

Children's Education Society (Regd.)

### The Oxford College of Pharmacy

(Recognized by the Govt. of Karnataka, Affiliated to Rajiv Gandhi University of Health Science, Karnataka; Approved by Pharmacy Council of India, New Delhi)

Accredited by NAAC and International Accreditation Organization (IAO)

Date: 04/11/2019

### **CIRCULAR**

This is to inform all the students and teaching staff of The Oxford College of Pharmacy that a seminar titled "Steps and challenges involved in Scientific Investigation" for the academic year 2019-20 will be conducted on 08/11/2019. We request active participation for the same.

PRINCIPAL The Oxford Interest Charmacy

No 6\9.1si Cross, Permi mengasandra Bangaiore - 560 058



Chief Patron SRI. S.N.V.L Narasimha Raju

The Oxford Group of

Chairman,

Institutions, Bangalore.

Convener

Dr. Padmaa M Paarakh

Principal & Professor, TOCP

Co-ordinator
Dr. Sheba Baby John
Department of Pharmacy
Practice

Resource Person
Dr.G. Parthasarathy
Professor & HOD
Department of Pharmacy
Prartice
The Oxford College of
Pharmacy

### ABOUT US

The Oxford College of Pharmacy (TOCP) was established in 1992. TOCP under the aegis of Children's Education Society (R) offers D Pharm, B Pharm, M Pharm, Pharm D, Pharm D Post Baccalaureate and PhD Programs.

TOCP is recognized by the Government of Karnataka, affiliated to Rajiv Gandhi University of Health Sciences, Karnataka, and Drug control Board, Karnataka respectivels, approved by Pharmacy Council of India,

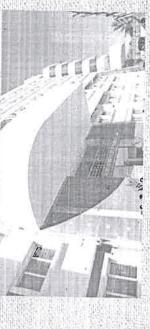
### Seminar on

"Steps and challenges involved in scientific investigation"

2

8th November 2019

Time: 10 AM-11 AM



Organized by

Department of Pharmacy

Practice

THE OXFORD COLLEGE OF PHARMACY

No 6/5 1st Cross, Begur Road, Hongasandra, Bangalore

PIN 560 068

New Delhi.

Karnataka, India.





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### DEPARTMENT OF PHARMACY PRACTICE

### **ORGANISED SEMINAR**

ON

"STEPS AND CHALLENGES INVOLVED IN

SCIENTIFIC INVESTIGATION"

### **CHIEF PATRON**

SHRI S. N. V. L NARASIMHA RAJU CHAIRMAN THE OXFORD EDUCATIONAL INSTITUTIONS

### **CONVENER**

Dr. PADMAA M PAARAKH
PRINCIPAL
THE OXFORD COLLEGE OF PHARMACY

### SEMINAR CO-ORDINATOR

MRS. SHEBA BABY JOHN
ASSISTANT PROFESSOR
DEPARTMENT OF PHARMACY PRACTICE
THE OXFORD COLLEGE OF PHARMACY

### RESOURCE PERSON

Dr. G. PARTHASARATHY

PROFESSOR

DEPARTMENT OF PHARMACY PRACTICE

THE OXFORD COLLEGE OF PHARMACY

DATE: 8th NOVEMBER 2019

**TIME:** 10 AM to 11 AM







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### **PREAMBLE**

The Department of Pharmacy Practice conducted the seminar on "Steps and Challenges involved in Scientific Investigation" for the teaching faculties. There were totally 22 participants. Dr. G. Parthasarathy, Professor, The Oxford College of Pharmacy, Bangalore delivered the lecture.

Scientific investigation is a complex process. It involves multiple steps and faces numerous challenges. These challenges have to be addressed in a collaborative manner by researchers, funding agencies and the people from scientific community. The current seminar addresses steps and challenges involved in the same.

### The content delivered in the seminar is as follows:

The session began with the introduction of Scientific investigation. Scientific investigation is a structured process that research scientists use to explore, understand the phenomena. It is a step-by-step problem-solving process that consists of many steps viz., observation, asking questions, framing hypothesis and making predictions, testing the hypothesis through conduct of experiments, collection of data, analysis of data using statistical tools followed by drawing conclusions. The investigation usually starts with an observation that catches research scientist's attention. Based on the observation, a question is raised about the investigation. Followed by this, a hypothesis is framed that answers the question. Then a prediction is made based on hypothesis to investigate the outcome of investigation. Then the prediction is tested through conduct of experiments or observations. Based on results, new hypothesis or predictions are generated for further investigation.

Further, the speaker addressed what are the challenges researcher face in scientific investigation. Sometimes researchers unintentionally introduce bias into their test results, thereby leading to crooked test results. Scientific investigations often requires excess resources in terms of funding, equipments, expertise people for complex studies. Further, replicability of results is difficult, this is due to variations in the experimental conditions or the methodologies conducted. The important challenge every researcher face is the ethical considerations, be it human subjects or *in vivo* animal studies. Research findings with large dataset or complex studies may pose challenges. Further, the speaker spoke about the peer-



