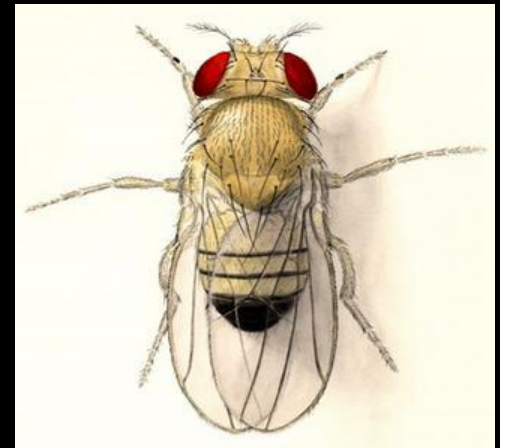


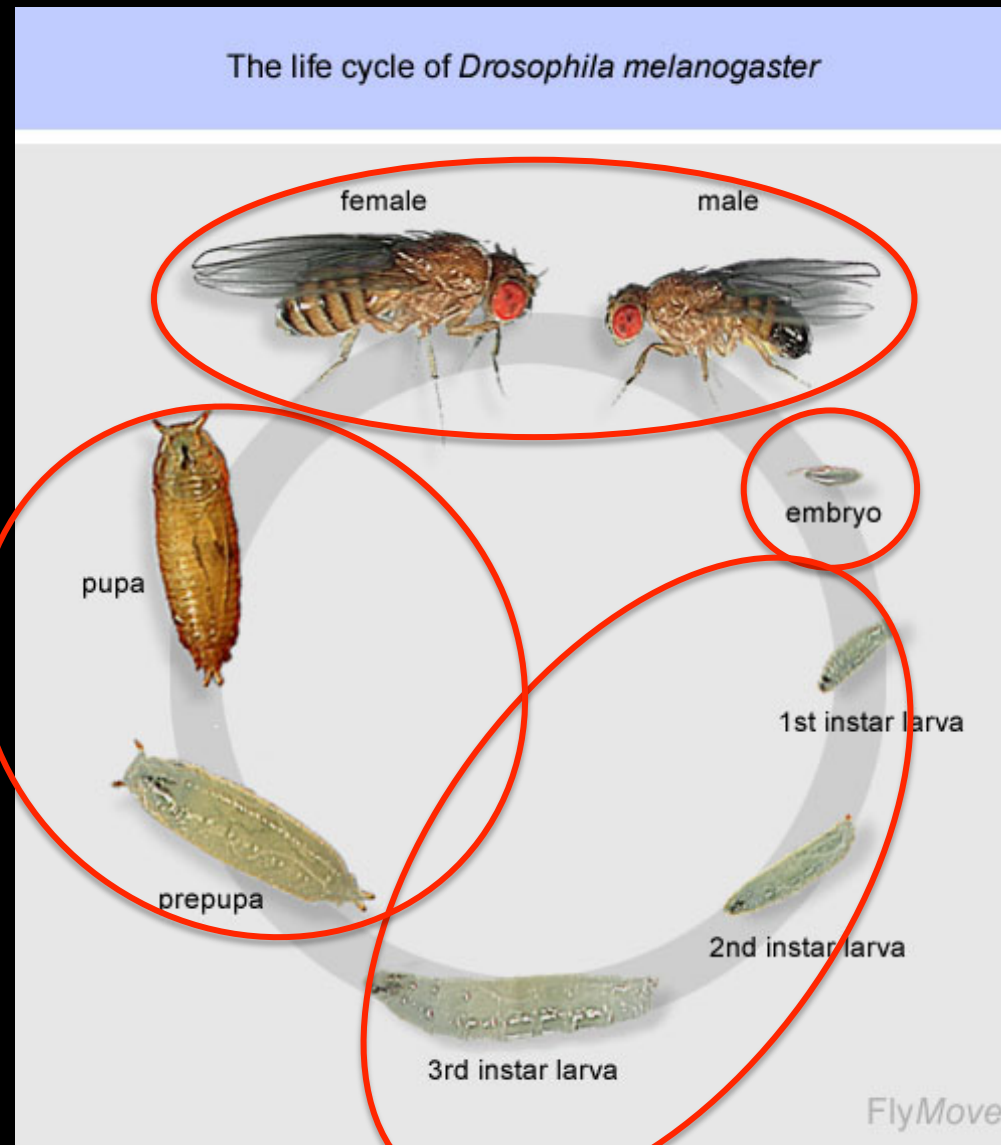
El desarrollo embrionario de
Drosophila melanogaster

