RESEARCH & DEVELOPMENT CELL RDC-JAMIA HAMDARD

Director: Prof. Shakir Ali

Preamble: Research and innovation make a crucial aspect of education in Higher Education Institutions (HEIs). Societal challenges can only be addressed by having a strong and vibrant higher education ecosystem with a strong emphasis on quality of research, innovation, and technology development. Jamia Hamdard, as envisaged by the National Education Policy (NEP)-2020 and the guidelines of UGC published in 2022, created a Research & Development Cell (RDC) to promote a culture of quality research and innovation at its premise vide an Office Order no. AS/JH/UGC-05/2022, dated 14/6/2022. The cell is headed by a Director, RDC and is guided by a Research Advisory Council/Committee (RAC) chaired by the Vice Chancellor.

Vision: To put in place a robust mechanism for developing and strengthening a research ecosystem at Jamia Hamdard.

Mission: (1) Create an environment conducive for quality research and productivity, (2) Consolidate, encourage, and facilitate research at Jamia Hamdard for better output and societal benefits, (3) Facilitate collaborations at local, national, and international levels and create research groups, (4) Mobilization of resources and access to funding by encouraging collaborative research.

Governance structure: RDC at Jamia Hamdard is governed by an apex body, the Research Advisory Council (RAC) headed by the Vice Chancellor of the University. The working of the cell (RDC) is facilitated by multiple committees, approved by the RAC, and headed and convened by the Director (RDC), a distinguished researcher from the university nominated by the Vice Chancellor. UGC directives (2022) envisage the RDC to have following five verticals/committees:

- 1) Committee for Research Program and Policy Development
- 2) Committee on Collaboration and Community
- 3) Product Development, Monitoring and Commercialization Committee
- 4) Committee of IPR, Legal and Ethical Matters, and
- 5) Finance and Infrastructure Committee

Functions: RDC-Jamia Hamdard is an enabling unit at Jamia Hamdard for attaining targets of a self-reliant/*Atma-Nirbhar Bharat*. The Cell is pivotal in catalysing multidisciplinary and transdisciplinary research to go beyond disciplinary boundaries, and actively engage stakeholders from different sectors.

Briefly, key functions of RDC, as envisaged in the UGC guidelines, 2022 include:

- (1) Creation of an organizational structure with role-based functions, formulate Research Policy for the University, identify thrust areas of research, and form related cluster groups, frontline teams, and consortia of researchers to bring researchers, faculty, students, scholars, and post-doctoral fellows for joint high value interdisciplinary and trans-disciplinary research projects to avail national and international funding opportunities. RDC-Jamia Hamdard is working to achieve the goal by promoting a culture of shared infrastructure and expertise, cross-fertilization of ideas, and resource mobilization.
- (2) Creation of enabling provisions in Research Policies for recruitment of research personnel, procurement of equipment and financial management *with adequate autonomy* to the Principal Investigator(s) and disseminate research outcomes to stakeholders and the public at large is

another key function of the RDC envisaged by the UGC. As on today, research grants worth tens of crores of rupees including eighteen individual, six institutional, and four consultancy grants from both national and international funding sources are being managed by the investigators at Jamia Hamdard. 687 Research scholars are currently working on their PhD thesis in various laboratories and a significant number of project staff and independent post-doctoral fellows are working in various laboratories of the University.

- (1) Liaisoning between researchers and relevant research funding agencies, extend guidance in preparation and submission of research project proposals and post-sanctioning of the grants to oversee adherence to timelines, and act as a facilitator for networking and collaborative research. RDC-Jamia Hamdard has facilitated signing 25 National and 05 International agreements/MoU with a number of reputed institutes to facilitate research and academic activities by fostering collaboration. The University has a robust mechanism in place for guidance and support of researchers at Jamia Hamdard.
- (2) Coordination with University-Industry Inter Linkages, Incubation, Innovation & Entrepreneurship Development, and Intellectual Property Rights (IPR). University has started an incubation and innovation centre and taken initiatives for industry-academia linkages, including an agreement with multinational companies like BD Biosciences, a leading manufacturer of flow cytometers, an advance technology used in research. A separate cell for IPR has been created and is functional.
- (3) Development of a robust Institutional Research Information System for sharing the status of ongoing and completed research projects and programmes, expertise & resources, etc., and making effective use of the Information & Communication Technology (ICT) for preparing database of in-house experts to provide industrial consultancy and services is another key function of RDC which the University is working and try to improve.
- (4) Engage and utilize the services of superannuated active faculty/scientists in research, capacity building of talented young minds, and promote mobility of researchers across institutions and R&D Labs. Eminent scientists, professors, and persons of high stature in their respective field are appointed as Adjunct Professor and Professor of Practice in the University as per the UGC guidelines and on the recommendation of the Competent Body of the University.
- (5) Serve as a nodal centre for ideation and conceptualization of research topics and themes by organizing workshops and training programs, and ensure integrity and ethical practices in research activities including clearance of bioethical committee wherever required. RDC-Jamia Hamdard has been routinely conducting and facilitating workshops, training programs and other activities as per the mandate.
- (6) Facilitate resource mobilization and create a Corpus for research and development from government, industry, and other funding agencies and channelize Corporate Social Responsibility (CSR) funds for sustenance and furtherance of research activities. Apart from creating a Corpus fund exclusively for R&D, RDC, as envisaged by the UGC, is also expected to explore venture capitalists and angel investors for funding in research and innovation, liaise with funding agencies, and track funding opportunities from industrial consortia. The corpus created for research could also be used to support the seed funding for freshly recruited faculty for developing research facilities, publications, and patenting. RDC-Jamia Hamdard is working on this aspect and will take necessary steps as per the policy of the University.

(7) As per the directives of UGC, RDC-Jamia Hamdard has also developed mechanisms to ensure integrity and ethics in research and comply with ethical codes of research and publishing practices at institutional, national, and global levels and sensitize the research community about dubious research and publishing practices and predatory journals. Academic Integrity Panels have been constituted at School level and RDC. The University has subscribed and mandated the use of DrillBit, a standard plagiarism check software and made it accessible to researchers at Jamia Hamdard.