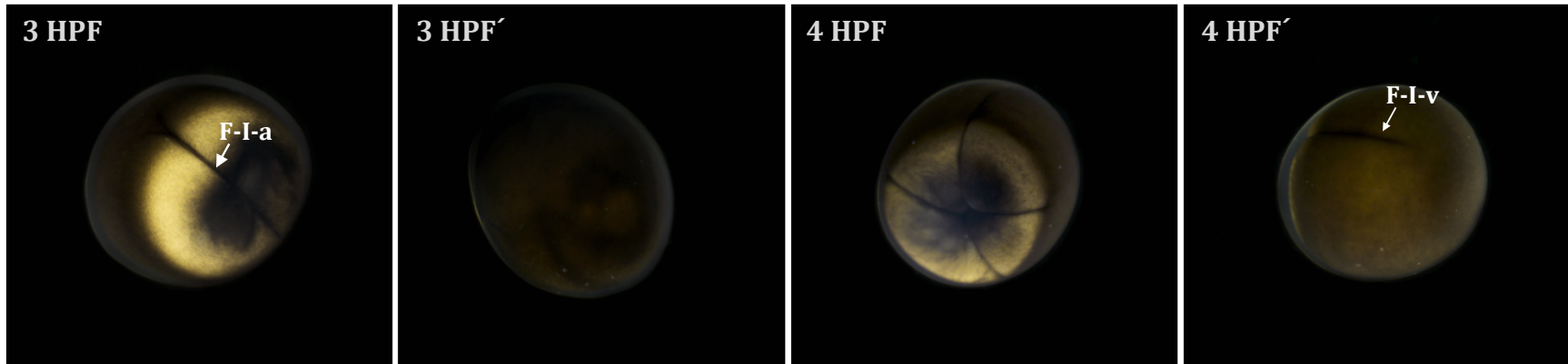
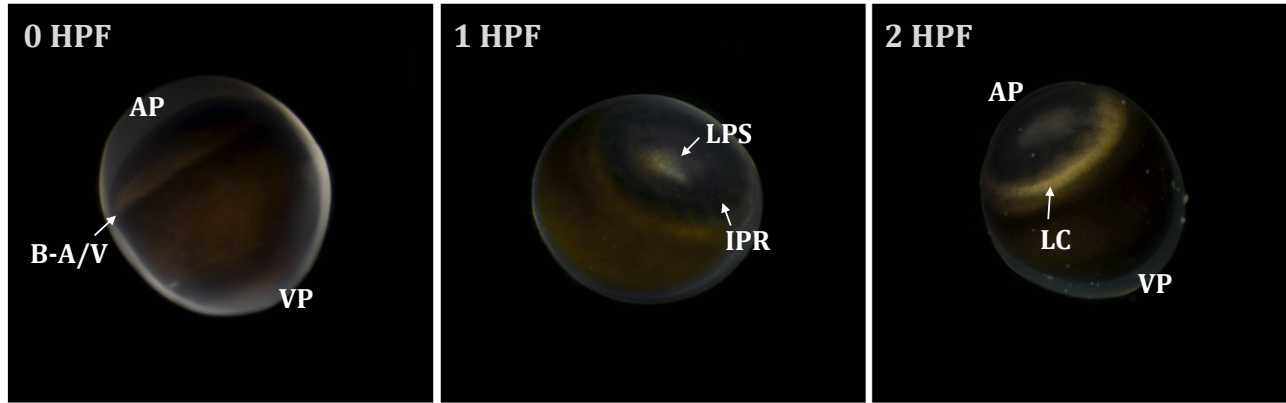


Supplementary Figure S1.