Sofia J. Araújo

IBMB-CSIC, IRB Barcelona



Drosophila – ciclo de vida



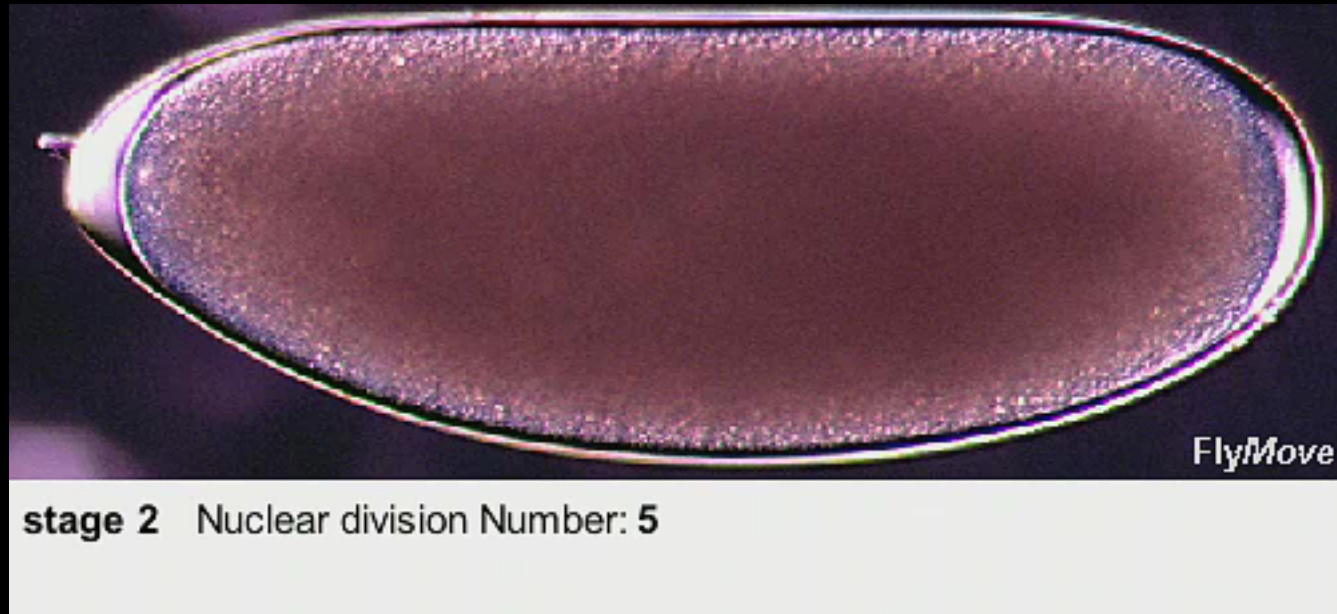
Ciclo de vida- embriogenesis 24h at 25C

Time table of embryogenesis

	Stage	Time	Developmental events
	1- 4	0:00 - 2:10 h	Cleavage
	5	2:10 - 2:50 h	Blastoderm
	6 - 7	2:50 - 3:10 h	Gastrulation
	8 - 11	3:10 - 7:20 h	Germ band elongation
	12 - 13	7:20 - 10:20 h	Germ band retraction
	14 - 15	10:20 - 13:00 h	Head involution and dorsal closure
	16 - 17	13:00 - 22:00 h	Differentiation



Embriogénesis



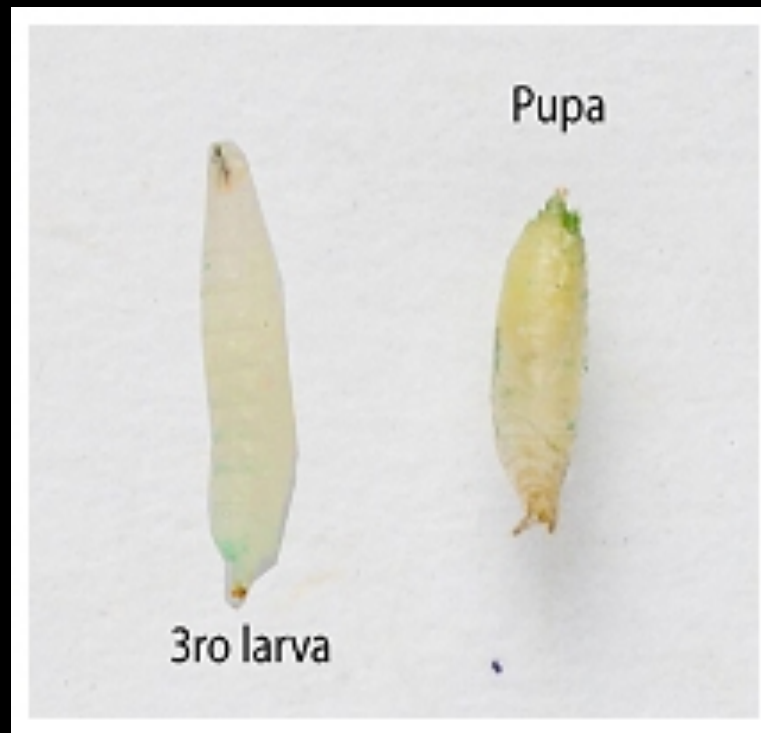
Embriogénesis

Análisis de fenotipos:

- Embriones fijados y teñidos
- Cutículas
- Embriones in vivo

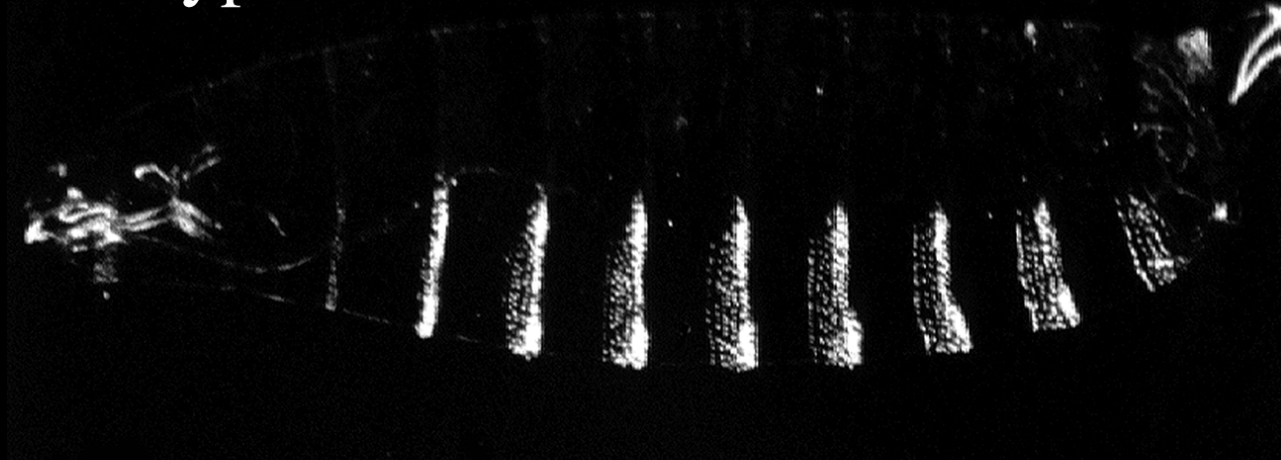


Ciclo de vida – larvas y pupas

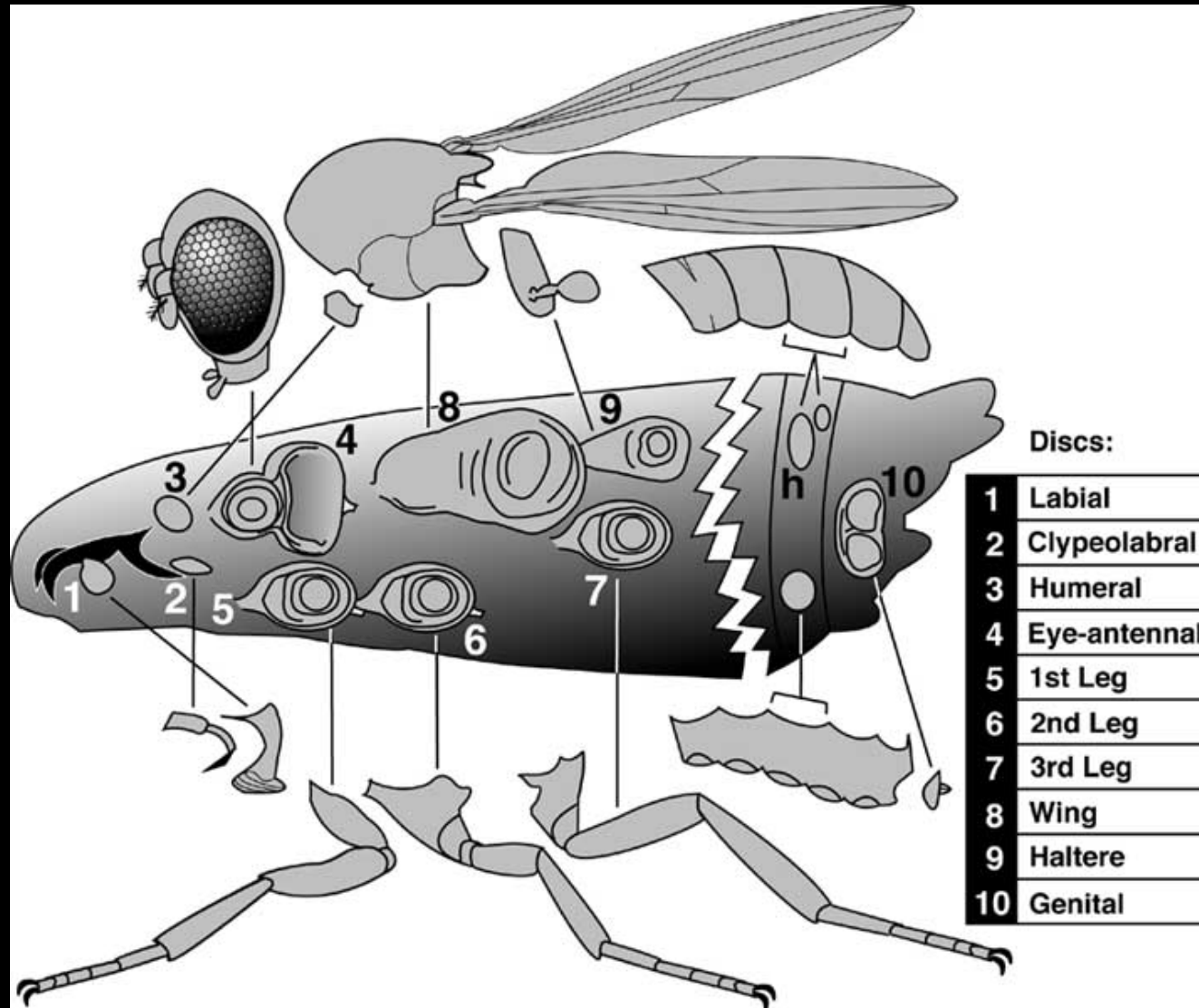


Ciclo de vida – cutículas

wildtype

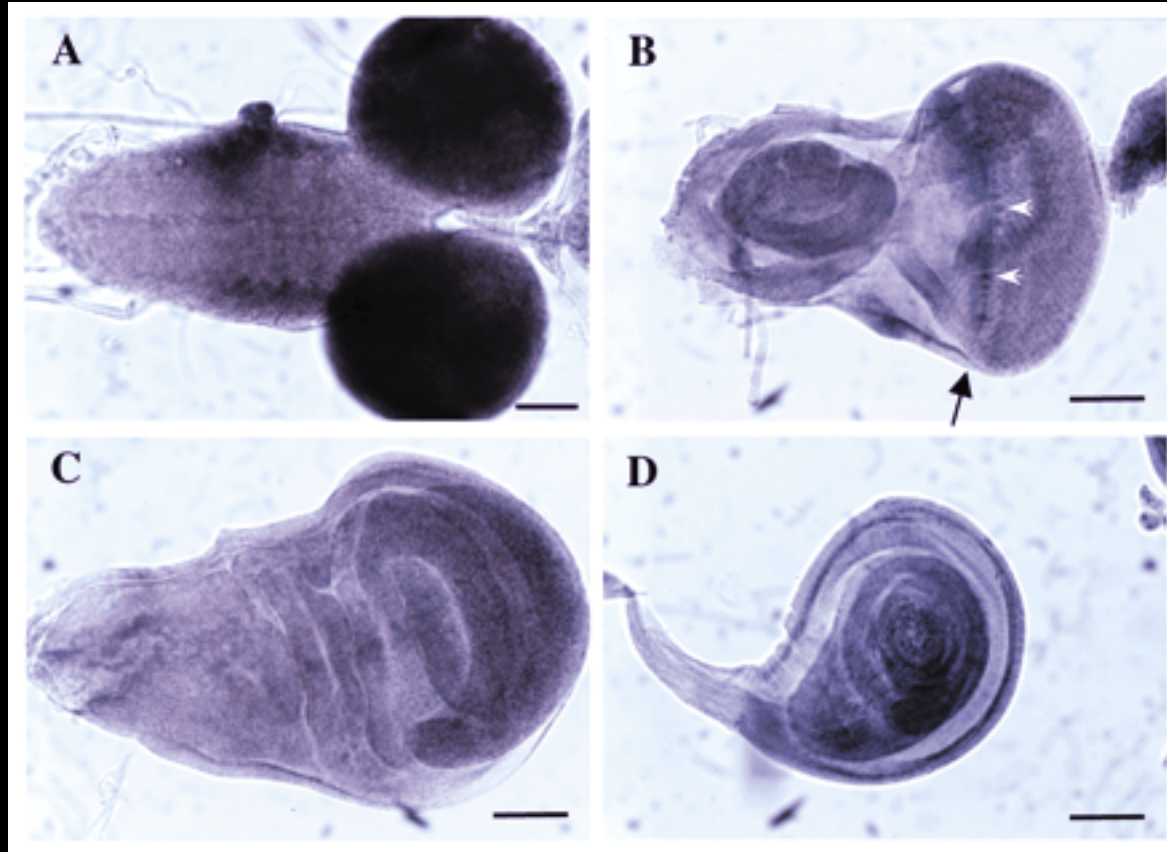


Ciclo de vida – metamorfosis y discos imaginales



