# **RESEARCH**

# Interactive Exploration of Ligand Movements through Multiscale Temporal Tunnels

Katarína Furmanová<sup>1\*</sup>, Miroslava Jarešová<sup>1</sup>, Jan Byška<sup>1,2</sup>, Adam Jurčík<sup>1</sup>, Július Parulek<sup>2</sup>, Helwig Hauser<sup>2</sup> and Barbora Kozlíková<sup>1</sup>

#### Author details

<sup>1</sup>Masaryk University, Brno, Czech Republic. <sup>2</sup>University of Bergen, Norway.

Reference

#### **Abstract**

**Background:** TODO BK **Results:** TODO BK **Conclusions:** TODO BK

**Keywords:** Molecular Sequence Analysis; Molecular Structural Biology; Computational

**Proteomics** 

## Background

TODO BK + JP (Intro + RW)

### Method

Overview + workflow - BK Trajectory Simplification - AJ Including mathematical model.

Derivation of Attributes - JB ligand attributes + attributes of its surrounding

Temporal Tunnel - JB

# Visual Exploration

 $\begin{array}{c} {\sf Data\ Views\ -\ BK\ +\ ladies}\\ {\sf motivation,\ design}\\ {\sf 3D,\ bar\ charts,\ scatterplot} \end{array}$ 

Analysis Procedure - BK, JP

#### Results and Discussion - BK

use case + feedback

#### **Conclusions - All**

and future work

## Competing interests

The authors declare that they have no competing interests.

Full list of author information is available at the end of the article

<sup>\*</sup>Correspondence: furmanova@mail.muni.cz

<sup>&</sup>lt;sup>1</sup>Masaryk University, Brno, Czech Republic