

Department of Biochemistry

(Supported by DST-FIST)

University of Kashmir

(NAAC Accredited Grade A+)

BEST PRACTICES

The Department of Biochemistry, University of Kashmir aims to achieve excellence in higher education and research through its innovative practices, community-centric approach and commitment to advancing knowledge and societal well-being. To achieve this, the Department has adopted the following practices:

- 1. Imparting comprehensive and connected practical courses: One stand- out practice followed in the department is to have students perform practicals that are interconnected and comprehensive, such that one practical leads to another in a logical design and students cover the entire gamut of Biochemistry experiments from the most basic ones to the advanced ones. We do not necessarily emphasize on obtaining positive results in an experiment, but help students analyze why an experiment failed and how to trouble shoot, since such practice prepares them better for tackling challenges in research, where one learns from failures.
- 2. Facilitating internships for M.Sc students of the department: The students from our department are required to work in a research laboratory under the supervision of a principal investigator for four to six months. This practice gives students an opportunity to pursue their interest area through study and practical experience. Further, through the process of dissertation writing, students also develop skills in writing, putting forth an informed argument, developing research questions and sharing their findings through presentations. The students have a choice to go to a lab of their choice within or outside the department, including labs/institutes at local and national levels. This also helps them to make a conscious choice of whether and how to pursue a research career.
- 3. Offering internships to students from other departments and institutes: As part of our vision to attract and provide research exposure to students at an early stage and hence nurture a scientific ecosystem, our labs also offer internships to students at college and university levels. Students from ours and other universities/colleges, both at local and national levels, are offered such opportunities.
- 4. Workshops and conferences: Our department has been holding workshops and conferences regularly. Students and PhD scholars are actively involved in organizing such events. In addition, we also encourage our students to attend workshops and conferences that are held at local, national and international levels.
- Conducting special lectures for competitive examinations: We also guide students for various competitive examinations like CSIR-UGC-NET, SET, GATE etc, which helps them pursue a promising research career.
- 6. Departmental tours for college students: To inspire students at college levels to pursue a research career, we encourage them to visit the department and our research laboratories. Teachers and research scholars spend a day to interact with them and answer their queries
- 7. Addressing health issues: The Department is conducting research on various health issues that are prevalent in the society like Polycystic Ovarian Syndrome (PCOS), Diabetes, various types of cancers etc. Using this approach, we aim to connect to the society and contribute to its welfare.
- Bio-waste management and disposal: The bio-waste and hazardous items are collected in appropriately designated containers, which are then properly disposed off by an approved agency.



(A DST, Govt of India Assisted Department Under FIST)

University of Kashmir

(NAAC Accredited Grade A⁺)

Future plans:

- Enhance faculty strength (recruitment and expansion)
- Introduce new trends/chapters/courses in the syllabus
- Constantly improvise teaching (theory, practicals) and learning
- Improve infrastructure of the Department: Teaching and Research facilities
- Develop and expand the "Common Instrumentation Facility" (CIF), through University and extramural support from agencies like DST, DBT, ICMR etc.
- Apply and obtain FIST-level II grant
- Apply for PI centric extramural grants
- Scale up PhD and internship programmes
- Apply for "Centre for Excellence"
- Strengthen and develop collaborations at national and international levels
- Help students qualify competitive exams, publish better papers and help them in making good career options
- Organize prestigious workshops and conferences (at national and international levels)
- Provide opportunities to students at college and university levels to do internships in our department.