

DEPARTMENT OF PHARMACEUTICS

The Strategic Plan, which is a collaborative effort of our faculty, staff, students, alumni, and community partners, charts the growth of our educational, clinical, research, and outreach programs.

GOAL: Provide high quality, innovative education in pharmacy and pharmaceutics

- Strengthen inter-professional education collaborations and student experiences with other health professional schools
- Incorporate state of the art pedagogies to enhance the student learning experience
- Promote and deploy best practices in assessment
- Develop online and blended courses for enrolled pharmacy students and specialized online and certificate programs for current practitioners

GOAL: Attract the best and brightest students to all of the college's programs

- Ensure admissions remain competitive, flexible, accessible and diverse
- Ensure Early Assurance Program remains a compelling recruitment mechanism

GOAL: Support and promote faculty excellence in the scholarship of teaching and learning

- Develop and maintain a college web page highlighting SoTL
- Convene an interest group to identify needs and means for pursuing SoTL excellence
- Promote high quality SoTL research endeavors
- Promote dissemination of SoTL endeavors through
 - Peer reviewed presentations at regional/national conferences
 - Peer reviewed publications in top tier journals
- Nominate faculty for external awards in SoTL

GOAL: Grow excellence in priority areas

- Priority Area 1: Novel Drug Delivery
- Priority Area 2: Herbal Cosmetics
- Priority Area 3: CAAD

GOAL: Elevate ACP-Pharmaceutics department standing as a leader in research productivity both internally and externally

- Increase grant submissions
- Develop systematic, top-down approach to pursue large grants
- Increase success rate of grant applications
- Grant support from pharmaceutical industry



GOAL: Modernisation of Machine Room

• The modernization of a pharmaceutical machine room involves updating and improving the equipment, processes, and technologies to enhance efficiency, compliance, and overall productivity.

GOAL: Establishment of new P.G Course (Regulatory Affairs)

• Regulatory Affairs is a multidisciplinary field that involves the development, implementation, and monitoring of regulations and policies within industries such as pharmaceuticals, biotechnology, medical devices, and food.

GOAL: Establishment of Research Lab facility

• The creation of a research laboratory is a testament to the commitment to excellence, exploration, and the pursuit of knowledge. It represents a dynamic environment where ideas converge, technologies emerge, and the boundaries of understanding are continually pushed. As the lab takes its place in the scientific community, its contributions are poised to shape the future of research, innovation, and education.

GOAL: MoUs with industries having regulatory affairs department.

• Memoranda of Understanding (MoUs) between pharmaceutical companies and industries with regulatory affairs departments can be beneficial for collaboration, information exchange, and mutual support in navigating complex regulatory landscapes.

GOAL: Updating research lab with novel drug delivery facilities.

• Updating a research lab with novel drug delivery facilities involves integrating state-of-the-art technologies and equipment to enhance research capabilities in the field of drug delivery. A research lab can create an environment conducive to innovative research in the field of drug delivery, ultimately contributing to advancements in pharmaceutical sciences.

GOAL: Global research collaborations

• Global research collaborations are essential for fostering innovation, sharing knowledge, and addressing complex challenges that transcend geographical boundaries.



DEPARTMENTS 10 YEARS STRATEGIC PLANS

DEPARTMENT OF PHARMACEUTICAL CHEMISTRY

- To convert present laboratories to the most established medicinal chemistry laboratory.
- Upgrade research laboratories as DSIR approved Laboratories
- To equip our laboratory with adequate chemicals required for carrying out quality research
- To purchase instruments like parallel synthesizer, high vacuum rotary flash Evaporator and snorkel exhaust system to facilitate research output.
- To maintain a pass percentage of 80 and above in chemistry related subjects in undergraduate/graduate and postgraduate level.
- To apply for research funding from various agencies every year.
- To attract students as full time research scholars
- To conduct seminars and workshop periodically (at least two in an year) to update the latest advances in medicinal chemistry
- To convert our enzyme assay lab as fully functional lab with adequate facility to provide quality research and consultancy work
- To outsource the research facility of our PG research lab, so that research scholars from outside can utilize our facilities on a day to day charge basis.
- To sign at least two MoU with industry/research institutes
- To ensure that every faculty members in the department are registered for Ph.D
- To publish research articles in reputed journals every year with cumulative impact factor of at least 20.
- Establish a collaborative research project with a leading pharmaceutical company to develop novel drug candidates
- Expand research funding opportunities by collaborating with industry, government agencies, and non-profit organizations.
- Establish a high-performance computing cluster to support molecular simulations and drug discovery research



