

**(1.1.1) Curricula developed /adopted have relevance to the local/ national / regional/global developmental needs with learning objectives including program outcomes, program specific outcomes and course outcomes of all the program offered by the University**

(Upload description in not more than 500 words)

The Centre for Clinical Biochemistry was established with the initial financial assistance from UGC under Innovative Programme Scheme in year 2005. The main aim of the Centre is to offer quality research and excellent teaching learning opportunities in the emerging field of Clinical Biochemistry.

**Vision & Mission:** To produce employable skilled manpower with sound technical knowhow in the field of diagnostic health care system, the mission is to serve the society to its maximum.

**Course Offered:** MSc (Clinical Biochemistry)  
Duration; Two Years (4 semesters)

**Curriculum Design:** The course is designed to bridge the interface between clinical & non-clinical aspects of Biochemistry. The curriculum is aptly designed to blend basic biochemistry concepts with the concepts of Clinical Biochemistry. The two-year course is framed of 4 semester of 6 month each. First semester deals with the build up to conceptual framework regarding basic biochemistry and molecular biology. Second semester includes the advanced information of the same that helps the students to qualify competitive examinations like NET, SET & GATE. In the third semester exposure to various organ system diseases along with clinical aspects and importance of clinical biochemistry is made. The last semester of full six months is dedicated to Hospital based Internship cum project trainings. The course contents are continuously monitored, fine tuned, updated and perfected. In past five years the syllabus has been upgraded twice

**Uniqueness:** Only course in school of biological sciences with a full fledged six months (4<sup>th</sup> semester) is dedicated to the Hospital / advance research institution based Internship programme. The internship is conducted at various institutions of national & international repute, such as All India Institute of Medical sciences (AIIMS), New Delhi, Post graduate Institute of Medical Sciences (PGMIER), Chandigarh, SKIMS Soura, and at premier research institutions like IISc & NCBS, Bangalore, CCMB Hyderabad, National Institute of Immunology (NII), JNU, New Delhi

**Outcome:** The pass-outs have a potential to pursue their career as academicians, scientists, counsellors as well as technologists. Rigorous and comprehensive theoretical inputs blended with hard-core practical trainings are the hallmarks of the course. In fact ten maiden batches have already passed out successfully and a good number of them have been enrolled for PhD/research programmes at various prestigious places of international repute like Oxford University, London, various other universities in USA, Germany, New Zealand, Hungary etc at international level and at All India Institute of Medical Sciences (AIIMS), New Delhi, National Institute of Nutrition, Hyderabad, National Institute of Immunology, New Delhi, CDFD, Hyderabad, Indian Institute of Sciences, Bangalore, Indian Institute of Technology, Mumbai at national level. A good number of our students have passed the National level tests, like CSIR-UGC NET, ICMR, DBT and have been selected for various teaching in education sector & administrative jobs by the govt. of Jammu & Kashmir.

A number of pass outs have set up their own diagnostic laboratory centres, In addition the Centre has started research activities focused at addressing clinical and medical problems of the developing world in general and that of the Kashmir Valley in particular.

**(1.1.2) Percentage of programs where syllabus revision was carried out during the last five years  
Data Requirement for last five years (Academic years 2012 -2018)**

Programme Code	Department	Name of the program revised
CLB <i>(The syllabus was revised thoroughly (100%) in 2014 for implementation of CBCS, Further revisions were carried out in 2015 &amp; 2017).</i>	Clinical Biochemistry	MSc. In Clinical Biochemistry

**(1.1.3) Average percentage of courses having focus on employability/ entrepreneurship / skill development  
Data Requirement for last five years (Academic years 2012 -2018)**

Name of the Course with code	Department	Activities with direct bearing on Employability/ Entrepreneurship/ skill development	Name of the Programme
Masters in Clinical Biochemistry (CLB)	Clinical Biochemistry	100%	MSc

Documents: Upload Program; Curriculum; Syllabus of the courses; Minutes of the Boards of Studies/ Academic Council with course approvals. MoUs with relevant organizations for these courses, if any.

**(1.2.1) Percentage of new courses introduced of the total number of courses across all programs offered during the last five years****Data Requirement for last five years (Academic years 2012 -2018)**

Name of the new course introduced	Department	Name of the programme
Bachelor's in Clinical Biochemistry	College Level	BSc

**(1.2.2) Percentage of programs in which Choice Based Credit System (CBCS)/elective course system has been implemented****Data Requirement for last five years (Academic years 2012 -2018)**

Name of all programs adopting CBCS	Department	Name of all programs adopting elective course system
MSc. in Clinical Biochemistry	Clinical Biochemistry	MSc. in Cli Biochemistry

**(1.3.1) Institution integrates cross cutting issues relevant to Gender, Environment and Sustainability, Human Values and Professional Ethics into the Curriculum****Data Requirement for last five years (Academic years 2012 -2018)**

A description of courses which address Gender, Environment and Sustainability, Human Values and Professional Ethics	Department	The list of core courses
From 2015 onwards, Clinical biochemistry started an open elective course (available to all masters students) regarding Bioethics. The course exposes students to ethical issues in preclinical (animal) & research studies. It also includes special issues in research in India as per guidelines of ICMR. Other aspects include guidelines for ethical conduct in the care and use of animals. And social responsibility for clinical researcher.	Clinical Biochemistry 2015 2016	<b>Bioethics in Clinical Research</b> (Code CLB-25-EO15)

**(1.3.2) Number of value-added courses imparting transferable and life skills offered during the last five years****Data Requirement for last five years (Academic years 2012 -2018)**

Names of the value added courses with 30 or more contact hours	Department	No. of times offered during the same year	Total no. of students completing the course in the year
Master's in Clinical Biochemistry	Clinical Biochemistry	Once	34

**(1.3.4) Percentage of students undertaking field projects / internships****Data Requirement for last five years (Academic years 2012 -2018)**

Names of the program	Department	No. of students undertaking field projects / internships in the last five years
MSc. Clinical Biochemistry (2012)	Clinical Biochemistry	36
MSc. Clinical Biochemistry (2013)	Clinical Biochemistry	32
MSc. Clinical Biochemistry (2014)	Clinical Biochemistry	32
MSc. Clinical Biochemistry (2015)	Clinical Biochemistry	33
MSc. Clinical Biochemistry (2016)	Clinical Biochemistry	33
<b>MSc. Clinical Biochemistry (2017)</b>	<b>Clinical Biochemistry</b>	<b>33</b>
<b>MSc. Clinical Biochemistry (2018)</b>	<b>Clinical Biochemistry</b>	<b>33</b>

**(2.1.1) Average percentage of students from other States and Countries during the last five years****Data Requirement for last five years (Academic years 2012 -2018)**

Number of students enrolled from other states and countries	Department	Total number of students enrolled
2012- Nil	Clinical Biochemistry	34
2013- Nil		33
2014- Nil		35
2015- Nil		35
2016- Nil		34
2017- Nil		35
2018- Enrolments yet to start for 2018		-

**(2.1.2) Demand Ratio (Average of last five years)****Data Requirement for last five years (Academic years 2012 -2018)**

Number of seats available in all the programs	Department	Total number of eligible applications received
2012- (34)	Clinical Biochemistry	311
2013- (34)		297
2014- (34 + 1 SN)		314
2015- (34 + 1 SN)		316
2016- (34)		341
2017- (34 + 1 SN)		250
2018- (26)		298

**(2.1.3) Average percentage of seats filled against seats reserved for various categories as per applicable reservation policy during the last five years****Data Requirement for last five years (Academic years 2012 -2018)**

Number of students admitted from the reserved category	Department	Total number of seats earmarked for reserved category as per GOI or State Government rule
Year- 2012 : 08 seats	Clinical Biochemistry	08 seats
Year -2013 : 05 seats	-do-	08 seats
Year -2014 : 06 seats	-do-	08 seats
Year -2015 : 08 seats	-do-	08 seats
Year- 2016 : 05 seats	-do-	08 seats
Year -2017 : 05 seats	-do-	08 seats
Year- 2018 : NA	-do-	08 seats

**(2.2.1) The institution assesses the learning levels of the students, after admission and organises special programs for advanced learners and slow learners**

- Induction cum orientation programme is carried out for the newly admitted students at the beginning of academic session.
- The students are assessed together via regular internal assessments followed by six monthly semester examinations. And from 2017 onwards university has adopted unit wise examination system allowing continuous assessment of students through out the academic session.
- Every teacher keeps track of his students in the class on regular basis by conducting surprise oral and written tests to evaluate their learning levels, and slow learners are provided required help and attention.
- Faculty members are available full time during their office hours and even beyond for the guidance of advanced learners and assistance of the slow learning students.
- For overall monitoring, class representatives are elected with the purpose of acting as an official communication channel between teacher and the class.

