



**2025**

# **ANNUAL REPORT**

**Department of  
Biological and  
Biomemmedical  
Sciences**

# CHAIR'S MESSAGE

It is a pleasure to share the Annual Report of the Department of Biological and Biomedical Sciences (BBS) for 2025, which captures a year of thoughtful progress, departmental maturity, and renewed purpose. The department has evolved from launching foundational initiatives to embedding them as enduring practices. Some milestones achieved during 2025 include continued innovation and delivery of transformative learning experiences for our students, initiation of core laboratory facilities for wider research use, and the development of a dashboard to support evidence-based decision-making. The past year also reflects a phase of refinement, where intention, planning, and execution were increasingly aligned. Having successfully completed our last five-year strategic plan, the department has transitioned into the next chapter of its journey through BBS2030, the new five-year strategic plan, which focuses on ensuring that academic and research activities remain relevant, impactful, and sustainable.

Research remains a defining strength of BBS. During the year, the department produced almost 70 scholarly publications and secured 11 research grants, reflecting sustained productivity aligned with departmental research priorities. In addition, UGME students were provided research exposure and mentorship through structured projects, graduate students trained at the bench in foundational and advanced molecular techniques, and internship programs enhanced capacity for basic science research beyond the institution. The Annual Biological Sciences Conference, now firmly established as a flagship departmental event, demonstrated both scale and academic depth. The 5<sup>th</sup> annual conference attracted over 350 registrations and a robust program provided a vibrant platform for scientific exchange, research dissemination, and discussion of key issues in biological and biomedical sciences, while reinforcing commitments to ethical research practices, sustainability, and global development priorities.

Education and training remain central to the mission of BBS. Faculty continue to play a vital role in advancing UGME through curricular leadership and pedagogical innovation. The MPhil in Biological and Biomedical Sciences programme demonstrated strong academic momentum in 2025, through both new student enrollment and successful defense of thesis projects by graduating students. These outcomes reflect sustained mentorship and academic rigour. Faculty also conducted or facilitated more than 40 workshops at AKU and other fora, enhancing professional capacity within the institution and beyond.

At the heart of these achievements are indeed the people of BBS. During the year, the department was strengthened through the appointment of new faculty members, enhancing teaching capacity, research expertise, and supervisory capabilities, ably supported by the administrative, research and laboratory staff. I am sincerely grateful to all our faculty, staff, and students for their dedication, commitment and professionalism.

This report reflects the work undertaken over the past year and the steady progress achieved through collective effort and thoughtful planning. I invite you to explore its pages and engage with the ongoing journey of the BBS as we move forward with purpose and optimism.

## DR KULSOOM GHIAS

**Professor & Chair**  
**The Feerasta Family Endowed Chair**  
**Department of Biological and Biomedical Sciences**



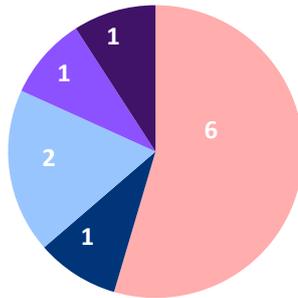
# 2025 IN NUMBERS

## Research

### Grants

- Cancer
- Communicable diseases
- Inflammation and infectious diseases
- Neurosciences
- Medical education

**11** new grants



**+37** ongoing grants

### Publications

- Communicable diseases
- Non-communicable diseases
- Inflammation and infectious diseases
- Complimentary medicine
- Neurosciences
- Cancer
- Reproductive sciences
- Medical education
- Others