Photographic images for developmental stages of Russian sturgeon (*Acipenser gueldenstaedtii*) embryos, incubated at 19 °C

Early cleavages-I



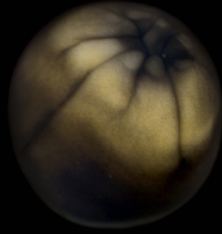
- **AP**: animal pole
- **VP**: vegetal pole
- **B-A/V**: boundary between the animal and vegetal areas
- **LPS**: light polar spot

- **IPR**: intensely pigmented ridge
- **LC**: light crescent
- **F-I-a**: first cleavage furrow at animal hemisphere
- **F-I-v**: first cleavage furrow at vegetal hemisphere

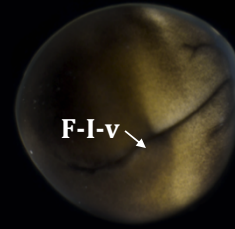
Early cleavages-II

- **F-I-v**: first cleavage furrow at vegetal hemisphere
- **AB**: animal blastomeres
- **VB**: vegetal blastomeres

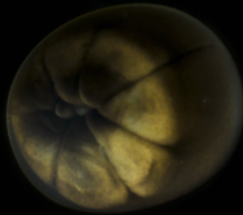
4.5 HPF



4.5 HPF'



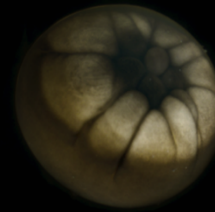
5 HPF (1)



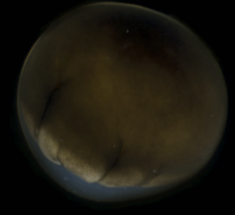
5 HPF (1)'



5 HPF (2)



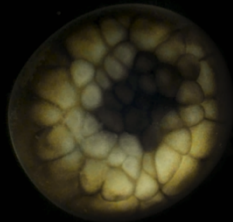
5 HPF (2)'



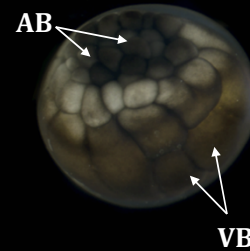
6 HPF



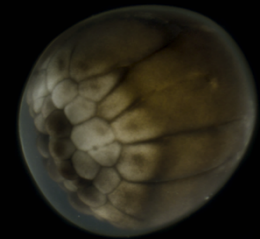
7 HPF (1)



7 HPF (2)

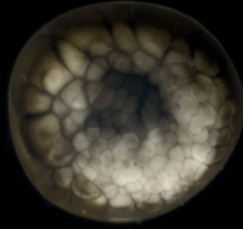


7 HPF (2)'

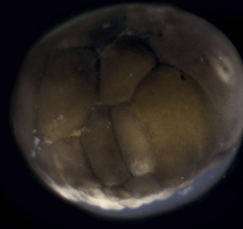


Late phase of cleavages

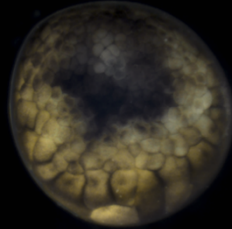
8 HPF



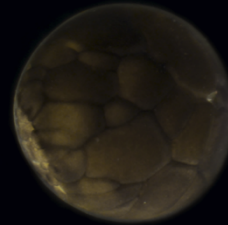
8 HPF'



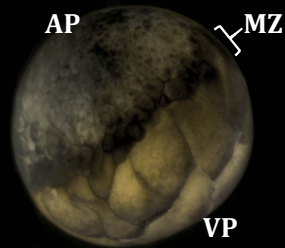
9 HPF



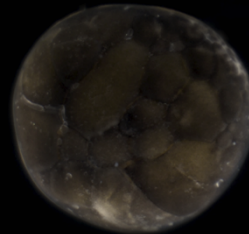
9 HPF'