**(2.2.2) Student - Full time teacher ratio****Data Requirement for last five years (Academic years 2012 -2018)**

Total number of students enrolled in the institution	Department	Total number of full time teachers in the institution
Year- 2012 : 34 students	Clinical Biochemistry	04
Year -2013 : 33 students	-do-	04
Year -2014 : 35 students	-do-	04
Year -2015 : 35 students	-do-	04 + 1 (RF)*
Year- 2016 : 34 students	-do-	04 + 1 (RF)*
<b>Year -2017 : 34 students</b>	<b>-do-</b>	<b>04 + 1 (RF)*</b>
<b>Year- 2018 :</b>	<b>-do-</b>	<b>04 + 1 (RF)*</b>

\* Dr. Abdul Wajid Bhat joined as (Ramanujan Fellow) in Clinical Biochemistry from 2015 .

**(2.2.3) Percentage of differently abled students (Divyangjan) on rolls****Data Requirement for last five years (Academic years 2012 -2018)**

Total number of differently abled students on roll in the institution	Department	Total number of students on roll in the institution
Year- 2012 : Nil	Clinical Biochemistry	34
Year -2013 : 01	-do-	33
Year -2014 : Nil	-do-	35
Year -2015 : 01	-do-	35
Year- 2016 : Nil	-do-	34
<b>Year -2017 : Nil</b>	<b>-do-</b>	<b>34</b>
<b>Year- 2018 :</b>	<b>-do-</b>	<b>-</b>

**(2.3.1) Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences**

- **Practicals;** Students of clinical biochemistry are exposed to 3 hours of practical trainings per day each during their 1<sup>st</sup>, 2<sup>nd</sup> & 3<sup>rd</sup> semesters. The full 4<sup>th</sup> semester includes **project dissertations** at various institutes of repute in and outside the state of J&K.
- **Seminars;** Conducted on regular basis to allow the exchange of ideas and knowledge with seniors, research scholars and teachers.
- **Journal Club;** For participative learning, students during their 2<sup>nd</sup> and 3<sup>rd</sup> semesters have to prepare research papers from reputed journals and present the power point presentations of the same in front of all students and faculty. This not only greatly helps their learning process, but does increase their own knowledge of the various latest subjects, and **also fine tune their** communicative and presentation skills.
- **Extension Lectures;** Expert visiting faculties and scientists from reputed national and international institutes are regularly invited for talks, to provide research and practical based understanding of major areas of clinical biochemistry and health sciences. In addition, interactive sessions are conducted with our own former students currently working in various international and national reputed universities for motivation, encouragement and career guidance.
- **Tutorials;** To focus and discuss the knowledge obtained in the extension lectures delivered by visiting faculties.
- **Group Discussions & Participative learning;** The students are involved in group-discussions of various topics from within and outside syllabi. Students are provided in advance the material and notes by the concerned teacher regarding the selected topic, encouraged to first read it individually and later discuss it vigorously and loudly among the group. This method has proved quite useful not only increasing the learning abilities of the slow learners, but has resulted in boredom of routine lecture classes while increasing the inquisitiveness and social interaction among the students themselves.
- **Internships;** As an essential component of master's course, every student has to undertake a six-month hands on training programme to hone their experimental research skills. The students are **supposed** to undertake these trainings at leading research institutes and super speciality hospitals of the country to explore and work on the advance research areas of clinical biochemistry and related areas.

**(2.3.2) Average percentage of teachers using ICT for effective teaching with Learning Management Systems (LMS), E-learning resources etc.****Data Requirement for last five years (Academic years 2012 -2018)**

Number of teachers using ICT (LMS, e-resources)	Department	Number of teachers on roll	ICT tools and resources available
Year- 2012 : 06	Clinical Biochemistry	4 + 2*	02
Year -2013 : 06	-do-	4 + 2*	02
Year -2014 : 06	-do-	4 + 2*	03
Year -2015 : 06	-do-	4 + 2*	03
Year- 2016 : 07	-do-	5 + 2*	03
<b>Year -2017 : 06</b>	<b>-do-</b>	<b>5 + 2*</b>	<b>03</b>
<b>Year- 2018 : 07</b>	<b>-do-</b>	<b>5 + 2*</b>	<b>03</b>
* CL : contractual lecturers			

**(2.3.3) Ratio of mentor to students for academic and stress related issues****Data Requirement for last five years (Academic years 2012 -2018)**

Number of students assigned to each Mentor	Department
Year- 2012 1: 08	Clinical Biochemistry
Year -2013 1: 08	-do-
Year -2014 1: 09	-do-
Year -2015 1: 09	-do-
Year- 2016 1: 07	-do-
<b>Year -2017 1: 07</b>	<b>-do-</b>
<b>Year- 2018 1: 06</b>	<b>-do-</b>



**(2.4.1) Average percentage of full time teachers against sanctioned posts during the last five years****Data Requirement for last five years (Academic years 2012 -2018)**

Number of full time teachers	Department	Number of sanctioned posts
Year- 2012 : 04	Clinical Biochemistry	04
Year -2013 : 04	-do-	04
Year -2014 : 04	-do-	04
Year -2015 : 04	-do-	04
Year- 2016 : 05*	-do-	04
<b>Year -2017 : 05*</b>	<b>-do-</b>	<b>04</b>
<b>Year- 2018 : 05*</b>	<b>-do-</b>	<b>04</b>

\* one full time teacher is employed on tenure basis under Ramanujan Fellowship scheme

**(2.4.3) Average teaching experience of full time teachers in number of years****Data Requirement for last five years (Academic years 2012 -2018)**

Name of the teachers	Department	Number of years with teaching experiences <i>(as on august 2018)</i>
Dr. Syed Hussain Mir	Clinical Biochemistry	12
Dr. Fouzia Rashid	-do-	12
Dr. Tanveer Ali Dar	-do-	8.5
Dr. Showkat Ahmad Ganai	-do-	7.5
<b>Dr. Abdul Wajid Bhat</b>	<b>-do-</b>	<b>2.5</b>

**(2.4.4) Average percentage of full time teachers who received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the last five years****Data Requirement for last five years (Academic years 2012 -2018)**

Number of full time teachers receiving awards from State, National, International level	Department	Total number of teachers
Year- 2012 : 01*	Clinical Biochemistry	04
Year -2013 : 01	-do-	04
Year -2014 : 02**	-do-	04
Year -2015 : 02***	-do-	04
Year- 2016 : 01	-do-	05
<b>Year -2017 : 0</b>	<b>-do-</b>	<b>05</b>
<b>Year -2018 : 0</b>	<b>-do-</b>	<b>05</b>
<ul style="list-style-type: none"> <li>* Dr. Syed H Mir got BIOSS Post Doc Fellowship at University of Freiburg, Germany (Oct 2012-Feb 2015).</li> <li>**Dr. Tanveer Ali Dar has been awarded INSA visiting fellowship award- 2104-2015.</li> <li>***Dr Abdul Wajid Bhat was awarded Ramanajun Fellowship by DST-SERB 2015-2020.</li> </ul>		

**(2.4.5) Average percentage of full time teachers from other States against sanctioned posts during the last five years****Data Requirement for last five years (Academic years 2012 -2018)**

Number of full time teachers from other states	Department	Total number of sanctioned posts
Year- 2012 : Nil	Clinical Biochemistry	04
Year -2013 : Nil	-do-	04
Year -2014 : Nil	-do-	04
Year -2015 : Nil	-do-	04
Year- 2016 : Nil	-do-	04
<b>Year -2017 : Nil</b>	<b>-do-</b>	<b>04</b>
<b>Year- 2018 : Nil</b>	<b>-do-</b>	<b>04</b>

**(2.6.1) Program outcomes, program specific outcomes and course outcomes for all programs offered by the institution are stated and displayed on website and communicated to teachers and students**

**Data Requirement for last five years (Academic years 2012 -2018)**

Upload COs for all courses (exemplars from Glossary-Notes)	Department	Upload a description of Mechanism of Communication
Year- 2012 :	Clinical Biochemistry	
Year -2013 :	-do-	
Year -2014 :	-do-	
Year -2015 :	-do-	
Year- 2016 :	-do-	

**(2.6.2) Attainment of program outcomes, program specific outcomes and course outcomes are evaluated by the institution**

Upload a description of the method of measuring attainment of POs , PSOs and COs in not more than 500 words and the level of attainment of POs , PSOs and COs.

