

# OH15500 ID

# Reference Manual

otIs669[NeuroPAL];otIs672[Panneuronal::GCaMP6s]  
23x Bottlenecked

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# Introduction *Please Read This!*

- Conventions:
  - I significantly increased the gamma so as to increase cell visibility. Please do the same. The actual volumes have much fainter colors.
  - The pages are ordered consecutively such that I display the landmarks on page 1, then overlay the GCaMP6s on page 2. All worms were anesthetized, the GCaMP6s reflects its baseline brightness.
  - *Italics* = the neuron's color is obscured due to being out of plane and/or another overlapping cell.
  - <Neuron ID>? = my best guess for the neuron. I have low confidence for the ID.
  - **Pink Text** = not a neuron.
  - I noted when cells were “missing” (obscured from view) as well as GCaMP6s qualities that can aid ID.
- Compared to NeuroPAL without GCaMP6s:
  - Most cells retain identical coloring with the following exceptions.
  - PVQ lost most of its blue coloring and is only visible in the panneuronal GCaMP6s & TagRFP-T channels.
  - AIA, AVL, RIM, & RIS appear to be more variable in the brightness of their reporters.
  - Because AVL & RIS share reporters, one's brightness/coloring is indicative of the other's.
  - AWC occasionally shows insufficient coloring to distinguish ON from OFF.
  - RIM often appears to venture further ventrally from its neighbor AVD.
  - The amphids often have a hole-y appearance, perhaps indicative of their landmark's histone tethers.

**HEADS**

L4 to Young Adult:

Head – Lateral

Left Side

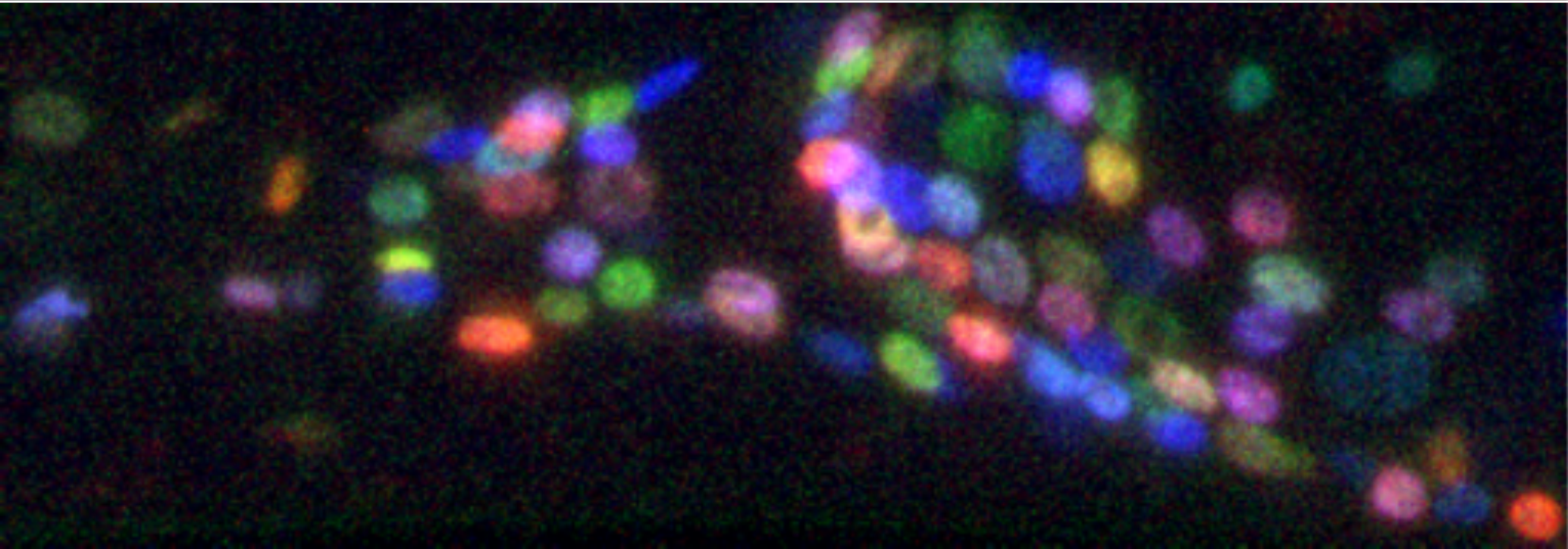
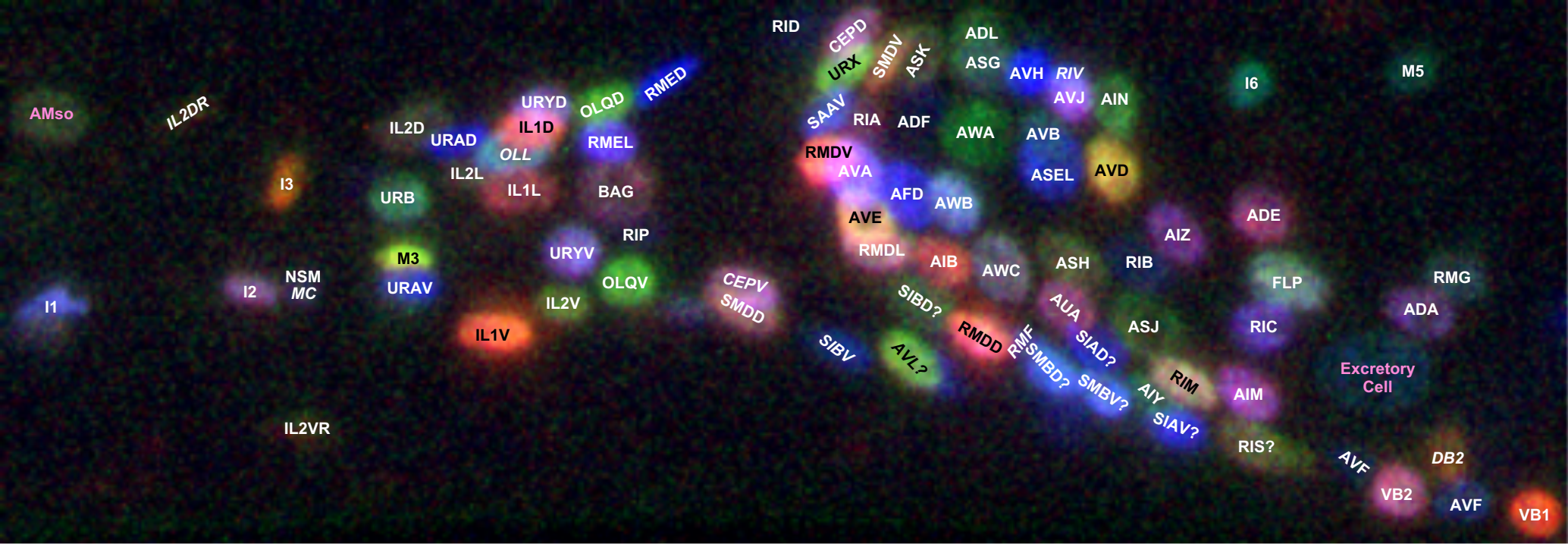




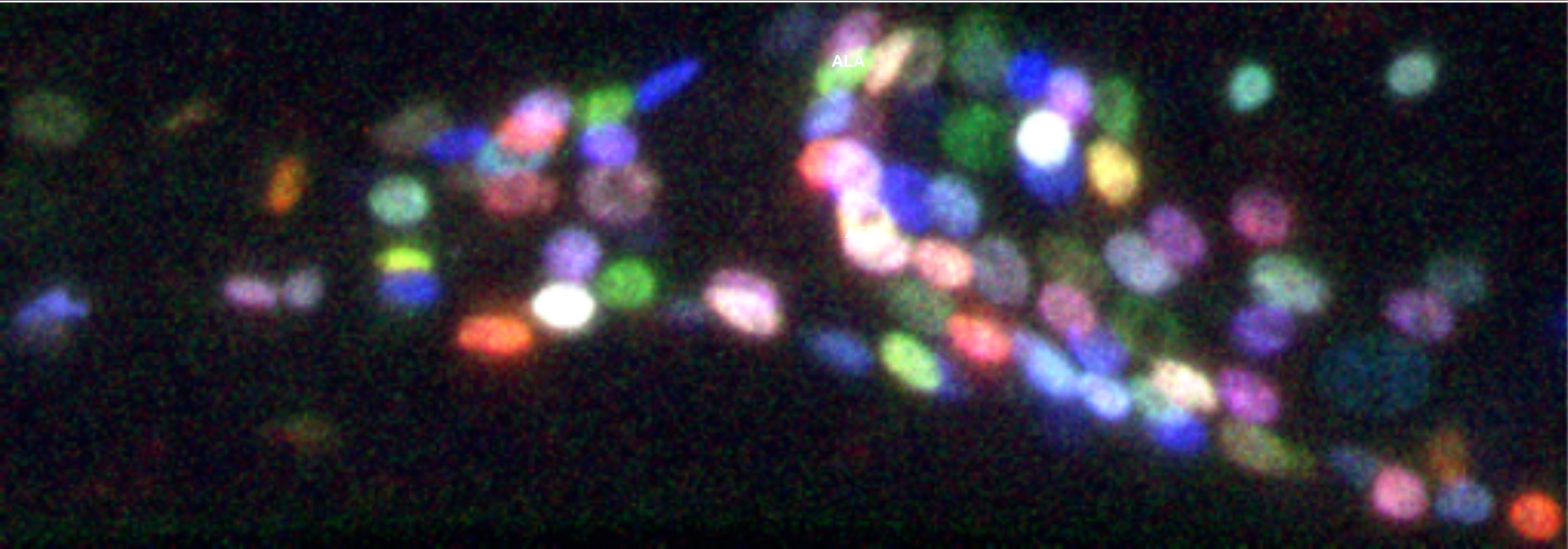
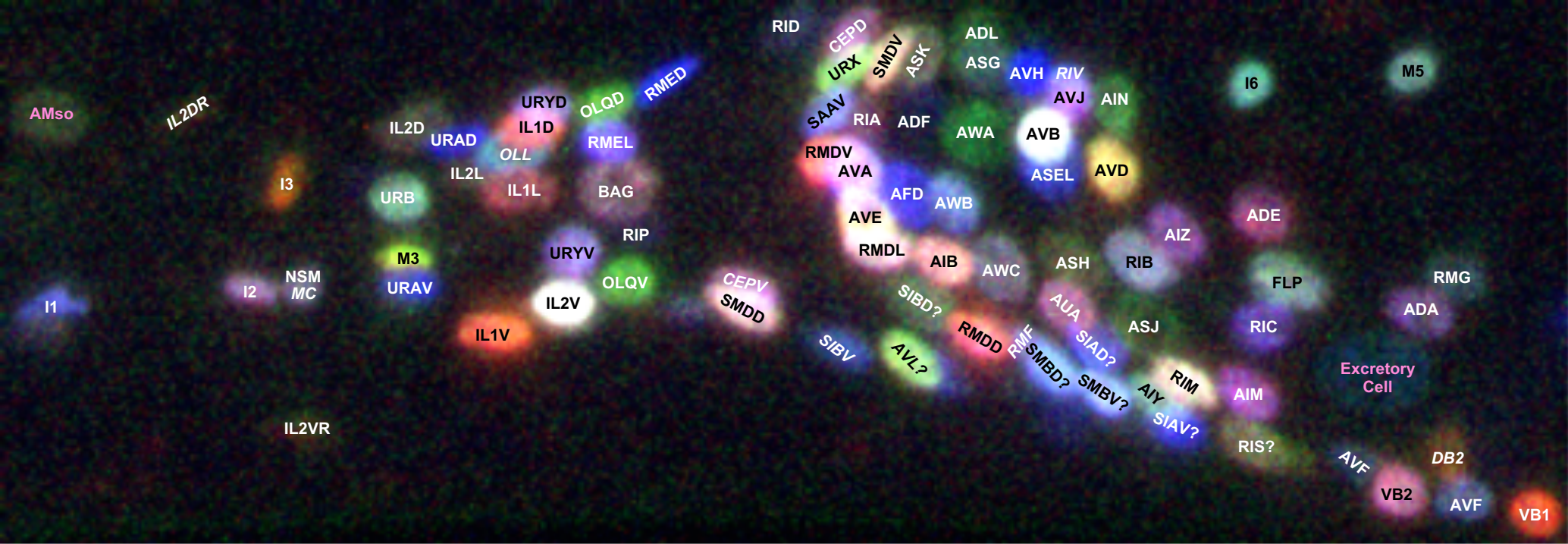