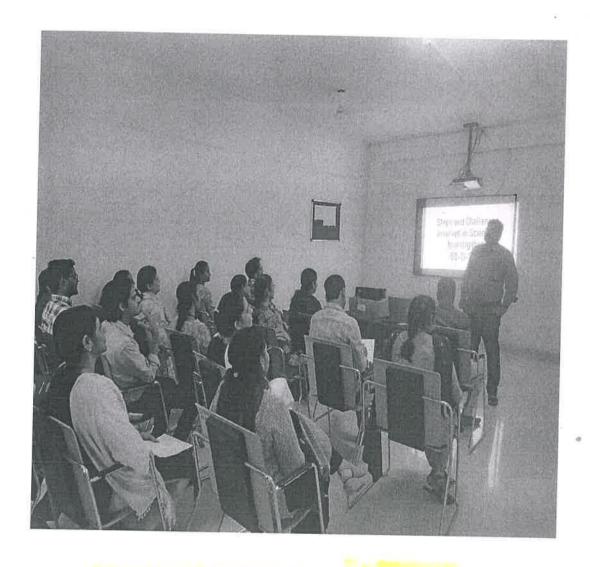




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review process involved in publication of manuscripts where very often opinions and criticisms differ among peers thereby lengthening the publication process. Controlling all variables at a time in experiment is difficult, especially in complex systems where multiple factors could affect the outcome.



Dr. G. Parthasarathy interacting with the participants



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Dr. G. Parthasarathy addressing Q&A with the participants

### **OUTCOME**

There were 22 participants in the seminar. After attending the seminar, the participants gained knowledge about the steps and challenges a researcher faces in scientific investigation. It is important since it aid people learn new things and solve problems which subsequently drives progress and innovation. In this process, very often it leads to the discovery of chemicals, processes and new technologies. Scientific research requires vigil methods and procedures which ensures and enhances reliability and integrity of the research findings, thus upholding the quality standards. In conclusion, it is vital for well being of the public, it increases knowledge and the prosperity of the world.



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### LIST OF PARTICIPANTS

SL.NO	NAME OF PARTICIPANT	SIGNATURE
1	DR. PADMAA M PAARAKH	P. Padwa
2	MS. JYOTSHNA DEVI BOLISETTY	Justin
3	MR. MOHAMMAD	My.
4	MS. SNEHA	Sala
5	MS.SONA MARIUM PANICKER	Com-
6	MR.DILEEP CHANDRA SREERAMA	Alub
7	MS.T. SRAVANI	T Smooni
8	DR. CHITRALI MALLIKARJUNA SETTY	(msh)
9	DR. GURURAJ S. KULKARNI	1
10	MS.SURINDER KAUR	y
11	MS.DIVYA SASI KUMAR	June One
12	MS.NALLAGUNTLA LAVANYA	P sec
13	MS.KANCHAN SINGH	No. 1
14	MS. AMRITHA V	Karel
15	MS. RAMYA TUNUGUNTLA	9 -57.
16	MS. R. UMA PRABHA	00/
17	DR. VIKRAM T	101-
18	DR. S. JAIKUMAR	1:1-
19	DR. DEVANGAM SHESHADRI SEKHAR	Java
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# # 6/9, 1ST MAIN, BEGUR ROAD, HONGASANDRA, BENGALURU-560 068

## PARTICIPATION CERTIFICATE

This is to certify that Mr/Ms/Dr/Mrs. Surinder Kaur has attended a Seminar

on Steps and challenges involved in Scientific Investigation held at the

Department of Pharmacy Practice, The Oxford College of Pharmacy,

Bangalore, Karnataka, for the academic year 2019-20.



Dept. of Pharmacy Practice
The Oxford College of Pharmacy



Dr. Parthasarathy Dept. of Pharmacy Practice The Oxford College of Pharmacy

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## PARTICIPATION CERTIFICATE

This is to certify that Mr/Ms/Dr/Mrs. Umaprabha has attended a Seminar

on Steps and challenges involved in Scientific Investigation held at the

Department of Pharmacy Practice, The Oxford College of Pharmacy,

Bangalore, Karnataka, for the academic year 2019-20.



Dr Sheba Baby John Dept. of Pharmacy Practice The Oxford College of Pharmacy



Dr. Parthasarathy
Dept. of Pharmacy Practice
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## PARTICIPATION CERTIFICATE

This is to certify that Mr/Ms/Dr/Mrs. T. Sravani has attended a Seminar on

Steps and challenges involved in Scientific Investigation held at the

Department of Pharmacy Practice, The Oxford College of Pharmacy,

Bangalore, Karnataka, for the academic year 2019-20.



Dept. of Pharmacy Practice
The Oxford College of Pharmacy



Dr. Parthasarathy
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## PARTICIPATION CERTIFICATE

This is to certify that Mr/Ms/Dr/Mrs. M. Gowrisri has attended a Seminar

on Steps and challenges involved in Scientific Investigation held at the

Department of Pharmacy Practice, The Oxford College of Pharmacy,

Bangalore, Karnataka, for the academic year 2019-20.



Dr Sheba Baby John Dept. of Pharmacy Practice The Oxford College of Pharmacy



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## PARTICIPATION CERTIFICATE

This is to certify that Mr/Ms/Dr/Mrs. Sneha has attended a Seminar on

Steps and challenges involved in Scientific Investigation held at the

Department of Pharmacy Practice, The Oxford College of Pharmacy, Bangalore, Karnataka, for the academic year 2019-20.



Dr Sheba Baby John Dept. of Pharmacy Practice The Oxford College of Pharmacy



Dr. Parthasarathy
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