**(2.6.3) Average pass percentage of students**

**Data Requirement for last five years (Academic years 2012 -2018)**

Program Code	Department	Name of the program	Number of students appeared	Number of students passed	Pass percentage
CLB (2012)	Clinical Biochemistry	M.Sc in Clinical Biochemistry	68	68	100%
CLB (2013)	-do-	-do-	67	60	89.5%
CLB (2014)	-do-	-do-	65	58	89.2%
CLB (2015)	-do-	-do-	66	57	86.3%
CLB (2016)	-do-	-do-	65	62	95.3%
CLB (2017)	-do-	-do-	65	63	96.9%
CLB (2018)	-do-	-do-	-	-	-

\* Number of students appeared, passed and pass percentage reflects total number of students (including both batches) in an academic year.

### (3.1.5) University has the following facilities

Data Requirement for last five years (Academic years 2012 - 2018)

Name of the facility	Department	Year of establishment	Videos/pictures
Diagnostic facilities	Clinical Biochemistry	2011	
Biochemical Analyser	-do-	2012	
ELISA Reader	-do-	2012	
Ion Analyser	-do-	2012	
Hematology Analyser	-do-	2012	
-20 deep freezer	-do-	2012	
-80 deep freezer	-do-	2013	
PCR	-do-	2012	
RT-PCR	-do-	2015	
Cooling centrifuge	-do-	2015	
Gel documentation system	-do-	2015	
Immuno Blot Analysis		2012	
Spectroscopic facilities	-do-	2015	
Proteomics	-do-	2014	
Cell Culture Yeast	-do-	2016	
Phytochemistry	-do-	2013	
-20 deep freezer	-do-	2017	
Drinking Water purification/cooling facility	-do-	2018	

Documents: Videos and photographs geotagged

**(3.1.6) Percentage departments with UGC-SAP, CAS, DST-FIST ,DBT,ICSSR and other similar recognitions by government agency****Data Requirement for last five years (Academic years 2012 - 2018)**

Name of the Department	Name of the Scheme	Name of the funding agency	Year of Award	Funds provided (lacs)	Duration of award
Clinical Biochemistry	RGYI	DBT	2013	34.95*	3 yrs
-do-	DMPB	JKDST	2013	18.00**	3 yrs
-do-	DST-WOS	DST	2013	24.00***	3 yrs
-do-	UGC-MRP	UGC	2013	01.20**	2 yrs
-do-	DST-WOSA	DST	2015	13.00****	3 yrs
	DST-SERB	DST	2015	69.40*****	5 yrs
-do-		CSIR	2016	22.00*	3 yrs
* Dr Tanveer, ** Dr Fouzia, *** Douhath, ****Aafia, *****Dr Wajid					

Upload of departmental recognition award letters on departmental website and send a hard copy and the scanned copies to office of the DIQA

**(3.3.3) Number of awards for innovation won by institution/teachers/research scholars/students during the last five years****Data Requirement for last five years (Academic years 2012 - 2018)**

Name of the Awardee	Department	Name of the Awarding Agency with contact details	Year of Award

Documents: Upload of award letters

**(3.4.4) Number of Ph.D.s awarded per teacher during the last five years.****Data Requirement for last five years (Academic years 2012 - 2018)**

Name of the PhD/MPhil scholar	Department	Name of the Department	Name of the guide/s	Year of registration of the scholar	Year of award of PhD/MPhil
Syed Douhath Yousuf (Mphil)	Biochemistry	Clinical Biochemistry	Dr Fouzia Rashid	October, 2010	November 2012
Syed Douhath Yousuf (PhD)	-do-	-do-	-do-	November, 2012	May, 2017
Saniya Nissar (M.Phil)	-do-	-do-	-do-	2013	January, 2015
Saniya Nissar (PhD)	-do-	-do-	-do-	January 2015	Thesis submitted
Saika Manzoor (M.Phil)	-do-	-do-	-do-	June, 2014	April, 2017
Qudsia Fatima (M.Phil)	-do-	-do-	-do-	June, 2014	May, 2017
Iram Ashaq Kawa (M.Phil)	-do-	-do-	-do-	June, 2014	April, 2017
Syed Sakina Mustafa (M.Phil)	-do-	-do-	-do-	June, 2014	April, 2017
Jasiya Qadri (M.Phil)	-do-	-do-	-do-	June, 2014	April, 2017
Insha din (M.Phil)	-do-	-do-	-do-	June, 2014	April, 2017
Anzar A. Shah (MPhil)	-do-	-do-	Dr. Tanveer Ali Dar	November, 2014	2017
Mashooq A. Dar (MPhil)	-do-	-do-	-do-	November, 2014	December, 2016
Parvaiz A. Dar (MPhil)	-do-	-do-	-do-	October, 2012	November, 2015
Ehsaan Abdullah (MPhil)	-do-	-do-	-do-	November, 2014	2016
Showkat Ahmad Dar (PhD)	-do-	-do-	Dr Showkat Ahmad	2012	2017
Aashiq Hussain Bhat (PhD)	-do-	-do-	-do-	2013	2017
Parvaiz Ahmad Dar (Mphil)	-do-	-do-	-do-	2013	2015
Shazia Mohammad (Mphil)	-do-	-do-	-do-	2014	2016
Khalid Bashir Dar (Mphil)	-do-	-do-	-do-	2014	2016
Mudasir Nabi (Mphil)	-do-	-do-	-do-	2015	2017
Suhail Anees (Mphil)	-do-	-do-	-do-	2014	2016
Khalid Bashir Dar (PhD)	-do-	-do-	-do-	2017	-
Saima Nazir (PhD)	-do-	-do-	-do-	2017	-
Ambreen Farooq (PhD)	-do-	-do-	-do-	2018	-
Ina Amin (PhD)	-do-	-do-	Dr Syed H Mir	2017	-

**(3.4.5) Number of research papers per teacher in the Journals notified on UGC website during the last five years****Data Requirement for last five years (Academic years 2012 - 2018)**

Title of paper	Name of the author/s	Department	Name of journal	Year of publication	ISBN/ISSN number
<b>Dr. Syed Hussain Mir</b>					
Prevalence of human papilloma virus infection in Kashmiri ethnic female population.	Asia Asiaf, Shiekh Tanveer Ahmad, Muhammad Afzal Zargar, Shahida Mufti, <b>Syed Hussain Mir</b>	Clinical Biochemistry	Genetic Testing and Molecular Biomarkers	2012	ISSN: 1945-0265   Online ISSN: 1945-0257  DOI10.1089/gtmb.2011.0354
Pattern of urinary albumin excretion in normotensive young and adolescent Indian women with polycystic ovary syndrome	Mohd Ashraf Ganie, Khalid Jamal Farooqui, Mohd Ashraf Bhat, Mohammad Muzzafar Mir, Zaffar Amin Shah, Syed Douhath, <b>Syed Hussain Mir</b> , et. al.	-do-	Indian Journal of Endocrinology and Metabolism	2012	ISSN: 2230-8210  DOI10.4103/230-8210.93752
Molecular Characterization of the Na/H-Antiporter NhaA from Salmonella Typhimurium	Christopher J. Lentès, <b>Syed H. Mir</b> , Marc Boehm, Constana Ganea, Klaus Fendler, Carola Hunte	-do-	PLOS One	2014	1932-6203  DOI No. 10.1371/j
Generation of Recombinant Antibody Fragments for Membrane Protein Crystallization	<b>Syed H. Mir</b> , Claudia Esher, Wei-Chun Kaw, Dominic Birth, Christophe Wirth, Carola Hunte	-do-	Methods in enzymology	2015	0076-6879  DOI10.1016/bbs.2014.12.029
Effect of antibody binding on the transport properties of the Na <sup>+</sup> /H <sup>+</sup> Antiporter NhaA from Salmonella typhimurium	Anika Fippel, <b>Syed H. Mir</b> , Christopher J. Lentès, Christophe Wirth, Carola Hunte	-do-	Biochimica et Biophysica Acta (BBA) Bioenergetics,	2015	0005-2728  1837(108): DC No. 10.1016/j
Targeting copper induced oxidative damage to proteins by ligation: a novel approach towards chelation therapy for oxidative stress disorders.	Syed Raashid Maqsood, Badruddin Khan, Mohsin Ahmad Bhat, Tanveer Ali Dar and <b>Syed Hussain Mir</b>	-do-	New J. Chem.,	2015	ISSN 1144-0546
Towards structural and functional characterization of Na <sup>+</sup> /H <sup>+</sup> antiporter variants	Anika Fippel, <b>Syed H. Mir</b> , Christopher J. Lentès, Christophe Wirth, Carola Hunte	-do-	Biochimica et Biophysica Acta (BBA) Bioenergetics	2016	0005-2728  doi:10.1016/j.bbabi.2016.04.163