Analisis de fenotipos en discos imaginales

Cerebro



Antena y ojo

Ala

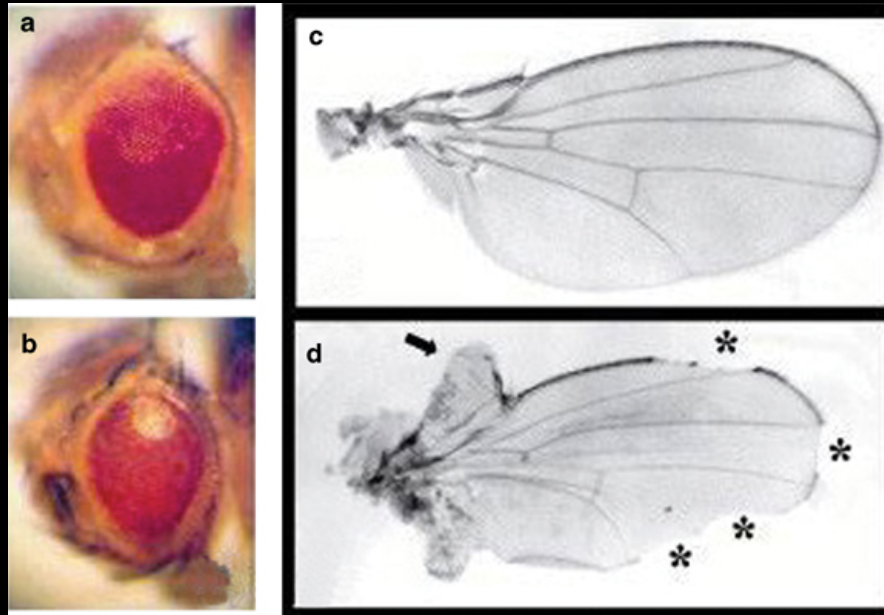
Pata



Ciclo de vida – el adulto



Analisis de fenotipos de adulto ojo y ala



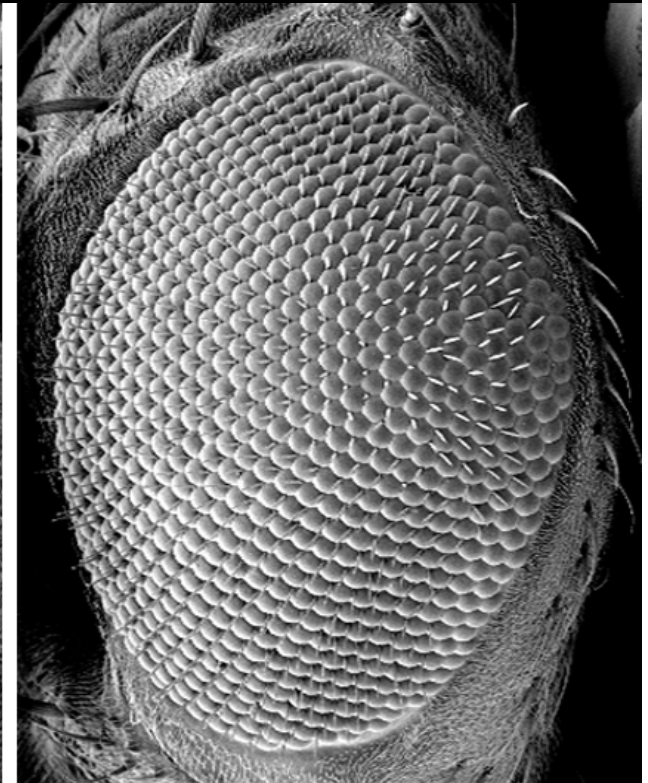
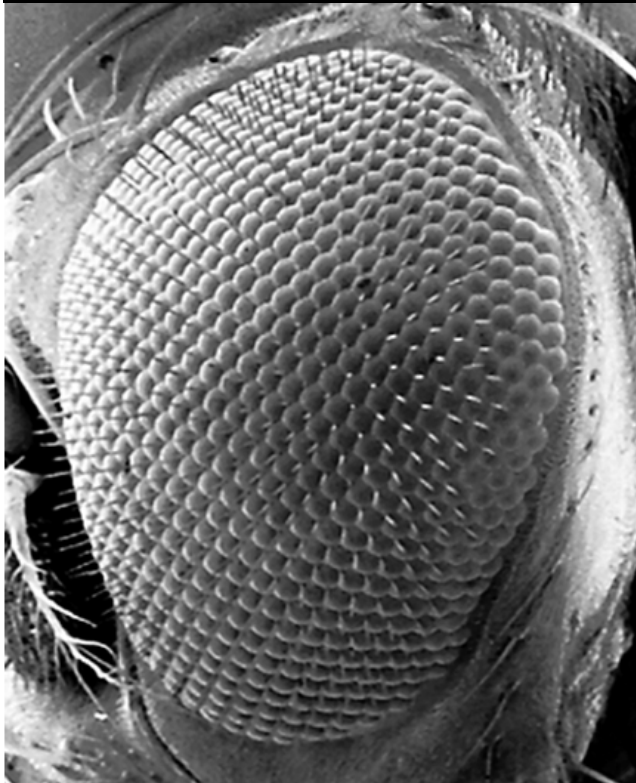
Analisis de fenotipos en el ojo

Supressors of *argos* (Casci et al.)

