Department of Bioinformatics, Alagappa University

Departmental Best Practices

The Department of Bioinformatics (DBI) in Alagappa University, has imbibed the following of best practices in pursuit of achieving excellence in both academic and administrative regards. Various processes are regularly followed by the students, research scholars and faculty members to streamline their administrative and academic workflows that would certainly prove to be successful in the longer run for the Department. These best practices range from Yoga Training, E-Book Resources to Social Media Platforms etc.

Digital E-Book Library Resource and Faculty Presentation Materials

The DBI has established a Digital E-Book library for the effective Teaching Learning process for both faculty and student community. There are more than 1700 E-Library books which can be accessed through this server. This platform also allows for students, research scholars and faculty to access reading materials and class presentations to prepare for their lectures and examinations, without any time or location constraints.

Bioinfo Nexus (BINX): http://172.23.7.40





Class Presentations							
Prof. J. Jeyzkanthan ab_mino_jipif biological_gene and protein networks_jipif cell.pof cell.pof cystal.pdf matrices_final.pdf matrices_final.pdf motion_fjana.pdf proc_argunitum.pdf protemic_jipif protemic_jipif anaktandran plot.pdf anaktandran plot.pdf confordf confordf force field.pdf force that cystsions.pdf protein_jipif bood structure and angle.pdf confordf force field.pdf force field.pdf force field.pdf force field.pdf trans.pdf	Prof. Sanjeev Kamar Singh S02101 - introductory beinformatics off S02203 - moleculæ modeling and pharmaceinformatics off S03304 - computer aided drug design off S05104 research area specialization off	Dr. M. Karthikeyan mass spectrometry pff marathetic networks pff plarmacogenemics, ii, mac perton microarry off small-world network pff marathetic network pff marathetic network pff marathetic network pff systembology pff	Dr. RAL Vidbyavathi c programs-lab manual pdf c++ pdf mysql-perl ma-3-2017.pdf perl-2017.pdf visual basic-lab manual pdf jara.pdf	Dr. J. Joseph Sakayarayan bomembrane pöl bemötenles important pöl central dogma of sequences pål computational biology equibrism and free energy change pöl elucidation of metabolic pathwayabl enymes catalysis pöl gybrolysis påd genomics protesmics gybroproteinis pål protection pål pål metabalis menten - päl medbalismetter - pål medbalismetter - pål medbalismetter of biology & genetics machenida pålotorymhesis pål pathotymhesis pål pathotymhesis pål vante-solublevitamins påf	Dr. P. Boomi computational biology off research area pif	Dr. V.K. Lasgeshwaras 201650001-genemak.pdf 201650002-gene.discovery.pdf 201650002-bidden makov_model.pdf 201650001-gene.discovery.using_forume_malayis.pd 201650001-genes.discovery.using_forume_malayis.pd 201650001-genes.discovery.using_forume_malayis.pd 201650001-genes.discovery.using_forume_malayis.pd 201650001-genes.discovery.using_forume_malayis.pd 201650001-genes.discovery.using_forume_malayis.pd 201650001-genes.discovery.using_forume_malayis.pd 201650001-genes.discovery.using_forume_malayis.pd 201650001-genes.discovery.using_forume.discovery.using_forume.discovery.using_forume.discovery.pdf 201650001-genes.discovery.discov	Video: a basic introduction to drugs-drug targets-and molecular interactions mp4 ferystaligneyth.3gp ferystaligneyth.3gp scientific animations and visual scientific animations and visual effects by schedinger mp4
			© 2016 Department of Bioin	formatics, Alagappa University, Karaiku	zđi.	Developed and Maintaining by P	rof. J. Jeyakanthan and R. Santhosh

Students' Presentation

The Department of Bioinformatics offers an innovative learning system which includes the Journal Club, helping students understand the importance of evidence-based research practices and the impact of Good Laboratory Practices (GLP) in Research. Students are encouraged to select a paper of their own interest to share in the Journal Club. It encourages active, student-centred learning rather than traditional faculty-mediated learning. Students are encouraged to question whether a certain research practice might actually be the best option for a given problem, based on recent developments in that particular field of research. This critical thinking skill is necessary for students, research scholars and faculty members to embark upon their future research ventures.