## Dr. Fouzia Rashid

Pattern of urinary albumin excretion in normotensive young and adolescent Indian women with Polycystic ovary syndrome (PCOS).	M.Ashraf Ganie, Zaffar Amin Shah, <b>Fouzia Rashid</b> et al	-do-	<b>Indian Journal of Endocrinology and Metabolism</b>	2012	ISSN: 1875-5305 (Online) ISSN: 0929-8665 (Print)
Chromosome 18p11.2 harbours susceptibility marker - D18S452, for Bipolar Affective Disorder	Andrabi, Mutahar; Hussain, Arshad; <b>Rashid, Fouzia</b> ; Sheikh, Ozar; Shah, Idrees; DAR, NAZIR	-do-	<b>Indian J Psychiatry</b>	2013	1472-6807
DNA repair gene--XRCC1 in relation to genome instability and role in colorectal carcinogenesis.	Nissar S, Sameer AS, Rasool R, <b>Rashid F</b>	-do-	<b>Oncol Res Treat</b>	2014	ISSN: 2296-5270
High-sensitivity C- reactive protein (hs-CRP) levels and its relationship with components of polycystic ovary syndrome in Indian adolescent women with polycystic ovary syndrome (PCOS).	Ganie MA, Hassan S, Nisar S, Shamas N, Rashid A, Ahmed I, Douhat S, Mudassar S, Jan VM, <b>Rashid F</b>	-do-	<b>Gynecol Endocrinol</b>	2014	ISSN: 0951-3590
Polymorphism of the DNA Repair Gene XRCC1 (Arg194Trp) and its role in Colorectal Cancer in Kashmiri Population: a Case Control Study.	Nissar S <sup>1</sup> , Sameer AS, Rasool R, Chowdri NA, <b>Rashid F</b>	-do-	<b>Asian pacific J cancer.</b>	2015	ISSN: 1513-7368
The ICAM-1 Gly241Arg Polymorphism is Not Associated With Polycystic Ovary Syndrome - Results from a Case Control study in Kashmir, India.	Yousuf SD, Ganie MA, Zargar MA, Parvez T, <b>Rashid F</b>	-do-	<b>Asian Pacific Journal of Cancer Prevention</b>	2016	1513-7368
Role of <i>TLR4</i> gene polymorphisms in the colorectal cancer risk modulation in ethnic Kashmiri population – A case–control study.	Saniya Nissar, Aga Syed Sameer, Roohi Rasool, Qurteeba Qadri, Nissar A. Chowdri, <b>Fouzia Rashid</b>	-do-	<b>Egyptian Journal of Medical Human Genetics.</b>	2016	1110-8630
Does the Oral Contraceptive Pill Increase Plasma Intercellular Adhesion Molecule-1, Monocyte Chemoattractant Protein-1, and Tumor Necrosis Factor- $\alpha$ levels in Women with Polycystic Ovary Syndrome: A Pilot Study.	Yousuf SD, <b>Rashid F</b> , Mattoo T, Shekhar C, Mudassar S, Zargar MA, Ganie MA.	-do-	<b>J Pediatr Adolesc Gynecol.</b>	2017	1083-3188
Metabolic Derangements and Possible CVD Risk in PCOS Women Owing to Use of OCP's as a Treatment Mode – Pros and Cons.	Saika Manzoor , Ashraf M. Gania , Syed Douhath Yusuf , Shajrul Amin , Rizwana Habib , <b>Fouzia Rashid.</b>	-do-	<b>J Endocrinol Diabetes Obes</b>	2017	2333-6692
The Lys469glu/K469E Polymorphism of the Inflammatory Gene Intercellular Adhesion Molecule-1 Lacks any Apparent Role in the	Yousuf SD, Ganie MA, Zargar MA, Amin SU, Bhat GA, Masood A, <b>Rashid F.</b>	-do-	<b>Asian Pac J Cancer Prev.</b>	2017	1513-7368

Polycystic Ovary Syndrome in Kashmiri Women: A Case Control Study.						
. Evaluation of deletion polymorphisms of glutathione S-transferase genes and colorectal cancer risk in ethnic Kashmiri population: A case-control study.		Nissar S, Sameer AS, Rasool R, Chowdri NA, <b>Rashid F.</b>	-do-	<b>Indian Journal of Cancer</b>	2017	1998-4774
POLYCYSTIC OVARY SYNDROME (PCOS) AND RELATED DISEASES		Humira Jeelani, Mohd Ashraf Ganie, Shajrul Amin, Iram Ashaq Kawa, Qudsia Fatima, Zainab Drabu, <b>Fouzia Rashid.</b>	-do-	<b>PRECISION MEDICINE</b>	2017	2456-2254
OXIDATIVE STRESS BIOMARKERS IN POLYCYSTIC OVARY SYNDROME (PCOS),		Humira Jeelani, Mohd Ashraf Ganie, Tabassum Parvez, Qudsia Fatima, Iram Ashaq Kawa, Saika Manzoor, <b>Fouzia Rashid.</b>		<b>PRECISION MEDICINE</b>	2017	2456-2254

### Dr Tanvir A Dar

An Overview on Potential Neuroprotective Compounds for Management of Alzheimer's Disease		Ishfaq Ahmed Sheikh, Riyasat Ali, Tanveer A. Dar and Mohammad Amjad Kamal	-do-	<b>CNS &amp; Neurological Disorders - Drug Targets</b>	(2012)	<b>ISSN: 1996-3181 (Online)</b> <b>ISSN: 1871-5273 (Print)</b>
Recent trends in treating neuronal proteinopathies,		Rimpy Kaur Chowhan, Marina Warepam, <b>Tanveer Ali Dar</b> and Laishram Rajendrakumar Singh	-do-	<b>Journal of Proteins and Proteomics</b>	(2013)	0975-8151
In vitro antioxidant and cytotoxic activities of <i>Arnebia benthamii</i> (Wall ex. G. Don): a critically endangered medicinal plant of Kashmir Valley..		Ganie SA, <b>Dar TA</b> , Hamid R, Zargar O, Ul Abeer S, Masood A, Amin S, Zargar MA.	-do-	<b>Oxid Med Cell Longev</b>	(2014)	ISSN:1942-0900 (Print) ; 1942-0994 (Electronic)
Molecular linkages between Diabetes and Alzheimer's disease: Current scenario and future prospects,		<b>Tanveer A. Dar</b> , Ishfaq A. Sheikh, Showkat A. Ganie, Riyasat Ali, Laishram R. Singh, Mohammad A. Kamal and Mohammad A. Zargar	-do-	CNS Neurol. Disord. Drug Targets.	(2014)	<b>ISSN: 1996-3181 (Online)</b> <b>ISSN: 1871-5273 (Print)</b>
Antioxidant and Hepatoprotective Effects of <i>Crataegus songarica</i> Methanol Extract		S A Ganie, <b>T A Dar</b> , R Hamid, A Masood, A Zargar, S Amin, O Zargar	-do-	<b>J Environ Pathol Toxicol Oncol.</b>	(2014)	ISSN Print: <b>0731-8898</b> ISSN Online: <b>2162-6537</b>
Structural characteristic of the initial unfolded state on refolding determines catalytic efficiency of the folded protein in presence of osmolytes.		Warepam M, Sharma GS, <b>Dar TA</b> , Khan MK, Singh LR	-do-	PLoS One.	(2014)	1932-6203
Ignored Avenues in Alpha-synuclein induced proteiopathy.		Chowhan RK, Mittal S, <b>Dar TA</b> , Kamal MA, Singh LR	-do-	CNS Neurol Disord Drug Targets.	(2014)	<b>ISSN: 1996-3181 (Online)</b> <b>ISSN: 1871-5273 (Print)</b>
Reshaping the Protein Folding		Sharma GS, <b>Dar TA</b> ,	-do-	Curr Protein Pept	(2015)	<b>ISSN: 1875-</b>