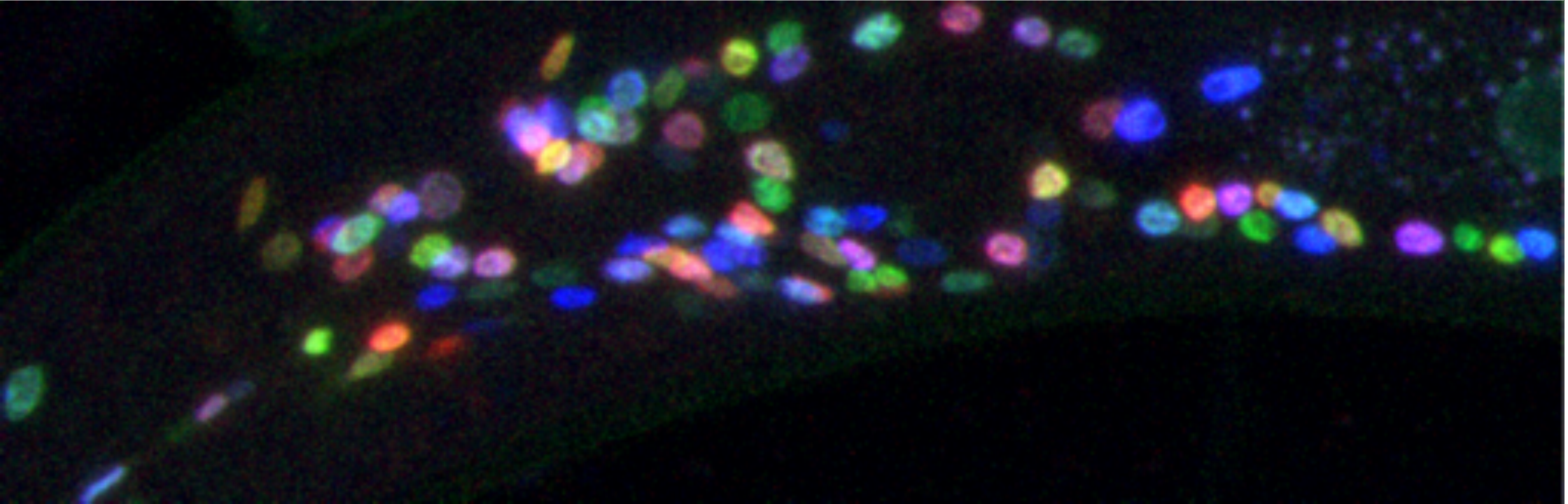
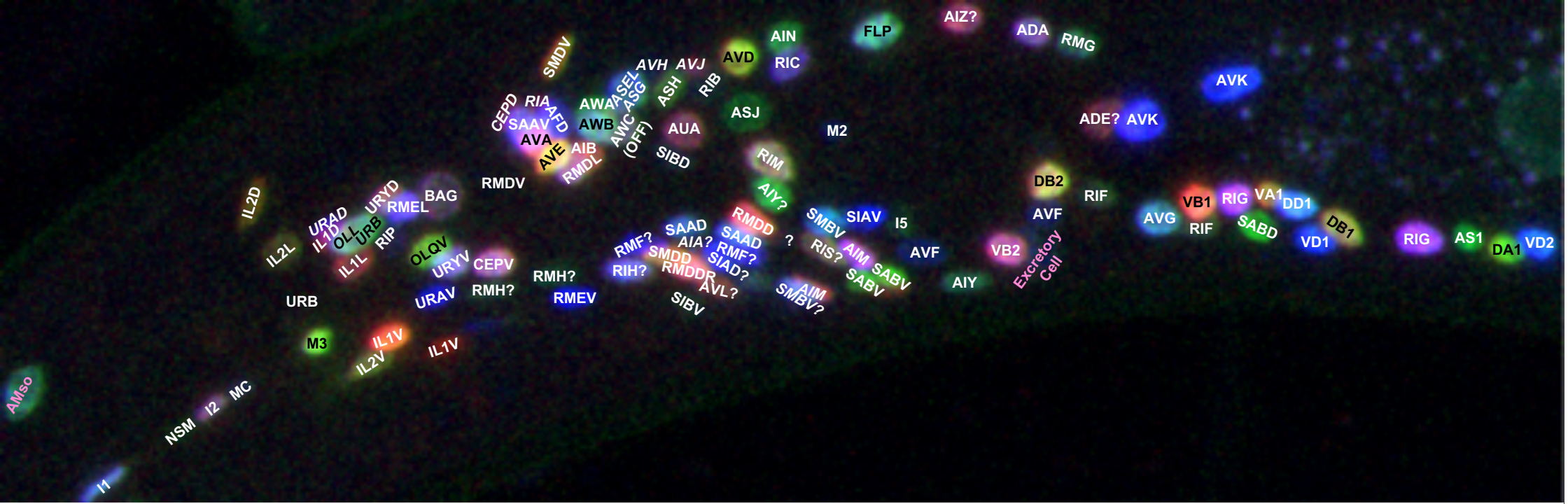




# 28\_L4a (Left)



# 28\_L4a (Left)

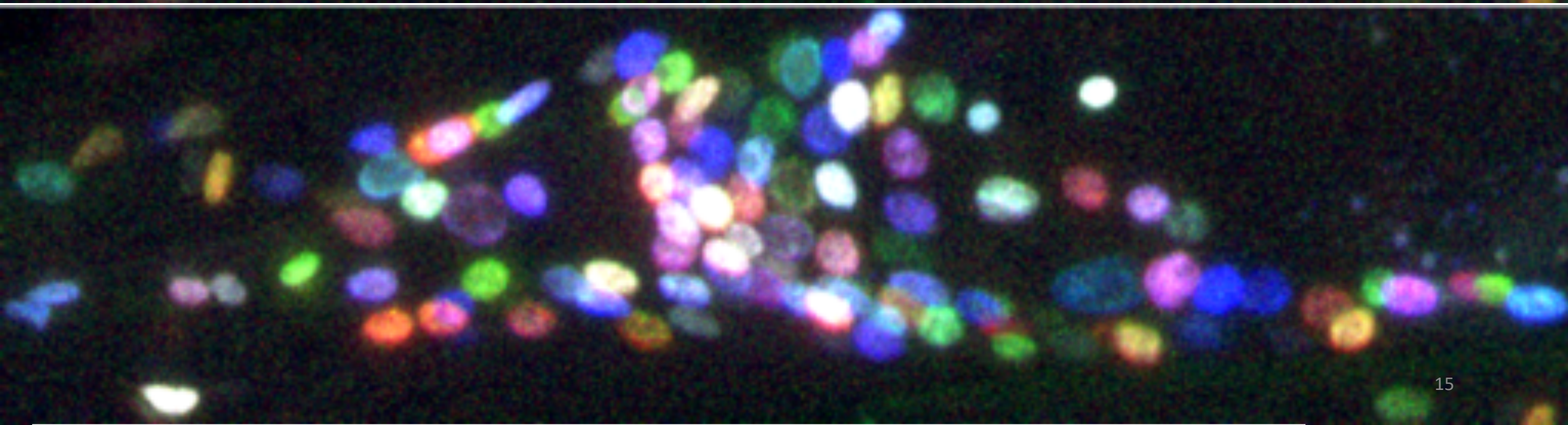
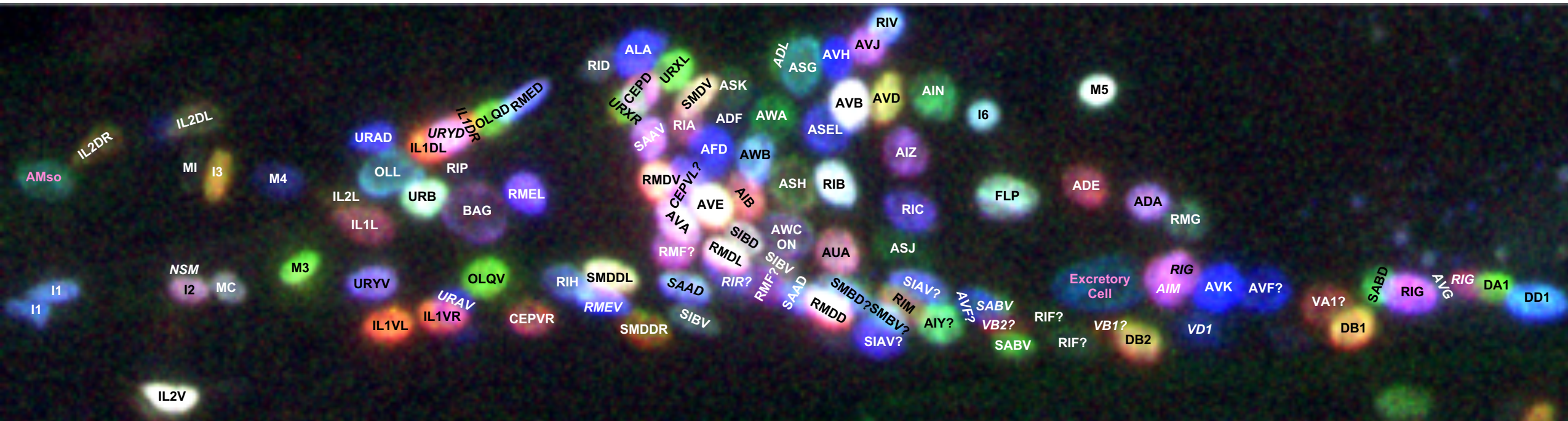


# 24\_YAa\_L4a (Left)





# 25\_L4a\_L1aSP\_L1a (Left)



L4 to Young Adult:

Head – Lateral

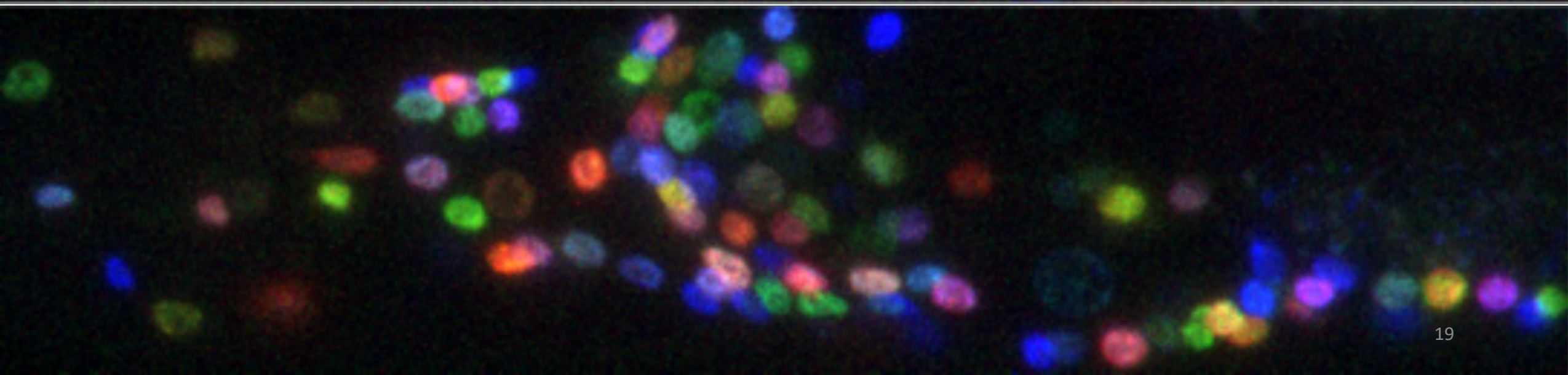
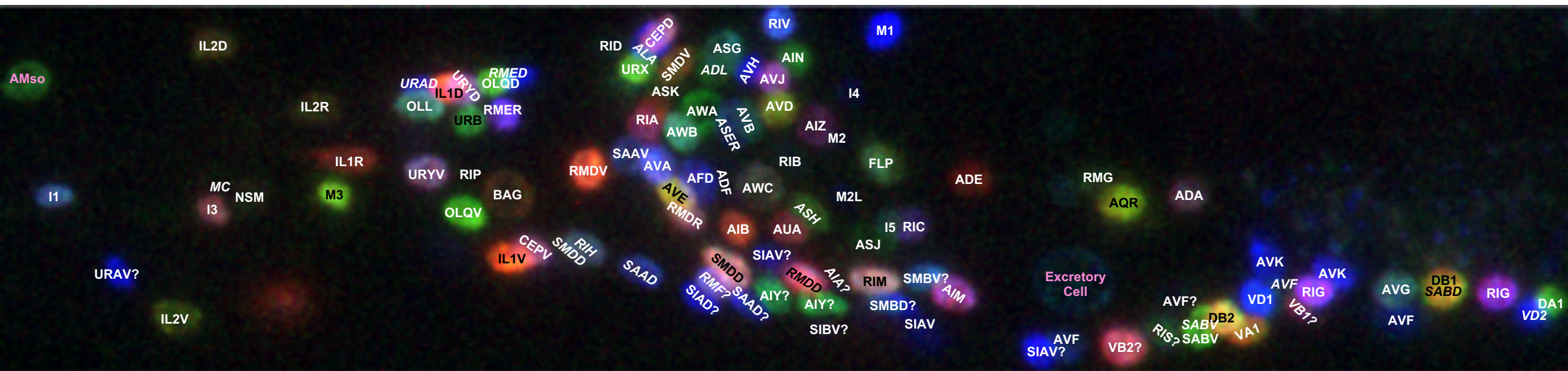
Right Side