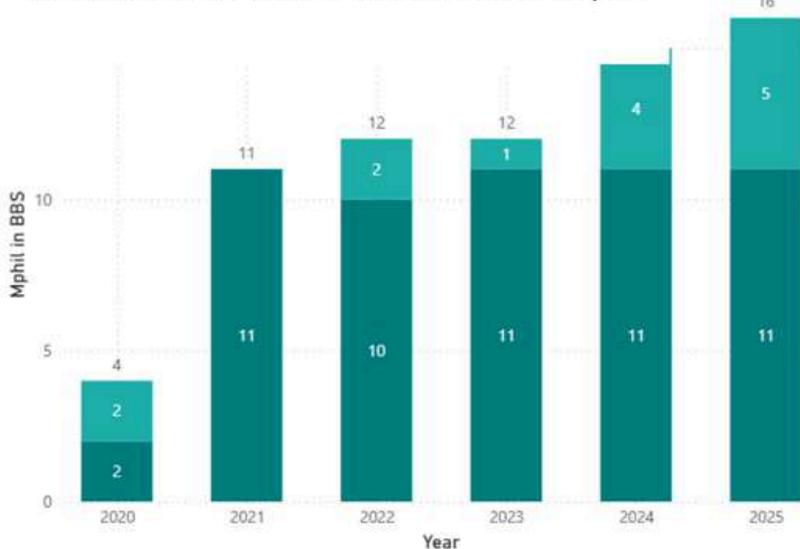


**67** scholarly publications

## Education

- Female
- Male

MPhil in BBS: Student distribution across academic years

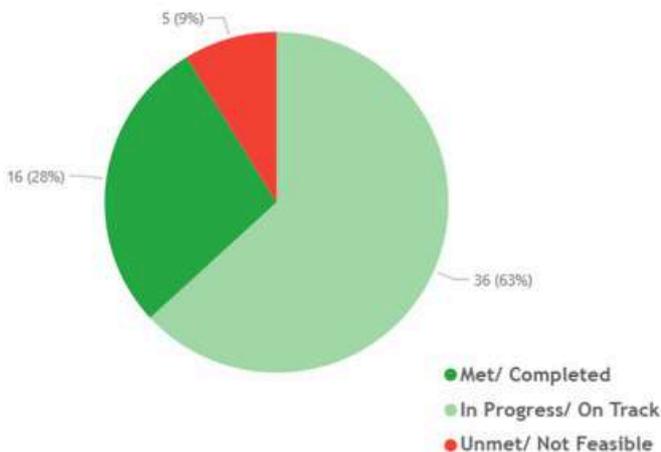


increase in student enrollment since inception **4x**

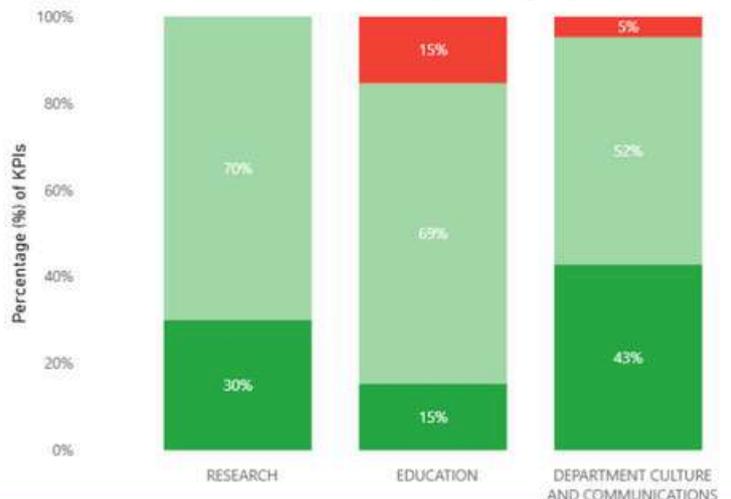
**PKR 280 M**  
endowment for tuition support

## BBS2030 Strategic plan

Overall KPIs achieved



KPIs achieved by Category



**≥ 91%** KPIs met by December 2025 including those that are longitudinal/ongoing

## KPIs

# **RESEARCH**

- 1 | Infection, immunity and inflammation**
- 2 | Noncommunicable diseases - cardiovascular, obesity, cancer, nutrition, infertility**
- 3 | Complimentary medicine**
- 4 | Neurosciences**
- 5 | Molecular biology**
- 6 | Maternal and child health**
- 7 | Medical education**

## Noncommunicable Diseases

Sobia Ekram, Faiza Ramzan, Asmat Salim, Marie Christine Durrieu, Irfan Khan. **Extracellular vesicles derived from human umbilical cord–mesenchymal stem cells ameliorate intervertebral disc degeneration.** *Biomedicines*. October 2025;13(10):2420. DOI: 10.3390/biomedicines13102420

This study shows that EVs support cellular repair, reduce inflammation, and help restore extracellular matrix balance in degenerating discs. By improving disc cell viability and lowering degenerative markers, the study highlights a minimally invasive, biologically driven alternative to surgical approaches. The findings also emphasize the growing therapeutic potential of EV-based treatments for musculoskeletal degenerative conditions.

Cameruddin W. Vellani, Abdul Hakeem, Satwat Hashmi, Mehwish Shehzad, Hira Mehtab, Sehrish Karim, Osman Faheem, Safia Awan, Zainab Samad. **Changes in electrical vectors correlated with coronary insufficiency with recent symptoms.** *Scientific Reports*. October 2025;15(1):34719. DOI: 10.1038/s41598-025-18313-2

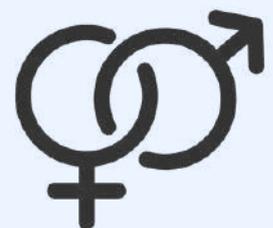


This paper examines how dynamic changes in electrical vectors correlate with coronary insufficiency and recent symptoms of myocardial ischemia. It discusses clinically actionable insights validated against established diagnostic standards. The work aims to translate fundamental electrophysiological principles into a portable and cost-effective approach for detecting myocardial ischemia.