Pathway by Osmolyte via its Effects on the Folding Intermediates.	Singh LR		Sci.		<b>5550 (Online) ISSN: 1389-2037 (Print)</b>
Targeting copper induced oxidative damage to proteins by ligation: a novel approach towards chelation therapy for oxidative stress disorders.	Syed Raashid Maqsood, Badruddin Khan, Mohsin Ahmad Bhat, <b>Tanveer Ali Dar</b> and Syed Hussain Mir	-do-	<b>New J. Chem.,</b>	<b>(2015)</b>	ISSN 1144-0546
Salt Potentiates Methylamine Counteraction System to Offset the Deleterious Effects of Urea on Protein Stability and Function	Rahman S, Rehman MT, Singh LR, Warepam M, Ahmad F, <b>Dar TA</b>	-do-	PLos One	<b>(2015)</b>	1932-6203
Protein N-homocysteinylation: From cellular toxicity to neurodegeneration.	Sharma GS, Kumar T, <b>Dar TA</b> , Singh LR	-do-	<b>Biochim Biophys Acta.</b>	<b>(2015)</b>	0304-4165
Alanine Counteracts the Destabilizing Effect that Urea has on RNase-A.	Chowhan RK, Ali F, Bhat MY, Rahman S, Singh LR, Ahmad F, <b>Dar TA</b>	-do-	<b>Protein Peptide Letters</b>	2016	<b>ISSN: 1875-5305 (Online) ISSN: 0929-8665 (Print)</b>
Human sex hormone-binding globulin as a potential target of alternate plasticizers: an in silico study.	Sheikh IA, Yasir M, Abu-Elmagd M, Dar TA, Abuzenadah AM, Damanhour GA, Al-Qahtani M, Beg MA	-do-	BMC Struct Biol. .	2016	1472-6807
Unique Medicinal Properties of Withania Somnifera: Phytochemical Constituents and Protein Component	Dar PA, Singh LR, Kamal MA, Dar TA	-do-	Current Pharmaceutical Design	2016	
Expression kinetics of natural resistance associated macrophage protein (NRAMP) genes in Salmonella Typhimurium-infected chicken	Dar MA, Ahmed R, Urwat U, Ahmad SM, Dar PA, Kushoo ZA, Dar TA, Mumtaz PT, Bhat SA, Amin U, Shabir N, Bhat HF, Shah RA, Ganai NA and Heidari M	-do-	<b>BMC Veterinary Research</b>	<b>2018</b>	
Trimethylamine N-oxide abolishes the chaperone activity of $\alpha$ -casein: an intrinsically disordered protein.	Bhat, Mohd Younus, Laishram Rajendrakumar Singh, and <b>Tanveer Ali Dar</b>	-do-	<b>Nature Scientific report</b>	<b>2017</b>	
Effect of an Imposed Contact on Secondary Structure in the Denatured State of Yeast Iso-1-cytochrome c	Danielson, Travis A., Jessica M. Stine, <b>Tanveer A. Dar</b> , Klara Briknarova, and Bruce E. Bowler	-do-	<b>Biochemistry</b>	<b>2017</b>	
Effect of an Imposed Contact on Secondary Structure in the Denatured State of Yeast Iso-1-cytochrome c	Dar, Parvaiz A., Fasil Ali, Ishfaq A. Sheikh, Showkat A. Ganie, and <b>Tanveer A. Dar.</b>	-do-	<b>Pharmaceutical Biology</b>	<b>2017</b>	
Salmonella typhimurium in poultry	Dar, M. A., S. M. Ahmad, S. A. Bhat, R. Ahmed, U. Urwat, P. T. Mumtaz, <b>Dar, TA</b> , Shah, RA and Ganai NA	-do-	<b>World's Poultry Science Journal</b>	<b>2017</b>	

## Dr Showkat A Ganai

Radical scavenging and antibacterial activity of <i>Arnebia benthamii</i> methanol extract	<b>Showkat A Ganie</b> , Asima Jan, Sabeera Muzaffar, Bilal A Zargar, Rabia Hamid, M Afzal Zargar	Clinical biochemistry	Asian Pacific Journal of Tropical Medicine;	2012	1995-7645
Podophyllum hexandrum aqueous extract as a potential free radical scavenger	<b>Showkat Ahmad Ganie</b> , Shajrul Amin, Rabia Hamid, Abid Hamid, Rabiya Majeed, Yasrib Qurishi, Bilal A. Zargar, Akbar Masood, Mohammad Afzal Zargar	do	Redox Report	2012	1351-0002
Effect of long dose exposure of Podophyllum hexandrum methanol extract on antioxidant defense system and body and organ weight changes of albino rats	<b>Showkat Ahmad Ganie</b> , Bilal Ahmad Zargar, Akbar Masood, Mohmmad Afzal Zargar.	do	Asian Pacific Journal of Tropical Biomedicine	2012	2221-1691
Nutritional values and antioxidant potential of some edible mushrooms of Kashmir valley	Rouf Hamza Boda, Abdul Hamid Wani, Mohammad Afzal Zargar, Bashir Ahmad Ganie, Bilal Ahmad Wani and <b>Showkat Ahmad Ganie</b> .	do	Pakistan journal of Pharmaceutical Sciences;	2012	1011601X
Free Radical Scavenging Activity of <i>Elsholtzia densa</i>	Misba Khan, <b>Showkat Ahmad Ganie</b> , Ishfak Hussain Wani, Bashir Ahmad Ganai, Akbar Masood, Mohmmad Afzal Zargar, Akhter Hussain Malik, Rabia Hamid	do	Journal of Acupuncture and Meridian Studies;	2012	2005-2901
Seasonal and monthly variations of protein content in the muscle of fish <i>Schizothorax esocinus</i>	Ulfat Jan, Mustafa Shah, Tahila Manzoor and <b>Showkat Ahmad Ganie</b>	do	Recent Research in Science and Technology;	2012	2076-5061
Hepatoprotective and Antioxidant Activity of Rhizome of <i>Podophyllum hexandrum</i> against Carbon Tetra Chloride Induced Hepatotoxicity in Rats	<b>Showkat Ahmad GANIE</b> , Bilal Ahmad ZARGAR, Akbar MASOOD, and Mohammad Afzal ZARGAR.	do	Biomedical and environmental sciences;	2013	0895-3988
Induction of apoptosis in human pancreatic MiaPaCa-2 cells through the loss of mitochondrial membrane potential ( $\Delta\Psi_m$ ) by <i>Gentiana kurroo</i> root extract	Bilal A. Wani, D. Ramamoorthy, Manzoor A. Rather, N. Arumugam, Abid Hamid, <b>Showkat A. Ganie</b> , Bashir A. Ganai, Rajneesh Anand, Ajai P. Gupta.	do	Phytomedicine	2013	0944-7113
Evaluation of antimicrobial activity of a lectin isolated and purified from <i>Indigofera heterantha</i>	Sakeena Qadir, Ishfak Hussain Wani, Shaista Rafiq, <b>Showkat Ahmad Ganie</b> , Akbar Masood, Rabia Hamid.	do	Advances in Bioscience and Biotechnology	2013	2156-8502
<i>In Vitro</i> Antioxidant and Cytotoxic Activities of <i>Arnebia</i>	<b>Showkat Ahmad Ganie</b> , Tanveer Ali	do	Oxidative Medicine and	2014	1942-0900

