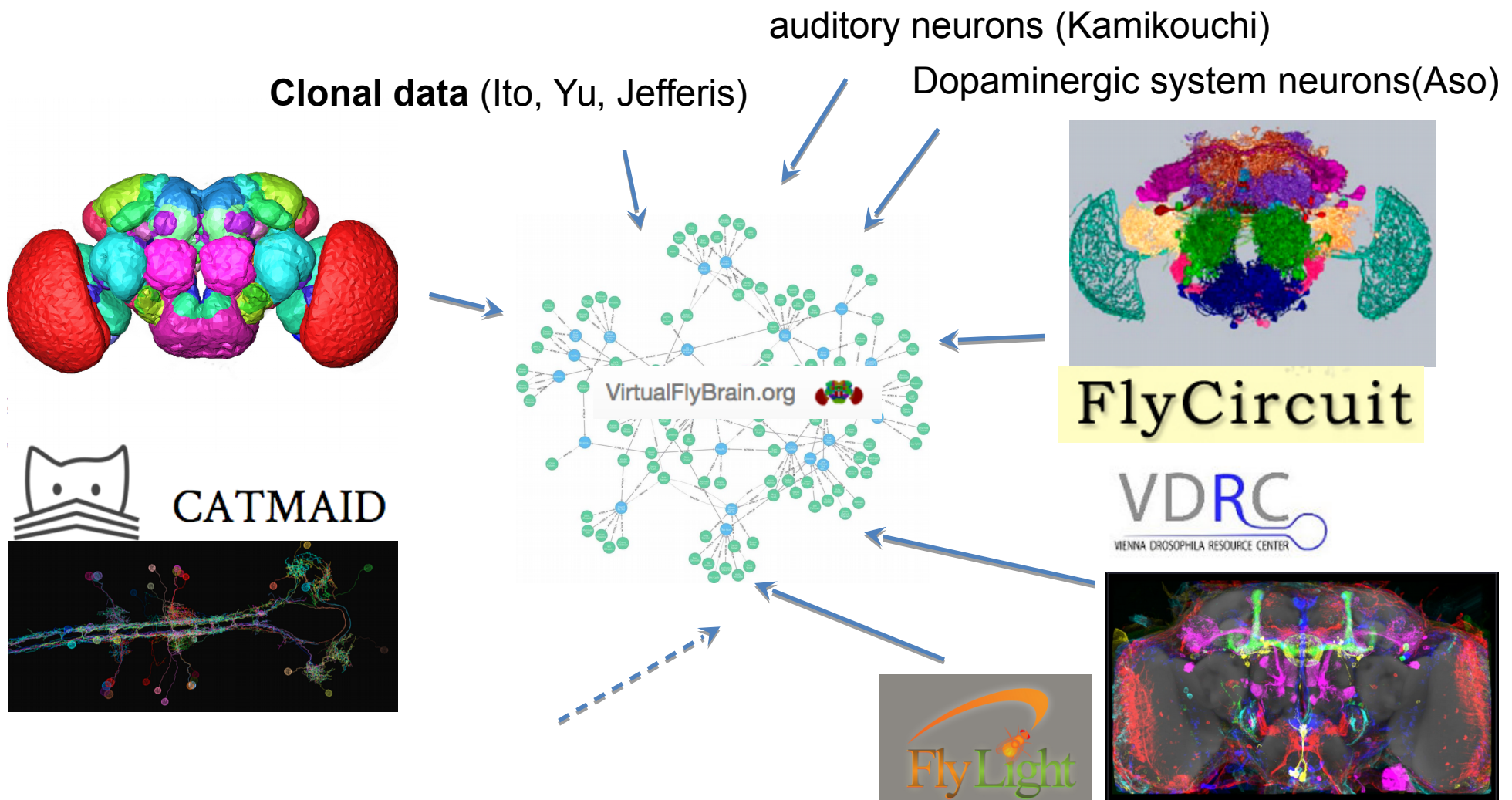


# Virtual Fly Brain

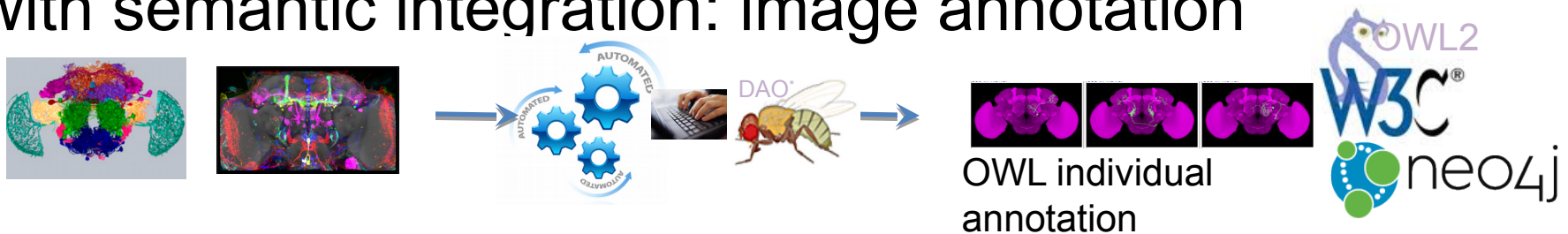
<https://www.virtualflybrain.org>

A data integration hub for *Drosophila* neurobiology, integrating disparate, large-scale datasets and