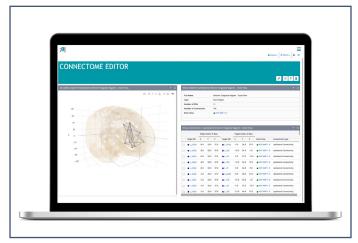


# NICARA™. Connectome Editor

### **Working with Subnetworks**

The Connectome Editor of NICARA™ helps you explore, analyze and compare connectivity of selected anatomical and functional subnetworks.

Subnetworks can be defined on the basis of individual ROIs or by the use of anatomical or functional brain ontologies. The NICARA™ Connectome Editor already provides a large selection of literature-based predefined subnetworks (major WM fiber tracts, (sub-)cortical areas, functional networks) based on selected brain atlases (e.g., HCP MMP 1.0 atlas).

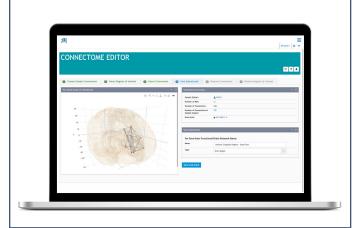


NICARA™ Subnetwork Overview Panel

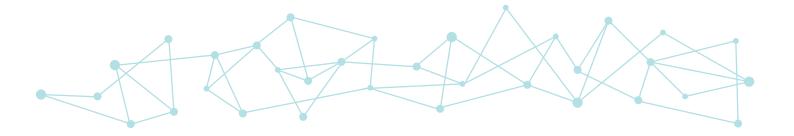
With just a few point and click operations you will be able to add or remove ipsi- and contralateral connections between selected ROIs.

## **Integrated Components**

- Editor to define subnetworks and to store them as templates
- More than 50 preconfigured subnetworks based on neurosurgical literature
- > Export functionality to .xlsx and .csv files
- > Templates can be used in the following components of NICARA<sup>TM</sup> for filtering connections:
  - Visualization with the Connectome Browser
  - Subject- and group comparisons of subnetworks with help of the Connectome Comparator

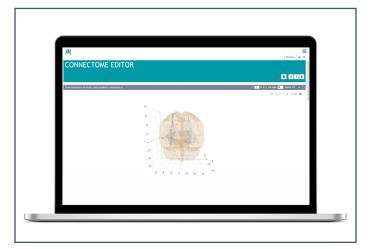


NICARA™ Subnetwork Wizard



#### **Required Input**

- An example connectome stored in the Connectome Browser
- > The desired brain atlas
- A set of ROIs and connections to be set manually



NICARA™ 3D Lattice Graph—Visual Cortex Subnetwork

#### **About NICARATM**

NICARA™ is a novel and unique software solution for everyone working with brain data. With it, dealing with multimodal brain data becomes easy and straightforward; it reveals new insights into the brain as never before.

NICARA™ provides our customers with various modules for building up, browsing, comparing, analyzing and editing large imaging data volumes.

Building on the Connectome Browser as a starting point, further modules can be licensed alone or in combination with any other software module of the NICARA<sup>TM</sup> environment.

Get in touch with our experts for a live demo of NICARA<sup>TM</sup> and receive your individual offer for an attractive bundle of software modules matching your needs. Organize imaging data on one platform with help of an institution-wide NICARA<sup>TM</sup> account with adjustable access and user rights management for separate projects.

## **Generated Output**

- A template for a subnetwork retrieving all selected connections irrespective of their strengths
- > A tabular report containing all selected connections, e.g., of an individual subject
- A graphical representation as either interactive
  3D lattice graph and, in a future release, as 3D volume in a whole brain visualization



NICARA™. Neurolmaging-based Connectome Assessment in Research & Application