<i>benthamii</i> (Wall ex. G. Don): A Critically Endangered Medicinal Plant of Kashmir Valley	Dar, Rabia Hamid, Ovais Zargar, Shayaq UI Abeer, Akbar Masood, Shajrul Amin, and Mohammad Afzal Zargar		Cellular Longevity;		
Variation of lipid and carbohydrate content in <i>Schizothorax esocinus</i> from Dal lake of Kashmir Valley	Tahila Manzoor, Ulfat Jan, Mustafa Shah and <b>Showkat Ahmad Ganie</b>	do	Pakistan journal of Biological sciences;	2014	1028-8880
Hepatoprotective activity of LC–ESI–MS standardized <i>Iris spuria</i> rhizome extract on its main bioactive constituents	Nayeema Akthera,, Khursheed Andrabi, Albeena Nissar, <b>Showkat Ganai</b> , B.K. Chandan, A.P. Gupta, Manoj Khuswant, Sarwat Sultana, Abdul S. Shawl.	do	Phytomedicine	2014	0944-7113
Antioxidant and Hepatoprotective Effects of <i>Crataegus songarica</i> Methanol Extract	<b>Showkat Ahmad Ganie</b> , Tanveer Ali Dar, Bilal Zargar, Rabia Hamid, Ovais Zargar, Parvaiz Ahmad Dar, Shayaq UI Abeer, Akbar Masood, Shajrul Amin & Mohammad Afzal Zargar.	do	Journal of Environmental Pathology, Toxicology and Oncology	2014	0731-8898
<i>Crataegus songarica</i> methanolic extract accelerates enzymatic status in kidney and heart tissue damage in albino rats and its <i>in vitro</i> cytotoxic activity	<b>Showkat Ahmad Ganie</b> , Tanveer Ali Dar, Sabuhi Zargar, Aashiq Hussain Bhat, Khalid Bashir Dar, Akbar Masood & Mohammad Afzal Zargar	do	Pharmaceutical Biology;	2015	1388-0209
<i>Taxus wallichiana</i> as a Potential <i>in vitro</i> Antioxidant with Good Lethal Effect on Pathogenic Bacterial Strains	Manzoor Ahmad, Mohd Yaseen, Aashiq Bhat, Bashir A. Ganai, Mohammad A. Zargar, <b>Showkat A. Ganie</b> and Rashida Qureshi	do	American Journal of Phytomedicine and Clinical Therapeutics;	2015	2321-2748
Anti-inflammatory effect of lycopene rich paste extract in the presence of NSAID on carrageenan induced paw oedema	Sabuhi Zargar, <b>Showkat Ahmad Ganie</b> , Akbar Masood and Mohammad Afzal Zargar	do	Asian Journal of Plant Science and Research;	2015	2249-7412
Oxidative stress, mitochondrial dysfunction and neurodegenerative diseases; a mechanistic insight	Aashiq Hussain Bhat, Khalid Bashir Dar, Suhail Anees, Mohammad Afzal Zargar, Akbar Masood, Manzoor Ahmad Sofi, <b>Showkat Ahmad Ganie</b>	do	Biomedicine & Pharmacotherapy	2015	0753-3322
Melatonin: A Potential Anti-Oxidant Therapeutic Agent for Mitochondrial Dysfunctions and Related Disorders	<b>Showkat Ahmad Ganie</b> , Tanveer Ali Dar, Aashiq Hussain Bhat, Khalid B. Dar, Suhail Anees, Mohammad Afzal Zargar, and Akbar Masood	do	Rejuvenation Research;	2016	1549-1684

An ornamental plant targets epigenetic signaling to block cancer stem cell-driven colon carcinogenesis	Ishfaq Ahmed, Badal C.Roy, Dharmalingam Subramaniam, <b>Showkat Ahmad Ganie</b> , Deep Kwatra, Dan Dixon, Shrikant Anant, Mohammad Afzal Zargar and Shahid Umar	do	Carcinogenesis	2016	1460-2180
Genetic diversity and population structure of Rheum species in Kashmir Himalaya based on ISSR markers	Shagoon Tabin, Azra Nahaid Kamili, <b>Showkat Ahmad Ganie</b> , Ovais Zargar, Vikas Sharma, Raghbir Chand Gupta	do	Flora	2016	0367-2530
Gracilone, a new sesquiterpene lactone from Tanacetum gracile (Tansies)	Gulzar Bhat, Akbar Masood, Bashir A. Ganai, Baseerat Hamza, <b>Showkat Ganie</b> , Tasfi Shafi, Ahmed Idris, Abdul S. Shawl & Mudasir A. Tantry	do	Natural Product Research	2016	1478-6427
Sub-Chronic Oral Toxicity Study of Kushta Qalai (A UniqueHerbo-mineral Unani formulation) in Wistar Rats	<b>Showkat A. Dar</b> , Seema Akbar, Khalid Ghazanfar, Mariya Hamdani, Tazeen Nazir, Masood S Mir, Akbar Masood, Khalid M. Siddiqui and <b>Showkat A Ganie</b>	do	BRITISH BIOMEDICAL BULLETIN	2016	2347-5447
Free Radical Scavenging and Cytotoxic Activity of Seed Extracts of Podophyllum hexandrum	O. Zargar · R. Hamid · K. Bashir Dar · A. H. Bhat · M. Afzal Zargar · A. Masood · A.G. <b>Showkat</b>	do	Phytothérapie	2016	1765-2847
Efficacy of Aqueous and Methanolic Extracts of Rheum Spiciformis against Pathogenic Bacterial and Fungal Strains	Khalid Bashir Dar, Aashiq Hussain Bhat, Shajrul Amin, Suhail Anees, AkbarMasood, Mohammed Iqbal Zargar, <b>Showkat Ahmad Ganie</b>	do	Journal of Clinical and Diagnostic Research	2016	0973-709x
Herbal Compounds as Potential Anticancer Therapeutics: Current Perspective	Khalid Bashir Dar, Aashiq Hussain Bhat, Shajrul Amin, Mohammad Afzal Zargar, Akbar Masood and <b>Showkat Ahmad Ganie</b>	do	Annals of Pharmacology and Pharmaceutics	2017	2573-6051
Amelioration of hyperglycaemia and modulation of antioxidant status by Alcea rosea seeds in alloxan-induced diabetic rats	Parvaiz A. Dar, Fasil Ali, Ishfaq A. Sheikh, <b>Showkat A. Ganie</b> & Tanveer A. Dar	do	Pharmaceutical Biology	2017	1388-0209
Evaluation of Antibacterial, Antifungal and Phytochemical Screening of Solanum nigrum	Khalid Bashir Dar, Aashiq Hussain Bhat, Shajrul Amin, Mohammad Afzal Zargar, Akbar Masood, Akhtar Hussain Malik and <b>Showkat Ahmad Ganie</b>	do	Biochemistry & Analytical Biochemistry	2017	2161-1009