10 HPF

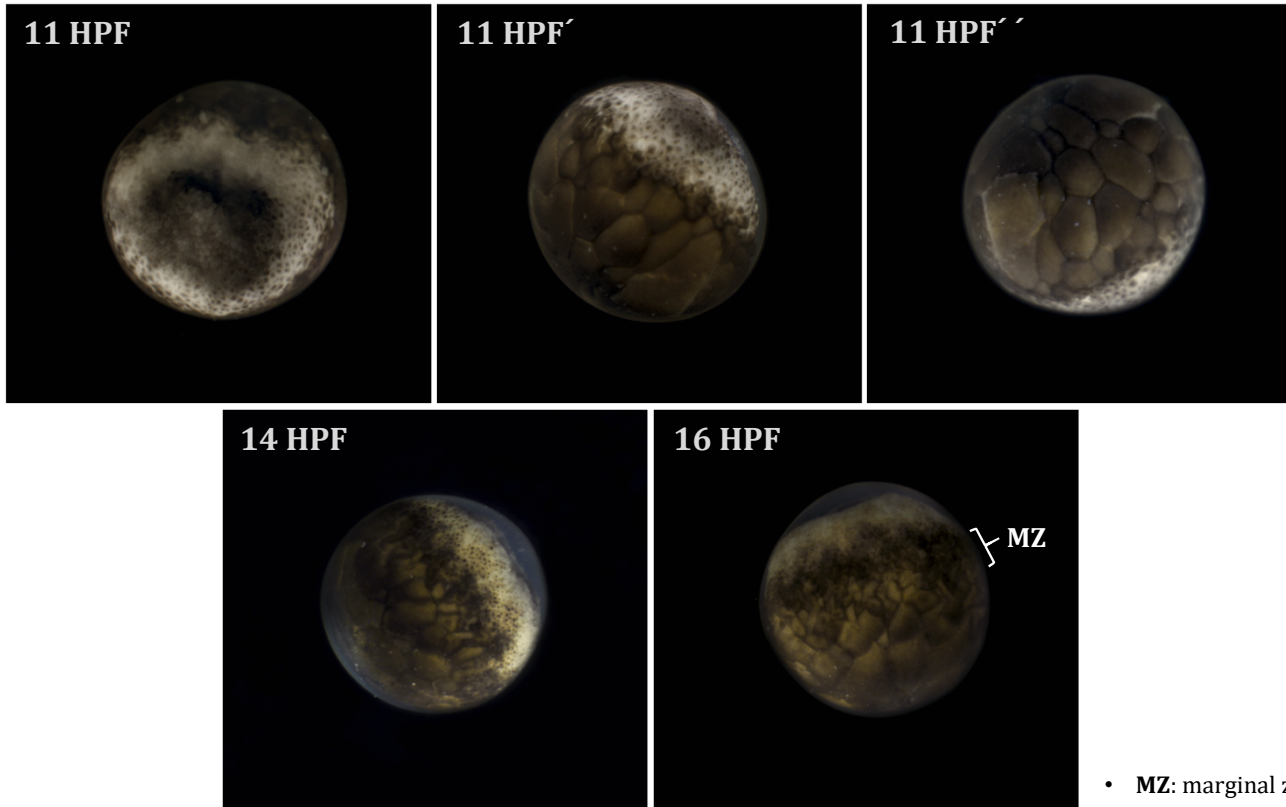


10 HPF'

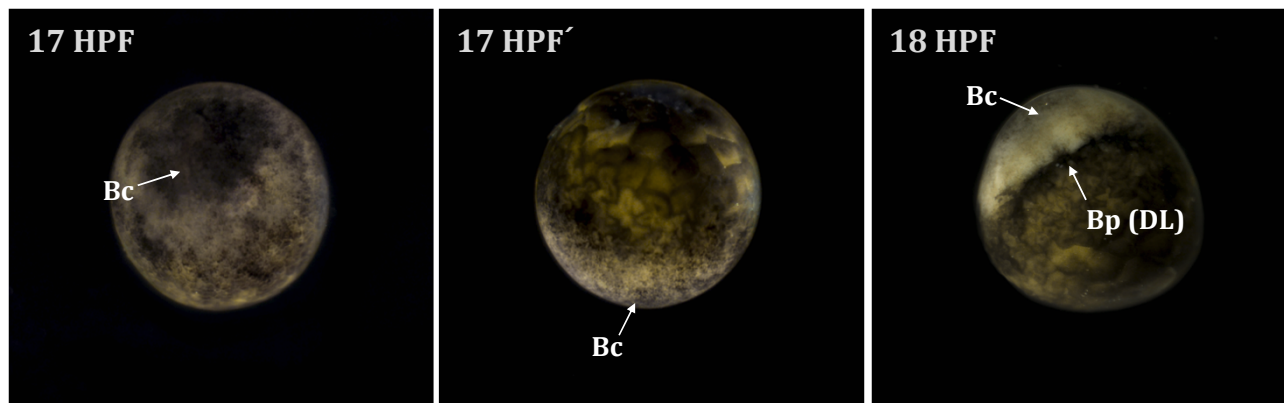


- AP: animal pole
- BP: vegetal pole
- MZ: marginal zone

Early blastula



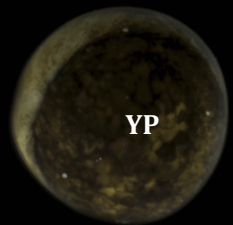
Late blastula to onset of gastrulation



- **Bc**: blastocoel
- **Bp**: blastopore
- **DL**: dorsal lip

Gastrulation (epiboly cover)