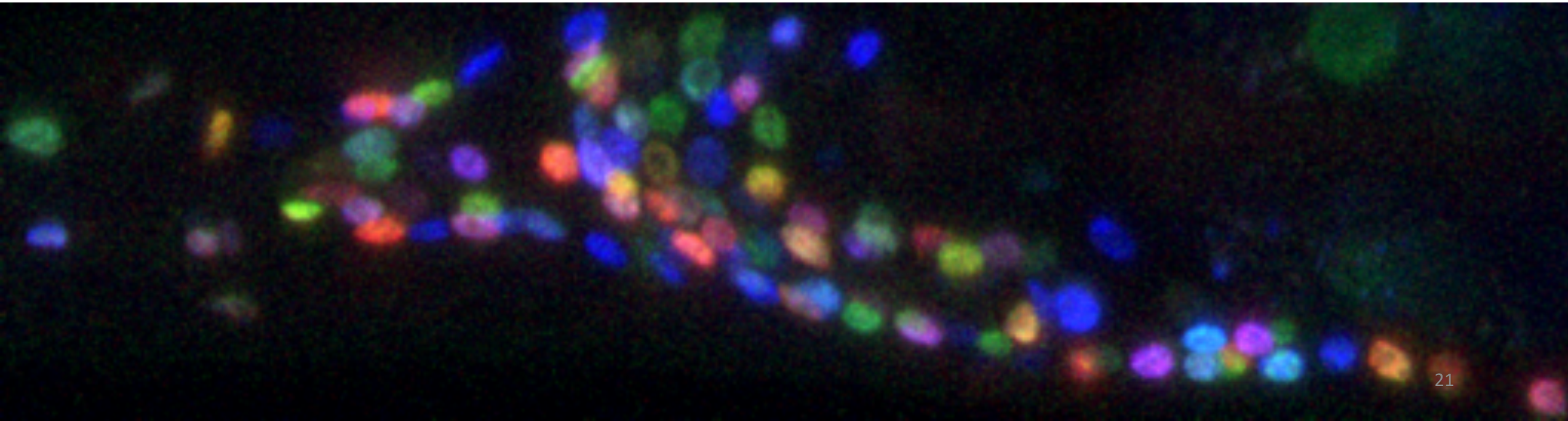
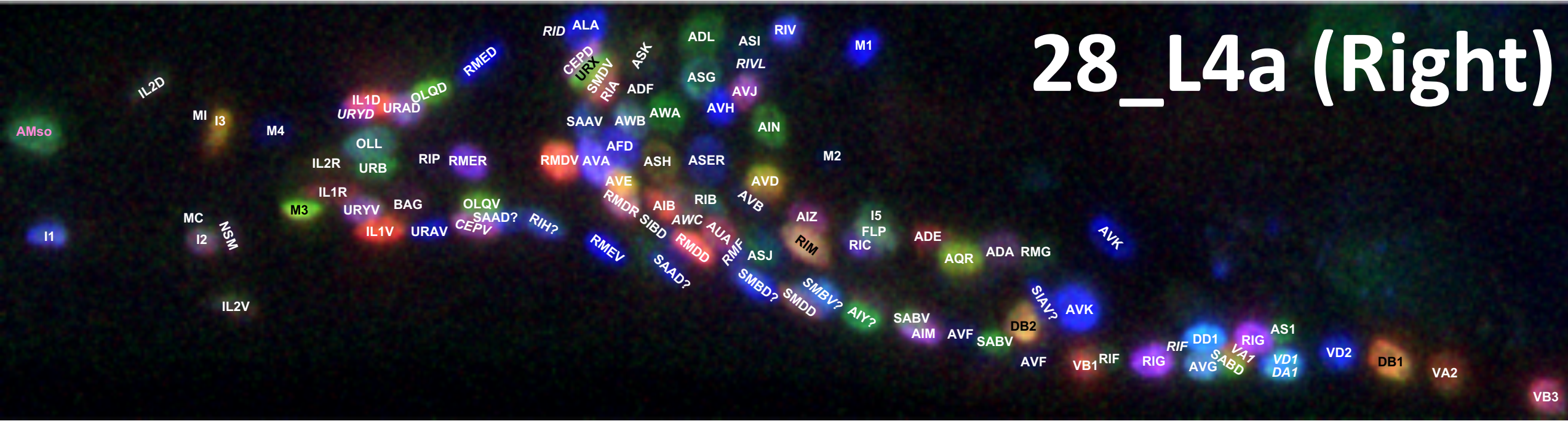


# 20\_YAa\_L2a (Right)

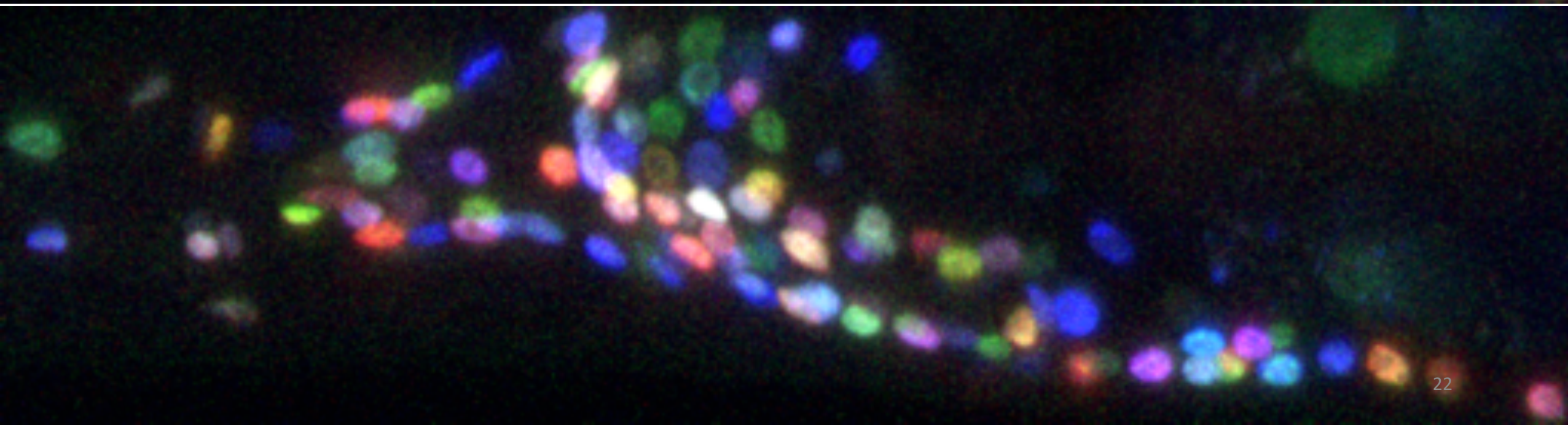
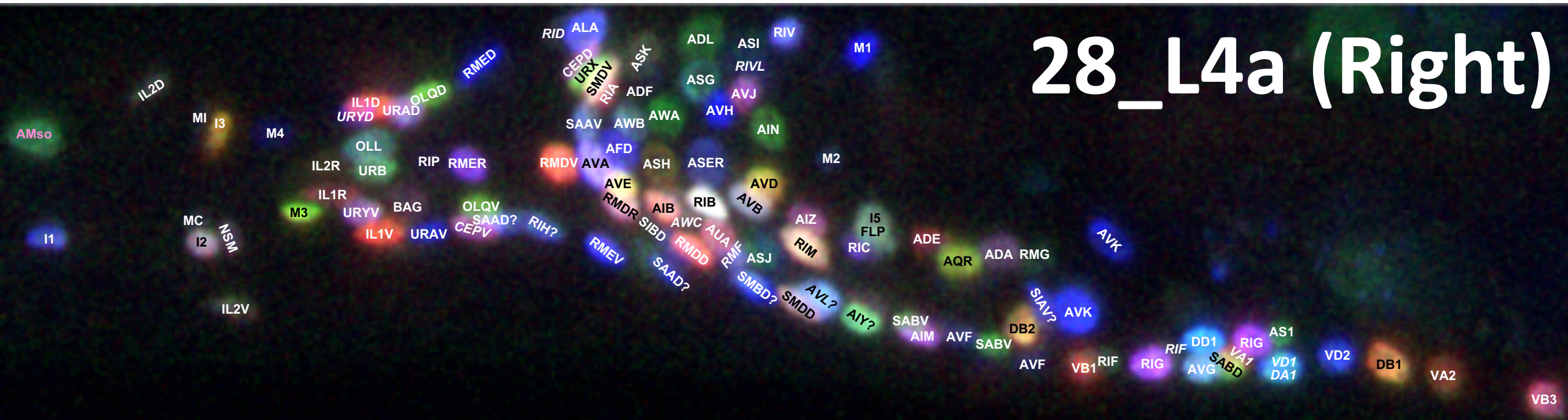




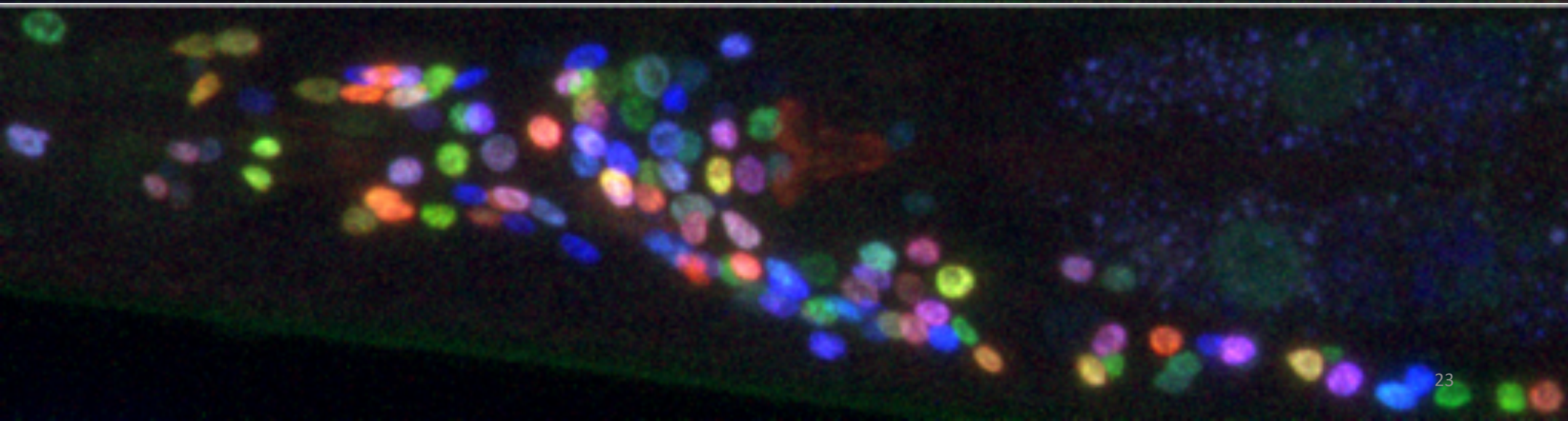
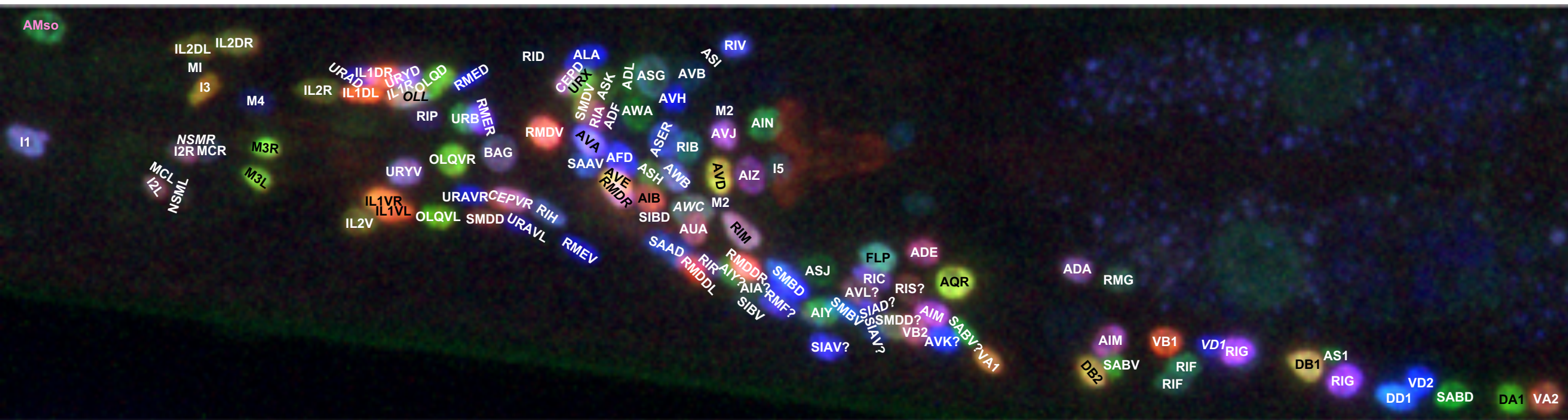
# 28\_L4a (Right)