## Reproductive Sciences

Dapeng Zhou, Ambrin Fatima, Afrasiab Ahmed, Tehseen Ullah Khan Afridi, Haq Nawaz Khan, Mussarat Ashraf, Muhammad Naeem, Syed Babar Jamal, Ishtiaq Hassan, Erica E. Davis, Feng Zhang, Rehana Rehman, Chunyu Liu, Tahir N. Khan. **Exome sequencing in a Pakistani male infertility cohort: perspective on molecular diagnosis, genetic heterogeneity, and diagnostic yield.** *Molecular Genetics and Genomics*. September 2025;300(1):87. DOI: 10.1007/s00438-025-02286-y

This study applied exome sequencing to a cohort of Pakistani men with primary infertility, identifying pathogenic variants in known infertility-associated genes and demonstrating a 17% diagnostic yield. The findings highlight significant genetic heterogeneity within the population and support exome sequencing as a valuable tool for improving molecular diagnosis and understanding the genetic basis of male infertility.



## Complimentary Medicine

Sumbal H. Hafeez, Aqsa Khalid, Sheraz Ahmed, Fayaz Umrani, Abdul Khaliq Qureshi, Kumail Ahmed, Fariha Shaheen, Aneeta Hotwani, Furqan Kabir, Sean R. Moore, Syed Asad Ali, Junaid Iqbal, Najeeha Talat Iqbal. **Fermented pickles improve gut microbiota and immune profile in women in a community trial in rural Pakistan.** *Scientific Reports.* October 2025;15(1):34522. DOI: 10.1038/s41598-025-17721-8

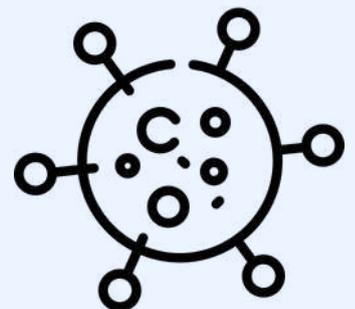
This 12-week community trial showed that consuming traditional fermented pickles improved gut microbial diversity and reduced inflammatory markers in women of reproductive age. Several water based achar group's participants demonstrated decreased in white blood cells, neutrophils, and platelets counts, indicating systemic immune benefits. The results suggest that culturally familiar fermented foods may offer a simple, low-cost way to support gut and immune health in underserved populations.



## Cancer

Siraj Ud Din, Sufiyan Sufiyan, Asif Ali Shah, Hania Fatima, Hira Salam, Sana Naeem, Altaf Ali Laghari, Hammad Afzal Kayani, Syed Ather Enam, Nouman Mughal. **HMGA1 as a prognostic biomarker for gliomas: expression patterns, survival correlations, and clinical insights from a Pakistani cohort.** *Journal of Neuro-Oncology.* September 2025;173(3):655–666. DOI: 10.1007/s11060-025-05031-y

This study investigates HMGA1 expression in glioma patients and its association with tumor grade and survival outcomes within a Pakistani cohort. Elevated HMGA1 levels were linked to more aggressive tumor biology and poorer prognosis, underscoring its potential as a clinically meaningful biomarker. By integrating molecular expression patterns with patient outcomes, the research highlights HMGA1's diagnostic and prognostic utility and supports its future exploration as a target for personalized therapeutic strategies in glioma management.



## Neurosciences

Syed Zaryab Ahmed, Faiq Amin, Nida Farooqui, Zhannur Omarova, Syed Faisal Mahmood, Qurat Ul Ain Khan, Haider A. Naqvi, Aida Mumtaz, Saeeda Baig, Muhammad Rehan Khan, Sharaf A. Shah, Ali Hassan, Srinivasa Bolla, Shamim Mushtaq, Syed Hani Abidi. **Neurocognitive impairment in ART-experienced people living with HIV: An analysis of clinical risk factors, injection drug use, and the sCD163.** *Viruses* (MDPI). September 2025;17(9):1232. DOI: 10.3390/v17091232

This cross-sectional study examines neurocognitive impairment (NCI) among people living with HIV receiving antiretroviral therapy, exploring the combined influence of clinical factors, injection drug use, and immune activation marker sCD163. The analysis highlights elevated immune activation, higher prevalence of injection drug use, and their association with NCI risk. Through neurocognitive screening and biomarker assessment, the study underscores the importance of identifying inflammatory pathways and behavioral risks to inform tailored clinical interventions for improving cognitive outcomes in this population.



