



**UFRJ**

**UNIVERSIDADE FEDERAL DO RIO DE JANEIRO**

## Work Plan 1

**Duration: 12 months**

**Activity:** Determination of landscape potential.

**Duration:** 1<sup>st</sup> to 3<sup>rd</sup> months

**Activity:** Characterization of the attraction basins corresponding to the luminal, HER+ and triple negative subtypes.

**Duration:** 4<sup>th</sup> month

**Activity:** Characterization of the potential landscape for determining key genes for the transition between attraction basins.

**Duration:** 5<sup>th</sup> month

**Activity:** Characterization of transition trajectories between basins.

**Duration:** 6<sup>th</sup> month

**Activity:** Use of global sensitivity analysis of the topography of the epigenetic landscape to determine the key interactions for the transition between basins of attraction.

**Duration:** 7<sup>th</sup> and 8<sup>th</sup> months

**Activity:** Generate stochastic simulations to characterize transition probabilities between attraction basins.

**Duration:** 9<sup>th</sup> month

**Activity:** Validate the results with well-established behaviors in the literature.

**Duration:** 10<sup>th</sup> and 12<sup>th</sup> months

**Activity:** production of an article for publication in a high-impact interdisciplinary journal.

**Duration:** 10<sup>th</sup> and 12<sup>th</sup> months