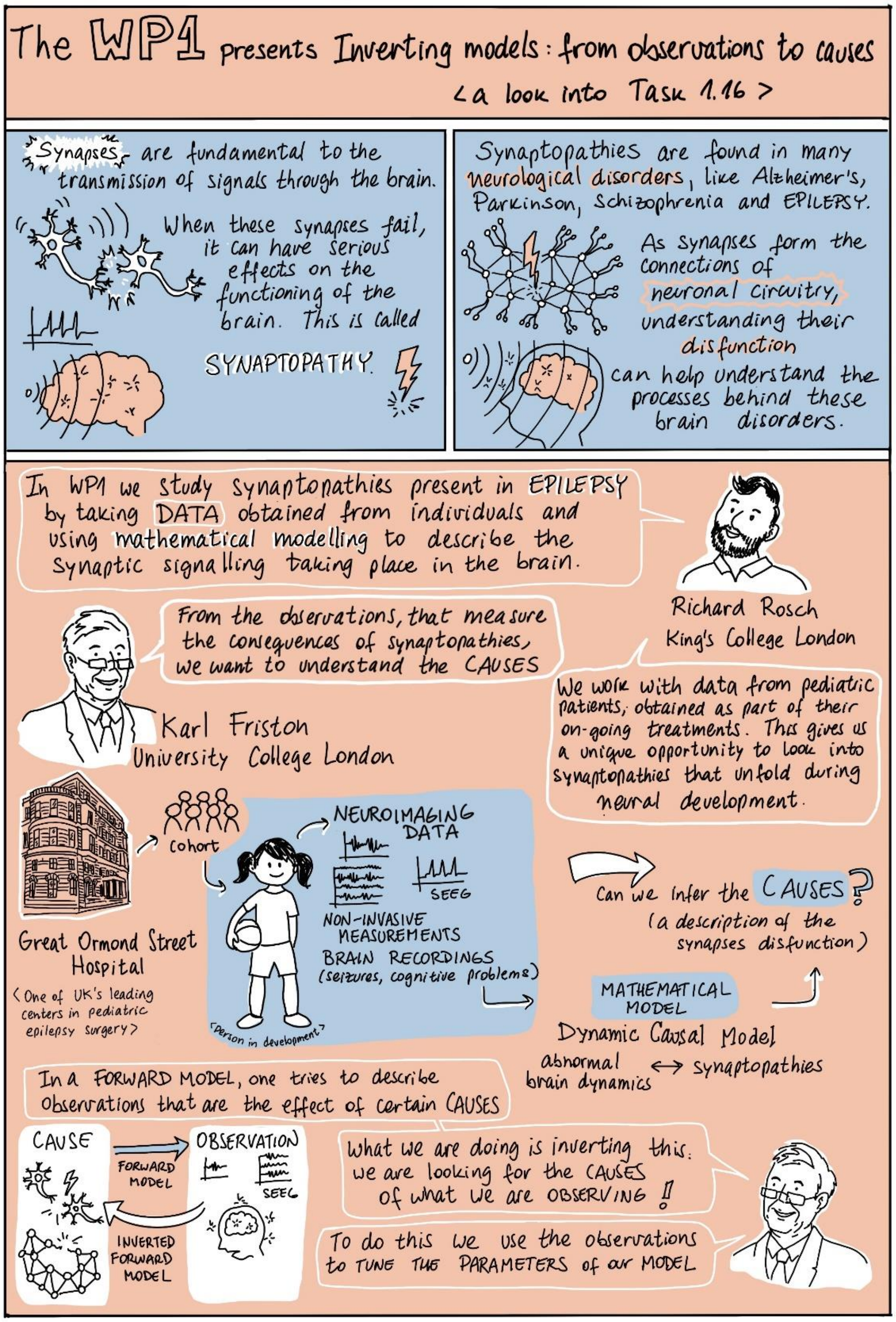
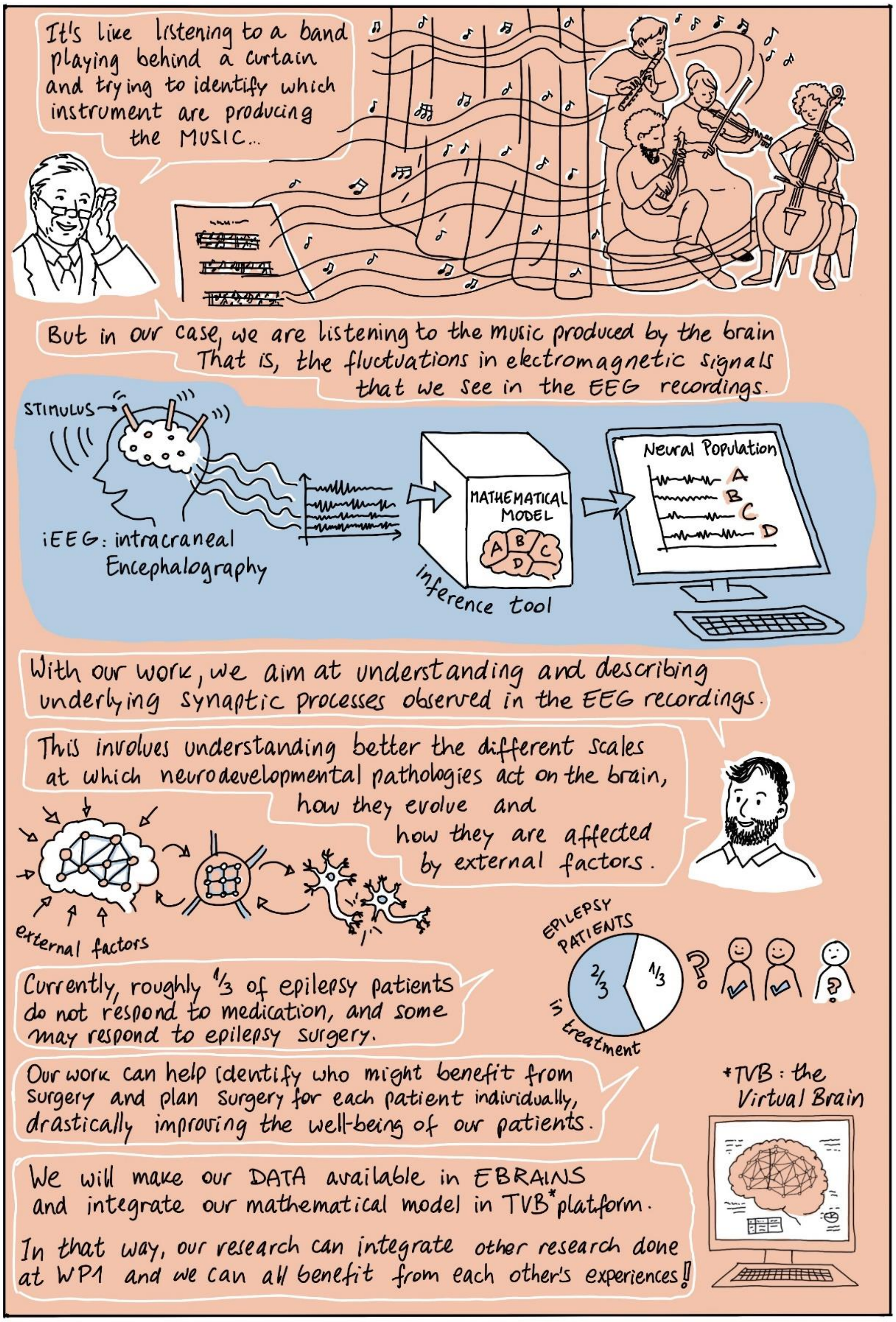
