Healthcare Databases** - K. Ornstein *(Exercise)*
- **Practical Considerations for Using Large Databases** - N. Egorova *(Exercise)*

### End of Day II

## Module I: Databases for Aging Research

- **Epidemiology of Aging** - Katherine Ornstein
- **Use of Administrative Data to Study US Older Adults** - B. Liu *(Exercise)*
- **HRS, SHARE and Other Longitudinal Surveys on Aging** - K. Ornstein
- **Comprehensive Geriatric Assessment** - G. Onder
- **Inappropriate Drug Use in Older Adults** - A. Marengoni *(Exercise)*

### End of Day III

## Module II: Cancer Registries

- **WHO Cancer Registry** - TBD
- **US Cancer Registries** - B. Liu *(Exercise)*
- **Using Cancer Registry Data for Environmental Research** - E. Taioli *(Exercise)*
- **Using Cancer Registries for Clinical Practice and Research** - E. Negri

### End of Day III

## Module III: Databases for Precision Medicine

- **Mechanism of Precision Medicine and Clinical Applications** - S. Bonassi
- **Creation, Management and Integration of Bioinfo Datasets** - C. Furlanello *(Exercise)*
- **Systems Medicine Databases for Drug Development** - J. Roca
- **Using Available Datasets to Look at SNPs** - TBD

### End of Day IV

## Module IV: Datasets for Pharmaceutical Research

- **Administrative and Panel Surveys in the US** - B. Liu *(Exercise)*
- **Drug Consumption in Italian Healthcare Datasets (HEALTHSEARCH)** - E. Taioli & TBD
- **National Databases for Regulation on Drug Registration/Marketing** - C. Tomino
- **GP Databases for Post-Marketing Monitoring of Medicine** - G. Trifiro *(Exercise)*

### End of Day IV

---

**Check-In 12:00 – 13:00, San Raffaela Pisana**