22 HPF



22 HPF'

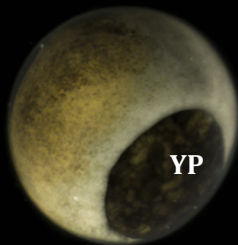


24 HPF

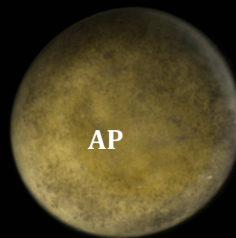


- YP: yolk plug
- AP: animal pole

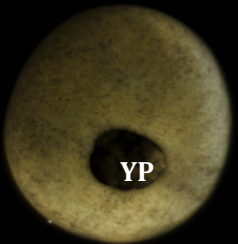
26 HPF



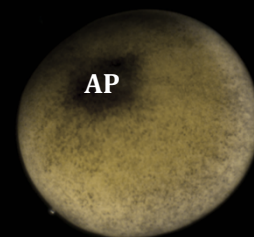
26 HPF'



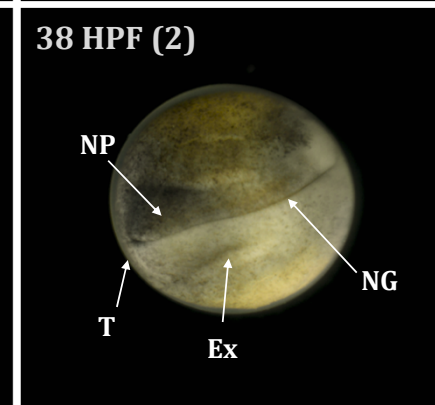
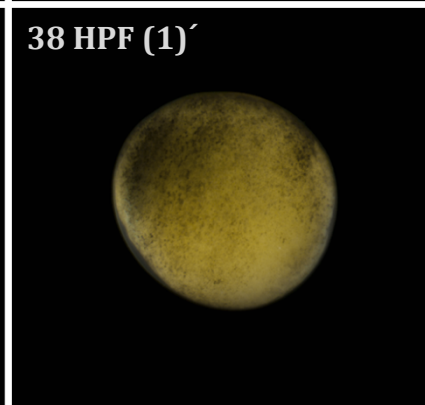
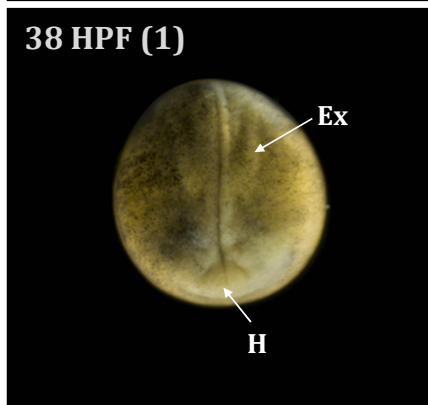
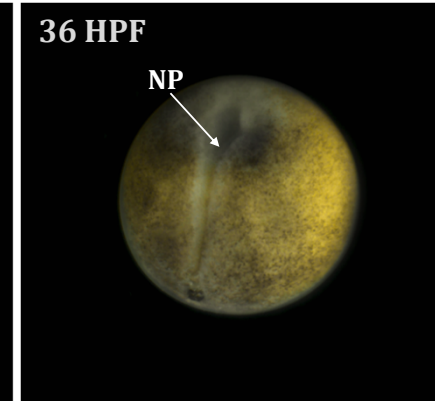
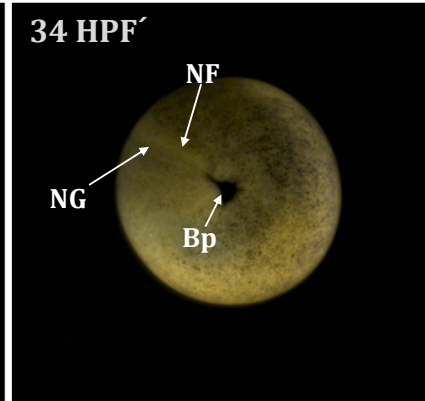
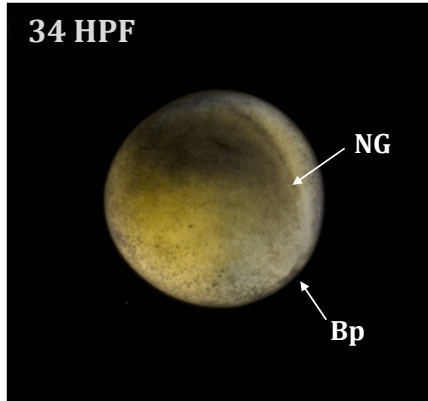
30 HPF



