# Vertebrate development and human pathologies

# Delara Saberan-Djoneidi & Vanessa Ribes

#### Effectives: max 20 Language: English Prerequisites:

working knowledge in molecular biology

Where?

PRG

#### When?

24 oct-28 oct

#### **Evaluation:**

Article presentation& active participation

### **Questions:**

Email Delara.saberan@u-paris.fr

Number ECTS: 3

#### **Total numbers of hours:**

25h including, student work by small groups

#### **Teaching format:**

conferences & visit of transgenesis platform

# **Teaching objectives**

Acquire knowledge of developmental biology and the underlying causes of congenital disease; develop scientific critical thinking skills; understand how understanding the fundamental mechanisms of developmental biology can aid in the understanding of disease; research awareness; develop ease of interaction

# **Teaching outline**

Students in this course will learn how vertebrate organisms develop from early embryonic stages to the adult stage and how defects in developmental mechanisms can lead to the emergence of pathologies. This course contains a few introductory lectures on the main principles of development, followed by lectures by researchers presenting their work in this field of research. In addition, a privileged meeting with two researchers is organized over two days. To prepare the students for this meeting, a bibliographic work with restitution is proposed. Among the topics discussed are neurodevelopmental disorders, ciliopathies, premature ovarian failure, heparanopathies and aniridia.