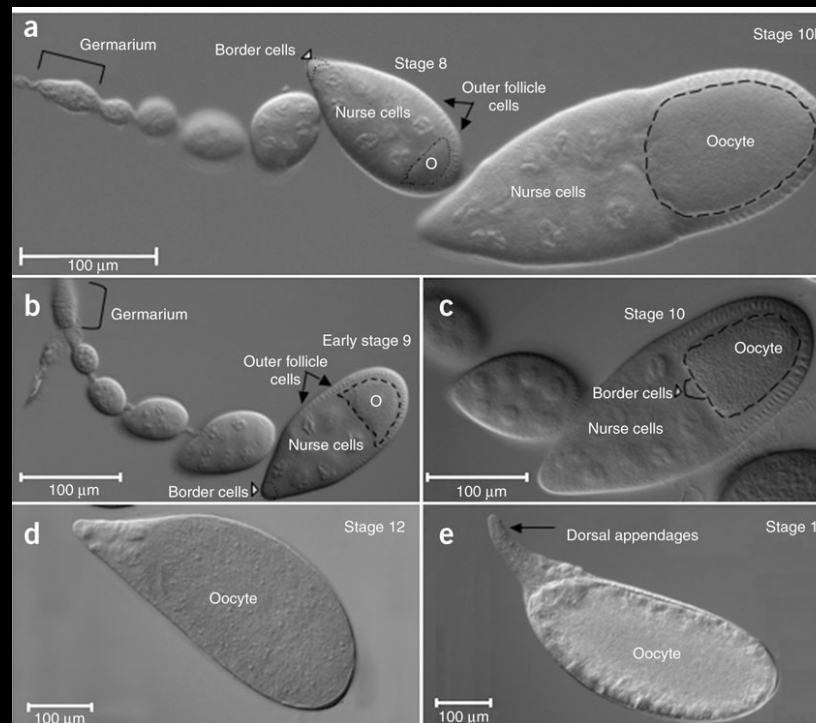
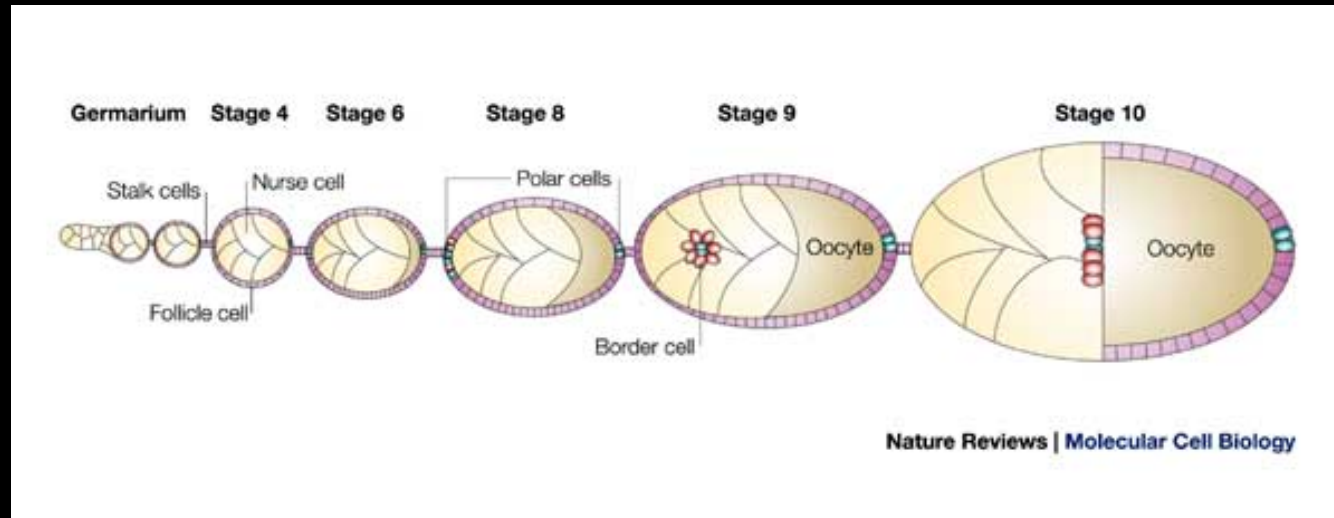
wildtype

GMR GAL4 - UAS *argos*/+

GMR-*argos*/+; Su(*argos*)



Analisis de fenotipos en el ovario

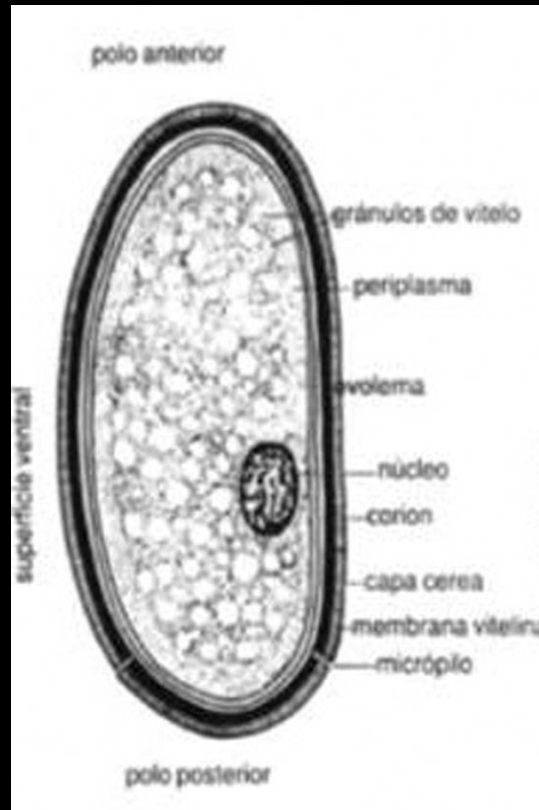


Hoy:

