

**A Brief Report on Invited Impact Pharmacy Lecture Series 2023 – Lecture 10**

(New connections and New learning)

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***Name of the presenter:***

Dr Krishna Prasad Bhat  
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Dept. of Translational Molecular Pathology  
MD Anderson Cancer Center, USA



***Title of the presentation:***

Career opportunities for pharmacists in USA and my unusual career trajectory from a pharmacist to cancer biologist

***Program Organized by:***

Dept. of Pharmacy Practice & Pharmacy Education Unit  
JSS College of Pharmacy, Ooty

*New Connections and New Learning: Pharmacy Practice- "Learning in the flow of work"*

Making learning is a part of everyday work – and everyone's experience at work differs of course and it multiplies at different places. Internship training for Pharm D students is an opportunity to learn new and provide service to the needy patient population. To enhance their learning experience, the institute has created new connections and learning opportunity at various practice settings. Our students are very excited to be at new practice site(s) to learn and demonstrate/shape their competencies.

Dr Krishna Prasad Bhat is a proud alumnus of JSS College of Pharmacy, Ooty and he obtained his Master of Pharmacy in Pharmacology in the year 1994 and got his PhD from USA. Presently he is working as Associate Professor in Dept. of Translational Molecular Pathology at MD Anderson Cancer Center, USA. His lab is mainly interested in designing novel molecular targets and diagnostic approaches for brain cancers with a focus on glioblastoma. His expertise is utilizing single cell technologies to decipher the brain tumor microenvironment and using this knowledge to design novel immunotherapies for glioblastoma aside from overseeing a NIH funded laboratory.

Dr Bhat started his presentation with a note about his education at Dept. of Pharmacology, JSS College of Pharmacy, Ooty and how his education / training at Ooty transformed him in to researcher in neuroscience at MD Anderson Research Center, USA. Further, he also explained about his journey from pharmacist to research scientist.

Hospital Pharmacist: It is an incredibly exciting time to pursue a career in pharmacy and pharmacy graduates have a wide range of career opportunities available to them. As members of the health care team composed of physicians and nurses, among others, institutional pharmacists have an opportunity for direct involvement with patient care. The knowledge and clinical skills

that contemporary pharmacist possesses make this individual an authoritative source of drug information for physicians, nurses, and patients. In addition to direct patient care involvement, pharmacists in hospitals are responsible for systems which control drug distribution and are designed to assure that each patient receives the appropriate medication in the correct form and dosage, and at the correct time. Hospital pharmacists maintain records of each patient, using them not only to fill medication orders but also to screen for drug allergies and adverse drug effects.

**Community Pharmacist:** This is a more familiar practice setting for the pharmacists and people probably visit the community pharmacy more often than they do other health care team. Pharmacists talk to people whether they are healthy and when they are sick. Pharmacists are playing an increasing role in the “wellness” movement, especially through counselling about preventive medicine. Pharmacists serve patients and the community by providing information and advice on health, providing medications and associated services, and by referring patients to other sources of help and care, such as physicians, when necessary. Pharmacists, in and out of the community pharmacy, must be knowledgeable about the composition of drugs, their physicochemical properties, their manufacturer and uses, as well as how products are tested for purity and strength. More and more prescribers rely on pharmacists for information about various drugs, their availability, and their activity.

**Industrial Pharmacy:** The pharmaceutical industry produces active drug substances, chemicals, prescription and non-prescription drugs, and all other health products. Pharmacists do such things as marketing, research and product development, quality control, sales and administration. Many pharmacists go on to obtain postgraduate degrees in this field. Pharmacists with an interest in sales and administration can combine this with their technical background in pharmacy by serving as medical representatives. They explain the uses and merits of the products their firms manufacture. Experienced and successful medical service representatives with administrative abilities often rise to supervisory or executive posts in the pharmaceutical industry.

**Veterinary Pharmacy:** The Pharmacist towing this line is focused on the treatment given to animals. A veterinary pharmacist should have a grounded knowledge of the basic care given to animals. He should be able to provide the necessary medication to animals and livestock. Such individual is to take note of the animals in the environment so that you provide the proper services. It is also important to be knowledgeable about antidotes in case of bites and other sores. This field is also a voice in giving advice to regulatory boards and other bodies involved in veterinary drug production.

**Social and administrative Pharmacy:** This practice involves research and analysis in various areas of the health sector including how to improve public health care, making necessary drugs available and affordable among others. Information gathered and the analysis made is important to the enhancement of pharmaceutical procedures. This helps various organizations take positive steps to serve the society better. A sound background is advisable in this field as well as a post-graduate.

**Pharmacy Journalism:** This is an adventurous field for the pharmacist who is looking for a not-so-ordinary job. This area involves being inquisitive and having a spark for writing. With your wealth of knowledge in the pharmaceutical field, you could educate your readers through your work. You can become a journalist for a pharmaceutical journal or you can opt to be a freelance writer. There are new platforms seeking medical information where you can share your expertise. There are quarterly pharmaceutical journals, columns in newspapers and other media.

The session was then concluded by Dr Bhat by taking questions from staff and students. More than 90 students and staff were fruitfully benefited with this invited virtual guest lecture.

Dr S Ponnusankar  
Co-ordinator