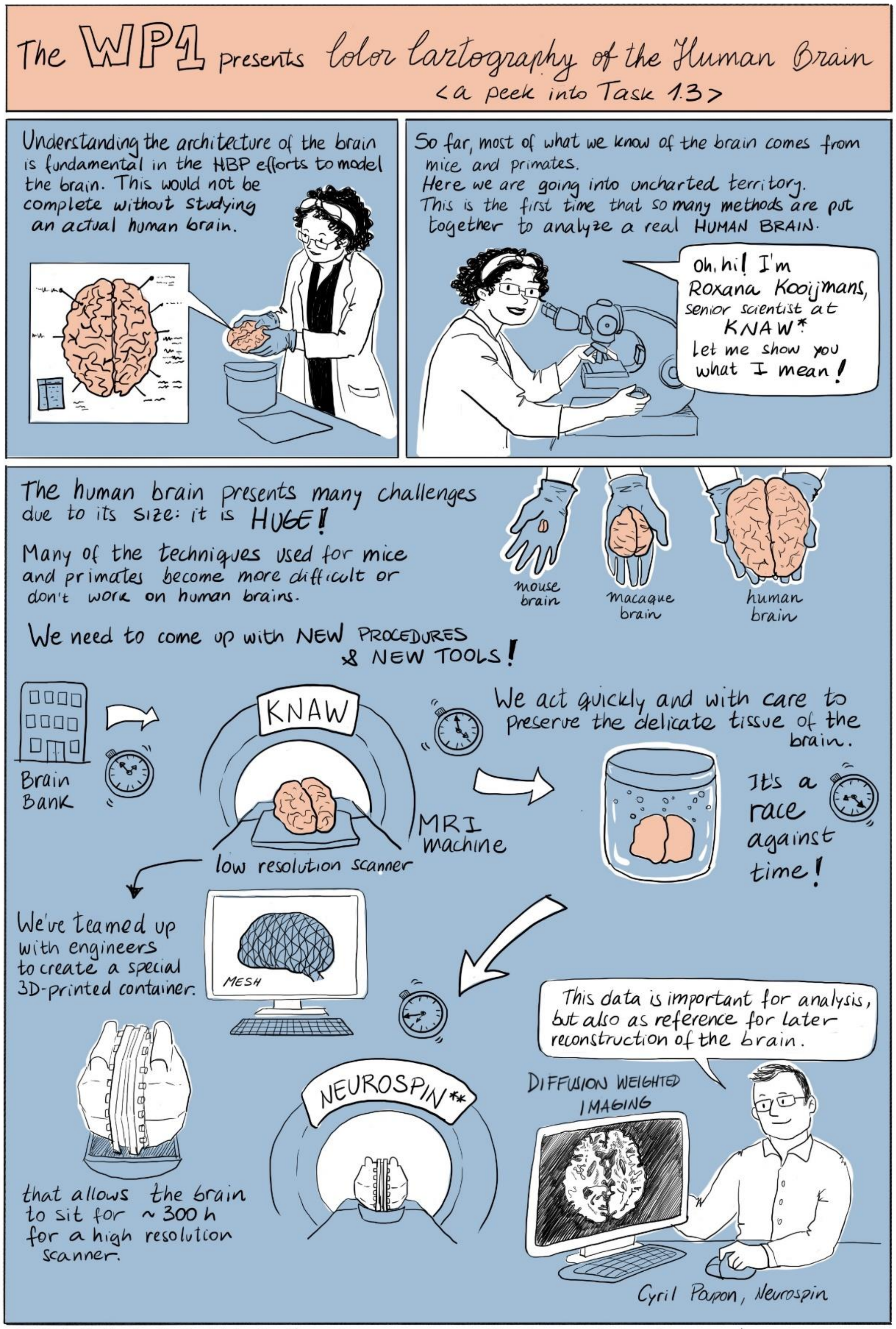
Samples of work : Comics as a tool to comunicate neuroscience

