

CAREER DEVELOPMENT CENTRE



Date: 15th August 2020.

Subject: Value Added Trainings School of Pharmaceutical and Population Health Informatics

Attention: B.Pharm- VIIth Semester (Session-ODD-2020-21)

Above mentioned students are hereby informed that as per the approved value added trainings for the academic year 2020-21, Career Development Centre offers the below mentioned technical training in the odd semester (2020-21). Details as follows:

Training	Semester	Program	Date of Commencing
Clinical Pharmaco-informatics (VAT-71)	VIIth	B.Pharm	13 th September 2020

NOTE:

1. The training will run in online mode (till further notice) on MS Team. Students will be assigned batch (as per the schedule) and will be added to their respective MS Teams.
2. It is suggested to all the above-mentioned students to attend the training (detailed schedule will be shared in your respective batch on MS Team).
3. The Department concerned shall notify the details about timings and MS Team batch of the training sessions. In case of any query please contact the Career Development Centre, DIT University.


Gaurav Singh

Head - CDC
Career Development Cell
DIT University, Dehradun

To:

- All Deans / Directors
 - HoDs
 - Head CDC
- } With the request to bring the above to the notice of the students

Copy to:

- Chairman
 - Chancellor
 - Vice Chancellor
 - Pro Vice Chancellor
- } For information please


Registrar
DIT University, Dehradun

VAT 71- Clinical Pharmaco-informatics

Platform: Online MS Team | Duration: 36 Hrs (13th September 2020 to 8th November 2020)

The Clinical Pharmacognosy training was conducted for students of Bachelor of Pharmacy program (7th Semester), the targeted students for the training were those who had to be skilled for areas like pharma industries, vaccine development, clinical research projects, academic research. It was conducted by the **School of Pharmaceutical and Population Health Informatics**, the coordinator for the training was **Dr. Dhirodatta Senapati (Trainer- DITU)**

OBJECTIVE:

The training aims to give an added value to the students of Bachelor of Pharmacy both at academic level and industry level in the areas like pharma industries, vaccine development, clinical research projects, academic research, etc. Main objectives:

1. To learn the world of Bioinformatics and its evolution.
2. Assess the, different types of biological data and bioinformatics resources.
3. Assess and explain the tools and techniques of analysing DNA and protein sequences.
4. Discuss the basic principles and applications of pharmacogenomics.
5. Utilize the different analysis packages available for different computational jobs.

TRAINING OUTLINE:

1. Introduction to bioinformatics
2. Chemo-informatics & Drug Design
3. Predictive Pharmacology
4. Project Work

Divided into 5 Units:



Registrar
BIT University, Dehradun


UNIT I: Overview of Bioinformatics and Information Technology History, Scope and application, Internet and World Wide Web; Generation of computers; Concept of Networking; Introduction to Data Mining; Application of data mining in Bioinformatics.

UNIT II: Bioinformatics Resources Biological databases, Basic classification – Sequence & Structure; Generalized & Specialized.

UNIT III Bioinformatics techniques Sequence comparison and alignment; Local and Global Alignment , Concept of Gap, Gap Penalty & Scoring Matrices , Dot Plot Analysis.

UNIT IV: Bioinformatics tools Information retrieval system (Entrez, SRS); Sequence alignment tools (BLAST, FASTA, CLUSTAL-W/X, MUSCLE, TCOFFEE), Variants of BLAST.

Training also involved the concepts of Information and Knowledge Delivery. The next core competency needed, information and knowledge delivery which involves how the databases are utilized. Pharmacy informaticists ensure that there is interoperability between the pharmacy information system and all other medication-related systems. With constant changes to clinical practice and complexities within health care, integrated systems are needed to support the delivery of accurate medication-related information to the end-user at the point of clinical decision-making. Pharmacy informaticists support best practices and apply knowledge of informatics principles, human factors, and systems design to the user interface, to ensure that there is no confusion or incorrect information at the point of care. This information delivery can be provided before decisions are made or passively as reference information. Pharmacy informaticists not only support and oversee the creation, application, delivery, and management of clinical information and knowledge, but they also inform how systems should be developed and why interoperability is essential to safe medication management.



Registrar
DIT University, Dehradun

FUTURE DIRECTIONS

There are many more interesting areas within health and pharmacy informatics to learn about and further develop. We have described only some examples of a pharmacy informaticist's operational responsibilities and current initiatives, but we foresee that the future holds many exciting changes. The health informatics curriculum is well established in medical and nursing training; however, in pharmacy, it has been slower to evolve. Although it is not new, the practice of pharmacy informatics is in a state of rapid growth. This diverse and evolving field leads the use of technology at multiple levels of pharmacy practice, from departmental projects to national collaborative. Equipped with a strong understanding of medication management workflows and knowledge of clinical system functionalities, pharmacy informaticists are in a great position to collaborate with other health care providers to optimize information management, improve workflow, and reduce medication errors. By supporting and developing the pharmacy informatics role, the profession of hospital pharmacy can optimize innovations to medication-related processes so that pharmacists can continue to improve patient care and outcomes.