## Medical Education

Kanza Muzaffar, Rozmeen Akbar, Sadia Cassim, Zehra Jamil. **Enhancing student engagement in anatomy by integrating technology to modify a practical exam.** *February 2025;59(2):236–237, February 2025.* DOI:10.1111/medu.15577

This publication introduces a technology-enhanced approach to anatomy practical assessment, demonstrating how digital integration can boost student engagement and support active learning. By modernizing traditional practical examination formats, the study advances learner-centred medical education while maintaining assessment validity and rigor. The work reflects the department's ongoing commitment to innovation and continuous improvement in educational practice.



# 5<sup>th</sup> ANNUAL BIOLOGICAL SCIENCES CONFERENCE

BBS hosted its 5<sup>th</sup> Annual Biological Sciences Conference, marking a significant stride in advancing scientific discovery under the theme “Innovation, Translation, and Impact.” The 2025 conference brought together leading national and international experts, creating a vibrant space for knowledge exchange, collaboration, and mentorship across the biological sciences.

The program included oral presentations organized into thematic sessions on Emerging Paradigms in Drug Delivery, Gene Therapy, and Cellular Engineering, as well as Advances in Metabolic and Cancer Research. Poster displays, lightning talks, and interactive workshops further enriched the experience, all aligned with the conference’s goal of promoting basic science, supporting student-led research, and fostering meaningful engagement between future healthcare professionals and scientific scholars.

The conference commenced with a welcome address by Dr Najeeha Iqbal, Vice Chair Research, BBS and Chair of the Organizing Committee, followed by remarks from Dean, Medical College, Dr Karim Damji, and Chair, BBS, Dr Kulsoom Ghias, setting a thoughtful tone for the day.

Mr Zia Akhter Abbas, Executive Vice President of The Citizens Foundation, served as the chief guest. The keynote lecture was delivered by Dr Catharina de Lange Davies, Professor at the Norwegian University of Science and Technology, who presented her pioneering work on ultrasound-mediated delivery of nanoparticles.

Hands-on learning and skill development were central to the conference workshops, which included sessions on Peer Mentoring for Students: Building Supportive Academic Communities; From Clicks to Code: Mastering Health Data with SPSS and R; and CRISPR/Cas9 Genome Editing in Model Systems. These sessions provided practical exposure to emerging tools and methodologies in both computational and experimental sciences.

The event concluded with forward-looking reflections from Dr Salim Virani, Vice Provost, Research AKU, followed by the closing remarks from Dr Sadia Fatima, Associate Professor, BBS who chaired the conference Scientific Committee. A post-conference networking session brought together participants to exchange ideas related to science and mentorship, communicable and non-communicable diseases, and basic and translational research, strengthening the collaborative spirit that defined the conference.



# BBS LABORATORIES

The departmental vision since its inception has been to be a leading international centre for biomedical research, training, and education. Keeping in line with the mission statement of BBS, the state-of-the-art Multi-Disciplinary Laboratory (MDL) and Microscopy Laboratory (ML) expanded support for teaching, research, and academic training by strengthening operations, improving staff competencies, and conducting multiple teaching and training opportunities for the students and staff nationally as well as internationally.

## **Operational capacity and research support**

The main focus of BBS labs in 2025 has been on improving the research infrastructure for the students and faculty of AKU. Lab staff have been given hands-on training in using and maintaining specialized equipment, including digital PCR, SeqStudio Flex Sequencer, EVOS M7000 imaging system, and flow cytometer, as well as the corresponding Image Analysis software.

In parallel, the “Tools to Techniques” and “Research Highlights” seminar series were also initiated in 2025 to strengthen technical proficiency and support the ongoing scientific development of laboratory personnel. These initiatives have been translated into active research support for faculty and the MPhil in Biological and Biomedical Sciences program, whereby multiple students benefited from these latest technologies.

## **National and international academic support**

BBS labs have been at the forefront of many academic initiatives in 2025, including the training of staff from other national and international universities. Lab/research staff have conducted numerous workshops and hands-on training sessions at different institutions within Pakistan and for AKU, Nairobi where training on specialized teaching tools such as the use of PowerLab® has contributed towards capacity building and improving academic programs.

## **Internship programs and workshops**

In line with the departmental commitment to engage in impactful and innovative bench-to-bedside-and-back research and training, we successfully conducted the following workshops and internship programs for national and international students at the BBS labs:

- **Pre-university internship:** Introduced early stage learners to laboratory practices and scientific inquiry. This internship program was conducted over a week and attended by 35 students.
- **Summer internship program:** In its second year, enrolled 8 students from different institutes where they were provided practical laboratory exposure in molecular biology techniques for a period of 4 weeks.

- **STEMX winter internship:** Offered skill development opportunities for under-graduate and graduate students preparing for careers in biomedical sciences. This 2-week internship was conducted for a carefully selected group of students who had excelled in their academic careers and focused on skill development and critical thinking.

