Value Added Program

Organized by

Department of Biochemistry

In association with TOSSEC

THE OXFORD COLLEGE OF SCIENCE

 # 32, 17th B Cross, Sector VI, HSR Layout, Bengaluru, Karnataka 560102.

Recognized by Government of Karnataka, Permanently affiliated to Bangalore University. Accredited by NAAC with "A" Grade in Cycle II, International Accreditation Organization (IAO) and LSSSD. Recognized by UGC under section 2(f) and 12(B). Supported by DST under FIST program, Recognized by GoK for BiSEP.

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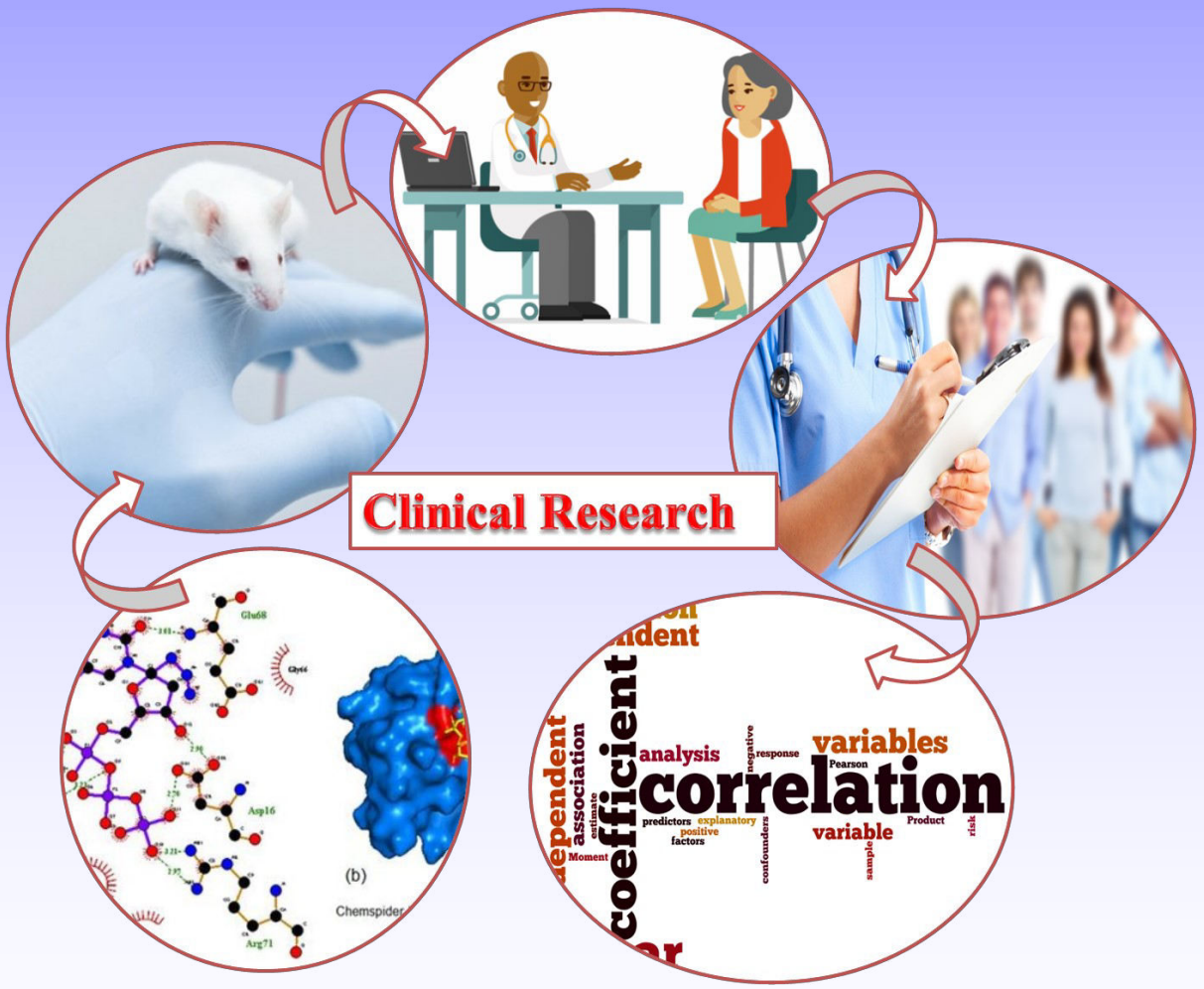
Basics in Clinical Research

Coordinator—Mr. Bhanuprakash K S

(*Associate Professor, Department of Biochemistry*)



A transition from academics to industry.