Training Outcomes:

1. Knowledge of bioinformatics tools application in drug discovery and development process.
2. Scientific professionals with added values of pharmcoinformatics in biological /pharmaceutical sciences research, at both academic level and industry level.
3. Acquisition of additional skills in Pharmaco-informatics for manpower required in pharma industries, vaccine development, clinical research projects, research, etc.
4. Added skills to students pursuing post-graduate studies in life sciences/pharmaceutical sciences/clinical sciences, etc.



Registrar
DIT University, Dehradun

Annexure - II

Value added course Details (Academic Year: 2020-21)

VAT Course Name: Clinical Pharmaco-informatics

VAT Code: VAT 71

Duration in Hours: 36

Number of Students Enrolled: 47

Number of Students Completed: 47

Grades: G = GOOD ; S = Satisfactory ; P = Poor ; W = Withdraw

Student ID	Student Name	Program/Course	Year	Passing Grade
170921054	NISHANT NIRWAL	BPharm	4th Year	S
170921024	POONAM SINGH	BPharm	4th Year	S
170921032	KRISHNA MADHESIYA	BPharm	4th Year	G
170921020	MONIKA .	BPharm	4th Year	G
170921005	ZAINUB SAALEHA FIRDAUS	BPharm	4th Year	S
170921058	NEETU KUMARI	BPharm	4th Year	S
170921004	TANNU KUMARI	BPharm	4th Year	S
170921023	UMANG .	BPharm	4th Year	G
170921008	SUMANTA KUMAR SINGH	BPharm	4th Year	G
170921036	SIMRAN KUMARI	BPharm	4th Year	S
170921010	PRIYANKA PAL	BPharm	4th Year	S
170921022	UTSAV TYAGI	BPharm	4th Year	G
170921044	TWINKLE CHATTERJEE	BPharm	4th Year	G
170921026	SAURAV PANWAR	BPharm	4th Year	S
170921056	ABHISHEK SHARMA	BPharm	4th Year	S
170921014	PATHSARTHAK SAXENA	BPharm	4th Year	G
170921055	SAKSHI ANAND	BPharm	4th Year	S
170921034	PUJA KUMARI	BPharm	4th Year	S
180921901	MAYANK RAWAT	BPharm	4th Year	G
170921059	SAWAN BAJAJ	BPharm	4th Year	G
170921041	SHADAB SIDDIQUI	BPharm	4th Year	S
170921025	ANKITA CHATURVEDI	BPharm	4th Year	S
170921021	KUNAL BISHT	BPharm	4th Year	G
170921027	NISCHAY PANDITA	BPharm	4th Year	G
170921003	ADITYA RANA	BPharm	4th Year	S
170921046	SAMYANK GAUTAM	BPharm	4th Year	S
170921033	AGRIM SRIVASTAVA	BPharm	4th Year	G
170921018	RITIKA YADAV	BPharm	4th Year	G
170921060	CHARUL BAHUKHANDI	BPharm	4th Year	S
170921015	KRIKA BADOLA	BPharm	4th Year	S
170921053	RAJESH KUMAR CHOUBEY	BPharm	4th Year	G
170921057	ABHAY SIROHI	BPharm	4th Year	S
170921016	ANKIT BHARDWAJ	BPharm	4th Year	S
170921040	DEVANSHI GUPTA	BPharm	4th Year	G
170921037	ABHINAV CHAUDHARY	BPharm	4th Year	G
170921038	GAURI GUPTA	BPharm	4th Year	S
170921029	MUSKAN MADAN	BPharm	4th Year	S
170921062	AADITYA CHAUHAN	BPharm	4th Year	G
170921042	SARA CHAUHAN	BPharm	4th Year	G

Received.
10000589/19
Abhishek

Registrar
GIT University, Dehradun

170921006	PRAJWAL SINGH	BPharm	4th Year	G
170921043	SIMRAN SINGH RATHORE	BPharm	4th Year	S
170921045	SAURABH KUMAR	BPharm	4th Year	S
170921007	PRIYA UNIYAL	BPharm	4th Year	G
170921009	NITESH KAPRI	BPharm	4th Year	S
170921039	PRASHANT KUMAR	BPharm	4th Year	S
170921049	HIMANSHU SINGH	BPharm	4th Year	G
170921031	ADITYA RAJ JOSHI	BPharm	4th Year	G


Registrar
BIT University, Dehradun