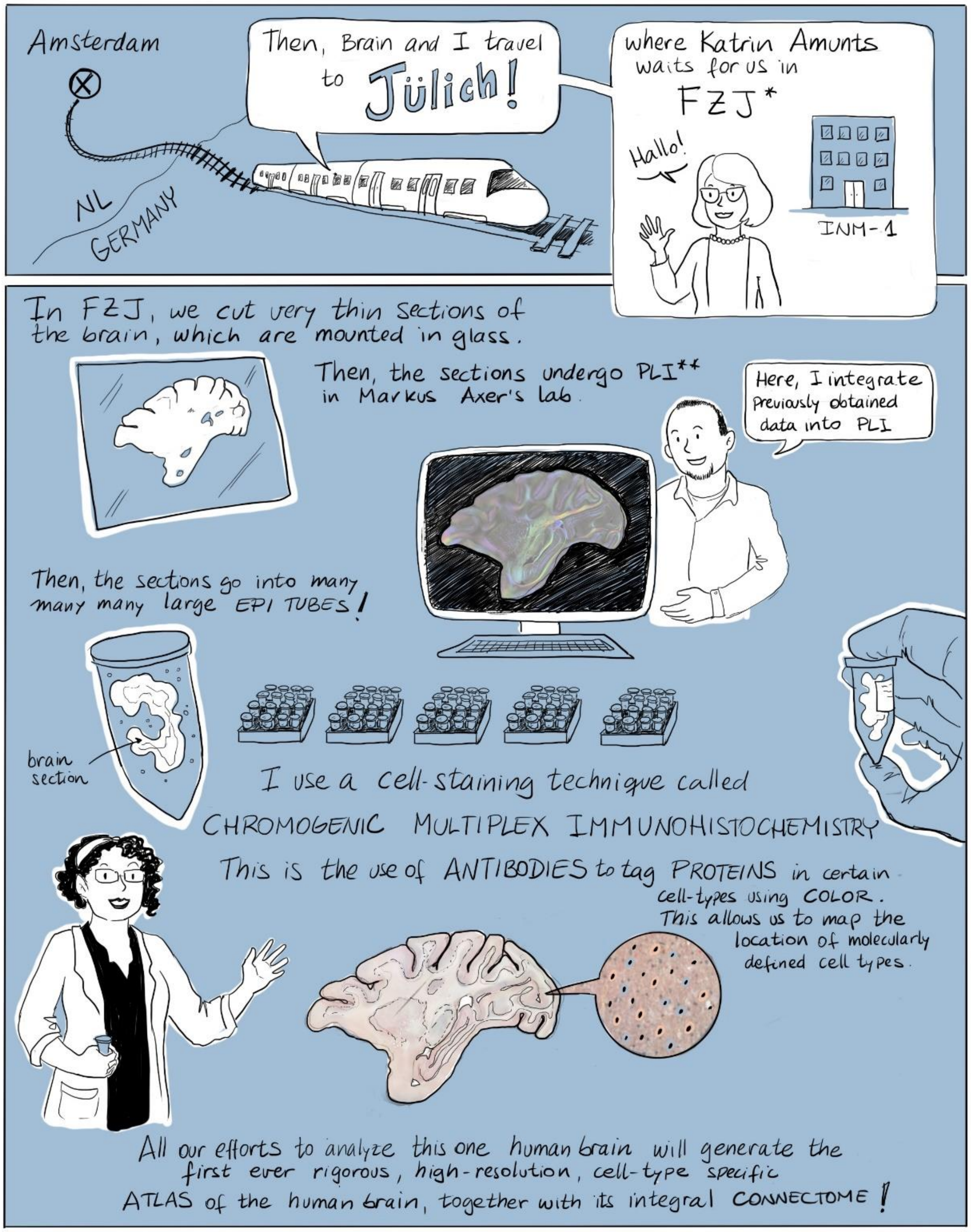



It's like listening to a band playing behind a curtain and trying to identify which instrument are producing the MUSIC...
But in our case, we are listening to the music produced by the brain That is, the fluctuations in electromagnetic signals that we see in the EEG recordings.
STIMULUS
iEEG: intracraneal Encephalography
MATHEMATICAL MODEL
A B C D
inference tool
Neural Population
A
B
C
D
With our work, we aim at understanding and describing underlying synaptic processes observed in the EEG recordings.
This involves understanding better the different scales at which neurodevelopmental pathologies act on the brain, how they evolve and how they are affected by external factors.
external factors
EPILEPSY PATIENTS
2/3
1/3
in treatment
Currently, roughly 1/3 of epilepsy patients do not respond to medication, and some may respond to epilepsy surgery.
Our work can help identify who might benefit from surgery and plan surgery for each patient individually, drastically improving the well-being of our patients.
*TVB: the Virtual Brain
We will make our DATA available in EBRAINS and integrate our mathematical model in TVB* platform.
In that way, our research can integrate other research done at WP1 and we can all benefit from each other's experiences!