# 28\_L4a (Right)



# 26\_YAa (Right)







L4 to Young Adult:

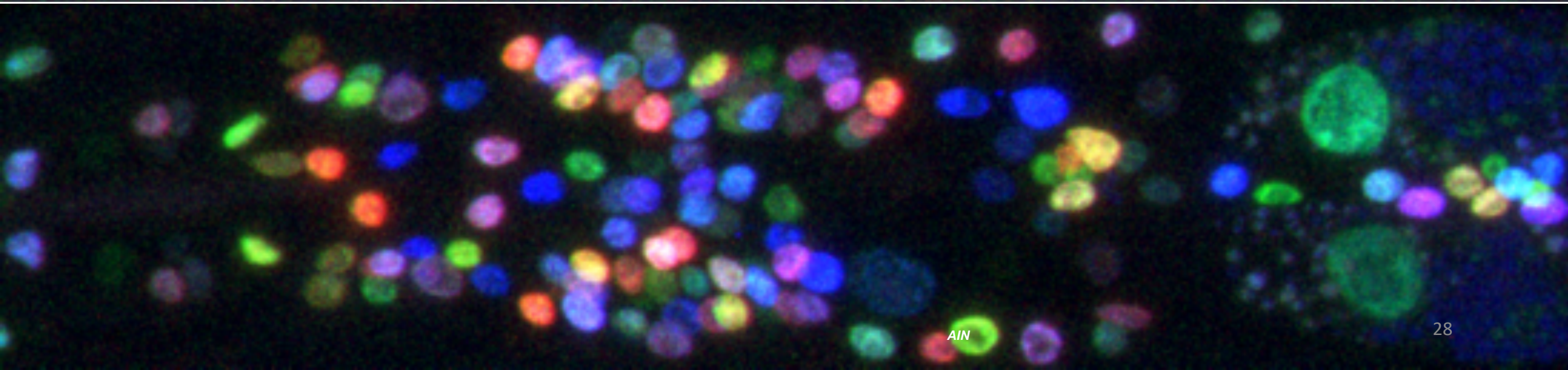
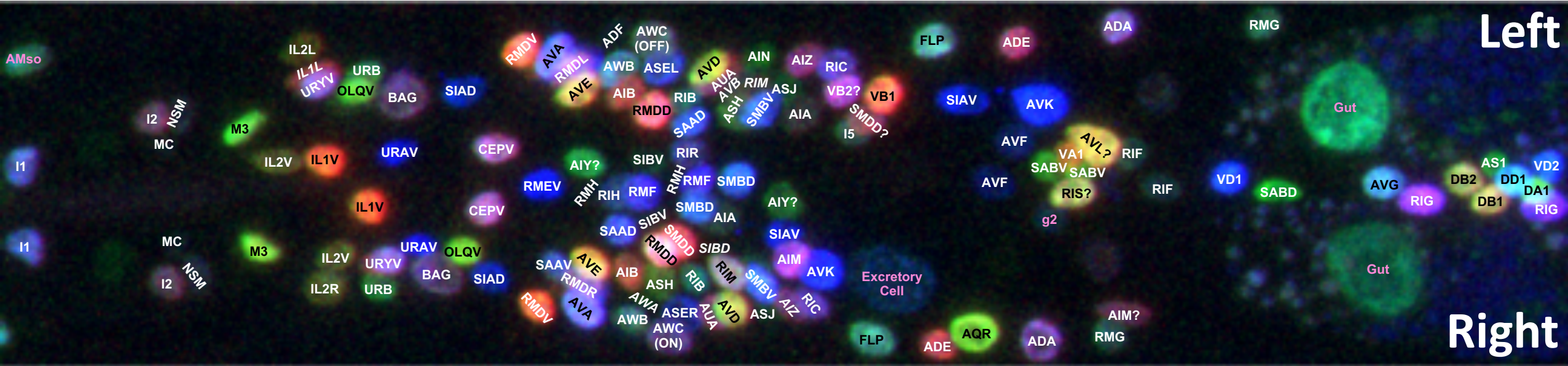
Head – Dorsal-Ventral





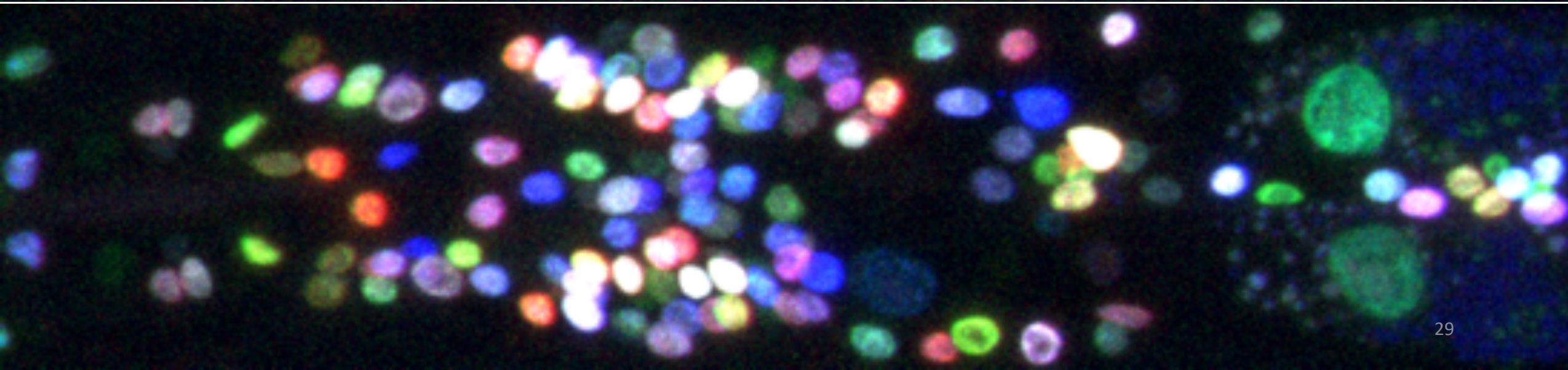
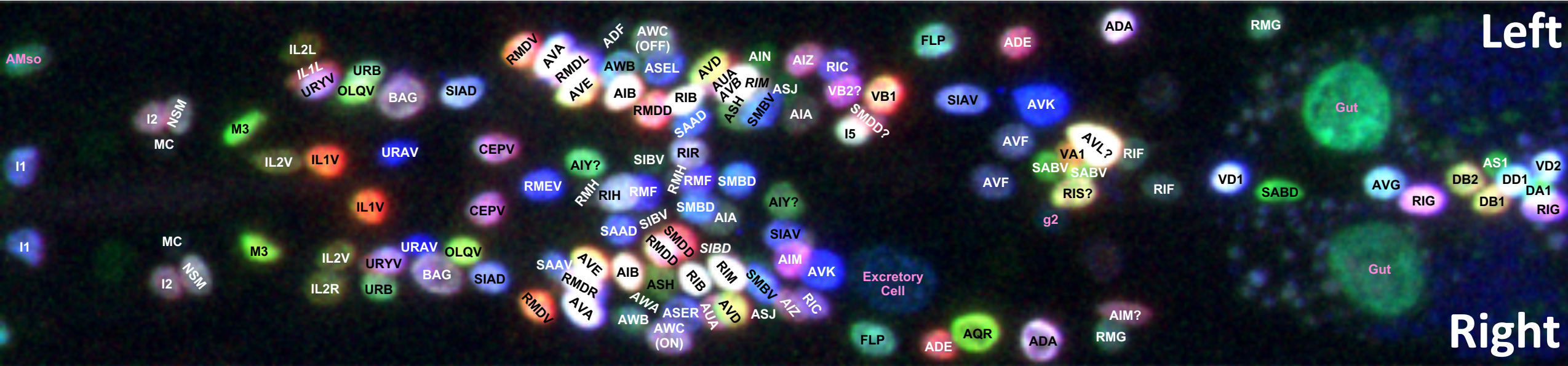
# 4\_AaSP (Ventral)

AWC::GCaMP6s = ON is slightly brighter than OFF.



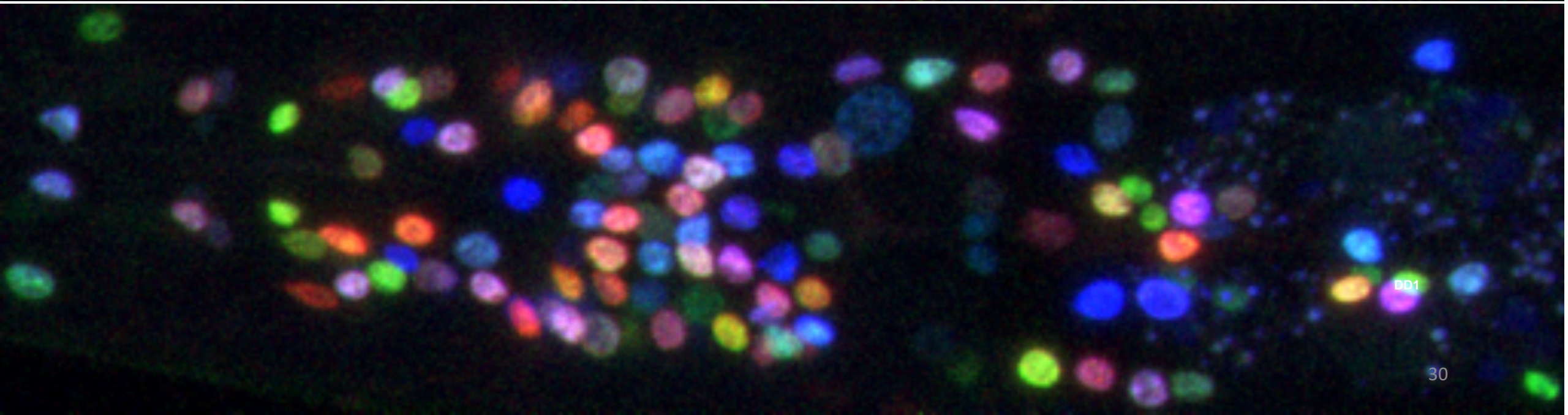
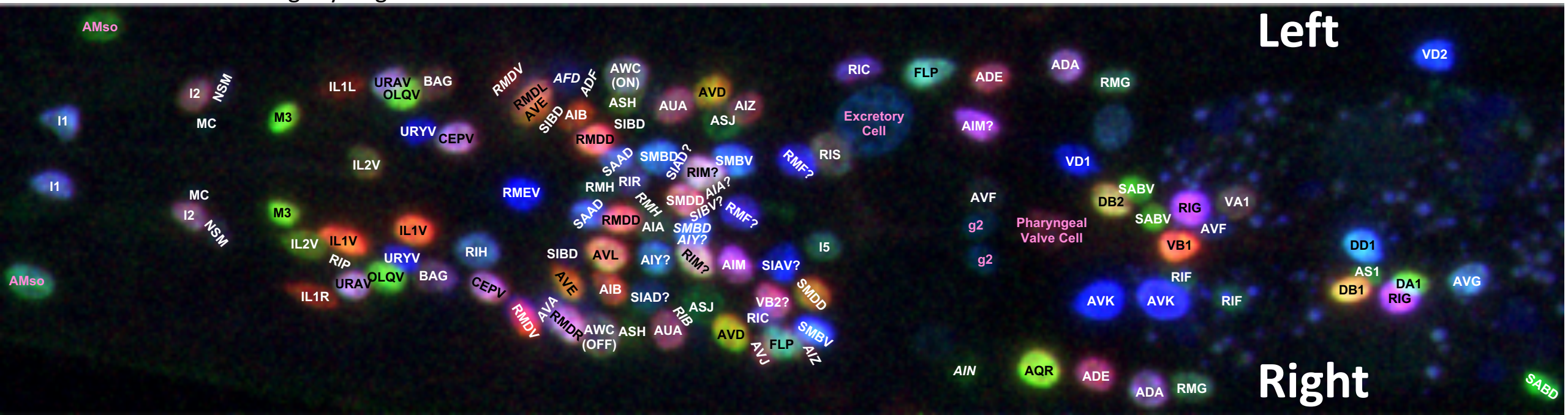
# 4\_AaSP (Ventral)

AWC::GCaMP6s = ON is slightly brighter than OFF.



