

## Bio Visualization and Cinematic Experiences

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### Abstract

The panel's goal is to explore art / science / technology relationships amidst the proliferated production of scientific and artistic data and the various forms of representation beyond traditional two-dimensional static interfaces. This panel is interested in gathering an interdisciplinary intercontinental group that includes producers of biological data, artists, and producers of the moving image, scientists and architects to provoke a dialogue about how bio visualization is becoming an intensified avenue for scientific and artistic exploration and knowledge production that had not been possible until recently. This panel will explore the relationship between data and its imaging in interactive environments, mediated by biological concepts. The panelists will address how the representation of the big data in virtual or interactive environments have moved beyond metaphor and bio mimicry and how they provide a vital contribution to all living beings that must find creative ways to coexist and survive the Anthropocene.

### Keywords

Visualization, Data, Interactive Environments, Bio-Creation, Moving Image, Organic Processes, Liquid Architecture.

### Introduction

Data visualization has evolved from a marginalized practice to a developing science whose ramifications are increasing daily. But, have we not historically been slaves of data, to survive, to organize crops, to determine the course of societies? Why this boom occurs at the height of the computer age?

While it is true that the rhythms of life have accelerated, and with it the production of data, it is also true that the radical change has been in the way the data is obtained, the way they are interpreted and the spaces where they are published. And the novelty is that now data visualization is transversal to this chain: it is mediating all the moments and is present in all the scenarios.

Bio Visualization and Cinematic Experiences panel is a comprehensive approach to data visualization. From different perspectives the authors address the complex fact of grouping data and communicating ideas and messages through digital applications, in different contexts and disciplines, mediated by biological concepts: Grisales and Correa reflect on how to generate greater learning processes in bioinformatics combining multimodal ways of cognition and multimodal technology experience; Restrepo abstracts the problem of visualization and transfers it to visual realistic representations that translate the multiple and simultaneous data produced by body movements into scenarios and avatars, rather than hierarchical schemes, since computer-based interactive spaces in real time are defined as dynamic, iterative and organic processes; Brakke criticizes architectural representation systems based on movement mapping and simulation work, through concepts of warm behavior like silk worms that enrich and change the perspective of the concept of bio-visualization; Finally, Rivera explores the possibilities that result from understanding the visualization of data from the categories of moving image and how the union of these two universes could produce richer experiences, where its own logic would generate a new relationship of the user that navigates the data with the data navigated, creating a sensitive experience.

We hope that this panel will expand the horizons of those who attend the discussion, in a subject that is crucial to understanding and putting into practice the representation of the millions of data that we are seized today.