linking them to curated literature and other resources. VFB provides the data to generate circuit hypotheses and identify research tools to test them.

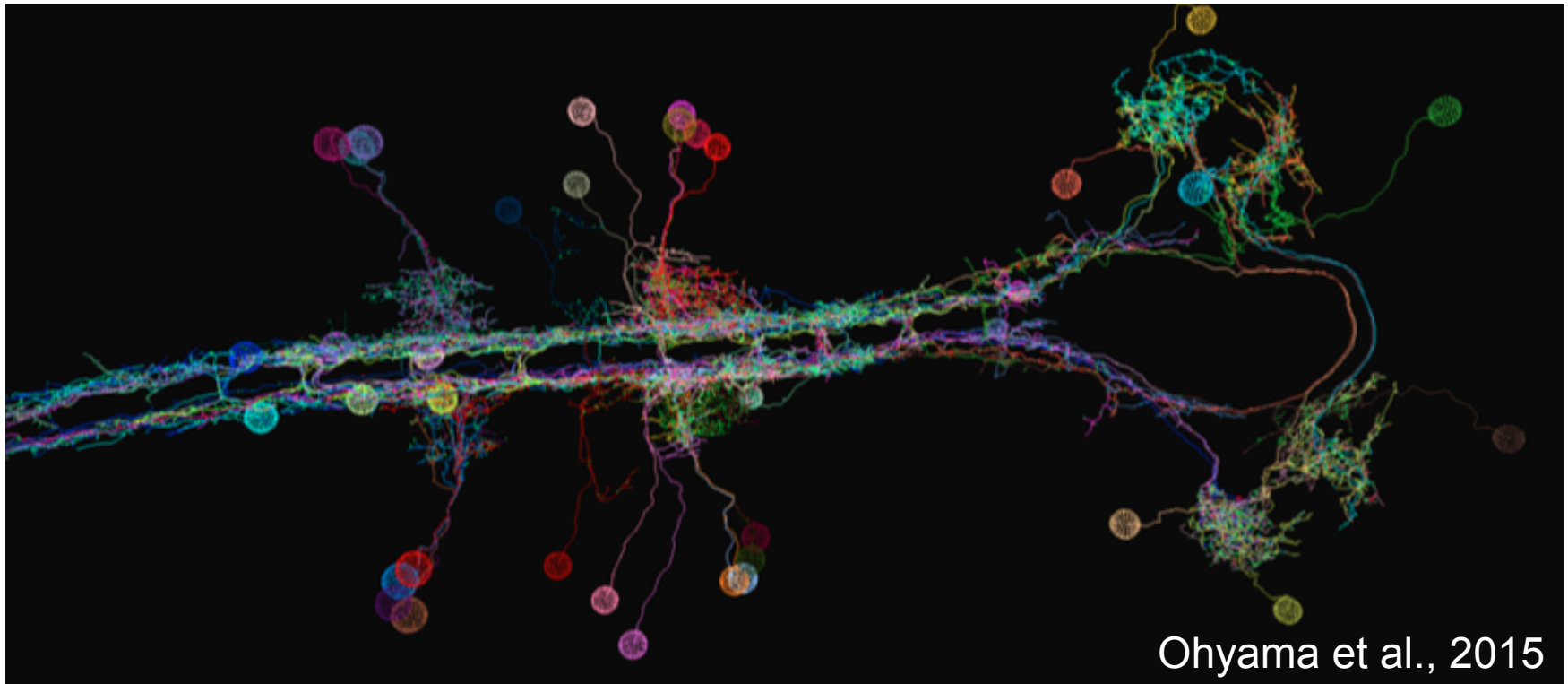
# Combining 3D Anatomy, Light & EM Image Data