Remedial Classes

The principal motto of remedial classes across the world, is to help the students improve their ability to learn, understand and master difficult scientific concepts. They are organized to achieve the competencies that are expected from students present in a certain grade or standard. Since 2010, the Department of Bioinformatics, has been conducting remedial classes every year for the students, to expose them to knowledge from various backgrounds and to improve the quality of teaching and research. These classes are planned during the afterhours of the office hours and before the commencement of regular classes. For the classes, the students were separated into two groups namely, the slow learners and the advanced learners. The groups were created based on the performance of the students in the classes, academic track records and their performance in the internal examinations in various disciplines, that were conducted by the department during the course of the academic year. These kinds of activities are helpful to the students to recognize their strengths and weaknesses of their understanding of important topics.

Teaching-Learning Methods

The DBI offers effective Teaching-Learning Methods (Experimental Learning, Group discussions, Student Presentations and Invited Lectures by research scholars and resource persons from other institutes) for the students to develop Latest Skills, Knowledge, Attitude, and Values to shape their behaviour and influence their personality through a positive approach. This method is also used to stimulate students' creativity and provide a constructive platform to develop their problem-solving skills and ensure participatory learning. The Faculty Members put a lot of effort in their quest to achieve these core competencies in students through these student-centric methods.



Yoga Training

The Department of Bioinformatics is organizing Holistic Yoga practice sessions for the student community every year for the benefit of their overall Physical and Mental Health. During these sessions, the students are also offered advice on maintaining their mental peace, personality development, dealing with pessimism and failure, etc.



Experimental Learning

The Department of Bioinformatics has been conducting hands on training sessions for the students to improve their observation skills, creativity, critical thinking and develop essential laboratory manipulation skills in arranging and handling different apparatus and equipment.



Group Discussion

In this type of student-centric method, students engage in discussion to generate various ideas about a certain topic, so that it enhances the perspective and creative thinking of the students participating in these discussions. Throughout this discussion, a plethora of ideas are exchanged between the students and research scholars on how to encounter a particular problem or issue regarding topics such as Computer Aided Drug Design for a particular bacterial or viral or genetic disease. These discussions encourage the growth of thinking and research aptitude skills.



Invited Lecture

The Department of Bioinformatics also offers the possibility of enhancing student learning to gain more knowledge as well as other innumerable benefits that can help students learn from a different perspective and more effectively from a Subject Matter Expert from an esteemed institute. In this regard, the Department of Bioinformatics regularly invites renowned resource persons from various prestigious institutes to teach the students and research scholars on a plethora of different topics to further enhance their knowledge and understanding.

and other large biomolecules) makes life possible



Prof. Ramanathan Natesh, School of Biology and Centre for High Performance, Indian Institute of Science Education and Research (IISER), Thiruvananthapuram, Kerala.

Digital communication Media for Students and Research Scholars to Promote an Environmentally Sound and Productive Organization

The Department of Bioinformatics has created a cross-platform messaging service for a paperless mode of communications through WhatsApp and Y-LIFT for faculty members, students, administrative staff and other Departments to quickly and easily transmit official information related to the Departmental activities such as Class Schedules, Upcoming Assignments, Books Materials, Examination schedules, Class Presentation Videoes, Audios, and other important information. This practice not only ensures that passing information takes place quickly, but it also reduces the need for paper in academic environments. In addition, digital communication paves way for easy access of data through digital transaction of information.

DBI-Academics



DBI-Research Scholars

	14/02/2024		
Dr. P. Boomi Asst. Profssor			
↓ 108 kB	Θ	DBI-PhD_Research Sch Group · 37 members	olar 🌶
	1:06 am	Add group description Group created by Dr. RM. Vidhyavathi, on 11/0 pm	3/2022 at 12:24
Good Moring to all, I hope this message finds you direction of the Head of Depar pleased to inform you that the for upcoming Journal Club me here. We encourage all particip	well. As per the tment (HOD), I am revised schedule ztings is attached wants to esentations to	Media, links and docs	54

DBI-Club Activities



DBI-Alumni

DBI-Alumni-ALU-2008 Arathy, Bala, Balajee., Dr., Dr.,	Dr., Dr., Dr., Dr.Karthikeyan	0 8 8	X Group info		
Dr. RM. Vidhyav	athi added Dr. Mrs. Sasikala Dr. PS Student	*		-	
0	Notification_PhD_Viva_Voce_Amal a.pdf 1 page + PDF + 2 MB				
	5:00 pm 🖋		2008 🖍 ers		
00	Notification_PhD_Viva_Voce_Sarit ha.pdf 1 page + PDF + 2 MB		Add group description	1	
	5-37 are //		Media, links and docs	82 >	
	Dear Students This is to inform you that two PhD students delivering PhD viva-voce examination on 11/01/2024 and 12/01/2024. I request you all to attend viva-voce examination.		Catron Catro		
	Thank you JJ 5x41 pm 🛷		★ Starred messages	>	
+ 🙂 Type a message		Ŷ	Mute notifications		