# 10\_YAaSP (Ventral)

AWC::GCaMP6s = ON is slightly brighter than OFF.

















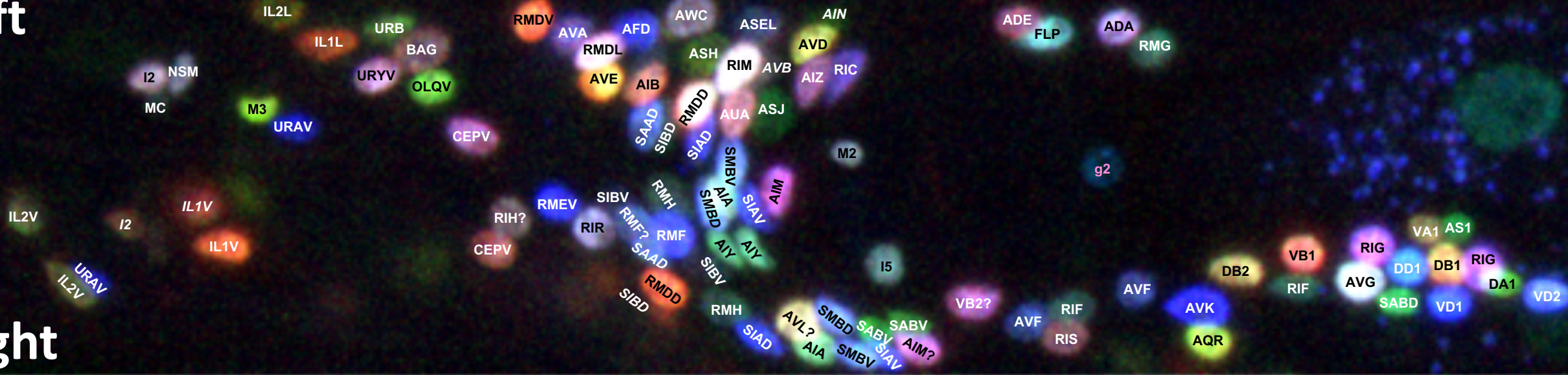
# 16\_YAaSP (Ventral)

Missing: AVKL, SMDDL.

Left

I1

I1



Right











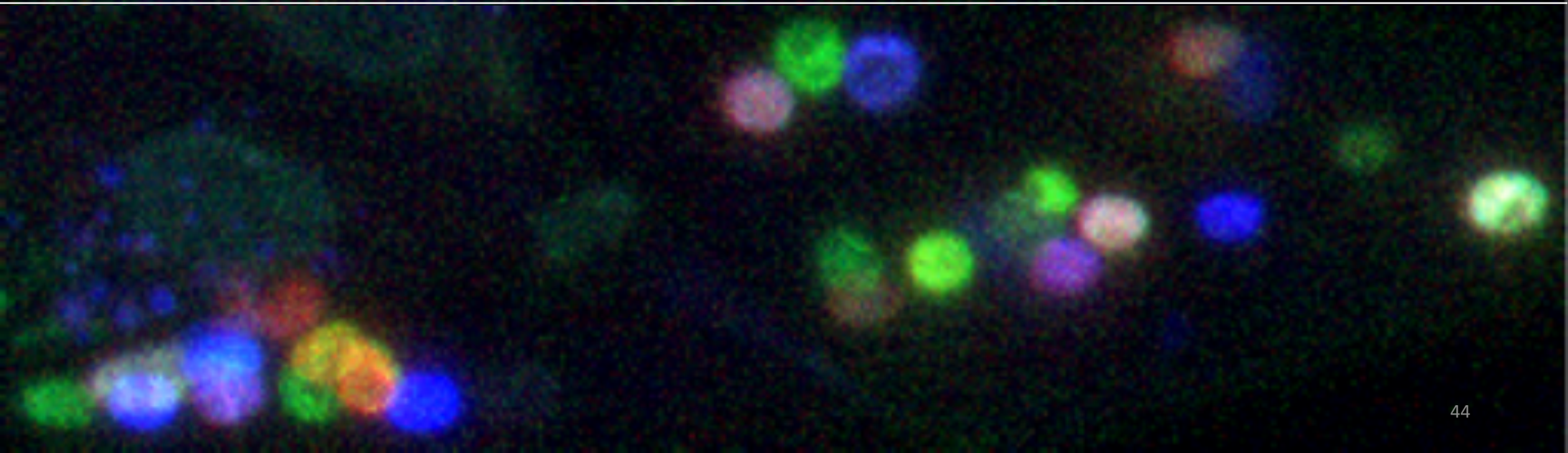
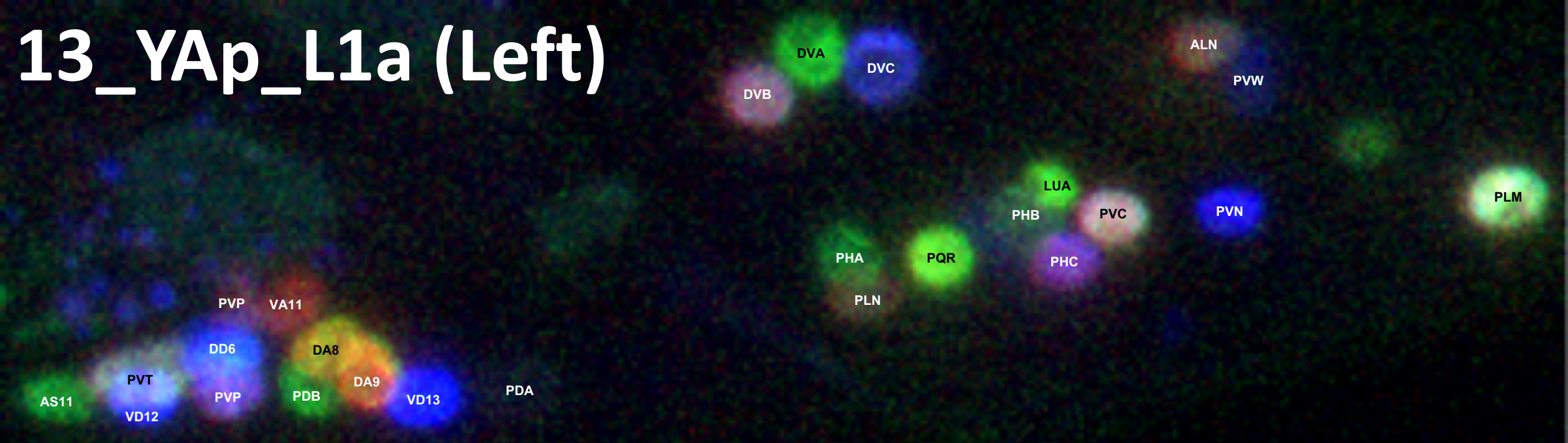
# TAILS

L4 to Young Adult:

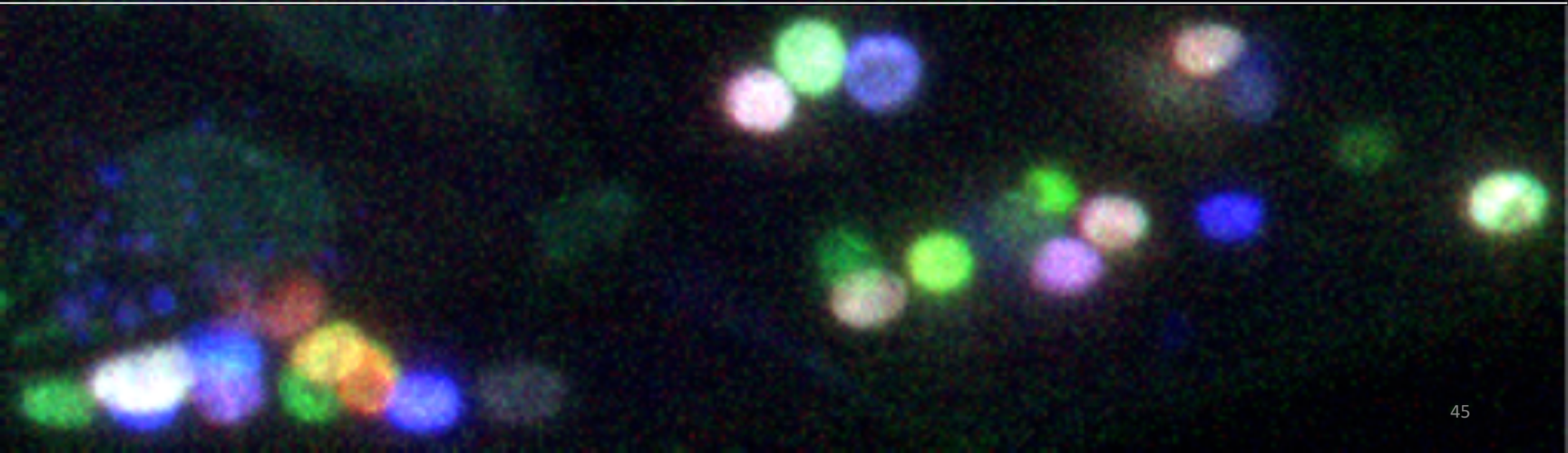
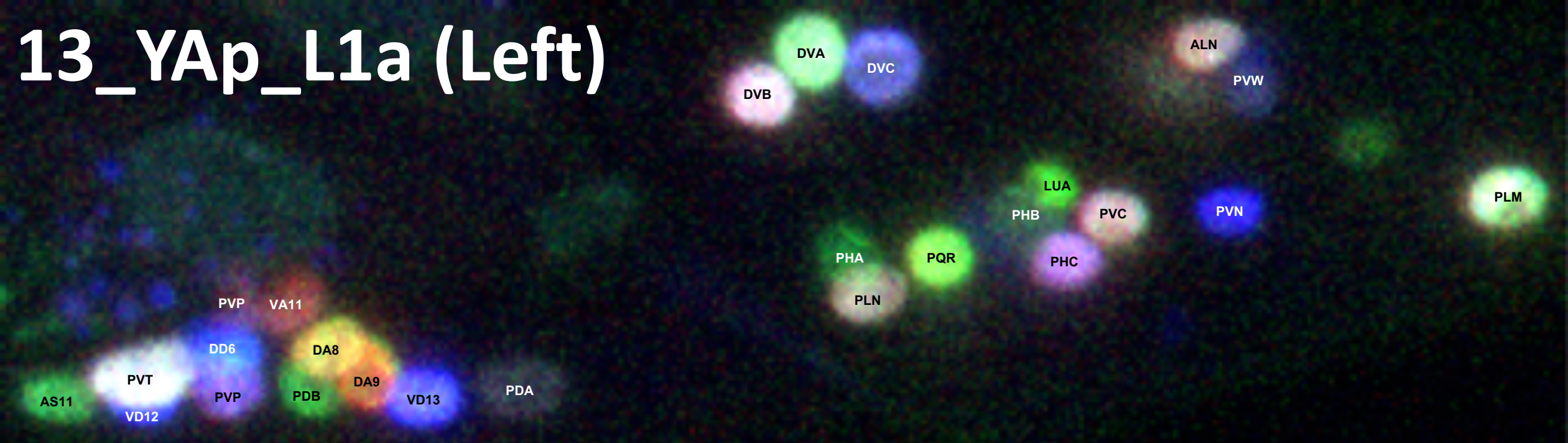
Tail – Lateral