* KNAW: Netherlands Institute for Neuroscience, Amsterdam.

** Neuroimaging Center, CEA, Paris region.

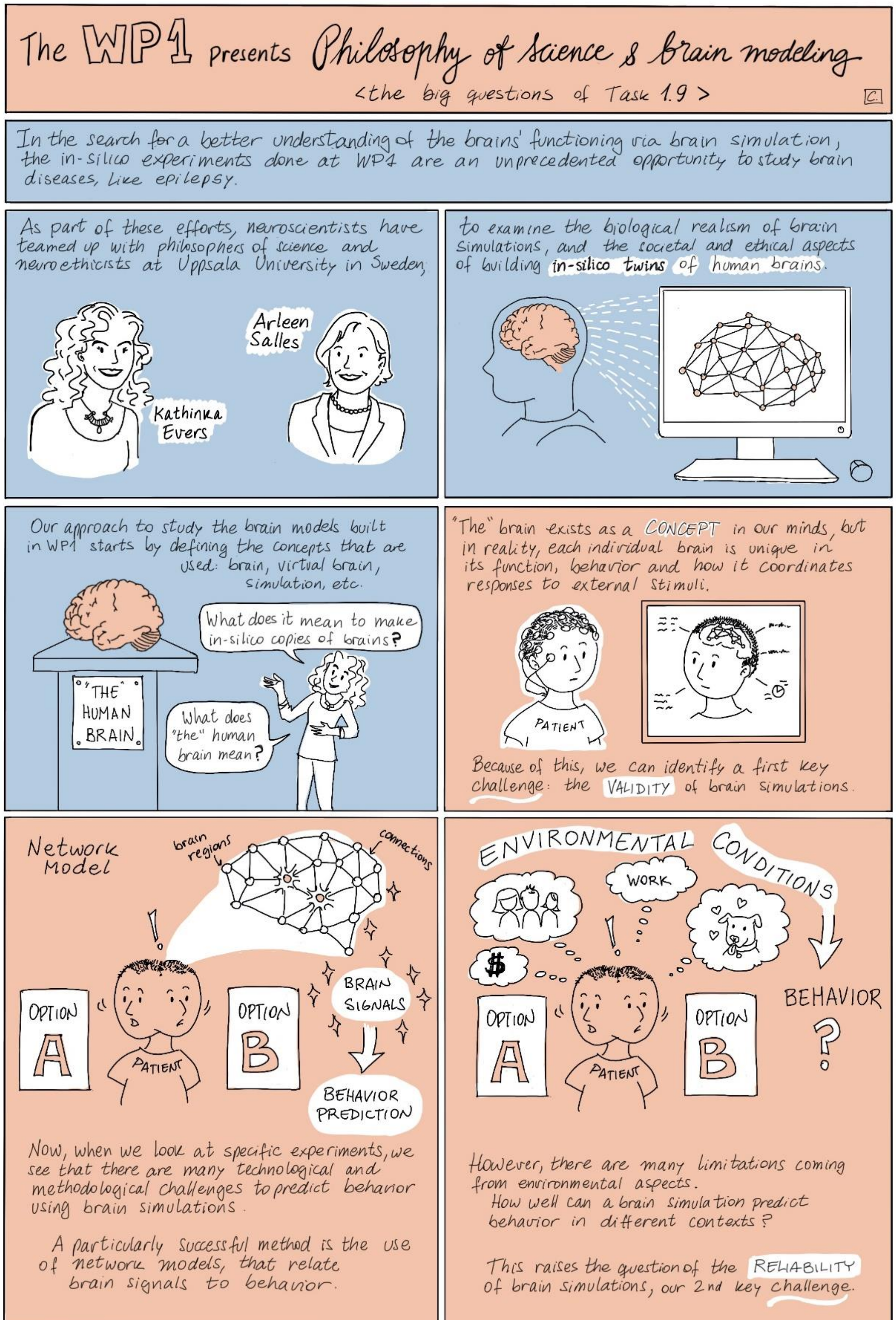


WP1 develops the brain reference framework **EBRAINS**, into which all these various pieces of information (geometry, connectivity, cyto-organization) are integrated.

