Deliverable T.4: Dissemination plan

Our dissemination plan consists of the following items:

- Release the code of the component on the GitHub page (https://github.com/lasigeBioTM/BOLSTM) and the docker image on docker hub (https://hub.docker.com/r/andrelamurias/bolstm/);
- Develop a tutorial describing how to install and use the component using the Adapt tool;
- Submit a manuscript describing the methods and results of the selected case study to a scientific conference;
- Include the work developed for this project in a PhD thesis,
- Explore two additional case studies:
    - Extraction of miRNA-gene relations: MicroRNAs, or miRNAs, are small endogenous sequences of nucleotides used by animals, plants, and viruses to downregulate gene expression by targeting messenger RNA for cleavage or translational repression. Since they were discovered, these molecules have been found to be associated with several biological processes, including various developmental and physiological processes. For this reason, their dysfunction might contribute to human diseases. The expression of each miRNA is regulated by transcription factors. Therefore, these regulatory relations provide an interesting case study of complex biological processes, where miRNAs are regulated upstream by transcription factors, while miRNAs target specific genes, and each miRNA-gene pair may be associated with one or more diseases. miRNAs are considered potential diagnostic and therapeutic targets for complex diseases.
    - Extraction of protein-cell relations: Tolerogenic cell therapies provide an alternative to conventional immunosuppressive treatments of autoimmune disease and address, among other goals, the rejection of organ or stem cell transplants. These therapies aim at modulating the pathological immune response with minimal effect on the immune system. Antigen-presenting cells (APCs) can be induced to control the immune response by targeting specific T cell responses, avoiding general suppression of the immune system. It is necessary to understand the underlying mechanisms of the immune system to develop tolerogenic cell therapies. Cytokines are small peptides involved in cell signaling, which can be used to induce tolerance in APCs. Immune cells express cytokines and their respective receptors. High-throughput sequencing techniques have improved our knowledge about cell signaling, introducing a variety of information about how cytokines are used by the immune system. This information is important to understand and develop new methods to isolate, culture, and induce tolerance in APCs.

Table 1 - Dissemination activities completed and planned for the following year

Activity	**Targetdate**
Code and image release	April 2018
Adapt tutorial	April 2018
Conference presentation	Until the end of 2018
PhD thesis	Until July of 2019
miRNA case study	September 2018
Tolerogenic cell therapy case study	November 2018