DEPARTMENT OF PHARMACEUTICAL ANALYSIS

- Analytical Department will acquire adequate scientific information regarding basic principles of Pharmaceutics including Cosmetology, Specialized drug delivery systems. They will also have hands on training of practical aspects of Synthesis of APIs and its intermediates along with Formulation and Development, Analysis and Quality assurance of various pharmaceutical dosage forms including those of herbal origin as per standards of official books, WHO, and other regulatory agencies.
- The Students will be able to think logically and solve the problems, will develop an ability to conduct, analyze and interpret data of pharmaceutical experiments in various departments (Eg: Drug discovery, Formulation & Development, Production, Quality control & Quality assurance etc) as per the needs of pharmaceutical industries
- Analytical Department will develop an ability to visualize and work on multidisciplinary tasks. They will be able to demonstrate necessary skills (eg.working independently, time management and organizational skills). They will demonstrate an adaptable, flexible and effective approach towards organizational development.
- Analytical Department will develop interpersonal skills such as influencing others, negotiating and working with others, conflict management and leading others through the problem-solving process. They will be able to lead and function both individually and as a member of a team.
- Analytical Department will demonstrate knowledge of professional and ethical responsibilities as per pharmaceutical jurisprudence. They will be able to demonstrate knowledge and skills in all disciplines of Pharmaceutical sciences and develop a sound pharmaceutical care plan to manage medication-related problems. They will retrieve, evaluate, and apply current drug information in the delivery of pharmaceutical care and assure safe and accurate preparation and dispensing of medications
- Analytical Department will demonstrate the impact of pharmacy knowledge on the society and also will be aware of modern issues. They will create awareness of healthcare issues through interactions with others and will gain a sense of self-respect towards community and citizenship.



- Analytical Department will be able to demonstrate a high-level of understanding of the key stages in drug discovery, development, and commercialization. This will lead to the manufacturing of drugs and pharmaceuticals considering its impact on the environment and surrounding.
- Analytical Department will swear by a code of ethics of Pharmacy Council of India in relation to community and shall act as integral part of a health care system. They will demonstrate honesty, integrity, ethical understanding, and respect for others and will carry out their professional responsibilities by adhering to high ethical standards.
- Analytical Department will acquire excellent interpersonal oral communication and writing skills. They will be able to demonstrate knowledge and proficiency with current audiovisual presentation technologies and develop an ability to communicate scientific knowledge in non -expert/lay term by adopting various modes of scientific communications (e.g., abstract, manuscripts, project reports, oral and poster presentations etc). This will allow effective exchange of professional information
- Analytical Department will master the key concepts in the discipline of their interest in pharmaceutical sciences. They will demonstrate these skills to use modern pharmaceutical tools, software, and equipment's to analyze & solve problems.
- Analytical Department will apply theoretical and practical skills developed through classroom, laboratories and team project experiences and thus will develop confidence and will be able to i) Do specialized research in the core and applied areas of pharmaceutical sciences. ii) Manufacture, analyse and assure the drug based formulations. iii) Promote and market the pharmaceuticals and iv) Train the budding pharmacist to become self-reliant pharmacist and a health care professional.
- Analysis department will plan for establishment of NABL accredited Analytical Lab along with establishment of a Quality Control lab for formulations in next five years