## **Governance, costing, and sustainability**

A major milestone in 2025 was the formalization of governance and sustainability mechanisms to support long-term operations of the state-of-the-art infrastructure:

- Development and approval of costing structures for all core facilities
- Implementation of bench fees and specialized equipment use charges, effective July 2025
- Development of facility specific policies and standard guidance for genomics, imaging, flow cytometry, proteomics, and cell culture services

Overall, 2025 reflected enhanced training opportunities, consolidation, and growth. By strengthening teaching, training, and research support, the Multidisciplinary and Microscopy Laboratories enhanced experiential learning and outcomes, and continued to contribute to the department's vision, mission and strategic goals.

# BBS laboratories



# RESEARCH INTERNSHIP PROGRAM

BBS successfully hosted its annual **Summer Research Internship Program** from June 30 to August 25, 2025, offering undergraduate and graduate students a unique opportunity to gain hands-on experience in cutting-edge biological research. The program aimed to immerse participants in a dynamic learning environment, fostering both technical expertise and scientific curiosity.

Interns were engaged in experiments that reflect the true essence of science and discovery. Over the course of 4 weeks, students explored fundamental and advanced techniques in molecular biology, genetics, and biotechnology. Key activities included:

- DNA and RNA-based techniques: Gel electrophoresis, PCR, qPCR, cDNA synthesis, RNA extraction, and CRISPR-based applications
- Protein analysis: Western blotting and ELISA
- Bioinformatics and primer design for gene analysis
- Cell culture and mammalian cell techniques, providing insights into cellular communication and signaling
- Literature review and scientific writing, enhancing critical thinking and research communication skills

## Student Feedback Highlights:

- “The facilitators were extremely helpful and knowledgeable, making complex techniques easy to understand.”
- “I learned RNA extraction and CRISPR applications, which broadened my perspective on modern molecular biology.”
- “Hands-on sessions like Western blotting and qPCR were invaluable for developing practical skills.”
- “The program improved my confidence and gave me a strong foundation for future research.”

Participants represented leading institutions, including Ziauddin University, Bahria University, Shaheed Zulfikar Ali Bhutto Institute of Science and Technology (SZABIST), Dow College of Biotechnology, Dow University of Health Sciences, and Atta Ur Rahman School of Applied Biosciences - National University of Sciences and Technology (NUST). This diversity enriched collaborative learning and networking among aspiring scientists.

By the end of the internship, students not only mastered essential laboratory techniques but also gained a deeper understanding of biological systems, preparing them for advanced research roles. The program reaffirmed the department’s commitment to nurturing the next generation of researchers and innovators.

In December, the department conducted a **Winter STEM Program** for undergraduate students, held from December 29, 2025 to January 9, 2026, the program hosted undergraduate students from external institutions and included laboratory exposure along with sessions on leadership, career development, and contemporary cell and molecular biology, contributing to the department’s graduate program recruitment efforts.

# Summer Research Internship Program



[Click to view student feedback](#)

## **UPDATES FROM EDUCATION**



**Aaleeza Ali**

**Thesis title:** Immortalization of CD34+ haematopoietic stem cells (HSCs) derived from umbilical cord blood using lentiviral vector systems: A sequel toward platelet generation

**Dr Muhammad Zuhair Yusuf** (primary supervisor),  
**Dr Hammad Hassan** (co-supervisor)



**Aiman Aslam**

**Thesis title:** Paramagnetic nanoparticles application for hematopoietic stem cells isolation

**Dr Fawad Ur Rehman** (primary supervisor),  
**Dr Afsar Mian** and **Dr Irfan Hussain** (co-supervisors)



**Al-Muayyad Gajani**

**Thesis title:** Z-36, a novel inhibitor of Bcl-2 family proteins, triggers non-apoptotic/non-autophagic cell death in human colorectal cancer HCT-116 cells

**Dr Mati Ur Rehman** (primary supervisor),  
**Dr Azhar Hussain**, **Dr Arooj Shafiq** and **Dr Paras Jawaid** (co-supervisors)



**Amama-tul-Bushra**

**Thesis title:** Tetra arms-based SNP profiling and serum protein expression of insulin and lipid regulatory markers in obese and non-obese metabolic syndrome: A cross-sectional study

**Dr Syeda Sadia Fatima** (primary supervisor),  
**Dr Paras Jawaid** and **Dr Bushra Bilal** (co-supervisors)



**Haniya Zia**

**Thesis title:** Phenotypes of long COVID disease in Pakistan

**Dr Najeeha Iqbal** (primary supervisor),  
**Dr Kulsoom Ghias** and **Dr Faisal Mehmood** (co-supervisors)



**Muhammad Tulaib Iqbal**

**Thesis title:** Investigating longevity of cellular immunity against SARS-CoV-2 in inactivated vaccinees with and without mRNA booster vaccinations

