



WEB FORMAT



**BHARATHIARUNIVERSITY
COIMBATORE – 641 046**

**Format for 28th Annual Report Data for University Departments
for the year 2009 (from 01.01.2009 to 31.12.2009)**

1. Department Details:

Name of the School	Life Science			
Name of the Department	Bioinformatics			
Name of the HOD, Phone No. and E-mail ID	Dr.K.Swaminathan, 9865467636			
Year of Establishment	2007			
Telephone Number	2428292			
Website / E mail	kswamibiotech @ yahoo.com			
Special Status	SAP	FIST	DST	Others (pl. specify)

2. Details of Faculty and Staff Members:

Sl. No.	Name of the Faculty	Qualification	Designation	Specialization	Experience in years		E-mail ID & Phone No.
					Teaching	Research	
1	Dr. N. Jeyakumar	Ph.D.	Reader	Computational Biology and Bioinformatics	13	13	n.jeyakumar@yahoo.co.in
2	Dr.P.Shanmughavel	Ph.D. D.Sc.	Assistant Professor	Computational Biology	9 years	15 years	Shanvel_99@yahoo.com 94864 46101
4	Dr. P.T.V. Lakshmi	Ph. D	Assistant Professor	Phytomatics	6.3 yrs-teaching	12.6 yrs-research	lakshmiptv@yahoo.co.in 0422- 2425283 (O) 0422-2424304 (R) 9486383094 (M)
4	Dr. N.SundaraBaalaji	Ph.D.	Assistant Professor	Structural Biology	3 years	15 years	sundarabaalaji@buc.edu.in 9486951102
5	Dr. M.Jeyam	M.Sc., M.Phil., Ph.D., PGDBI	Assistant Professor,	Biochematics	3yrs, 6 months	8 yrs., 6 months	jeyamvel@yahoo.co.in 98840 55057

3. Research Schemes/Projects undertaken:

Sl. No.	Funding Agency	Name of the Principal Investigator	Title of the Project	Amount(Rs)	Duration	
					From	To
1	Dept. of Information Technology	Dr. N. Jeyakumar	Text mining of protein kinase relations and pathways	20,99,000/=	Sep 2009	Aug 2012
2	DBT	Dr. P.Shanmughavel	Bioinformatics Centre	38	2006	2012
3	University Grants Commission	Dr. P.T.V Lakshmi	A Probablistic Approach to Interact the Substrate- Aloe emodin with proteins targeting for	9, 66, 800	01.04.2008	31.03.2011
4	University Grants Commission Rajiv Gandhi National	Dr. P.T.V Lakshmi	Targeting Opportunistic Disease PCP of HIV by Proteins derived from Natural Resources	Drawing Fellowship	2007	2012
5	University Grants Commission	Dr.M.Jeyam	Isolation and <i>Insilico</i> Evaluation of Bioactive compounds from wheat seedlings for depression and T-Cell mediated auto immune	8,77,300.00	01.05.2009	30.04.2012

4. (a) Deputation of Faculty to present papers in Congresses/Conferences/Seminars/Workshops, Symposia, etc.

Sl. No.	Name of the Faculty	Congress/Conference/Seminar /Workshop and Venue	Period	Title of the paper
1	Dr. N. Jeyakumar	International Conference on Bioinformatics, Singapore	7-11 Sep 2009	Microarrays and Bioinformatics Opportunities
2	Dr. N. Jeyakumar	National Conference on Biomedical Informatics, Vinayaka Missions University, Salem	11-12 Oct 2009	Data Mining Applications in Bioinformatics
3	Dr. N. Jeyakumar	National Seminar on Bioinformatics Applications Medical Sciences, SRM University, Chennai	13-14 Mar 2009	Microarray Informatics
4	Dr. P.T.V Lakshmi	UGC sponsored Refresher Course, Academic Staff College, Bharathiar University, Coimbatore- 46.	04-02-2009 to 24.02.2009	Value Education (Multidisciplinary)

5	Dr. P.T.V Lakshmi	International conference on food technology (INCOFTECH 2009) at Indian Institute of Crop Processing Technology.,	28 th and 29 th August 2009	Biochemical assay of Enzymatic and Non-enzymatic Antioxidants of <i>Encostemma littorale</i> ”.
6	Dr. P.T.V Lakshmi	National Seminar on “Man and Microbes”, Bharathiar University.	27 th January, 2009	Modeling the Structure of Nd4 Responsible for Retinopathy.
7	Dr. P.T.V Lakshmi	National Symposium on “Frontiers in Biotechnology at Bharathiar University	22 nd July, 2009.	Insilico sequence specific analysis-ErbB2 RTK alterations for Neuroectodermal Tumors of <i>Homosapiens</i> .
8	Dr.M.Jeyam	i) Participated in the workshop organized by the Department of Botany, Bharathiar University.	9-2-2009	Intellectual Property Rights(Natural Products)