Inflammation: A Multidimensional Insight on Natural Anti-Inflammatory Therapeutic Compounds	<a href="#">Khalid Bashir Dar</a> , <a href="#">Aashiq Hussain Bhat</a> , <a href="#">Shajrul Amin</a> , <a href="#">Akbar Masood</a> , <a href="#">Mohammad Afzal Zargar</a> and <a href="#">Showkat Ahmad Ganie</a>	do	Current Medicinal Chemistry	2017	1875-533X
In vitro Antioxidant and RBC membrane Stabilization Activity of Euphorbia wallichii	Shazia Tantary, Akbar Masood, Aashiq Hussain Bhat, Khalid Bashir Dar, Mohammad Afzal Zargar, Showkat Ahmad Ganie	do	Free Radicals and Antioxidants	2017	2231-2536
Evaluation of Antioxidant and Immunomodulatory Potential of Methanolic Extract of Juniperus squamata Buch.-Ham. ex D.Don.	Rohaya Ali, Nasreena Sajjad, Qureshi, Sumaya Hassan, Muzaffar Ahmad, Showkat Ahmad Ganie, Rabia Hamid	do	Free radicals and antioxidants	2018	2231-2536
Hepatoprotective Potential of Elsholtzia densa Against Acute and Chronic Models of Liver Damage in Wistar Rats	Ovais Ahmad Zargar, Rohina Bashir, Showkat Ahmad Ganie, Akbar Masood, Mohammad Afzal Zargar, Rabia Hamid	do	Drug research	2018	2194-9379
Some nutraceutical properties of fenugreek seeds and shoots (Trigonella foenum-graecum L.) from the high Himalayan region	Waqas N. Babaa, Qazi Tabasuma, Sabeera Muzzaffara, Farooq A. Masoodi, Idrees Wani, Showkat A. Ganie, Mohd Munaff Bhat	do	Food Bioscience	2018	<a href="#">2212-4292</a>
Reactive oxygen species (ROS) and response of antioxidants as ROS-scavengers	Rohaya Ali, Nasreena Sajjad, Sumaya Hassan, Showkat Ahmad Ganie, Rabia Hamid	do	Journal of Applied Science and Computations	2018	--
Cancer: Proteomic Drug Targets and Therapeutics	Khalid B Dar, Aashiq H Bhat, Shajrul Amin, Rabia Hamid, Bilal A Reshi, Mohammad A Zargar, Akbar Masood, Showkat A Ganie	do	Current cancer drug targets	2018	1873-5576
Rheum- spiciforme Royle- the medicinal herb with positive modulatory effect on controlled in vitro oxidative stress	Aashiq Hussain Bhat, Khalid Bashir Dar, Manzoor Ahmad Sofi, Showkat Ahmad Dar, Mohammad Afzal Zargar, Akbar Masood and Showkat Ahmad Ganie	do	Indian journal of experimental biology	2018	0019-5189
Modern Computational Strategies for Designing Drugs to Curb Human Diseases: A Prospect	Khalid Bashir Dar, Aashiq Hussain Bhat, Shajrul Amin, Rabia Hamid, Suhail Anees, Syed Anjum, Bilal Ahmad Reshi, Mohammad Afzal Zargar, Akbar Masood and Showkat Ahmad Ganie.	do	Current topics in medical chemistry	2018	1568-0266
Modulation of Oxidative Stress and Hyperglycemia by Rheum	Aashiq Hussain Bhat, Khalid Bashir Dar,	do	Drug Research	2018	2194-9379

spiciformis in Alloxan Induced Diabetic Rats and Characterization of Isolated Compound		Mohammad Afzal Zargar, Akbar Masood, Showkat Ahmad Ganie				
<b>Dr Abdul Wajid Bhat</b>						
TINTIN, at the interface of chromatin, transcription elongation, and mRNA processing.		Wajid Bhat, Salar Ahmad and Jacques Cote	Clinical Biochemistry	RNA Biology	2015	Print ISSN: 1555-8584 Online ISSN: 555-8584
Casein kinase 2 associates with the yeast chromatin reassembly factor Spt2/Sin1 to regulate its function in the repression of spurious transcription		Wajid Bhat, Geneviève Boutin, Anne Rufiange and Amine Nourani	Clinical Biochemistry	Molecular and Cellular Biology	2013	Print ISSN: 0270-7306 Online ISSN: 1098-5549
Casein kinase 2 mediated phosphorylation of Spt6 modulates histone dynamics and regulates spurious transcription		Emmanuelle Gouot, Wajid Bhat, Anne Rufiange, Eric Fournier, Eric Paquet and Amine Nourani	-do-	<i>Nucleic Acids Research</i>	2018	ISSN 0305-1048 EISSN 1362-4962



**(3.4.6) Number of books and chapters in edited volumes / books published, and papers in national/international conference-proceedings per teacher during the last five years****Data Requirement for last five years (Academic years 2012 - 2018)**

Name of the teacher: Title of the paper	Department	Title of the book published: Name of the author/s: Title of the proceedings of the conference	Name of the publisher: National / International	National / international : ISBN/ISSN number of the proceeding	Year of publication:
<b>Dr Tanvir Ali Dar</b>					
Small molecule osmolytes can modulate proteostasis	Clinical Biochemistry	Proteostasis and Chaperone Surveillance	Springer India	ISBN 978-81-322-2467-9	2015
Proteopathies: Biological, Molecular and Clinical Perspectives	Clinical Biochemistry	Proteostasis and Chaperone Surveillance	Springer India	ISBN 978-81-322-2467-9; Hardcover ISBN-978-81-322-2466-2	2015
Extraction and purification of a therapeutically important protein from a traditional medicinal plant of Kashmir Himalayas	-do-	National Symposium on Biophysics & Golden Jubilee Meeting of Indian Biophysical Society	Journal of Proteins and proteomics	0975-8151	2015
Casein proteins: structural and functional aspects	-do-	Milk Proteins-From Structure to Biological Properties and Health Aspects	Intech/ international	ISBN 978-953-51-2537-2, Print ISBN 978-953-51-2536-5	2016
Modulation of Protein Aggregation/Fibrillation by Osmolytes	-do-	Cellular Osmolytes	Springer Nature Singapore Pte Ltd	ISBN 978-981-10-3706-1	2016
<b>Cellular Osmolytes: From Chaperoning Protein Folding to Clinical Perspectives</b>	-do-		Springer Nature Singapore Pte Ltd		2017
<b>Dr Fozia Rashid</b>					
Protein Misfolding Diseases: In perspective of Gain and Loss of Function.		Proteostasis and Chaperone Surveillance	Springer India	ISBN 978-81-322-2466-2	2015
Clinical perspective of post translational modifications		Protein Modificomics	<b>ELSEVIER</b>	(In Press)	

**(3.5.2) Revenue generated from consultancy during the last five years****Data Requirement for last five years (Academic years 2012 - 2018)**

Name of the consultants	Department	Name of consultancy project	Consulting/sponsoring agency with contact details	Revenue generated (amount in rupees)	Total revenue generated in rupees

**(3.5.3) Revenue generated from corporate training by the institution during the last five years****Data Requirement for last five years (Academic years 2012 - 2018)**

Names of the teacher – consultants	Department	Title of the corporate training program	Agency seeking training with contact details	Revenue generated (amount in rupees)	Number of trainees	Total revenue generated in rupees

**Documents:** Audited statements of account indicating the revenue generated through consultancy.

**(3.6.3) Number of extension and outreach programs conducted in collaboration with industry, community and Non-government Organisations through NSS/NCC/Red cross/YRC etc., during the last five years****Data Requirement for last five years (Academic years 2012 - 2018)**

Name and number of the extension and outreach programs	Department	Name of the collaborating agency: Non-government, industry, community with contact details
Medical camp for screening of Metabolic syndrome in adult population at Pulwama, Kmr (2014)	Clinical biochemistry	ENDOCRINOLOGY, SKIMS
Medical camp for screening of Metabolic syndrome in adult population at Dept. of social work, KU (2013)	Clinical biochemistry	
Medical camp for screening of Metabolic	Clinical biochemistry	

syndrome in adult population at Dept. of Geography, KU (2013)		
Medical camp for screening of Metabolic syndrome in adult population at Dept. of Earth Sciences, KU (2013)	Clinical biochemistry	
Medical camp for screening of PCOS in female students at Islamia College, Sgr (2014)	Clinical biochemistry	ENDOCRINOLOGY, SKIMS
Medical camp for screening of PCOS in female students at Bemina degree College, Sgr (2014)	Clinical biochemistry	ENDOCRINOLOGY, SKIMS
Medical camp for screening of PCOS in female students at Dept. of Home Sciences, KU (2014)	Clinical biochemistry	ENDOCRINOLOGY, SKIMS
2015- Organised PCOS screening /awareness camps in Girl's hostel, University of Kashmir		

**3.7.1 Number of collaborative activities for research, faculty exchange, student exchange per year  
Data Requirement for last five years (Academic years 2012 - 2018)**