Left Side

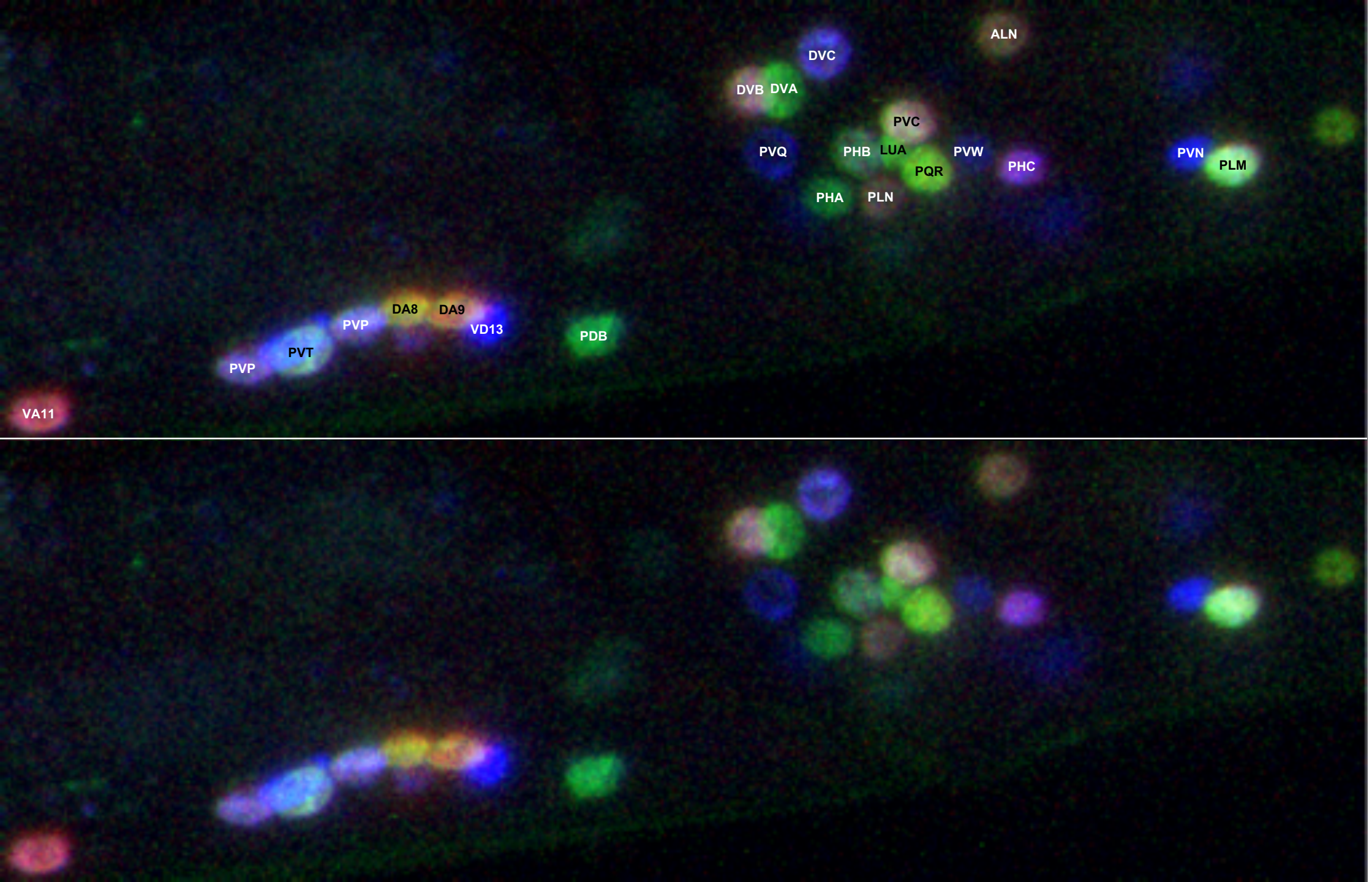
# 13\_YAp\_L1a (Left)



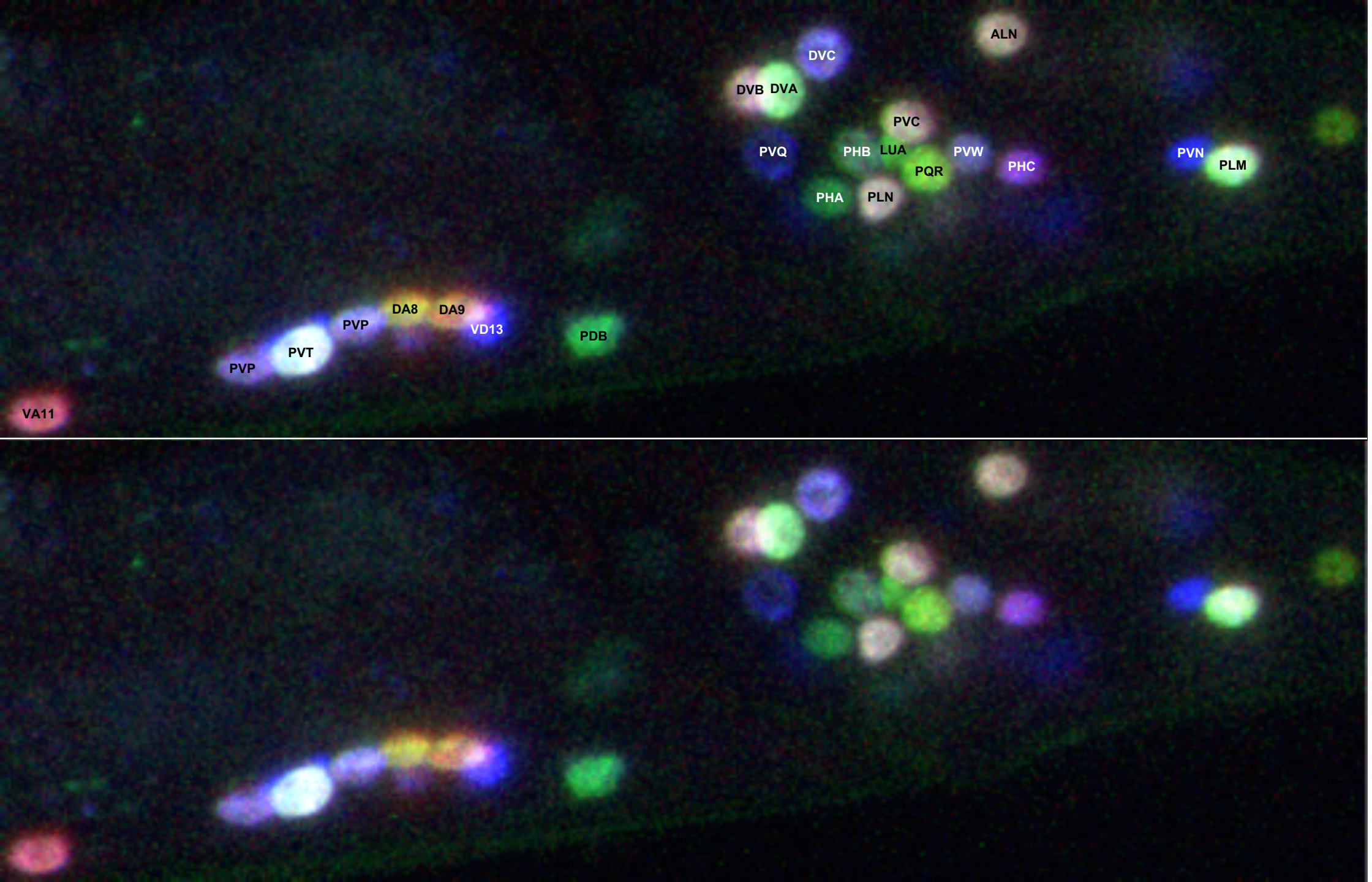
# 13\_YAp\_L1a (Left)



