ICAN IO
Data Sciences

CHART

Description

The ICAN IO - Data Sciences team is committed to maintaining the integrity and efficacy of data management and analysis within our organization. Our core responsibilities encompass managing data workflows, conducting extensive statistical analyses, and contributing to research growth.

01. Organisation

Head of the Platform and Data Scientist: Maharajah Ponnaiah, Ph.D

Coordinator of the Platform: Ludovic Le Chat, Ph.D

Team Members

Data Manager: Mehdi Menai, Ph.D

Data Scientist /Data Manager: Pauline PaulStephenRaj, Ph.D

Apprentice Bioinformatics: Rose Tchala Sare, MS

02. Operations and Workflow

Data Management

e-CRF Creation and Management:
- Overseen by the Data Manager, Project Leader, and Clinical Team, this involves ensuring the e-CRF items are appropriately created, logically arranged, and integrated with direct controls.

Data Management of Retrospective Data:
- This includes selecting quality treatment protocols for data without re-importation into an e-CRF using Clinical Team insight and Data manager experience.

Data Management of e-CRF-derived Data:
- Involves programming queries as per the data validation plan, under the aegis of the ICAN I/O pole.

Clinical and Omics Statistics

Data Reception:
- The ICAN I/O pole is responsible for validating the integrity and accuracy of received data, adjusting treatments as needed based on data quality.

Statistical Analysis:
- Conducted by Data Scientists to align with research plans or protocols. The analyses include classical statistical methods and/or machine learning and AI techniques, depending on project needs. Outputs are presented in PowerPoint, with detailed tables in Excel, accompanied by a comprehensive Project Statistical Report.

Participation in Publications

Quality Assurance:
- Data Scientists and Data Managers typically contribute to manuscripts and presentations at conferences. The PI is responsible for ensuring the quality of ICAN I/O members' contributions to publications.

03. Statistical and Bioinformatic Tools

The team predominantly utilizes R statistical tools, Python libraries, SPSS v.28.0, and customized omics tools for integrated treatment analysis.

04. Data Handling and Security

Archiving and Traceability:
- Managed by ICAN IO Quality Control, this involves archiving, tracing, and storing all data and relevant documents for 12 months post-results delivery using predetermined processes.

05. Project Planning and Submission

In collaboration with clinicians and researchers, the team engages in proposal writing for grants at national (ANR), European, and international levels.

06. GDPR Compliance

The team adheres strictly to GDPR regulations, working closely with the ICAN LEGATO team, which oversees legal compliance and data policy.

IHU
ican
Foundation for Innovation
in Cardiometabolism
and Nutrition

07. Billing and Funding

As a platform, ICAN IO bills users upon completion of activities, either through a direct billing to the PI team or through the corresponding Project Managers.

08. Training and Development

ICAN IO regularly offers internships to students at the Master's or Bachelor's level, training them in Data Science, Statistical Analysis, and Artificial Intelligence.

09. Communication and Publications

Publication and Communication Protocol:
- All publications or communications involving data from the team must appropriately acknowledge the team's involvement.