

## RAPTOR - LOOP REQUIREMENTS 4th-9th SEPTEMBER 2022



Contribution ID: 99

Type: **not specified**

### **Big data: acquiring and using large (patient) datasets/ Big Data in a Clinical Context**

*Monday, 5 September 2022 14:30 (1 hour)*

The rise and widespread adoption of internet technologies in the last twenty years have triggered the generation and storage of massive amounts of data. This abundance has fostered the development of systems able to perform distributed computations on a large scale that later came to be known as “big data technologies”. As often happens in the medical technology field, digital innovations that have matured in other industries eventually make their way into the research and clinical workflow.

This talk will give a brief introduction to the distributed computing core principles, providing a historical perspective on which technologies have developed over time and which are the most commonly used nowadays. It will then focus on how these technologies can be applied to data generated during the radiation therapy treatment course, addressing the unique challenges arising during data extraction, transformation, and analysis. Lastly, it will present how oncology analytics platforms like RayIntelligence have been developed to address the specific needs of radiation therapy data analysis.

**Primary author:** RUFFA, Giorgio

**Presenter:** RUFFA, Giorgio