30 HPF'



Early neurulation

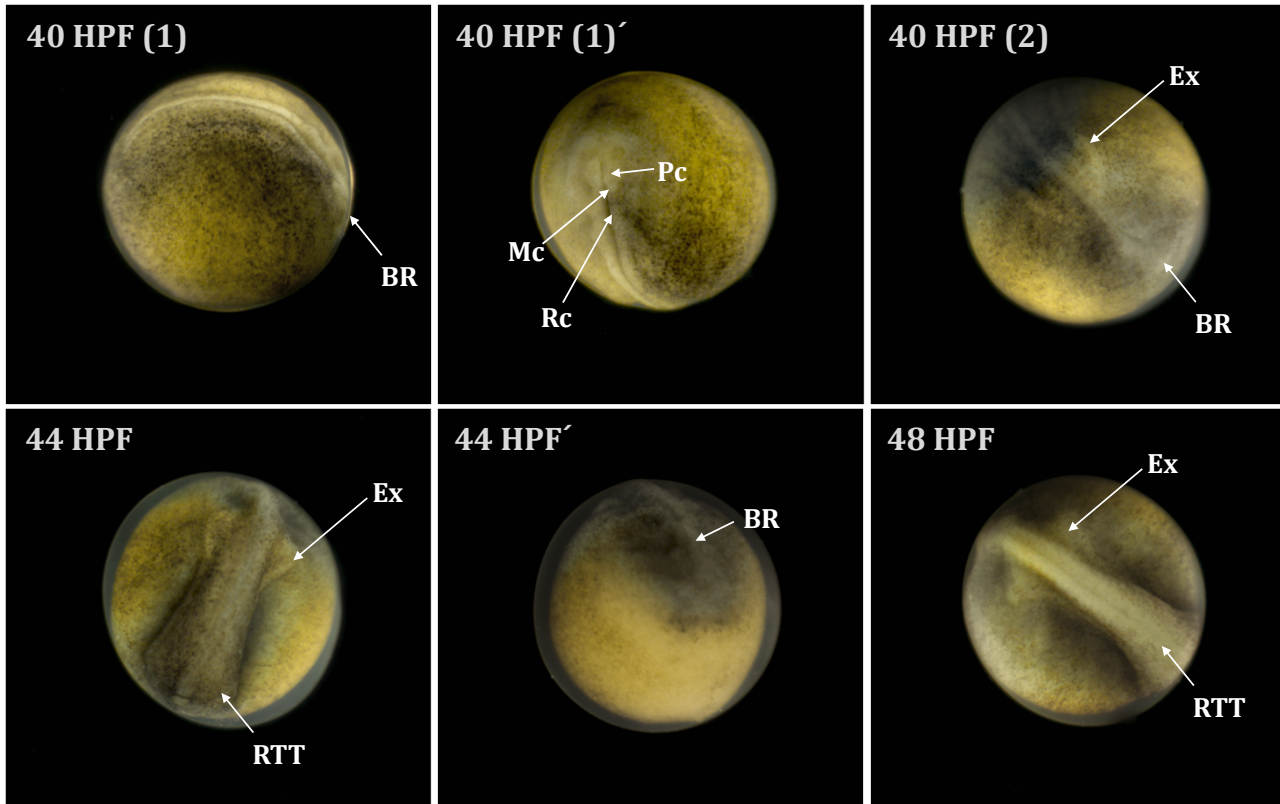


- **NG:** neural groove
- **Bp:** blastopore

- **NF:** neural fold
- **NP:** neural plate

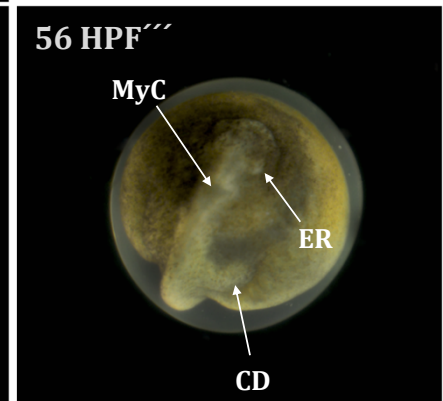
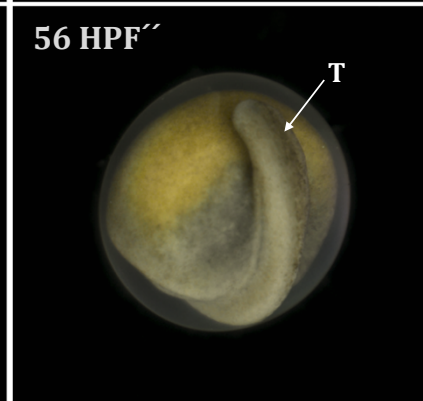
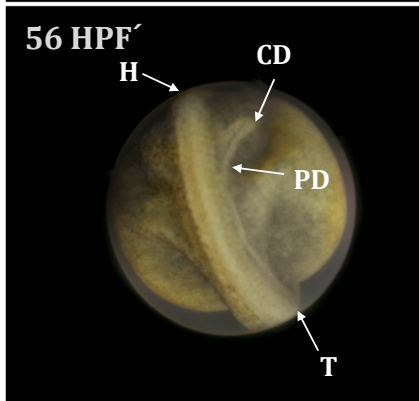
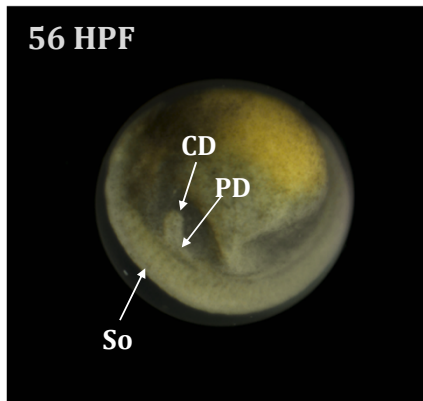
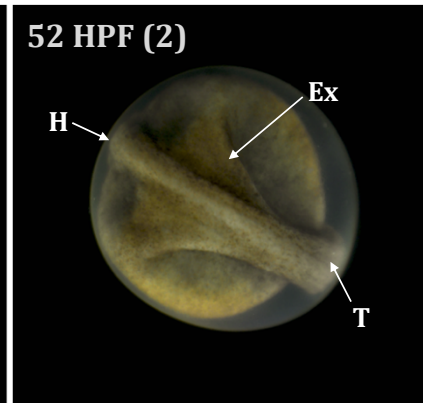
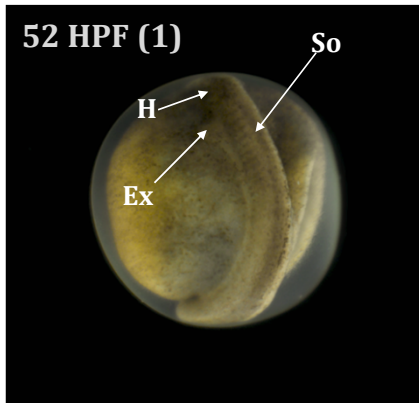
- **Ex:** rudiment of the excretory system
- **H:** head region
- **T:** tail region

Late neurulation



- **Pc**: prosencephalon
- **Mc**: mesencephalon
- **Rc**: rhombencephalon
- **BR**: brain rudiment
- **Ex**: rudiment of the excretory system
- **RTT**: rudiment of the posterior trunk and tail region