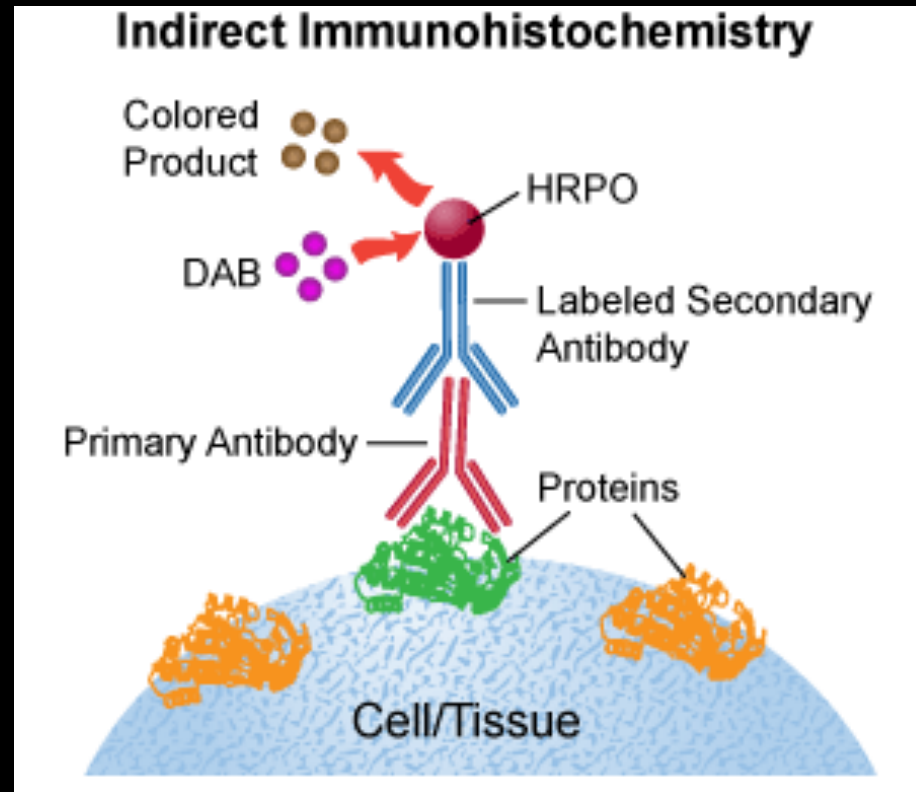
- Embriones fijados y teñidos - inmunohistoquímica
- Cutículas
- Embriones in vivo



