AN E-MAIL INTERVIEW WITH PROF. YASHWANT V. PATHAK, ASSOCIATE DEAN FOR FACULTY AFFAIRS, USF HEALTH TANEJA COLLEGE OF PHARMACY, UNIVERSITY OF SOUTH FLORIDA

Biography (Your journey): Yashwant Pathak was born in a village with 3000 people. He completed his Bachelors (1975) and Masters in Pharmacy (1977) from Nagpur University. Subsequently worked in many institutions and industries during his long career of 43 years post masters. He has over 25 years of teaching experience and many years in the Pharma industry. Yashwant has published over 225 research papers, reviews and chapters in the books. He has 4 US patents to his credit. He has also edited more than 35 books in the field of drug delivery systems, nanotechnology, nutraceuticals and conflict management. He has attended and presented research papers worldwide in national and international conferences. He has received several international awards including Fulbright Senior Scholar Core Fellowship Award 2015-2016 for Indonesia (visiting Ubaya University, Surabaya, Indonesia from Jan till July 2017) and visited Vietnam, Cambodia, Singapore, Philippines, Thailand and Japan as part of the program, Endeavour Executive fellowship by Australian Government 2015 in collaboration with Deakin University to work on siRNA delivery, CNPQ Brazil Government Fellowship, visiting PUCRS in Porto Alegre every year for one month from 2015 till 2017 working on space pharmaceuticals and microgravity impact on the stability of drug delivery systems, Outstanding Achievement Award for Global Engagement by University of South Florida, a unique award given to only one faculty/administrator annually, Fellow of NSF I-Corps USF 2016 and 2020, Outstanding faculty Award for USF March 2017 and Fulbright Specialist Fellowship 2018-2019, spent one month from 07-01-2019-to 07-29-2019 at Witwatersrand University South Africa. He was inspired by RSS since childhood, and because of the sanskaras, he is involved in many non-profit organizations and contributes his time for many different social and cultural causes. He has travelled over 80 countries and given talks on nanotechnology and related topics in more than 100 universities. Some of his books are textbooks for Graduate studies.

Editor: Sir, you are a Scientist of eminence and have been working in the field of pharmaceutical nanotechnology, and also contributed many valuable books in the field of pharmacy. I would like to request you to edify on the pharmaceutical education and research based on the following framed inquiries for the greater interest of researchers working in the fields of Pharmaceutical and Biomedical sciences.

1. Which particular factor has motivated you for research?

My first mentor who encouraged me to do research was Professor Ramlal Nikore, a great professor who had a life long impact on my career. Then many Professors with whom I worked Prof AK Dorle (Nagpur, India), Professor MNA Rao (Manipal, India), Prof Gregory Gregoriadis (Royal free Hospital, London, UK), Prof Simon Benita (Hebrew University of Jerusalem, Israel) and Professor Robert Levy, all of them taught so many things and gave me training on how to conduct research and work on socially impacting research projects. Subsequently, I had the opportunity to interact with the world's best brains in the field of drug delivery systems and their mentoring was very useful. I owe a lot to all these great minds and they were the real motivation for me all through my career.

2. How a research scholar should organize, plan and prioritize his work?

Focus and a good mentor are the two things most important for any researcher to perform well as a scientist. The more you work with excellent scientists, you learn the tricks of the trade, I would like to quote Great saint Ramkrishna Paramhansa

"As long as I live, so long do I learn" **−Ramakrishna**

This is the key. Organize, plan and prioritize are all milestones of lifelong learning.

3. How a research scholar can identify the strengths and weaknesses of alternative solutions to research problems?

Unless you do, you will never know what will be the outcome and whether it is a strength or weakness. Research should be done to find the natural laws which exist eternally, going closer to these laws and understanding the phenomena is the key. Every alternative may be a good solution or may lead to another research project.

4. How one can successfully apply scientific rules or methods to solve a problem at work? How to manage in case of deviations?

I define Scientific is something which is not proven otherwise. To explain, the existence of God is not proven otherwise, hence accepting the existence of God is very scientific. Every approach is scientific unless it is proven unscientific. One has to be truthful and present what is the real outcome and that will resolve the dilemma.

5. What are the basic requirements to develop technical writing skills?

Write and revise X infinity, you build the skills over the period of time.

6. What is the most challenging part of conferring with research in pharmaceutical nanotechnology?

Lack of patience and perseverance.

7. Would you share your views on nanotoxicity?

Wait and watch as there are no methods to understand it properly. We need to work with existing methods and it will change with the efforts of young scientists in this field.

8. What is your opinion on the toxicity study protocols for nano-particulate drug delivery systems?

Evolving and will be taking shape in due course of time. People are working and we will see the positive outcomes soon.

9. What should be the direction of formulation development at present?

Where there is a need, let us work in that direction, keep options for innovations and entrepreneurship.

10. How should we, as a researcher, prepare for future situations like COVID-19 and how should we change the direction of our research for such situations?

By increasing the social commitments for our science so that what we do is useful to humanity at large and rest will be a success story.

11. Please share your opinion for young researchers on the prospect of pharmaceutical technology.

Great potential and there is always a place at the top, just need patience and perseverance to reach there.