DEPARTMENT OF PHARMACY PRACTICE

- To increase the number of outreach activities by collaborating with LSG and NGOs.
- To uplift the DIC of KIMS Al Shifa Hospital with more patient care facilities.
- To uplift the AMC as a training centre for Pharmaco and Materiovigilance.
- To adapt PBL and OSCE teaching methodologies in department.
- To establish a toxicovigilance centre for the department.
- Initiate hemovigilance programs. To develop add on courses in the particular area.
- Set a department with all the faculties have PhD degree.
- Implementation of modern teaching learning systems
- Enhance the global student exchange.
- Enhance the global faculty exchange through the department
- To increase the number of outreach activities by collaborating with foreign universities
- To uplift the department into global level by various foreign accreditations like ACCP
- Establish new courses in clinical pharmacy at college level.
- Enrolling every faculty at least in one foreign training program
- Implement the modern technology and advancements in teaching methodologies as per global standard.

DEPARTMENT OF PHARMACOLOGY

The Department of Pharmacology at Al Shifa College of Pharmacy (ACP) has contributed extensively in imparting both theoretical and practical knowledge into students to achieve their academic goals.

The department's strategic plan for the next 10 years for upgradation include:

- Commencement of M.Pharm & Ph.D. (Full-time) Pharmacology courses;
- Modernization of Central Animal House including inception of various animal breeding;
- Establishment of Zebra-fish Research Centre (ZRC) for conducting toxicity studies (developmental toxicity, reproductive toxicity, neuro & locomotor toxicity, immunotoxicity, genotoxicity etc.);



- Establishment of Behavioral Neuropharmacology Laboratory to study and conduct research on various psychopharmacological & neuropharmacological related activities;
- Establishment of Animal Tissue Culture Facility (ATCF) to conduct various research activities to study -intracellular activity (like cell cycle, differentiation, metabolism etc.), intracellular influx, environmental interactions (like cytotoxicity, mutagenesis etc.), genetics (like genetic analysis, senescence etc.)
- Establishment of CADD Center to carry out research in molecular pharmacology
- Industrial collaborations and signing MoU with reputed national and international pharmaceutical companies and research organizations;
- Applying for various grants from national funding agencies to conduct and organize conferences, hands-on training, short-term courses and to conduct extramural research on topics related to pharmacology;
- Publication of periodic (quarterly) scientific Pharmacology Journal of the department;
- Filing patent application related to the major areas of research of the department;
- Increase the publications of the department in peer-reviewed, indexed national and international journals;
- Publication of books related to latest semester scheme;
- Commencement of pharmacological Newsletter;
- Upgradation of Departmental & Central library with latest books and advanced research journals related to pharmacology;
- Instillation of 3D display models of bones & organs in HAP labs;
- Development & establishment of various experimental software related to pharmacology;
- Procurement of latest instruments such as HPLC, Flame Photometer, UV Spectrometer, Flowcytometer, Computer attached Photomicroscopy



DEPARTMENT OF PHARMACOGNOSY

Department of Pharmacognosy is an integral part of Al Shifa College of Pharmacy as many of the Courses of Undergraduate and post graduate programmes are linked with this subject, at least in the Research area. The main aim of the department is to deliver the course with the cutting edge standard that requires for the industry and in turn in line with the syllabus of KUHS.

Short term Objective of the Department

- 1. Improve the Result to above 90% for all the courses of Pharmacognosy
- 2. Publish at least 8 papers in journals of repute
- 3. File at least two patents
- 4. Publication of one text book of Pharmacognosy
- 5. Commencement of Post graduate course in Pharmacognosy
- 6. Commencement of Add on Certificate course in Pharmacognosy
- 7. Renovation of the existing medicinal garden with more number of medicinal plants
- 8. No of specimens available in crude drug museum to be improved

Long term objectives of the Department

- 1. Establish a Patent information centre for herbal and natural products
- 2. Development of herbal formulations suitable for the market
- 3. Establish Research centre of Pharmacognosy under KUHS
- 4. Establishment of Centre of advanced Research in marine Drugs

Signature of the Principal

PRINCIPAL KT KENALA