**Dr Zahra Hasan** (primary supervisor),  
**Dr Kiran Iqbal** & **Dr Hammad Hassan** (co-supervisors)



**Razia Jabeen**

**Thesis title:** Investigation of PIK3CA genetic alterations and clinicopathological features in endocrine resistant, hormone receptor positive HER2 negative metastatic breast cancer patients in Pakistan

**Dr Shagufta Khan** (primary supervisor),  
**Dr Adnan Abdul Jabbar** and **Dr Imrana Mansoor** (co-supervisors)



**Rehma Tahir Sheikh**

**Thesis title:** Thymus vulgaris and solanum melongena, alone and in combination, produce lipid modulating and cardioprotective effects in experimental rat models

**Dr Hasan Salman Siddiqi** (primary supervisor),  
**Dr Amber Palla** and **Dr Azhar Hussain** (co-supervisors)



**Sabira Sharif**

**Thesis title:** Changes in Glutamate receptor gene expression in response to long-term treatment with herbal extracts in a rodent model of temporal lobe epilepsy with hippocampal sclerosis

**Dr Fazal Arain** (primary supervisor)  
**Dr Hasan Salman Siddiqi** and **Dr Saara Muddasir** (co-supervisors)



**Sajid Ali**

**Thesis title:** Delineating genetic underpinnings and disease pathogenesis of rare neurodevelopmental disorders

**Dr Ambrin Fatima** (primary supervisor)  
**Dr Ambereen Surti**, **Dr Irfan Khan** and **Dr Hammad Yousaf** (co-supervisors)



**Seema Nadir Shah**

**Thesis title:** Evaluation of the Pan-KRAS inhibitor RMC-6236 as a therapeutic strategy in colorectal cancer: Effects on cell viability, cell cycle progression, apoptosis, and RalA/B pathway

**Dr Arooj Shafiq** (primary supervisor)  
**Dr Kulsoom Ghias**, **Dr Mati Ur Rehman** and **Dr Azhar Hussain** (co-supervisors)



**Syeda Fatima**

**Thesis title:** Ameliorative effects of fermented soybean and flaxseed (fSF) against acetic acid induced-ulcerative colitis model

**Dr Amber Palla** (primary supervisor)  
**Dr Najeeha Iqbal**, **Mr Kumail Ahmed** and **Dr Irfan Khan** (co-supervisors)