4 (b). Faculty having acted as chief guest, key note speakers, resource person, chair person, external experts, etc.,

Sl. No.	Faculty	Role	Event	Venue & Date	Title
1	P.Shanmughavel	Chairperson	National seminar	Periyar Auditorium, Bharathiar University, Coimbatore, 7-8 th Septmeber2009	National seminar on Herbal Science
2	P.Shanmughavel	Valedictory Address	National seminar	Kongunadu Arts and Scinec College, Auditorium, 4 th April 2009	National Seminar on Computer Science,
3					

5. Seminars and Conferences Organized:

Sl. No.	Name of the Faculty	Congress/Conference/Seminar/ Workshop/Symposia, etc. Organized	State/National/ International Level	Period
1.	Dr.K.Swaminathan	Motif 2009 – Bringing Revolution	State	17 th September 2009
2	Dr.M.Jeyam	Seminar on ‘Opportunities in Bioinformatics’	State	26 th February 2009.

6 (a). Publication of Research Papers at the State/National/International Levels:

Sl. No	Title of the paper	Author(s)	Journal	Volume No. Issue No.	Year of	Page(p n)
1	Computational identification of Alzheimer's disease specific transcription factors using microarray gene expression	Vishalini K., Nicy Sweety I and Natarajan J	Journal of Proteomics and Bioinformatics	2: 505-508,	2009	4
2	Analysis of disordered regions in Protein kinase subfamilies of Homo sapiens and Coenorhabditis elegans.	Kurup, K., and Natarajan J.,	ACM Proceedings on Biocomputing	10.1145/1722024.1722028	2009	8
3	Molecular Modeling of Human Pentameric $\alpha 7$ Neuronal Nicotinic Acetylcholine Receptor and Its Interaction with its Agonist and Competitive Antagonist.	Marimuthu Parthiban, Mohan Babu Rajasekaran, Suryanarayanan Ramakumar, Piramanayagam Shanmughavel	Journal of Biomolecular Structure & Dynamics	26	2009	0739-1102
4	Role of Microbicides in the Prevention of HIV and Sexually Transmitted Diseases	Radhika Ramachandran and Piramanayagam Shanmughavel	A Review. Current HIV Research	7	2009	279-286
5	Docking Studies on Flavin and Phenosafranine to Inhibit the Human	P.Lakshmi priya and P.Shanmughavel	Bioinformation	4(3)	2009	123-126

6	A database for human Y chromosome protein	P.P. Karthikeyan, P.T.V. Lakshmi, C. K.	Bioinformation	4(5)	2009	184-186,
7	HPTLC and HPLC Analysis of Bioactive Phyllanthin from Different Organs of Phyllanthus amarus.,	Annamalai and P.T.V. Lakshmi	Asian Journal of Biotechnology	1	2009	154-162
8	Effect of Drying Treatment on the Content of Antioxidants in Enicostemma littorale	R. Sathishkumar, P.T.V. Lakshmi and A. Annamalai	Research Journal of Medicinal Plant	3(3)	2009	93 – 101,
9	Structure-function annotation and Phylogenetic strategy of nifH domain of a cyanobacter	PTV. Lakshmi, S. Uma Maheswari and A. Annamalai	Indian J. of Biotechnology	8	2009	46-52

6 (b). Abstracts:

Sl.No	Author	Title	Event

7. Publications of Books/Monographs:

Sl. No.	Author	Name of the Book	Publisher/Place	Year
1	Shanmughavel.P and Gulshan Wadhwa	Practicals in Bioinformatics	Pointers Publishers, Jaipur	2009
2	P.Shanmughavel	National Biogenetic Information System, (NBGIS) Under utilized wild Plants	V.S.Ramachandran, Bharathiar University, Coimbatore	2009
3	PTV Lakshmi, and Anand N,	Biological and Biodiversity of Microalgae In: Response of Divap 100 on the Release of Extracellular products of Cyanobacteria (Blue Green	(Eds) Anand. N.	2009