with semantic integration: image annotation

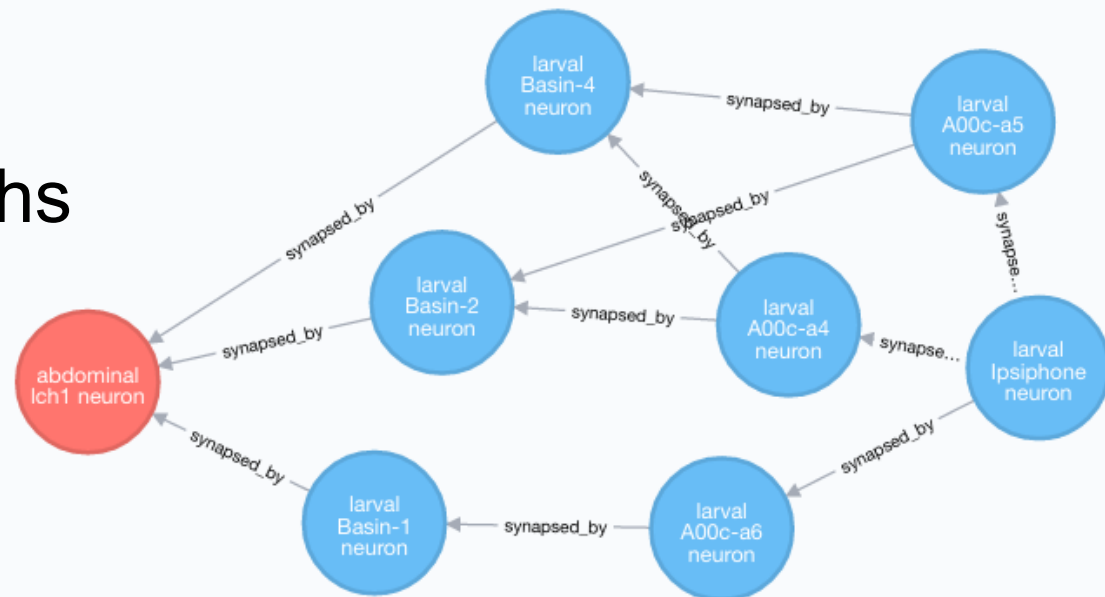


# VFB 2 – interactive 3D circuit reconstructions



## Context graphs: Exploring circuit paths

Query: circuit paths from  
'abdominal vch1 neuron' to  
'larval Ipsiphone neuron'



# Value added by VFB

## OWL-based approach

- › scalable, queryable integration of knowledge and data about *Drosophila* neuroanatomy

## Knowledge curated from the literature

- › context and queryability to bulk data

## Tight integration with FlyBase

- › Expression
- › Phenotypes

## Planned collaboration with EBI

- › integration transcriptomic data

## Nblast

- › find morphologically similar neurons
- › find potential driver lines for a specific neuron

Direct API's to query data.