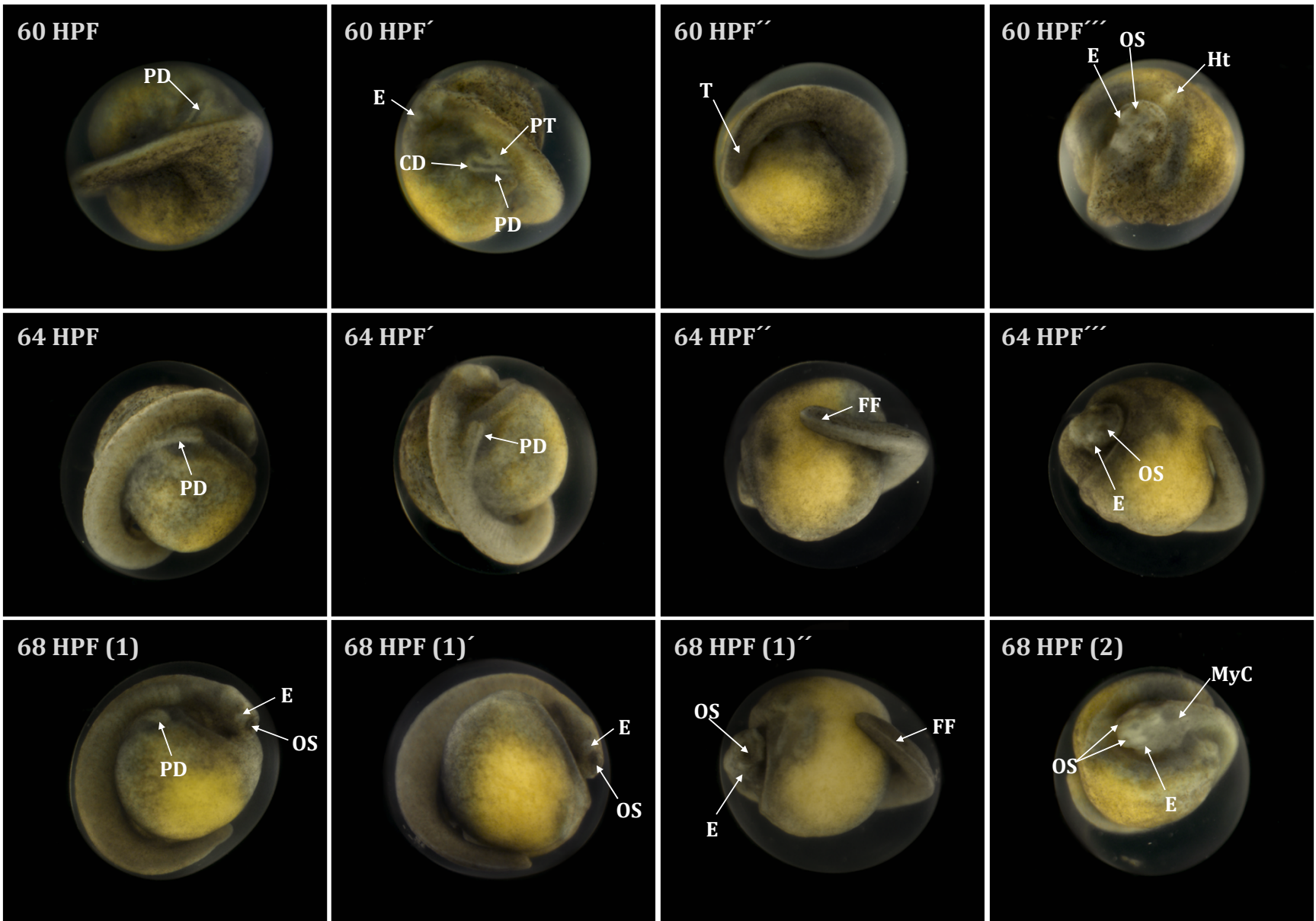
Morphogenesis of organs-I



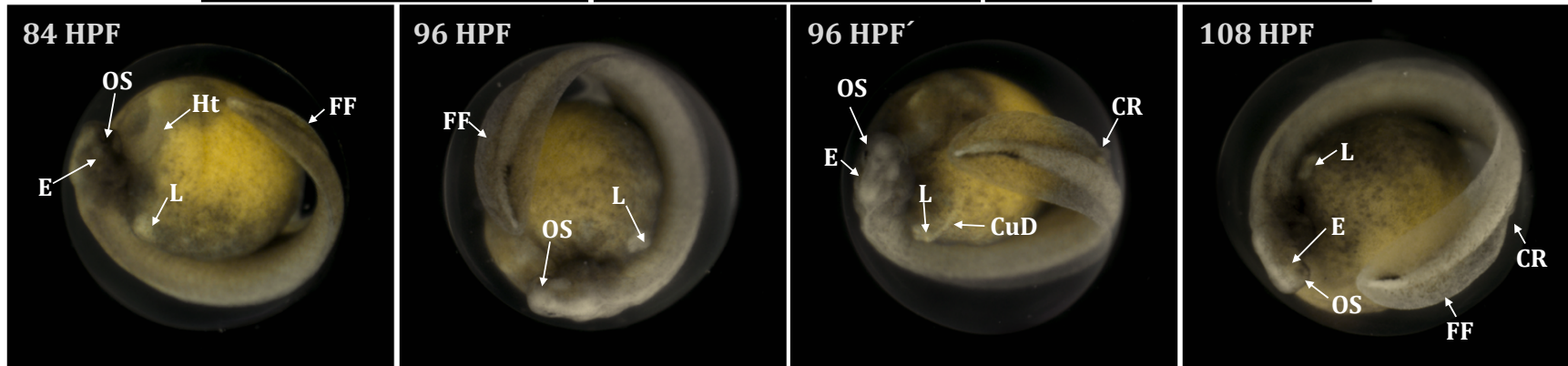
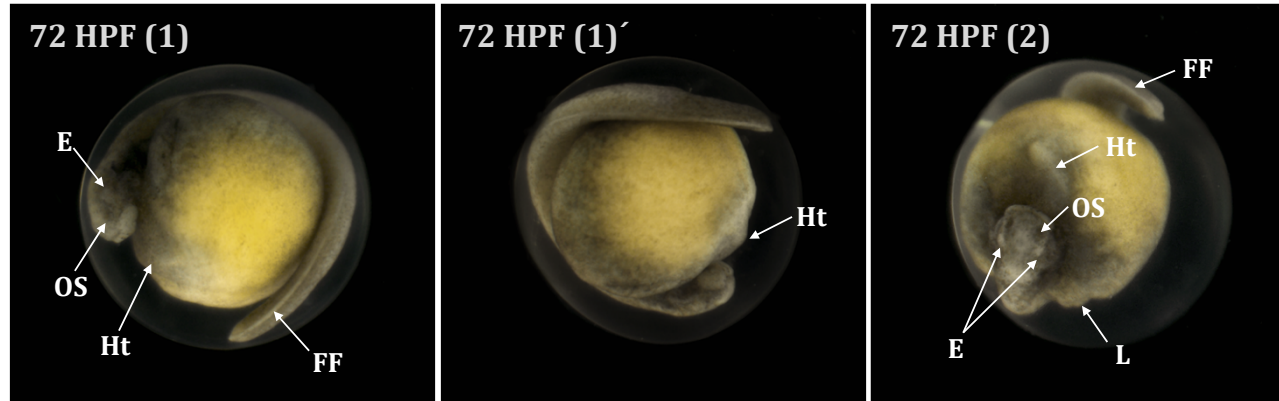
- **H:** head
- **So:** somite
- **T:** tail
- **CD:** collecting part of the pronephric duct
- **PD:** pronephric duct
- **MyC:** myelencephalon cavity
- **ER:** eye rudiment

Morphogenesis of organs-II

- **PD**: pronephric duct
- **E**: eye
- **CD**: collecting part of the pronephric duct
- **PT**: pronephric tubules
- **T**: tail
- **OS**: olfactory sac
- **Ht**: heart
- **FF**: (rudimentary) fin fold
- **Myc**: myelencephalon cavity



Morphogenesis of organs-III



- **E:** eye
- **OS:** olfactory sac
- **Ht:** heart
- **FF:** fin fold
- **L:** loop formed by the anterior part of the pronephric duct
- **CuD:** duct of Cuvier
- **CR:** cloaca rudiment

Pre-hatching stage