

LPU scientist develops novel technology for DNA amplification

10 March 2015 | News | By Rahul Koul Koul

LPU scientist develops novel technology for DNA amplification



As per Lovely Professional University, its scientist, Dr Vikash Bhardwaj has researched intensively to unlock new knowledge for DNA amplification. Through this novel technique, the LPU scientist has researched on DNA that may unlock remedial solutions for Cancer, Tuberculosis, AIDS, and other fatal diseases. Technically speaking, this is a development in new 'Parallel DNA Polymerase Chain Reaction' (PD-PCR) for two different products from a DNA template. The *'F1000Research Journal'* of UK has recently published Dr Bhardwaj's research bringing strong credibility to this work.

Congratulating Dr Vikash Bhardwaj, LPU Chancellor Mr Ashok Mittal said, "Government Funding Agencies should be liberal in adopting researchers to stop brain drain. Research work is a never ending process which brings more and more of positive results, as such funding agencies should not limit a researcher right from the beginning about the results. Sometimes, research results can be diversified also. However, I feel that researchers should lay determined stress on the not traversed or unsuccessful areas to provide possible novel results."

As per Dr Bhardwaj, "Even with the discovery of DNA in 1868, it took near 85 years to universally accept DNA as a key molecule that contains all information necessary to build and maintain an organism. Initially, it was really challenging for me to think beyond conventional knowledge. I and my co-researcher have now explored the role of "Parallel DNA" and developed a novel technique for its amplification. So, this research is revolutionary one which will be helpful in tracing all errors hitherto committed. Analysis of these errors will further help researchers to find better solutions to eradicate fatal diseases like cancer, tuberculosis, AIDS and more." Adding he said: "This research work is my leap towards the aim of my working place LPU to get included in the list of top 200 universities of the world by the year 2025. I am now really excited and looking for grants to carry out further research."

LPU says that the newer technique is in a way further to one of the monumental scientific techniques of the twentieth century developed by Dr Kary Mullis in 1983, who received a Nobel Prize for his invention of breakthrough technology PCR. This technology has allowed life scientists to advance their understanding of various phenomena occurring in a living cell. It has already had a major impact on life science and is a well-recognized tool in forensic sciences. It is also being widely used to study various diseases including Cancer, TB, AIDS etc. In a conventional PCR, DNA is amplified millions of times as it is in original form. However, going steps further, LPU Scientist has researched on DNA more and developed a new PD-PCR

technique which claims synthesis of a new DNA having polarity opposite to the template used. This new knowledge will definitely open a way in better understanding of remedies for fatal diseases with more probes.