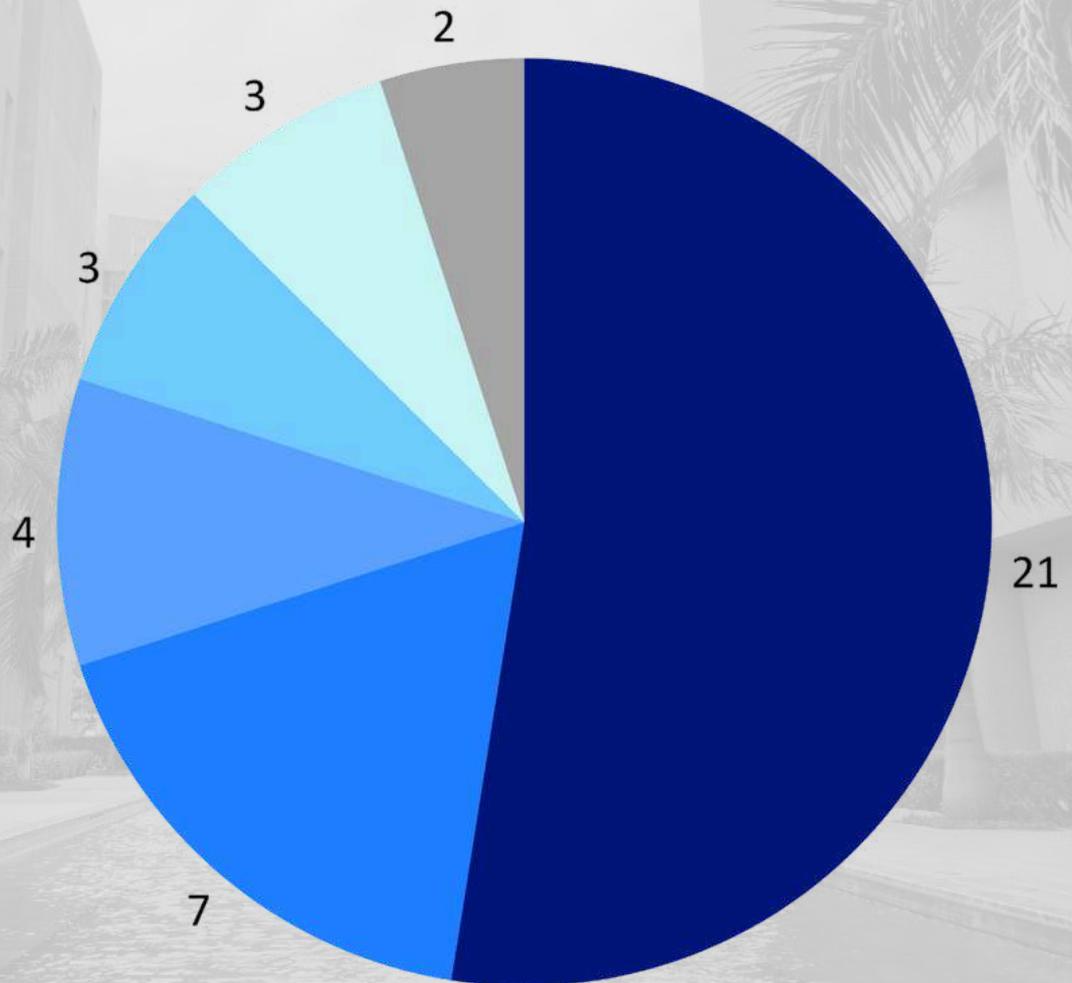
**Tooba Tajammul**

**Thesis title:** Developing potent and selective drug against resistant Philadelphia positive (Ph+) leukemia using proteolysis targeting chimeras (PROTACs) technology

**Dr Afsar Mian** (primary supervisor)  
**Dr Fawad Ur Rehman** and **Dr Irfan Hussain** (co-supervisors)

# CONTINUING PROFESSIONAL EDUCATION WORKSHOPS - 2025

- AI, digital tools and innovation
- Research methodology, biostatistics and scientific writing
- Mentorship, leadership and professional development
- Laboratory and animal sciences
- Microbiology and genomics
- Biomedical/physiology training



# FACULTY & STAFF RECOGNITION AND ACHIEVEMENTS

## Global recognition in research rankings

Dr Rehana Rehman (Rank 370,498) and Dr Syeda Sadia Fatima (Rank 410,793) from BBS were recognized for their exceptional scholarly impact in the **World's Top 2% Scientists List for 2024**, compiled by Stanford University. This prestigious annual list identifies leading researchers globally, based on standardized citation metrics from Elsevier's Scopus database, which evaluates the influence of scientific work through citations and the quality of peer-reviewed publications.



Stanford University, 2024

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## Fellowship of the Higher Education Academy

Dr Amber Palla  
Dr Ambereen Surti  
Dr Khalid Ahmed Hameed

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## Fellow International Union of Physiological Sciences

Dr Sadia Fatima

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## Collaborative Award for Teaching

Dr Kausar Jabeen (Team Lead) "Students as Partners in Assessment"  
Team: **Dr Satwat Hashmi**, Dr Javeria Rehman, Omar Mahmud, Muhammad Ali Akbar, Amna Irfan Ansari, Shaikh Saif-ur-Rehman, Umer Adnan

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## Individual Award for Innovation in Education

Dr Sadia Fatima

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## Excellence in Teaching Award

Dr Khalid Ahmed Hameed

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## Fullbright Scholar Award 2025-2026

Dr Shakil Saghir, visiting faculty, selected as a senior mentor in the National Institute of Health (NIH) funded Mentoring and Skills Development Training Program, hosted by the University of California, Davis, USA

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# International Advisor in Pakistan - Royal College of Physicians and Surgeons of Glasgow

Dr Hasanat Sharif (joint appointee BBS)

