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Jamia Hamdard launches vaccinology initiative

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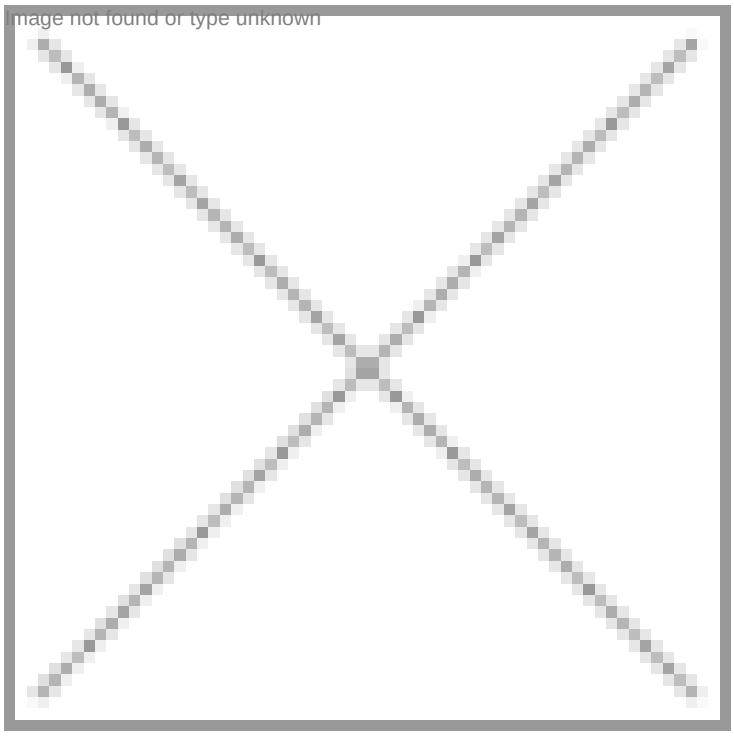

The deemed university, in collaboration with Hilleman Laboratories, will offer a two-year specialized master's course from September this year to meet the manpower needs of the industry. Initially, it will take 15 to 20 students per batch

Image not found or type unknown Departmentofbiotechnology One of the challenges before vaccine manufacturers is the lack of trained manpower. Taking a step forward in this direction to address the demand and supply gap of skilled manpower, Gurgaon-based Hilleman Laboratories, an international research facility sponsored by Wellcome Trust and Merck, UK, signed a memorandum of understanding with Jamia Hamdard (a deemed university), New Delhi, for collaboration in research and academics.

In order to facilitate quality research in the area of vaccinology, Hilleman Laboratories and Jamia Hamdard will partner under a 'no profit, no loss' business model to jointly set up a vaccine research facility at the institution campus in the national capital.

Under this joint program, called the Hamdard Vaccinology Initiative, the institution will start a two-year full-time specialized master's program in vaccinology from September 2011. Initially, the course will have 15-20 students per batch. The focus areas of the course will be research and development, manufacturing process and regulatory mechanism involved in the segment. Practical know-how and training on various aspects of the vaccine industry will be provided. While the program is expected to start by the end of September this year, the facility will start operating as a professional lab from November 2011.

In the first phase, MSD will make an investment of close to 10 crore ($2.1 million). The postgraduate labs at Jamia Hamdard have already been revamped into GMP and GLP environment labs. A 200-square feet area, available with the institution, will be used to build the facility. The institution will have both environmentally-controlled FDA-approved labs and the other labs accessible to students, where replica of fermentation units will help students gain practical knowledge.

Besides that, the institution is also planning to have a one-year post-MSc diploma in vaccinology from 2012 with an aim to

train students in various aspects of vaccine development and production to cater the needs of the industry. The Department of Biotechnology is the nodal department for these courses.

Given the specific requirements of experts in the area (training and practical knowledge), the course is meant to bridge the gap between the supply and demand of the industry. Till now, there was only a 10-day course at the Christian Medical College, Vellore, supported by Department of Biotechnology, Government of India. The course at Jamia Hamdard will be the first full-fledged master's degree course in vaccinology in the country.

Talking about the need for such collaborations, Dr G N Qazi, vice-chancellor of Jamia Hamdard, said they wanted to â€œtap the expertise of the people from the industry to provide our students with the best from both the academia and the industryâ€?.

â€œResearch in vaccines is only done by a few private companies and a few research labs as there is a scarcity of trained professionals. Through this lab and with the introduction of new courses in the area, we want to develop a pool of human resource at the undergraduate, postgraduate and PhD level,â€? said Dr Qazi. â€œStudents will have good knowledge of lab practices and so they can get into manufacturing or further research in the area of vaccinology. In fact, they will be able to apply their learning to any biotech company.â€?

Dr Altaf Lal, CEO, Hilleman Labs, said the course was much needed to fulfill the requirements of the industry. â€œThe course will establish a partnership between the industry and an academic institution,â€? he said. â€œJamia Hamdard was chosen to set up the lab because their core values are related to health systems. In the lab, students will be able to perform practicals through rigorous training programs being drafted for them. India has a huge capacity to develop vaccines. This opportunity will allow us to meaningfully contribute to the institution's vaccination training program. In a few years, we hope that the program will become self-sustainable.â€?

Reacting to this initiative, Dr Krishna Ella, chairman & MD, Bharat Biotech, said that such specialized courses were a welcome step and they should be able to help find a solution to the requirements of trained manpower for the industry.

The master's program in clinical research at Jamia Hamdard, started in 2009, is already a success with most students finding placements with companies such as Ranbaxy. The focus of the course is regulatory pharmacology, new biologicals and recombinant products for clinical research. The facility at the campus has successfully conducted the bioequivalence and bioavailability of generic drugs.

The institution has tied-up with Max Neeman, Fortis CRO and other organizations. Giving attention to practicals, 60 percent of the time of students is spent on hands-on training. After looking at the positive response received by these collaborations, Jamia Hamdard and its partner are highly optimistic about the vaccinology course.

In India, vaccines hold an important position in the biotechnology industry with a huge chunk of the population suffering from various diseases. In 2010-11, this segment registered a continued growth of 12 percent and held close to 20 percent share of the overall Indian biotechnology industry's revenue. While claiming the biggest pie in the 10,655 crore ($2.3 billion) biopharma market, the vaccine segment generated 2,441.6 crore ($0.5 billion) as revenue in FY 2010-11 as compared to previous year's figure of 2,180 crore ($0.4 billion).

There are about 15 prominent Indian and multinational companies in the segment that manufacture and supply human and animal vaccines in India and across the world. Few of the well-known Indian names include Serum Institute of India, Panacea Biotec, Shantha Biotech, Indian Immunologicals, Bharat Biotech, Biologicals E, Haffkine BioPharmaceuticals and Cadila Healthcare.

Besides the local companies, there are multinationals such as GlaxoSmithKline, Pfizer (Wyeth), MSD Pharamaceuticals, Sanofi Pasteur and Sanofi Aventis that produce and supply vaccines in different disease categories. India also has several animal vaccine manufacturing companies including Indovax, Venkateshwara Hatcheries and Indian Immunologicals.

Rahul Koul in New Delhi