#### 2.1 Program Outcomes

The PhD in Human Anatomy and cell biology is designed to produce highly competent scholars equipped with advanced scientific knowledge, practical expertise. And ethical integrity to lead transformative progress In Human Anatomy and Cell Biology at academic and policy making levels, The competency-BasedProgram Learning Outcomes(PLOs) of the PhD are:

### **Knowledge Domain Outcomes**

Graduates will be able to:

- Demonstrate advanced and integrative knowledge of human gross anatomy, microscopic anatomy, developmental biology, and cell biology, including their clinical and research applications.
- Critically analyze scientific literature in anatomy and related disciplines, identifying gaps and proposing new research questions.
- 3. Explain the cellular and molecular mechanisms underlying human structure and function, development, and disease processes.
- 4. Apply theoretical knowledge to the design of experimental models and teaching strategies in human anatomy and cell biology.

## **Skills Domain Outcomes**

Graduates will be able to:

- 1. Design and conduct independent research using advanced techniques in histology, imaging, molecular biology, and morphometry.
- 2. Develop and validate experimental protocols for anatomical and cell biological

investigations using both human and animal models.

- 3. Use digital tools and technologies (e.g., 3D reconstruction, virtual dissection, image analysis software) for teaching and research in anatomy.
- 4. Communicate research findings effectively, both orally and in writing, through scientific publications, presentations, and teaching.
- 5. Mentor and supervise undergraduate and postgraduate students, demonstrating effective academic and research guidance.

# **Behavior / Attitude Domain Outcomes**

Graduates will:

- Demonstrate ethical conduct in research, including informed consent, animal welfare, and data integrity.
- 2. Exhibit professionalism and responsibility in academic, research, and collaborative environments.
- 3. Promote interdisciplinary collaboration, showing openness to integrating insights from genetics, physiology, and pathology into anatomical research.
- Commit to lifelong learning, keeping up-to-date with advances in anatomical sciences and pedagogy.
- 5. Foster critical thinking and curiosity in themselves and others through reflective practice and academic engagement.

# 2.6 Alignment of Program Objectives with University Mission Statement

Objectives have been defined in the light of LUMHS Mission statement that requires output (health professional) as competent and ethically sound. This is achieved thorough

predefined set of course content, availability of requisite facilities and feedback & evaluation of the program for continuous improvement.