About the College

The Oxford College of Science was started in the year 1994 with twelve students and five teachers. Within 25 years the college has registered a phenomenal growth. Presently College is catering education to more than 3000 students. The institution owes this astounding progress to our dedicated Management and a committed teaching staff. Within an intensely competitive environment, the college has adopted a dynamic, global, high quality: creative and communicative approach in education, as well as research and development. Keeping abreast with modern developments, the institution is constantly reinventing itself and renovating its physical infrastructure as well as its research and education facilities. With our vision to participate in the nation's march towards a knowledge society by nurturing intellectual growth and sound value system in students through science education, we have organized many certificate and supportive courses in association with BiSEP and TOSEC.

About the Department

The Department of Biochemistry was pioneered under The Oxford College of Science, Bangalore in the year 2001. Since its inception the department has proven with a consistent track record, not only in academics also in research and extracurricular activities. The department strictly abides to the vision of the college by equipping highly qualified, experienced practicing biochemists as teaching fraternity who are self motivated and always caters their knowledge to enrich budding biochemists.

Biochemistry includes both chemical & biological disciplines with exponential increase in information and understanding in the field of Life Science. Biochemistry holds promises in areas like clinical diagnostics, pharmaceutical industries, industrial production of enzymes, fermentation industry, food and dairy industry and research. Biochemistry is accountable for a great deal of scientific advancements in medicine and biotechnology. It can cause a rewarding career and graduates remain in high need.

Importance of Value Added Program

With the changing demand of industries value-added program is a must for the science students in the current scenario not only for the jobs but also for the long-term growth & development of the students. Value-added program act as a bridge which fills the gap between the formal education and the industry demands. The value added program is introduced for holistic development of students through academic flexibility.

Program Objective

- Understanding the clinical study and phases of drug development.
- Analysis of different parameters of the clinical trials and documentation.
- Methods of Data Collections, Analysis and Management
- Practical understanding of the basis of clinical study

Course Outcome

Upon completion of this Value-Added Program, students will be able to:

- Validate competency in understanding clinical trial research designs and Ethical importance to meet the health and medical needs.
- Evaluate data analysis, critical domestic and global regulatory and health care issues that challenge and influence drug development .
- Establish advanced critical thinking skills essential to augment employment opportunities or advance within the biopharmaceutical industry .

Program Details (Code—VAPBC21/01)

This program will be conducted in modules. Each module will be done under virtual sessions of specified hours. Practical hands will be conducted offline. Overall, the course includes six modules;

- ***Module 1—*** **FOUNDATIONS OF CLINICAL STUDY** ***(History of the clinical study, Concept of Clinical Research, Role of Theory in Clinical Research, Ethical Issues in Clinical Research).***
- ***Module 2— CONCEPTS OF MEASUREMENT (Principles of Measurement, Reliability of Measurements, Validity of Measurements)***
- ***Module 3— DESIGNING CLINICAL RESEARCH (Asking the Research Question, Sampling, Validity in Experimental Design, Experimental Designs and Systematic Reviews and Meta -Analysis)***
- ***Module 4— DATA ANALYSIS (Descriptive Statistics, Statistical Inference, Comparing Two Means: The t-Test, Comparing More Than Two Means: Analysis of Variance, Multiple Comparison Tests, Nonparametric Tests for Group Comparisons, Correlation, and Regression, Chi-Square test, Statistical Measures of Reliability and Validity, Multivariate Analysis and Data management.)***
- ***Module 5— COMMUNICATION (Searching the Literature, Writing a Research Proposal, Reporting the Results of Clinical Research and Evaluating Research Reports).***
- ***Module 6— PRACTICAL EXPOSURE (Estimation of the Glucose/reducing sugars, Estimation of Cholesterol Estimation of albumin/globulin ratio, Estimation of SGOT/SGPT , Data analysis by R– software).***

Reference Books

- ***Foundation of clinical research—Application to practice, 3rd Edition by Leslie G Portney, Mary P Watkins, 2015, Publisher—F A Davis company, Philadelphia.***
- ***Medical Biochemistry, 4th Edition by John W Bayer and Marek H Dominiczak Elsevier publisher.***

Assessment Methodology

Students will be awarded completion certificate based on their performance during the sessions end examination.

Registration process

Online using Google form

https://docs.google.com/forms/d/e/1FAIpQLSdfYhnSqywGQphOcOpswbARl1w13oocu4G7ZSd0j2oAfH4Z1w/viewform

Program start date — January 4th 2021.

Duration is 30 hrs

Time of Classes

Second and fourth Saturday and Tuesday/Thursday at 3.30pm to 5.30pm

Program Fees — **1500/- .** Payment is in cash or online.

Bank name—Bank of Baroda
Name of the account—THE OXFORD COLLEGE OF SCIENCE—TOSSEC
Account number—89600100015409
IFSC code—BARB0VJHSRL
Branch— HSR layout Bengaluru.

Resource Persons

Mr. Bhanuprakash
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BOE– chairman (UG)
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Mr. Somenath Mukherjee
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