8. Courses offered, Sanctioned Strength of Students and Enrolment details:

S.No	Name of the Degree / Subject	Aided / Unaided	Sanctioned Strength	First Year Enrolment		Total	Community-Wise Enrolment														Second Year		Total		Pass % 08-09	
				M	F		OC		BC		BCM		MBC / DNC		SC		SCA		ST		M	F	M	F	M	F
							M	F	M	F	M	F	M	F	M	F	M	F	M	F						
1	PG Courses 1 2 3	Unaided	20	14	6	20	2	4	3	3	--	--	--	3	1	3	--	--	--	--	14	6	14	6	100%	100%
2	M.Phil Course 1 2	Un aided	20	3	15	18	--	--	--	12	--	--	2	1	1	2	--	--	--	--						
3	Ph.D Course 1 2 3	Un aided	40	10	8	18	1	2	3	4	--	--	2	--	4	2	--	--	--	--						
4	Diploma / PG Diploma Courses 1 2																									
5	Certificate Courses 1 2 3																									
	Tota																									

9(a). Enrolment of Overseas Students': Nil

Sl.No.	Degree and Subject	Nationality	Number of Students		Total
			M	F	

9 (b). Enrolment of Students' from other states

Sl.No.	Degree and Subject	Name	State	Number of Students		Total
				M	F	
1	M.Sc Bioinformatics	Indore	1		1	1
2	Ph.D Bioinformatics	Kerala		1	1	2
3	Integrated Ph.D	Pondicherry	1		1	3

10. Research Degrees Awarded / Submitted:

Sl.No.	Name of the Scholar	Name and Designation of the Supervisor	Title	M.Phil./Ph.D.
1	Nicy Sweety I	Dr. N. Jeyakumar, Reader	In Silico	M.Phil 2009
2	Vishalini K	Dr. N. Jeyakumar, Reader	Computati	M.Phil 2009
3	A.Muthu Sankar	Dr.P.Shanmughavel,	Structural	M.Phil 2009
4.	P.Lakshmi Priya	Dr.P.Shanmughavel,	<i>Insilco</i>	M.Phil 2009
5.	I.R.Oviya	Dr.P.Shanmughavel,	<i>Insilco</i>	M.Phil 2009
6.	R.Mohana Priya	Dr.P.Shanmughavel,	Insilco	M.Phil 2009
7	R.Subhashini	Dr. P.T.V Lakshmi	Insilico	M.Phil 2009
8	K. Renuka	Dr. P.T.V Lakshmi	Genome	M.Phil 2009
9	V. Sindhuja	Dr. P.T.V Lakshmi	Mutation	M.Phil 2009
10	M. Syed Abuthakir	Dr. M.Jeyam ,	<i>In silico</i>	M.Phil 2009
11	A. Premalatha	Dr. M.Jeyam ,	Screening	M.Phil 2009
12	M. Ilanagai	Dr. M.Jeyam ,	<i>In silico</i>	M.Phil 2009

11. Fellowships Awarded:

Sl.No.	Agency*	Position (URF/JRF/SRF/RA)	Number of Fellowships		Total
			M	F	
1	UGC	URF- M-1, W-2	5	4	9
	DIT	JRF- M-1 SRF – W-1			
	UGC	JRF –M-1,W-1			
	UGC	RGNF- M-2			

*(DSC/DRDO/AICTE/Ministry/CSIR, Others...)

12. Scholarships Awarded:

Nature of Scholarship	P.G.		M.Phil.		Ph.D.		Amount Rs.
	M	F	M	F	M	F	
B.C.(State)							
B.C.M.(State)							
M.B.C./D.N.C.(State)							
SC/SCA/ST(National)							
SC/SCA/ST(State)		1	1	1	1		29,310
First Generation Free Education							
Loan Scholarship							
Others (Specify the name of the scholarship)							
Total		1	1	1	1		29,310

13. Placement Details: Nil

Name of the Placement Co-ordinator:

Phone No.

Sl.No	Number of Placements & Programme and campus interview	Number of Companies that visited the campus	Number of placements obtained through off campus interviews
1			
2			
3			

14. (a) Outstanding achievements by Faculty members': Nil

Sl.No	Name of the Faculty	Achievements	Agency
1			
2			
2			

14. (b) Outstanding achievements by Students': Nil

Sl.No	Name of the Student	Achievements	Agency
1			
2			
3			

15. Infrastructure and research facilities available (Please specify equipments more than Rs. One Lakh Only):

Sl.No	Name of the Equipments/Computer/Software/Others	Quantity
1	Sonicator	1
2	Lyophilizer	1
3	Double Distillation Unit	1
4	Rotary evaporator with Vacuum Pump	1

