# **Laboratory of Animal** Structure Development

The Laboratory of Animal structure development supports teaching and research on the anatomy, histology and animal development. Equipped with modern instruments, it provides facilities for developing technical competencies, applying scientific methods, and fostering innovations in animal structure development.



### Lecturers



Prof. Dr. Bambang Retnoaji, M.Sc. Structure and Development of Aquatic Animals

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Sructure and Development of Terestrial Animals

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Zuliyati Rohmah, S.Si., M.Si., Ph.D.Eng. Morphology and Development of Marine Animals

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Dr. Luthfi Nurhidayat, S.Si., M.Sc. **Evolutionary Development of** Animals



Dr. Nur Indah Septriani, S.Si., M.Sc. Animal Structural Adaptation Email: nurindahseptriani@ugm.ac.id



# **Main Laboratory Equipment**



Fluorescence microscope



Stereo microscope with Optilab



Microscope with camera



Oven for Parafin



Microtome and





waterbath



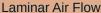
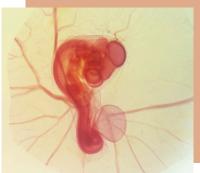


Photo · Personal Documentation

# **Public Service**

- Training on Histological Specimen Preparation by Paraffin Method
- Training on Immunohistochemistry (IHC) Training on Fish Otolith Preparation
- Training on Whole-Mount Chicken Embryo and Skeletal Staining
- Training on Taxidermi
- Provision of counseling and outreach in animal developmental structure. aligned with the laboratory's research focuses.
- whole-mount chick embryos, bone



Source: Canva (Stock Image)

# Scope of Expertise

- Structure and Development of **Aquatic Animals**
- Animal Cell Biology and Histology
- Sructure and Development of Terestrial Animals
- Biology of Animal Behavior
- Morphology and Development of Marine Animals
- **Evolutionary Development of Animals**
- **Animal Structural Adaptation**



## **Research Topic**

- Animal embriology, Histology and anatomy
- **Biomedical Science**
- Regeneration
- Animal Bioacoustic and camouflage
- Locomotion and Biomechanic
- Animal Adaptation
- Marine Aquaculture
- Nutrition by using animal models (i.e. fish, chicken, reptile, mouse, and rat)
- Human/Animal Cell Culture



### **Courses offered for** doctoral programme

- Organogenesis and Teratology
- Microscopy and Animal Models
- Comparative Anatomy and Evolution
- Medical Histology
- **Animal Behaviour Science**



Preparation of histological specimens, including paraffin-embedded sections, clearing and staining, and frog embryos.