WORKSHOP
BIG DATA IN SLEEP ANEA
November 18th 2016. (8:00 - 14:30)

IRB Lleida. Institut de Recerca Biomédica
3.05 - Aula docent
Rovira Roure, 80. 25198 Lleida (Catalonia, Spain)

8:00 h

Wellcome and presentations.
(Montse Rue and Ferran Barbé)

8:30 h

Workpackage #1. **Big Data definition and methodology**
(Facilitator: Francesc Solsona)

• Introduction to Big Data (Francesc Solsona)	10 min
• Data Extraction, Transformation and Loading (Ivan Teixidó)	10 min
• Data storage, cloud infrastructure and Big Data processing (Jordi Vilaplana)	10 min
• Data Science: Computer science, Statistics, Mathematics.... Their role in Big Data analysis. (Ricard Gavaldà)	10 min
• Discussion	20 min

Deliverable #1: At the end of WP1 researchers will know the basic principles of Big Data analysis and the specific methods proposed for the analysis of large datasets.

9:30 h

Workpackage #2. **From Data Science to Clinic**
(Facilitator: Manuel Sánchez-de-la-Torre)

• Clustering and subgroup discovery: Identifying emerging relationships and hypothesis generation. (Sandra Bertran)	15 min
• Search of frequent patterns and associations. Comorbidome network identification. (Ricard Gavaldà)	15 min
• Big Data utility evidence in the clinical practice. Previous studies. (Jordi de Batlle)	15 min
• Discussion	45 min

Deliverable #2: At the end of WP2 researchers will be familiarized with the possible applications and clinical utility of Big Data analysis.

11:00 h

Coffee break
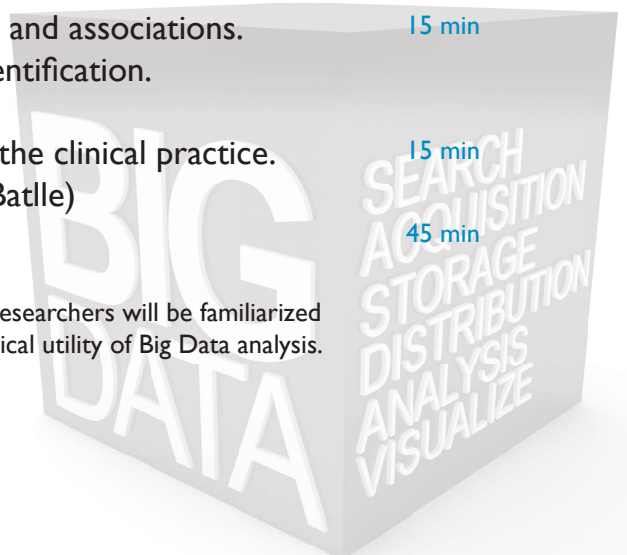
11:30 h

Workpackage #3. What Big Data can offer to sleep apnea? (Facilitator: Ferran Barbé)

- Applications of Big Data analysis to sleep apnea. (Cecilia Turino)

  20+10 min

- How can we extract information from the sleep apnea databases? Available sources of data. (Sandra Beltran)

  20+10 min

- ResMed: Available dataset from the industry. (Holger Woehrle)

  20+10 min

- Future perspectives and roadmap for our research (Joaquin Duran)

  60 min

Deliverable #3: At the end of WP3 researchers will know what Big Data offers to the sleep field, and will be able to identify current and future topics in sleep apnea to improve knowledge, translational and clinical practice from real-life population based data.principles of Big Data analysis and the specific methods proposed for the analysis of large datasets.

14:00 h

Closing comments
(Montse Rue and Ferran Barbé)

BIG
DATA

SEARCH
ACQUISITION
STORAGE
DISTRIBUTION
ANALYSIS
VISUALIZE

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