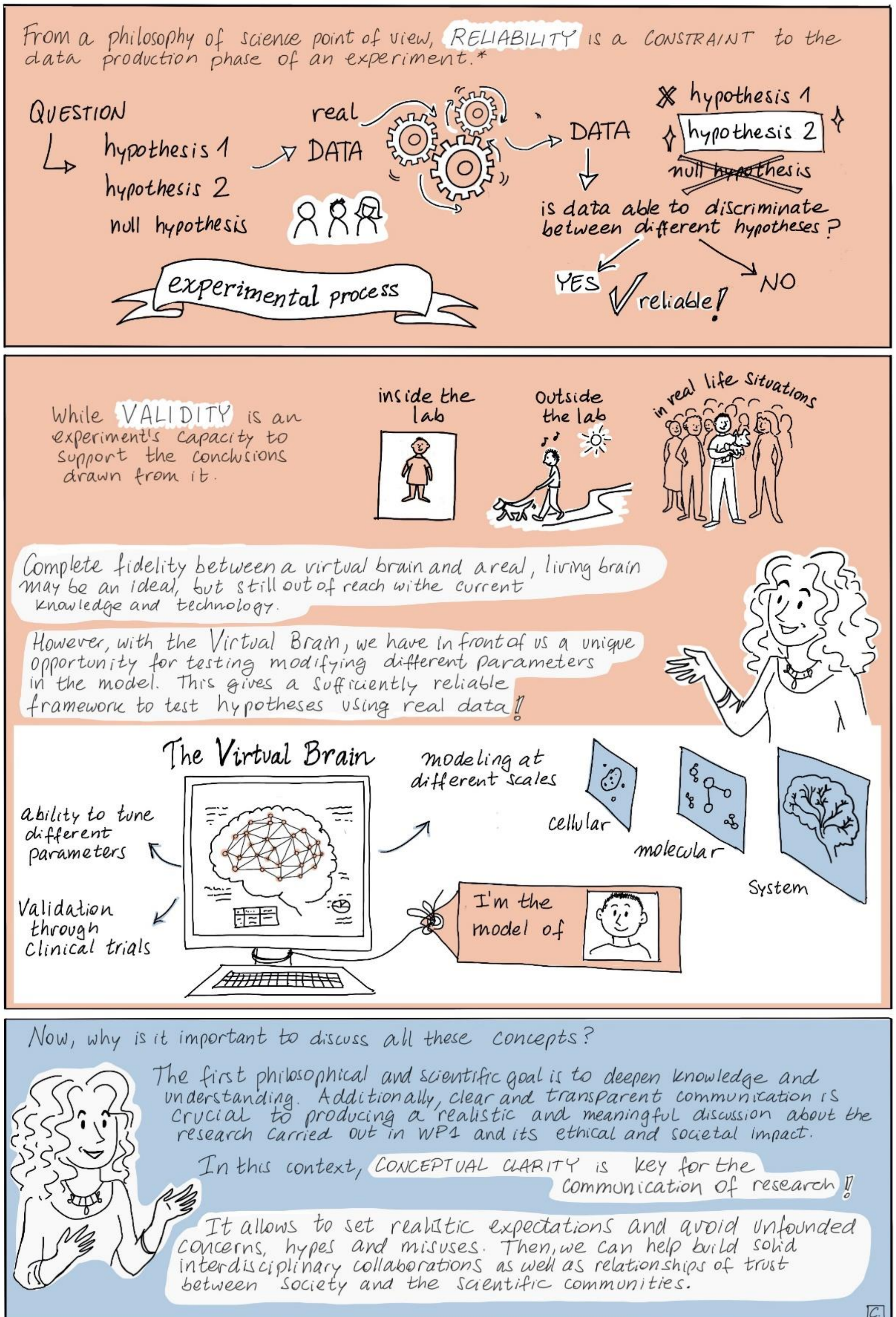
They serve to constrain brain models, and are accessible to neuroscience and medical communities.

* Forschungszentrum Jülich.

** Polarized light imaging



* This comic is part of a series in WP1 (Human Multiscale Brain Connectome) of the Human Brain Project (SGA3).



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