# 26\_YAp (Left)



# 26\_YAp (Left)

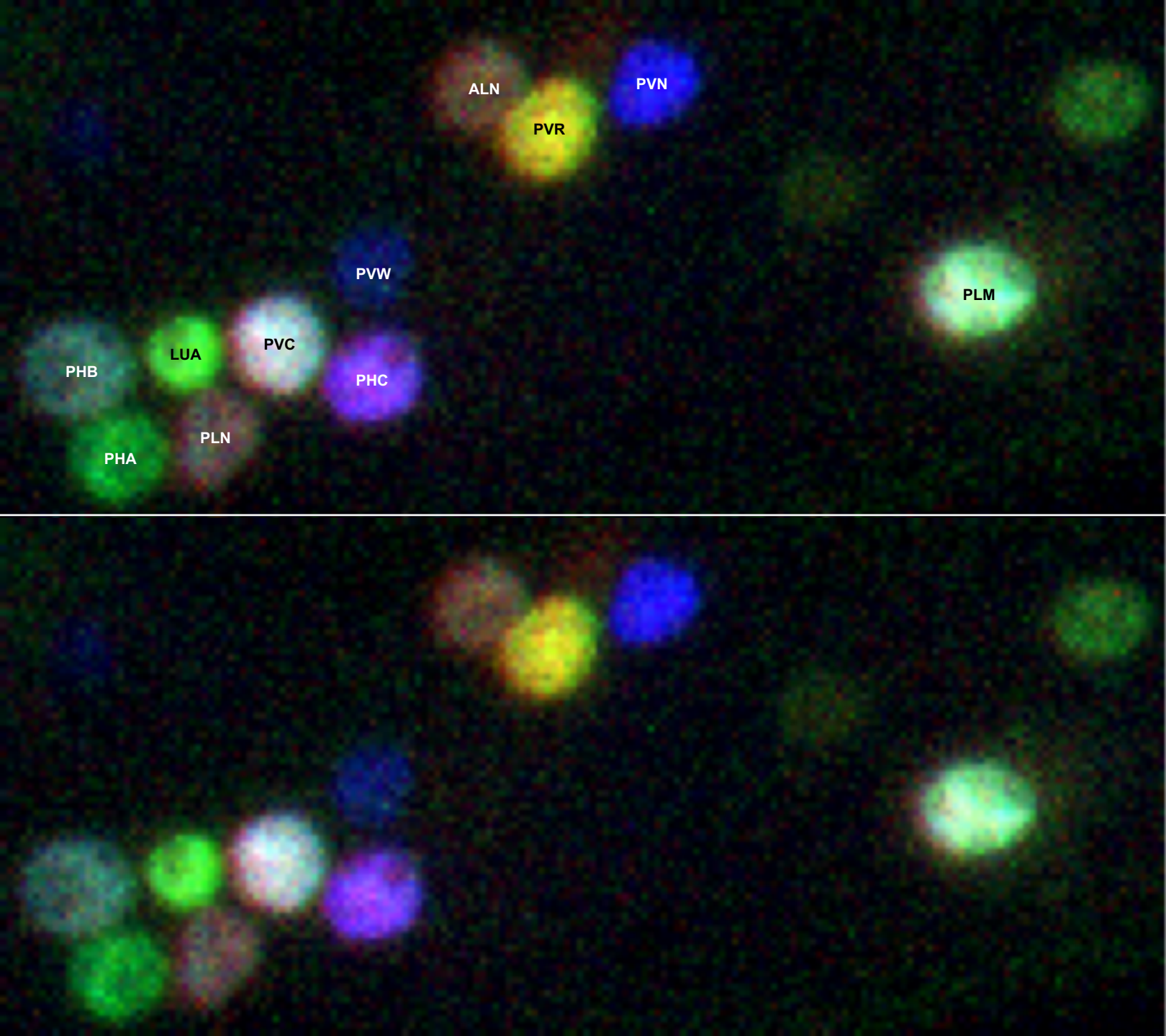


# L4 to Young Adult:

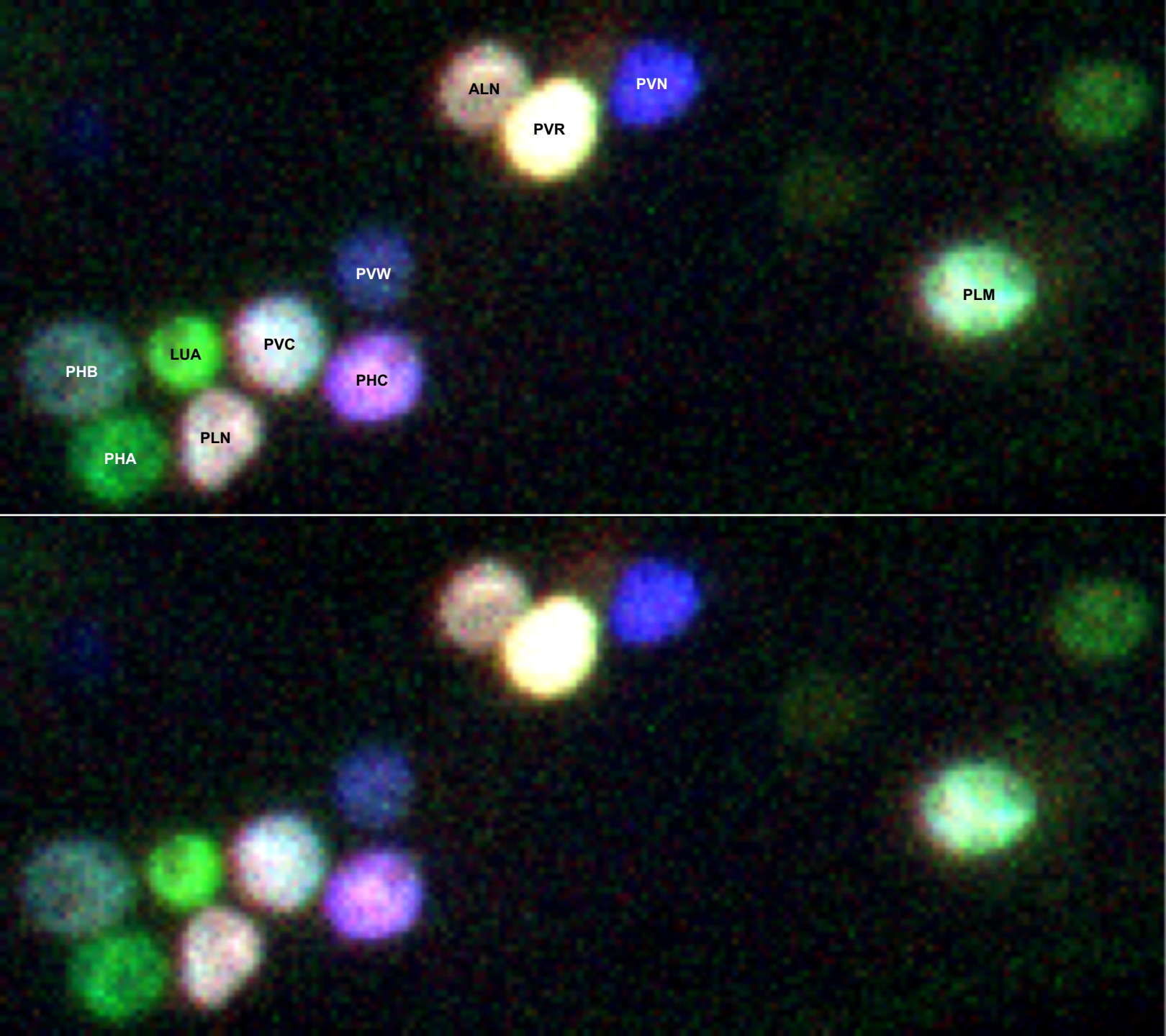
Tail – Lateral  
Right Side

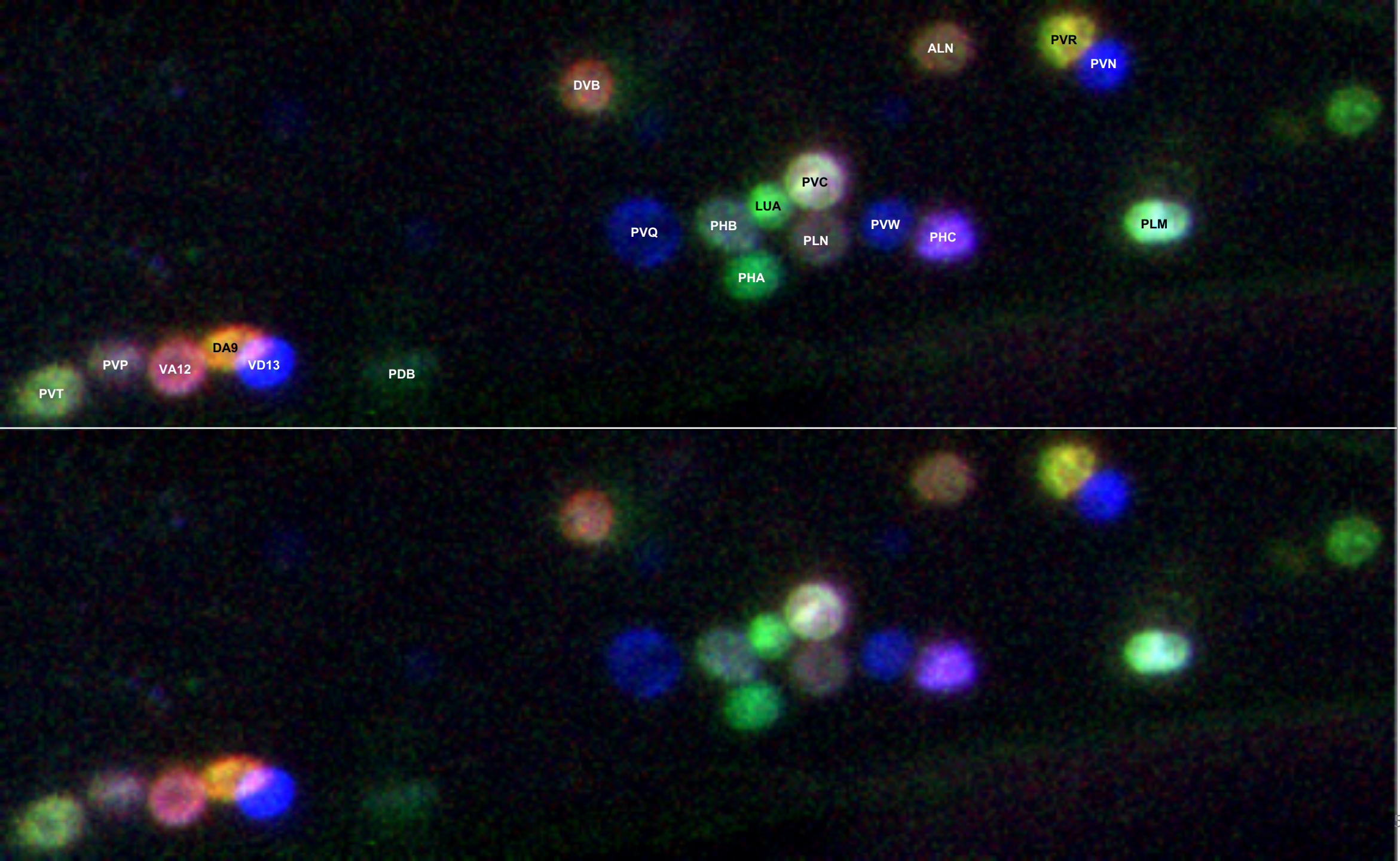


# 13\_Yap\_L1a (Right)

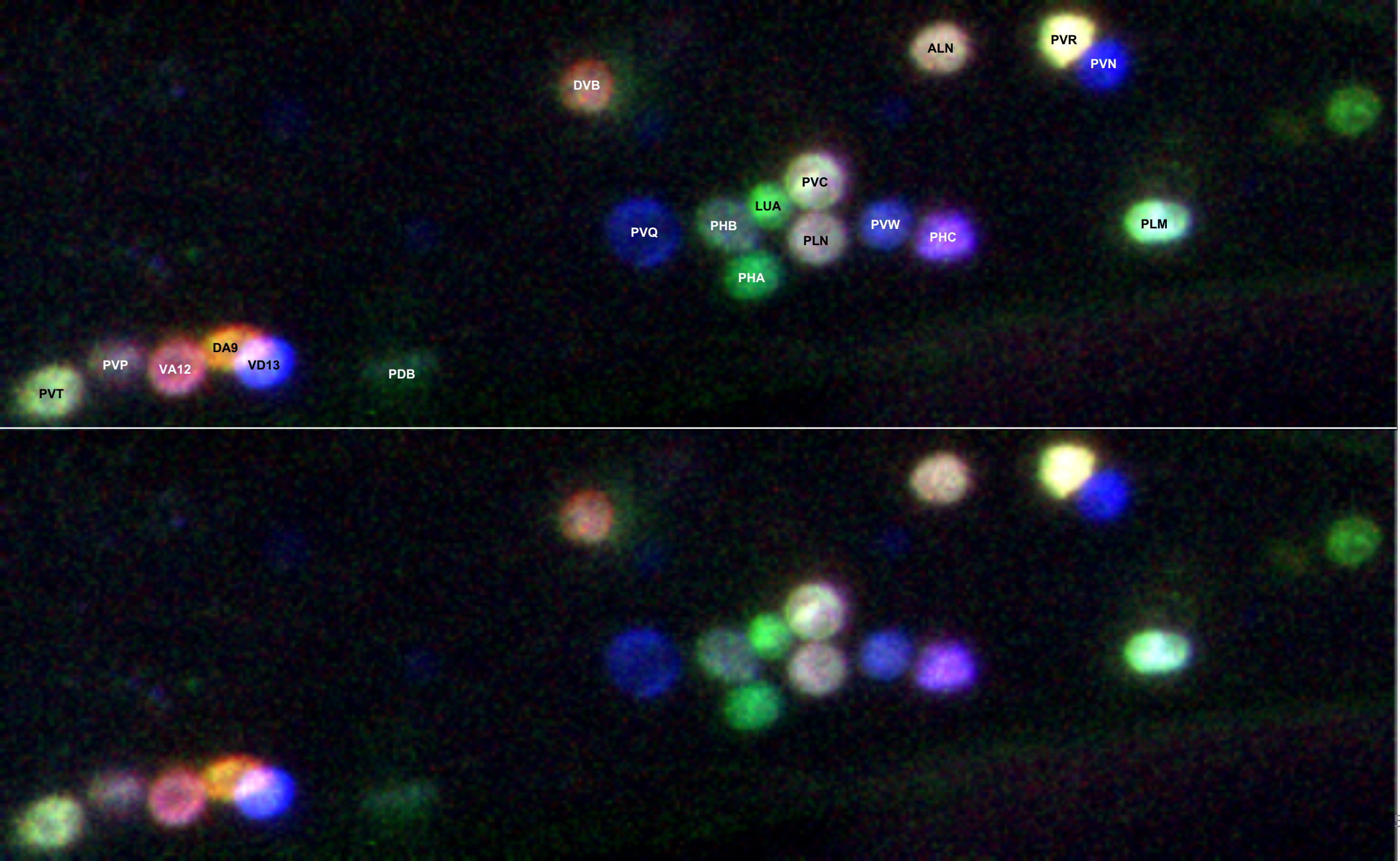


