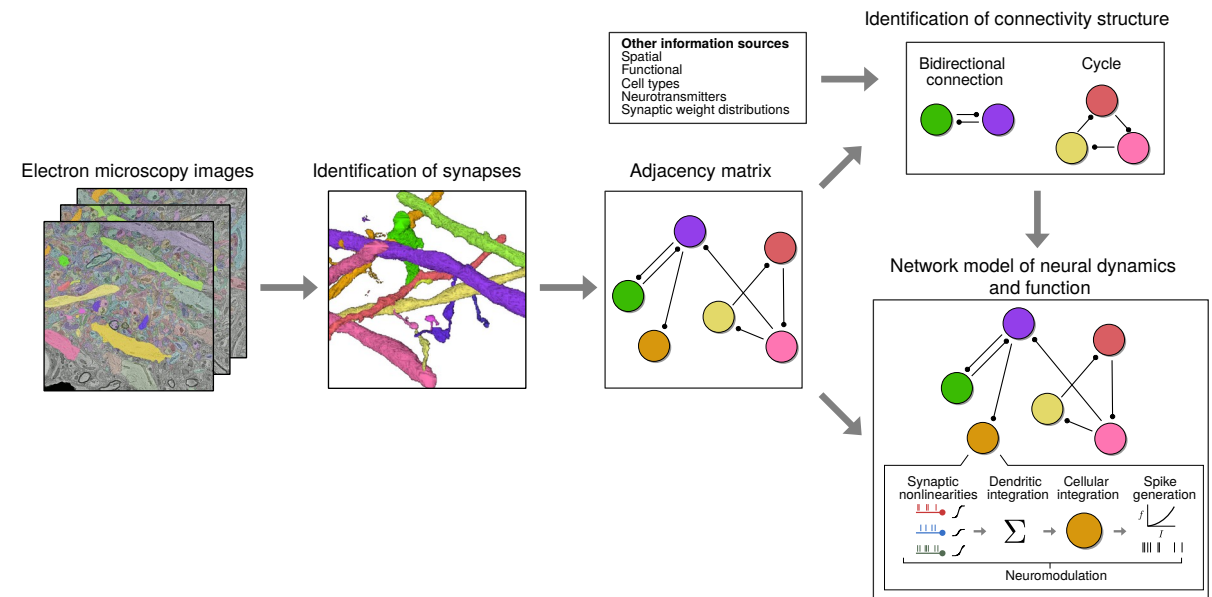


Relating structure and function in synapse-level wiring diagrams

What will be delivered? We are developing tools for identifying structure in synapse-level wiring diagrams (“connectomes”) and, concurrently, developing theories of to understand when such connectivity information can meaningfully constrain circuit models.

What is new inside? We are applying methods for discovery of structure in connectome datasets that have not previously been applied to connectome data, including network flow analyses and clustering analyses involving multiple data modalities. We are also performing novel analyses of the solution spaces of constrained artificial neural network models.



How will this change current practice? The increasing availability and scale of connectome datasets requires new methods for identifying structure beyond small network motifs.

End Users: Experimental and theoretical neuroscientists analyzing and/or building models based on connectome data.

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