



Good Laboratory Practices and L.I.M.S. system: the Challenge for a Next Generation

Sequencing and Bioinformatic Research Laboratory



Istituto di Biomembrane e Bioenergetica

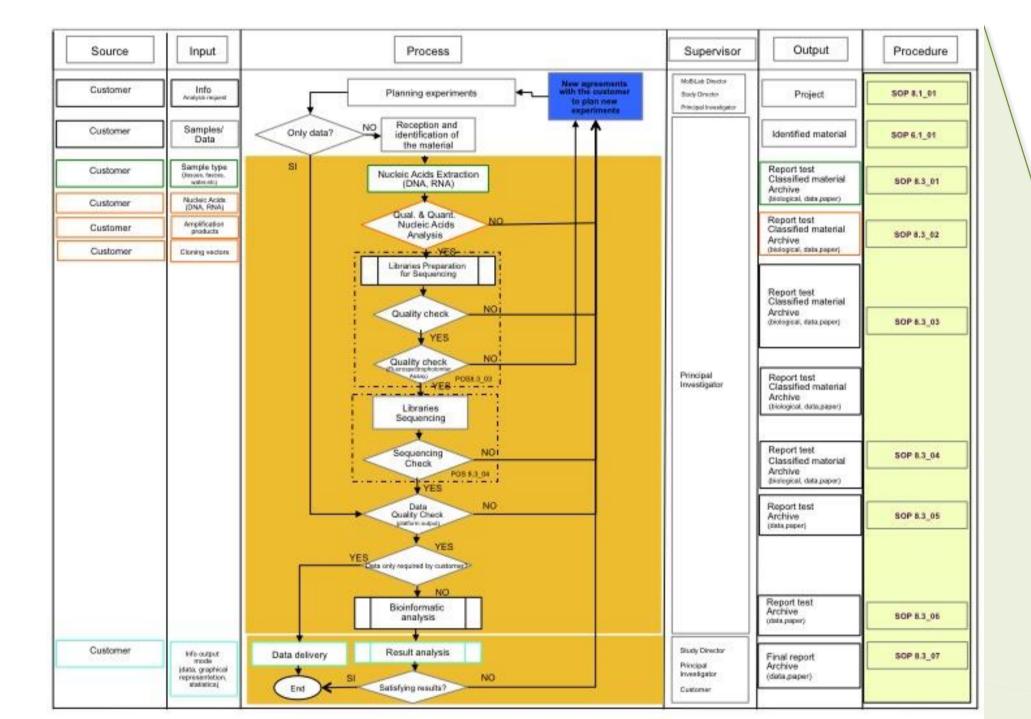


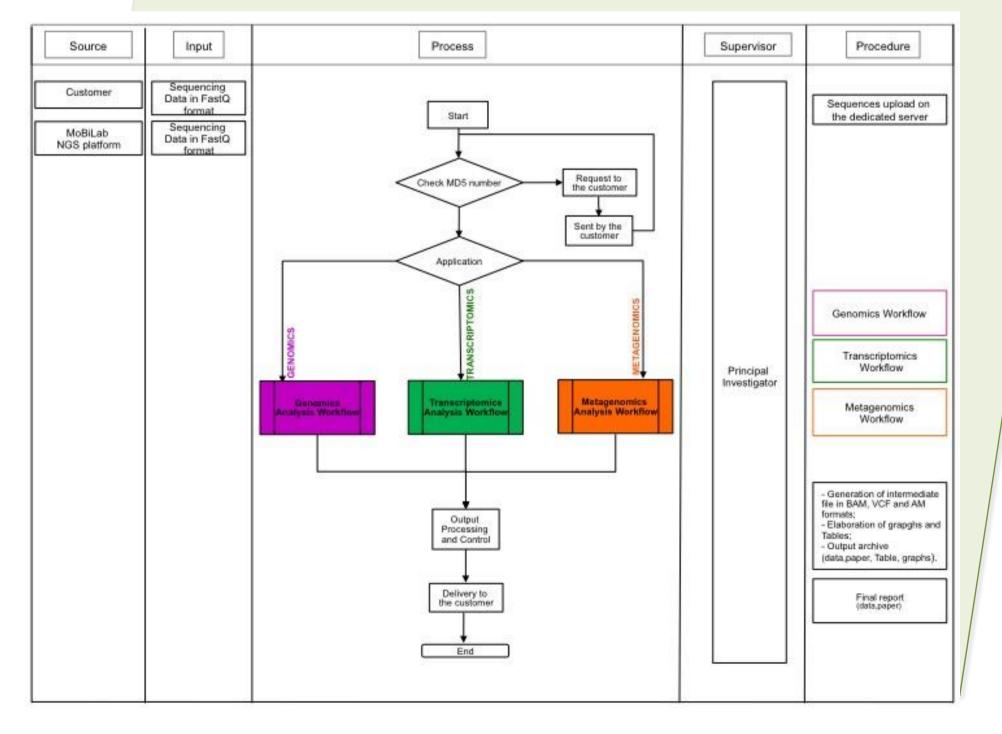
Marinella Marzano^{1*}, Caterina Manzari^{1*}, Daniela Filannino², Rossella Pizzi², Annamaria D'Erchia³, Claudia Lionetti¹, Ernesto Picardi³, Giuseppe Sgaramella¹, Graziano Pesole^{1,3}, Antonella Lanati⁴ and Francesca De Leo¹

¹Institute of Biomembranes and Bioenergetics-IBBE CNR, Via Amendola 165/A, 70126 Bari, Italy, ² Eusoft S.r.l. Bari, Milano, Londra www.eusoft.com, ³Department of Biosciences, Biotechnologies and Biosciences-University of Bari, Via Orabona 4, 70126 Bari Italy, ⁴Valore Qualità, Via G. Vidari 5, 27100 Pavia, Italy. * Marzano M and Manzari C have contributed equally to this work

Next Generation Sequencing (NGS) platforms have radically changed the field of genomics allowing both resequencing and de novo sequencing of whole genomes and are routinely applied to a variety of functional genomics problems, including, but not restricted to, global identification of genomic rearrangements, investigation of epigenetic modifications, single nucleotide polymorphism (SNP) discovery, transcriptome profiling and metagenomics. Although NGS has markedly accelerated multiple areas of genomics research, it is a massively parallel process and, thus, generates unprecedented volumes of data, which present challenges and opportunities for data management, storage, and, most importantly, analysis and interpretation.

PRELIMINARY RESULTS







INFORMATIONS

Tipologie Campione

Ricerca Tipologia can 🗙

Tipologie materiale

🛓 Campioni

THE PROJECT GOAL

Set up of a quality management system based on Good Laboratory Practices (GLPs) accompanied by a L.I.M.S. management system in order to assure the highest levels of reliability, reproducibility and traceability of the results, a process that is also expected to foster their potential exploitation.

WHO WE ARE?

The Molecular Biodiversity Laboratory (MoBiLab), located in Bari at the CNR-IBBE, is a NGS research infrastructure. In MoBiLab skills and advanced facilities for molecular and bioinformatics analyses are integrated to provide the scientific community with services and counselling for molecular biodiversity studies. The laboratory is fully equipped with operative platforms based on the most innovative NGS technologies and powerful resources for data storage and computational analysis in the field of Genomics, Metagenomics and Transcriptomics.

y Descrizione

ACIDI NUCLEICI

MATRICI CLINICHE

ACIDI NUCLEICI

MATRICI CLINICHE