16. Extension activities carried out: Nil

Sl.No.	Name of the Activity	Date	Venue	Beneficiaries
1				
2				
3				

17. Library / Learning Resources/ Information and Communication Technology Resources:

Name of the Librarian or Faculty in-charge and qualification:

S.No.	Particulars	Nos.	S.No.	Particulars	Nos.
1	No. of Books Available		8	No. of CDs and Digital Books	
2	No. of Titles Available		9	No. of Indian Magazines	
3	Books Added During the Year 2009		10	No. of Foreign Magazines	
4	No. of Data bases Available		11	Average no. of Students Visiting the Library per day	
5	No. of Online Journals		12	Average no. of Books Issued per day	
6	No. of Indian Journals		13	Availability of Internet (Specify the Capacity) (E.g – 8 Mbps etc..)	
7	No. of Foreign Journals		14	Availability of Language Lab	Yes / No

18. Department Lab: Nil

Sl.No.	Name of the Lab	Purpose Research/Practical	Equipments	
			No.	Value
1				
2				
3				

19. Others (Please Specify):**a. Collaborative Research****Dr.P.Shanmughvel****1.Data mining****Professor Xu Dong,**

Digital Biology Laboratory,

Computer Science Department

110 Christopher S. Bond Life Sciences Center

1201 East Rollins Road

University of Missouri-Columbia

Columbia, MO 65211-2060. Fax :573-884-9676,

2. Integrative**Bioinformatics systems****Prof. Dr. Ralf Hofestädt**

Technische Fakultät

Bioinformatik/Medizinische Informatik

Universität Bielefeld • Postfach 10 01 31 33501 Bielefeld, Germany

3. Comparative Genomics**Prof.Gopal P.Agarwal**

Professor Gopal P. Agarwal

Department of Biochemical Engineering & Biotechnology

Indian Institute of Technology, Delhi

b. Consultancy**c. No. of NET/SET/GATE Qualified students - Nil**

KEY ACADEMIC RATIOS

S.No	Particulars	Formula	Ratio
1	FACULTY RATIOS		
1.1	Non-Teaching staff to Teaching Faculty Members' Ratio	Total No. of Non-Teaching Staff / Total number of Teaching staff	0.16
1.2	Ratio of publications per faculty	Total no. of publications / Total no. of Faculty members	2.40
1.3	Ratio of Paper presentation to Faculty	Total no. of papers presented/ Total no. of Faculty members'	1.60
1.4	Ratio of Workshops, Seminars, Conference organized to Faculty	Total no. of Seminars etc, organised / Total no. of Faculty	0.40
1.5	Ratio of participation	No. of Faculty who attended the programmes / Total number of teaching staff	1.80
1.6	Ratio of Projects to Faculty	Total number of Projects /Total no. of Faculty	1.00
2	RESOURCE RATIOS		
2.1	Ratio of Computers per student	Total no. of Computers in the Department/ Total No. of Students	3.50
2.2	Ratio of Books to students	Total no. of Books / Total no. of Students	LIB.
2.3	Hostellers' Ratio	Total hostel inmates / Total students admitted	0.60
2.4	Constructed area per student	Total constructed area / Total number of students	--
3	STUDENT RATIOS		
3.1	Demand Ratio	Number of Students Applied / No. of Students Admitted	3.45

3.2	Student Faculty Ratio	Total number of Students/Total No. of Faculty members	3.20
3.3	Gender Ratio	Total number of female students / Total number of male students	1.00
3.4	Percentage of differently abled students admitted	No. of differently abled students admitted / Total no. of students admitted	--
3.5	Percentage of students from other state	No. of other state students admitted / Total no. of students admitted	0.05
3.6	Percentage of Foreign students admitted	No. of Foreign students admitted / Total no. of students admitted	--
3.7	Success Rate of Students	Total number of students passed / Total number of students appeared for final exam	1.00
3.8	Cost of education per student	Total Expenditure / Total no. of Students on roll	--
3.9	Amount of scholarship per student	Total amount of scholarships / Total no. of Students getting scholarships	--
3.10	Ratio of students given remedial coaching	No. of students given remedial coaching / Total no. of Students	--

4	OTHER ACADEMIC RATIO		
4.1	Percentage of student dropouts in the academic year 2008 – 2009	Number of dropouts / Number of students admitted	0.20
4.2	Ratio of placements to students	Total no. of Placements / Total no. of out going students	--
4.3	Ratio of students given competitive / Civil service Examination coaching	No. of students given coaching / Total no. of out going Students	--