# 13\_Yap\_L1a (Right)





# 26\_YAp (Right)



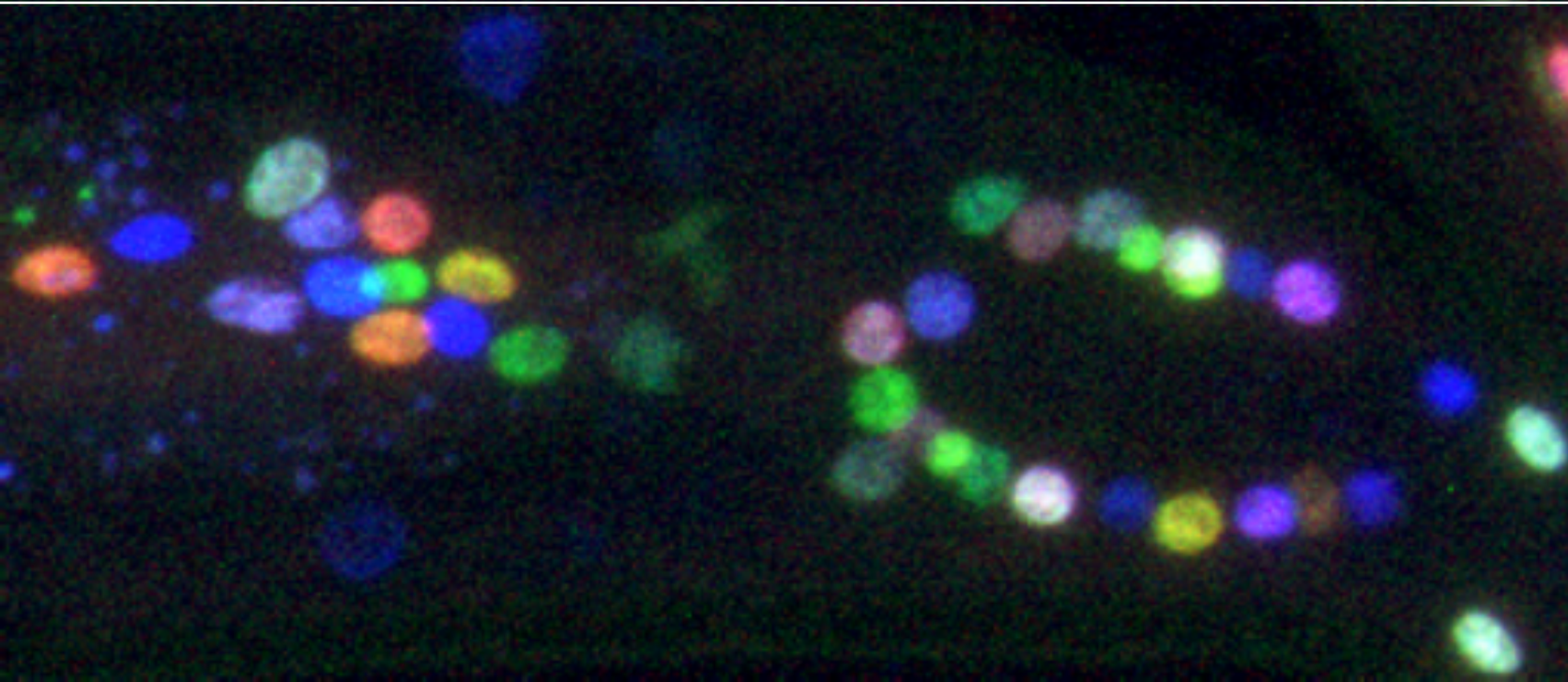
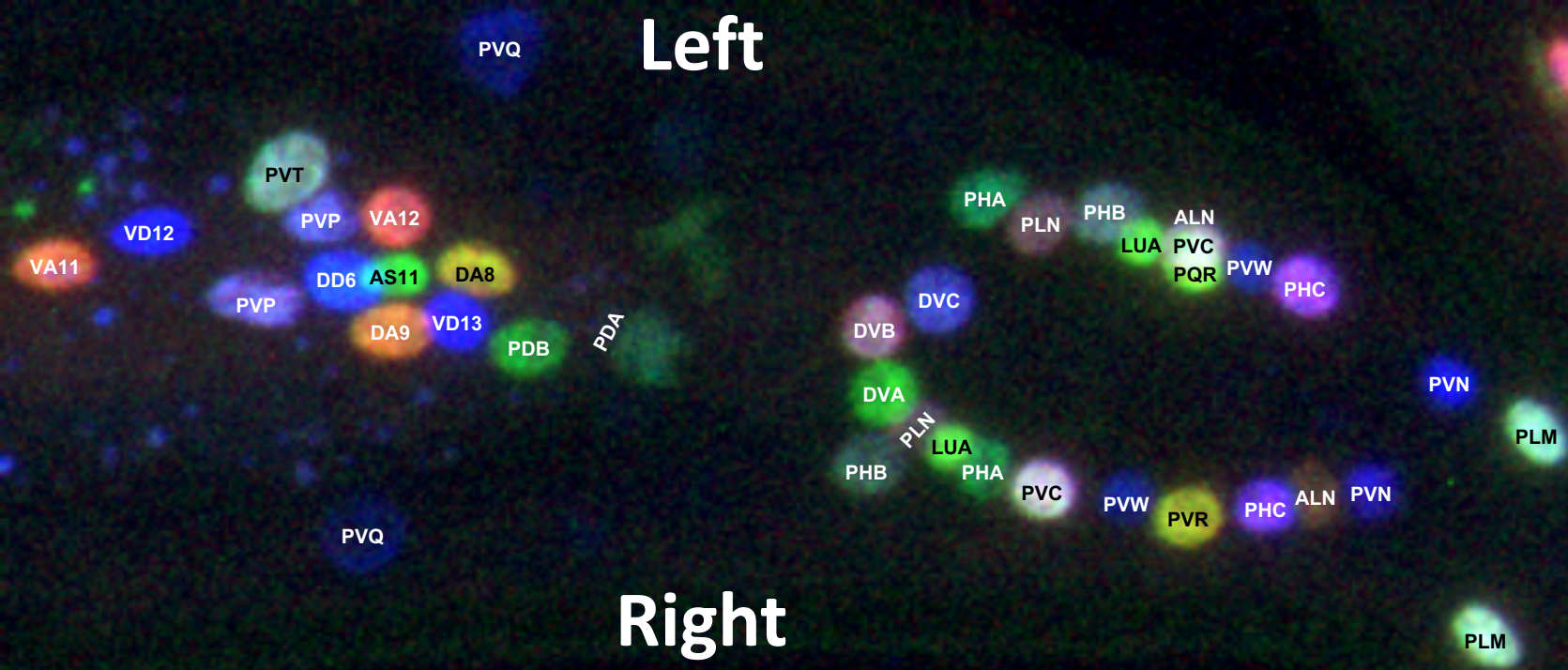
# 26\_Yap (Right)

L4 to Young Adult:

Tail – Dorsal-Ventral

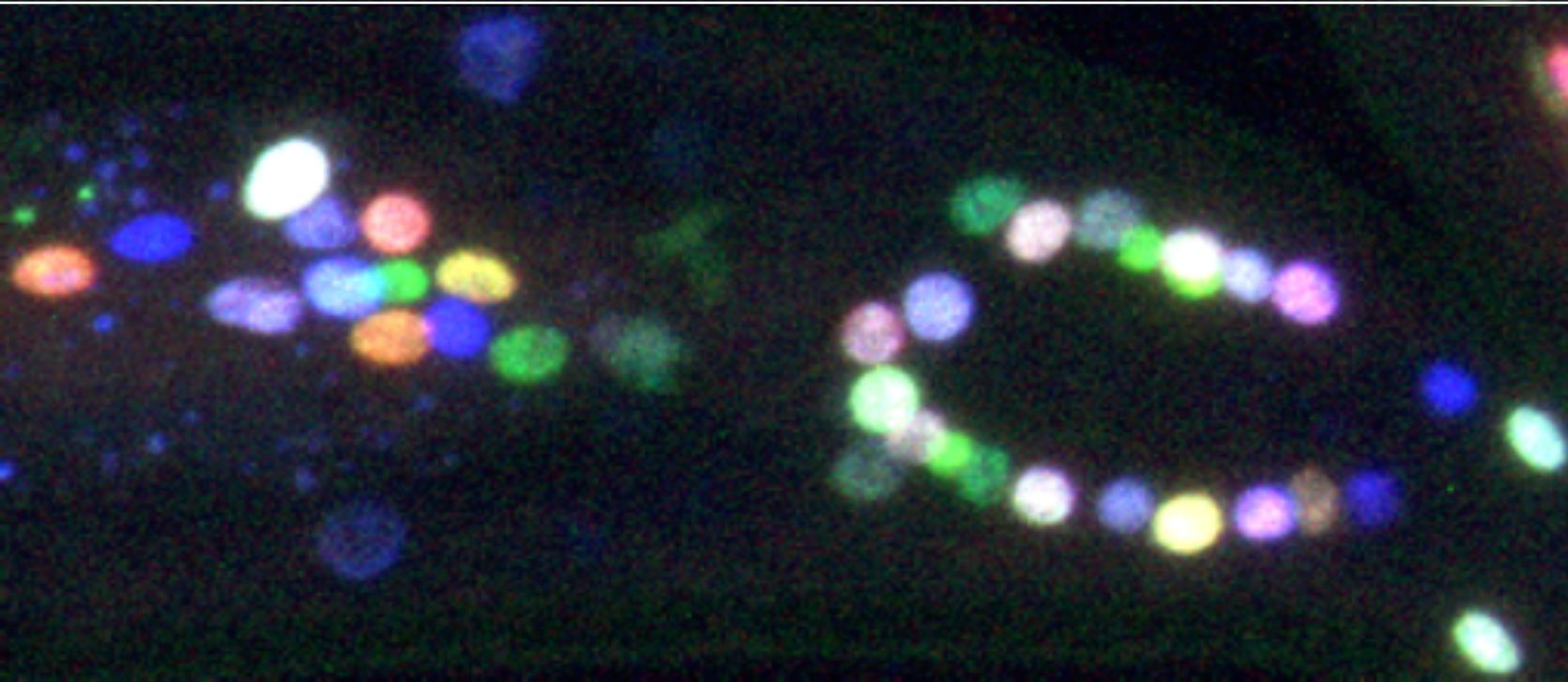
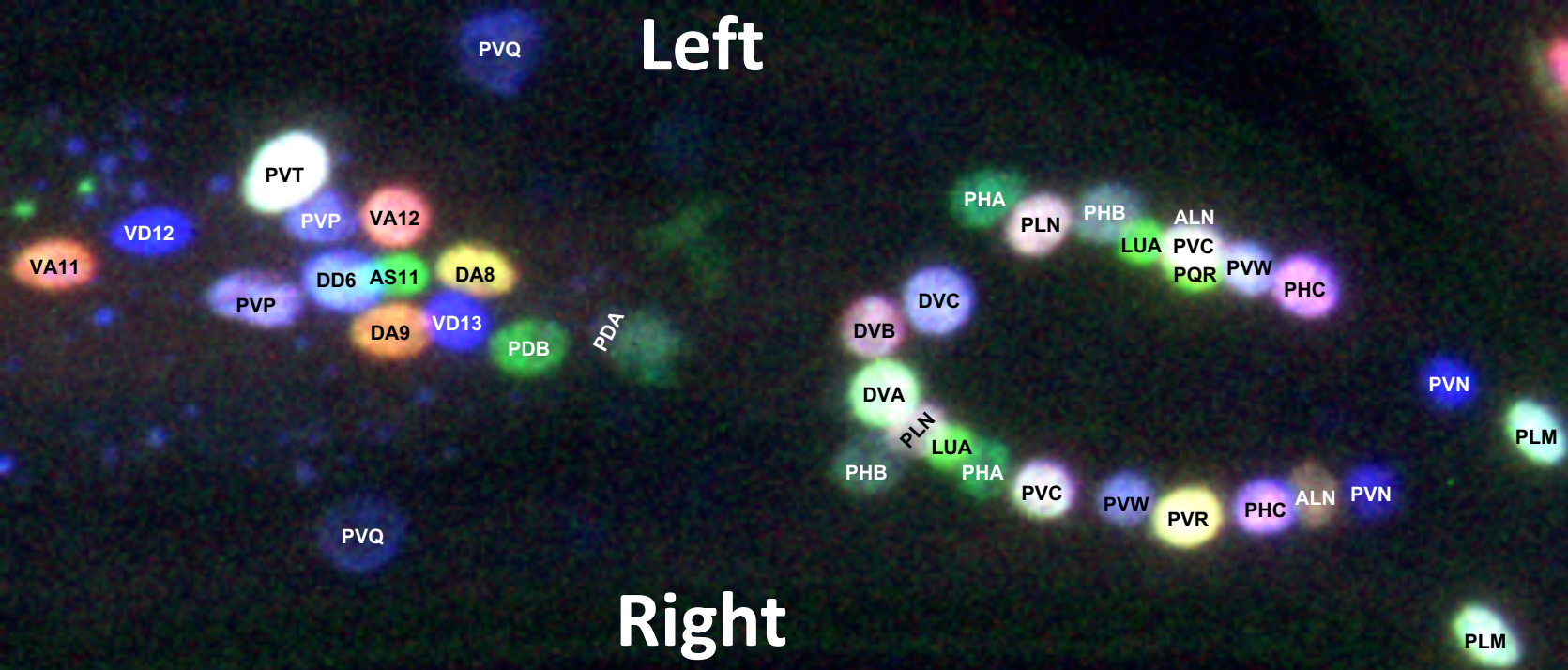






# 10\_YAASP (Ventral)





# 10\_YAASP (Ventral)

# 12\_YApSP (Ventral)

Left