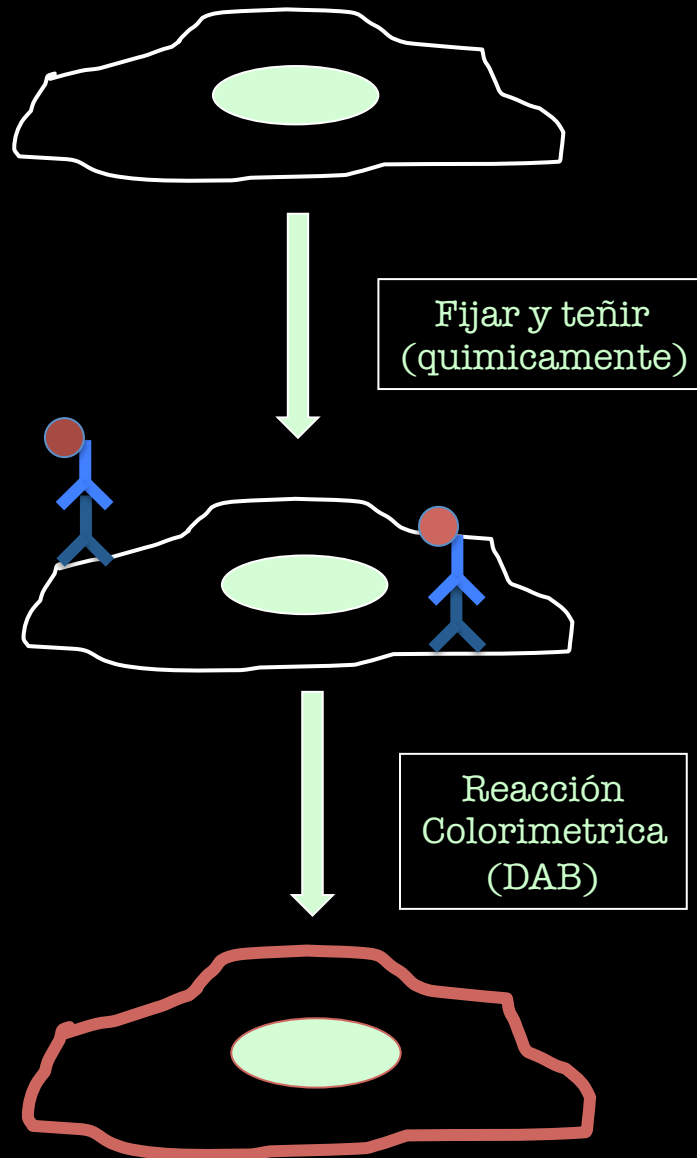
Estructura del embrión de Drosophila



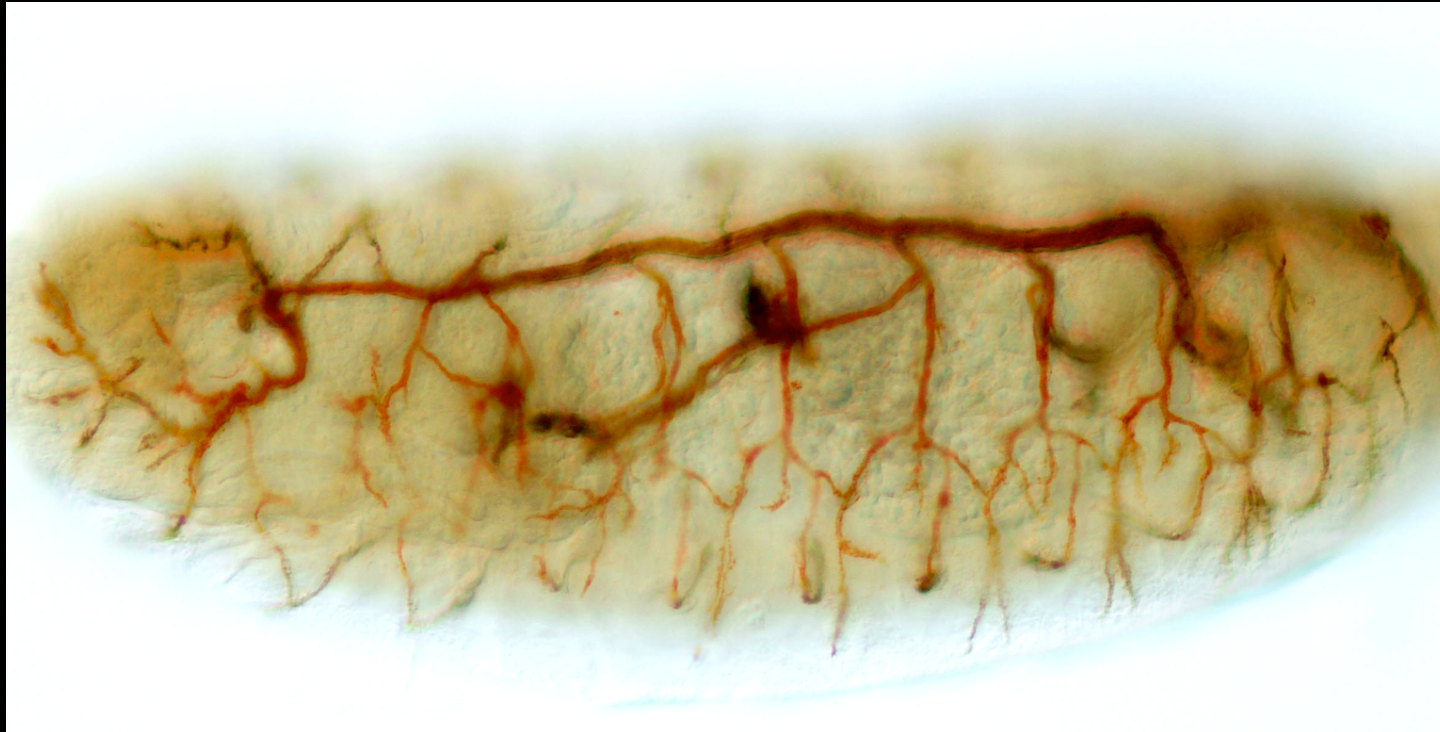
Inmunohistoquímica



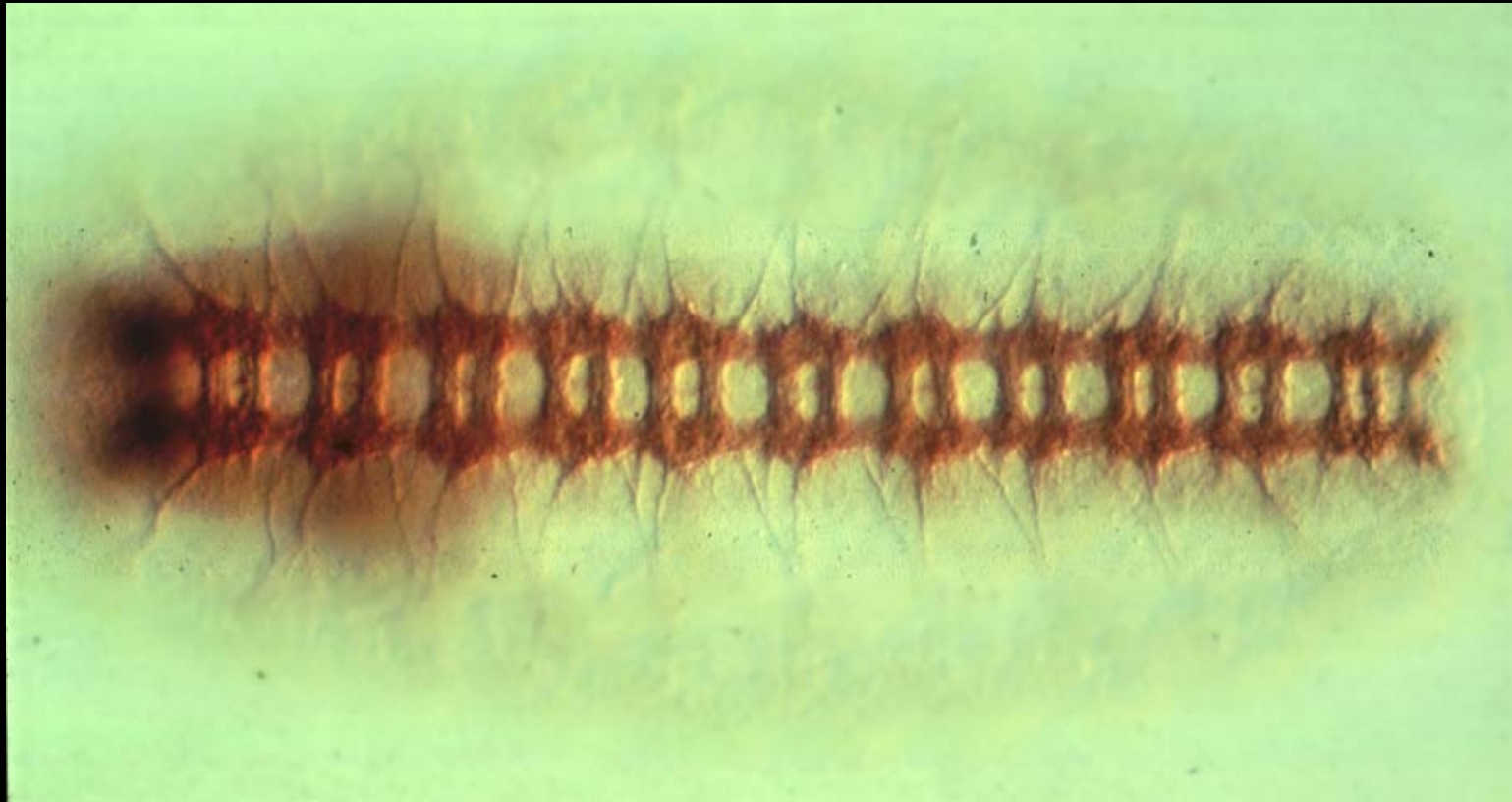
Inmunohistoquímica



Tinción del sistema traqueal

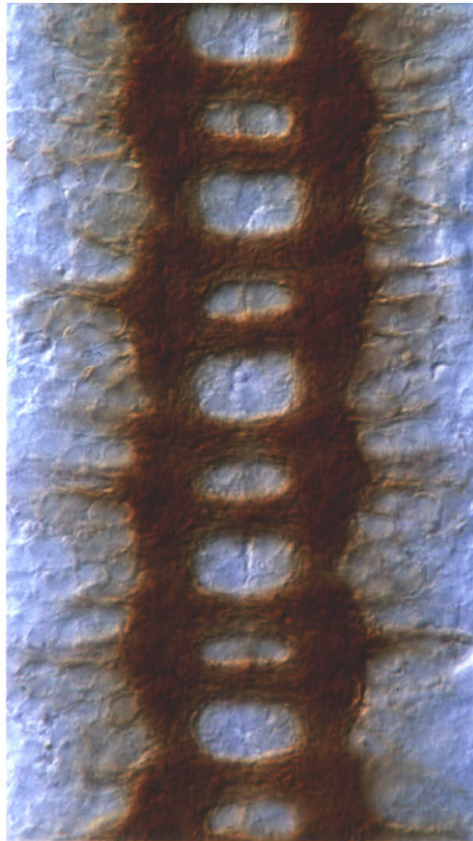


Tinción del sistema nervioso