DBI-Faculty Members

	DBI-Faculty-ALU Dr., Dr., Dr., Dr., Dr.Karthik	eyan, Mrs., You	e ~ Q	:	X Group info		
	department will be scheduled for thorough verification by committee members. Subsequently, the finalized profiles will be uploaded to the university website. Feel free to reach out for any additional clarifications or discussions etc., . Note: IQAC is plannRead more 9.02 pm ✓ 29/02/2024				DBI-Faculty-ALU Group · 8 members		
	You						
	Good morning Kindly conduct the both int	ernal			Add group description	1	
-	Reminder	11:06 am			Media, links and docs	67 >	
•	Dr. RM. Vidhyavathl Dear Professors and collegues, As per the direction, I would like to bring to your kind attention that, inform you that, Internal complaints commitee meeting for our Teaching and Non Teaching Facuties, all students, and sweepers is scheduled on 4th					0	
	March 2024 at 11.30am in Hall. Kindly request your p meeting. Thank you.	resence for the 12:35 pm		$\overline{}$	* Starred messages	>	
+	😄 Type a message			Ŷ	Mute notifications	())	

Social Media Platforms (Y-LIFT)

To stay updated with social media networking, the DBI at Alagappa University has established a presence on platforms including YouTube, LinkedIn, Instagram, Facebook, and Twitter (At present: X) **(Y-LIFT)**. The primary goal of this is to network and interact with Global researchers, Academicians, Industries and Alumni to share updates about the departmental Research Activities. Notifications related to Admissions, Fellowships, Conferences, Research collaboration invitations and Job opportunities are also regularly shared with our online community. Departmental events, such as Class presentations, Livestream instruction, Journal Club presentations, Research Presentations, etc., are posted periodically on these platforms in an effort to attract students from across the world interested in research or higher education in Structural/Computational biology. The DBI at Alagappa University has continuously shared these activities in their social media platforms, and it is certain that this has improved and will continue to increase students' and researchers' knowledge of career guidance, research prospects, international networking, and cross-cultural interactions in Bioinformatics.

YouTube (<u>https://youtube.com/@departmentofbioinformatics</u>)



<u>LinkedIn</u>

https://www.linkedin.com/company/department-of-bioinformatics-alagappa-

in Q Search	Home My Network Jobs Messaging Notifica	B tions Me ▼ For Business ▼ 20	
Existing the second s	Гарана С	Profile language	
Suggested for you Private to you Beginner Complete 1 step to achieve intermediate Complete 1 step to achieve intermediate Where do you currently work? × Members who include at least one position receive up to 35 times as many profile views. Add position	3/7 Add skills linked to your experience Stand out as a professional by adding your top skills and unique skillies.	People also viewed Haridha Sree C - 1:tt Boinformatician l Algappa University @ Message 	
Analytics Private to you		Viknesh K · 2nd Attended THE AMERICAN COLLEGE	Messaging ···· C ^

university/

Instagram

https://instagram.com/bioinformaticsalu?igshid=MjEwN2IyYWYwYw==





Facebook (https://www.facebook.com/Bioinformatics.ALU?mibextid=LQQI4d)

Twitter (Currently Known as X) (<u>https://twitter.com/bioinfoalu?s=21</u>)



Bioinformatics and Drug Discovery Society (BIDDS)

The Bioinformatics and Drug Discovery Society (BIDDS) was established in the year 2017, as an Indian Academic Society for Bioinformatics, Computational Biology and Drug Discovery. With Bioinformatics becoming an indispensable part in Biological Research, an Academic society would be instrumental in recognizing eminent scientists and academicians for their contributions to Bioinformatics. This Society has been serving as a platform for Research in Bioinformatics and. The esteemed members of the BIDDS organize together every year to discuss recent advancements in the fields of Computational Biology and Bioinformatics. To supplement this gathering, Workshops, Symposiums and Conferences are also arranged for Students, Research Scholars, Academicians and Researchers to participate and engage in. During these events, students are given opportunities to interact with scientists from various fields of research to exchange ideas and present their own scientific studies to critically analyse it. This allows for students to get recognized for their research works and BIDDS has been working diligently to recognize their achievements. This society acts as an inspiration and a learning hub for young researchers to further explore research in these disciplines. The website for BIDDS can be accessed through the following hyperlink for further information: https://www.bidds.org/index.html.