## RISE Programme - Faculty of Health Sciences 2.0

Dr Amber Palla  
Dr Khalid Ahmed Hameed

## AKU Service Awards - 10 years

Dr Satwat Hashmi  
Dr Rehana Rehman  
Dr Fazal Arain

## Appointments and Promotions



**7** faculty appointments

**2** administrative staff appointments



**1** faculty promotion

**2** administrative staff promotions

**1** laboratory staff promotion

# FACULTY

Dr Kulsoom Ghias – Professor and Chair  
Dr Tania Bubela – Provost & Vice President, Academic  
Dr Satwat Hashmi – Associate Professor and Vice-Chair Education  
Dr Najeeha Iqbal – Associate Professor and Vice-Chair Research (Joint Appointee)  
Dr Rehana Rehman – Professor and Director MPhil  
Dr HR Ahmad – Professor Emeritus  
Dr Anwar ul Hassan Gillani – Professor Emeritus  
Dr Perwaiz Iqbal – Professor Emeritus  
Dr Anwar Siddiqui – Professor Emeritus  
Dr Shahid Mahmood Baig – Professor  
Dr Khalid Khan – Professor  
Dr Hasanat Sharif – Professor (Joint appointee)  
Dr Ather Enam – Professor (Joint appointee)  
Dr Syeda Sadia Fatima – Associate Professor  
Dr Fazal Arain – Associate Professor  
Dr Saara Muddasir – Associate Professor  
Dr Tashfeen Ahmad – Associate Professor (Joint appointee)  
Dr Azhar R. Hussain – Assistant Professor and Director Labs  
Dr Shagufta Khan – Assistant Professor  
Dr Hasan Salman Siddiqi – Assistant Professor  
Dr Fareena Bilwani – Assistant Professor  
Dr Mati Ur Rehman – Assistant Professor  
Dr Zehra Jamil – Assistant Professor  
Dr Ambrin Fatima – Assistant Professor  
Dr Amber Palla – Assistant Professor  
Dr Khalid Ahmed Hameed – Assistant Professor  
Dr Arooj Shafiq – Assistant Professor  
Dr Ambereen Surti – Assistant Professor  
Dr Afsar Mian – Associate Professor, CRM  
Dr Hammad Hassan – Assistant Professor, CRM  
Dr Sheerien Rajput – Assistant Professor, CRM  
Dr Fawad Ur Rehman – Assistant Professor, CRM  
Dr Irfan Khan – Assistant Professor, CRM  
Dr Rida e Maria Qazi – Senior Instructor, CRM  
Dr Kanza Muzaffar – Senior Instructor  
Dr Faiq Amin – Senior Instructor  
Dr Rozmeen Akbar – Senior Instructor & Coordinator, ASLS  
Dr Paras Jawaid – Senior Instructor  
Dr Sadia Farrukh – Senior Instructor  
Muhammad Faisal Fahim – Senior Instructor  
Dr Syed Saqib Khalid – Senior Instructor  
Dr Saadia Saad – Senior Instructor  
Dr Samia Khalid – Senior Instructor  
Dr Qamber Haider Kazmi – Senior Instructor  
Dr Syed Hani Abidi – Visiting Faculty  
Dr Shakil Ahmed Saghir – Visiting Faculty  
Dr Khalid Saeed – Visiting Faculty  
Dr Muhammad Nouman Mughal – Visiting Faculty

## ADMINISTRATIVE STAFF

Noorulain Salim - Manager  
Irfanullah Baig - Assistant Manager  
Ali Moosa - Assistant Manager  
Imran Hajani - Coordinator  
Bilal Effendi - Coordinator  
Dr Zehra Noor Brohi - Coordinator  
Ramzan Samnani - Associate  
Shermeen Rattani - Senior Assistant  
Sadia Doulat Aman - Senior Assistant  
Dr Mah Zul Kaif - Senior Assistant

## LABORATORY STAFF

Dr Farzana Abubakar - Research Specialist  
Mussarat Ashraf - Research Specialist  
Naheed Amir - Research Specialist  
Ghulam Haider - Research Specialist  
Sabah Farhat - Research Specialist  
Zeeshan Haider - Specialist  
Mahwish Fatima - Research Coordinator  
Sumaiya Binte Hamid - Research Coordinator  
Syed Masnoon Akhter - Research Associate  
Saba Falak - Research Associate  
Ghazala Zafar - Research Associate  
Sher Khan - Research Associate  
Nazia Shah - Senior Research Assistant  
Prashant Tikmani - Senior Research Assistant  
Rabia Aiman - Senior Research Assistant  
Adil Jamal - Senior Research Assistant  
Maleeha Saeed - Senior Research Assistant  
Zahid Hussain - Senior Technologist  
Pir Bux Memon - Technologist  
Ghulam Abbas - Laboratory Aide

## RESEARCH STAFF ON GRANTS

Bilal Ahmad Mian - Research Associate  
Asmat Ali - Research Associate  
Faiza Naz - Research Associate  
Lubaba Binte Khalid - Research Associate  
Sehar Suleman - Senior Research Assistant  
Ayesha Tahir - Technologist  
Dr Haleema Sadia - DCRF Research Fellow

# POST DOCTORAL FELLOWS

Dr Shafaq Ramzan  
Dr Hammad Yousuf  
Dr Zaid Abdul Razzaq

# TEACHING ASSOCIATES

Dr Pallavi Rani  
Dr Mariam Hussain  
Dr Fatima Hussain  
Dr Hibba Erum Arif  
Dr Zainab Ayaz Dandia  
Dr Iqra Kanwal  
Dr Mustafa Habib  
Dr Maham Jaskani  
Dr Priya Ashok Kumar  
Dr Sofia Faraz



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