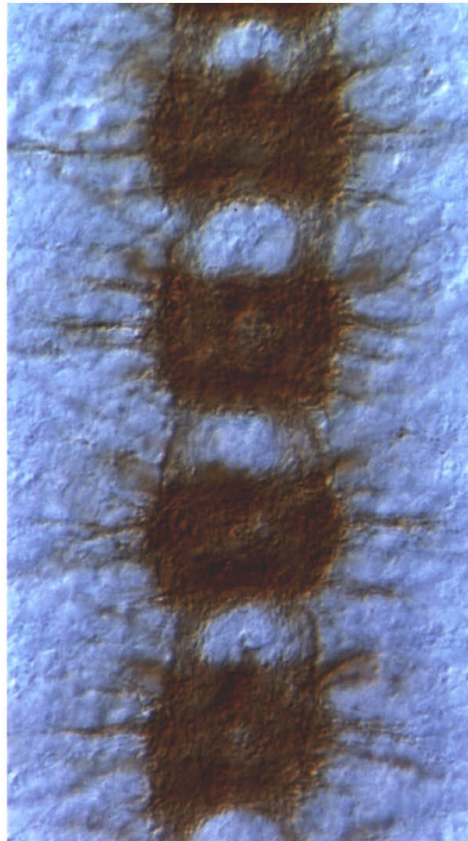


Fenotipos de sistema nervioso

wild type



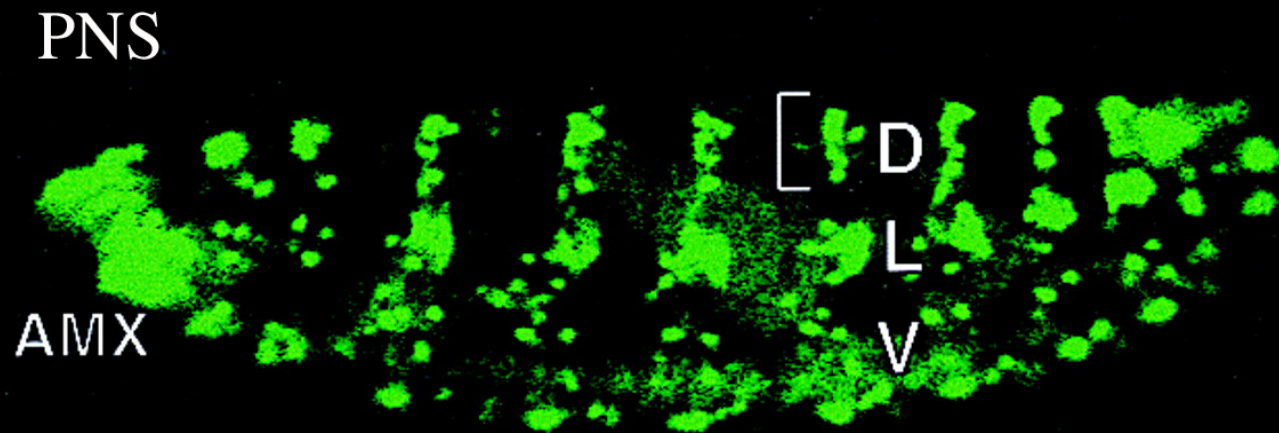
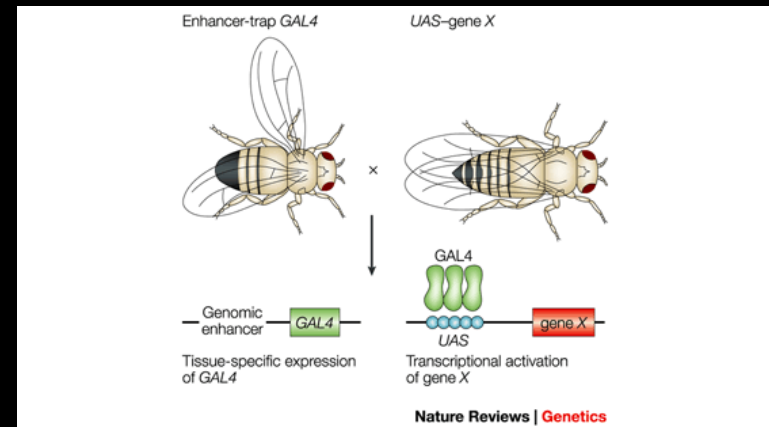
***roundabout*
loss-of-function**



***commissureless*
loss-of-function**



Forward genetics - Traditional screens



GFP in the peripheral nervous system



The power of the fly