Title of the collaborative activity	Department	Name of the collaborating agency with contact details	Source of financial support	Year of collaboration	Duration	Nature of the activity
Generation of monoclonal antibody fragments for structural & biochemical characterization of difficult membrane proteins.	Dr. Syed H Mir, Clinical Biochemistry	Prof. Carola Hunte Institute of Biochemistry & Molecular Biology, University of Freiburg, Germany	DFG	2012	Cont.	Research
Structural and Functional Characterization of Secondary Transporters using monoclonal antibody fragments.	Dr. Syed H Mir, Clinical Biochemistry	Prof. Carola Hunte Institute of Biochemistry & Molecular Biology, University of Freiburg, Germany	BIOSS	2013	Cont.	Research
Evaluation of pathophysiology of PCOS	Dr. Fouzia, Clinical Biochemistry	Dr. Ashraf Ganai, Endocrinology, SKIMS	JKDST	2012	Cont.	Research
Co-solvent engineering of proteins by osmolytes	Dr. Tanveer A Dar Clinical Biochemistry	Dr. L Rajendra Kumar Singh. ACBR, University of Delhi	DBT	2012	Cont.	Research
Modulation of protein aggregation by chemical chaperones	Dr. Tanveer A Dar Clinical Biochemistry	Dr. L Rajendra Kumar Singh. ACBR, University of Delhi	CSIR	2015	Cont.	Research
Isolation, characterization and mechanistic elucidation of <i>Alcea rosea</i> extracts for anti-cancer activities	Dr. Showkat A Ganai Clinical Biochemistry	Dr. Abid Hamid Indian Institute of Integrative Medicine, Jammu	DBT	2014	Cont.	Research
Blocking of stem cell driven colon cancer with isolated compounds of <i>Alcea rosea</i> active seed extracts	Dr. Showkat A Ganai Clinical Biochemistry	Dr. Shahid Umar Kansas Medical Institute, University of Kansas, USA	KI	2015	Cont.	Research

**(3.7.2) Number of linkages with institutions/industries for internship, on-the-job training, project work, sharing of research facilities etc. during the last five years**

**Data Requirement for last five years (Academic years 2012 - 2016)**

Title of the linkage	Department	Name of the partnering institution/ industry/ research lab with contact details	Year of commencement	Duration (From-to)	Duration (From-to)	Nature of linkage
Provide internship facilities to our 4 <sup>th</sup> Semester Students	Biochemistry, Biophysics, Lab Medicine etc	All India Institute of Medical Sciences, New Delhi	2007	Cont.	Cont.	honorary
-do-	-	SK Institute of Medical Sciences, Srinagar	2007	Cont.	Cont.	honorary
-do-	Genetics	SGPG Institute of Medical Sciences, Lucknow	2011	2011	2012	honorary
-do-	-	National Institute of Biological Sciences, Bangalore	2012	Cont.	Cont.	honorary
-do-	-	Indian Institute of Sciences, Bangalore	2012	Cont.	Cont.	honorary
-do-	-	JNU, New Delhi	2013	Cont.	Cont.	honorary
-do-	-	CCMB, Hyderabad	2013	Cont.	Cont.	honorary
-do-	-	SUKAST, Srinagar	2013	Cont.	Cont.	honorary
-do-	-	Indian Institute of Integrative Medicine, Jammu.	2013	Cont.	Cont.	honorary
-do-	-	Indian Institute of Integrative Medicine, Srinagar	2011	Cont.	Cont.	honorary

Documents: Upload the linkages with institutions/ industries

**3.7.3 Number of functional MoUs with institutions of national, international importance, other universities, industries, corporate houses etc. during the last five years (only functional MoUs ongoing activities to be considered)**

**Data Requirement for last five years (Academic years 2012 - 2016)**

Organisation with which MoU is signed	Department	Name of the institution/ industry/ corporate house	Year of signing MoU	Duration	List the actual activities under each MoU	Number of students/ teachers participated under MoUs

Documents: Upload the MoUs with institution/ industry/ corporate house

**(4.1.2) The institution has adequate facilities for sports, games (indoor, outdoor, gymnasium, yoga centre etc.) and cultural activities**

Upload a description of adequate facilities for sports, games and cultural activities which include specification about area/size, year of establishment and user rate.

**4.1.3 Percentage of classrooms and seminar halls with ICT-enabled facilities such as smart class, LMS, etc.****Data Requirement for last five years (Academic years 2012 - 2018)**

Number of classrooms with LCD facilities	Department	Number of classrooms with wi-fi/ Lan facilities	Number of seminar halls with ICT facilities
Nil	Clinical Biochemistry	01	Nil



**(5.2.1) Average percentage of placement of outgoing students during the last five years****Data Requirement for last five years (Academic years 2012 - 2018)****(PI see below)****(5.2.2) Percentage of student progression to higher education (previous graduating batch)****Data Requirement for last five years (Academic years 2012 - 2016)****(pl see below)**

<b>Year</b>	<b>Name of the Student</b>	<b>Institute</b>	<b>Passout</b>
2009	Aijaz Rashid	PhD IIT, Mombay	2008
	Mehrajuddin Bhat	PhD NIN Hyderabad	2008
	Qudsia Rashid	Dept of Biosciences, Jamia Millia Islamia	2008
2010	Muneeb A Faiq	Ph.D AIIMS	2007
	Showkat Malik	Ph.D SKIMS	
	Mohsin Maqbool	PhD Dept of Medical Oncology, AIIMS	2009
	Samina Bashir	PhD Biochem, J. Hamdard, New Del	2009
	Nomaana	PhD NII	2009
2011	Rizwana Qadri	Ph.D AIIMS PhD Department of biochemistry GMC/KU	2007
	Tehseen Khan	Srinagar	2007
	Sumaira Rashid	PhD Dept of Gastroenterology, AIIMS	2009
	Zaffer Zargar	PhD CDFD HYDERABAD.	2009
2012	Touseef Ahmad	PhD NBRC	
	Javeed Ahmad	PhD Biophysics AIIMS	2010
	Naseer Iqbal	PhD AIIMS	
2013	Syed Muntazir Andrabi	PhD IIT Kanpur	
	Safoora Rashid	PhD AIIMS	2011
	Madiha Niyaz	PhD SKIMS	2012
	Mohamad Ishaq Dar	PhD IIIM Jammu	2008
	Bushra Nisar	PhD Dept. of Biochemistry KU	2012
2014	Adil Bhat	PhD Institute of liver and Biliary Sciences, New Delhi, India	
	Edris hajam	PhD , INSTEM, NCBS, Bangalore.	2013
	Aasif Majeed	PhD, IIIM Srinagar.	2012
	Mohd Younus Bhat	Ph.D Dept of Biochemistry, KU	2013
2015	Parvaiz Ahmad	PhD IGIB/ Dept. of Biochem KU	2012
	Misbah Majeed	PhD Dept. of Biochem KU	2012
2016	Nida Fatima	PhD Dept of Biotech. KU	2016

2017	Usma Manzoor	Ph.D inspire fellow Dept of Biochemistry, KU	2015
	Snober shabeer wani	Ph.D inspire fellow Dept of Biochemistry, KU	2015
	Saima Nazir	Ph.D inspire fellow Dept of Biochemistry, KU	2015
	Ghulam Jeelani Mir	Ph.D inspire fellow Dept of Biochemistry, KU	2015
2018	Ambreen Farooq	Ph.D Dept of Biochemistry, KU	2015

#### List of students placed in international institutes

<u>Year</u>	<u>Name of the Student</u>	<u>Institute</u>	<u>Passout</u>
2011	Nomaana	PhD University of Massachusetes Medical School	2009
2012	Kowcee Jalal	PhD Oxford University, under common wealth Fellowship	
	Nomana Bhat	PhD, University of Massachusetts Medical School (Umass Med), Worcester, MA	
2013	Sajad Sofi	PhD,fellowship, Freie University Berlin.	
	Firdous H Beig	PhD USA	
2014	Hilal Bhat	PhD fellowship, Hanover Medical School, Hanover, Germany.	
	Hilal A Parray	Phd department of Biotechnology, Daegu University, South Korea	2011
2015	Abu Imran Baba	PhD Fellow, University of Szeged & Biological Research Centre, Hungarian Academy of Sciences Szeged, Hungary	2012
2016	Sama Mugloo	PhD University of Otago, New Zealand	2013
2018	Qurat Ul Ain Reshi	PhD dept. of medicine, Uni. of Tartu Estonia	2016

#### List of Students in Govt Jobs.

Firdous H Beig	Leturer, KSA
Rashid Baqqal	Biochemist, Ministry of health at Aljhara hospital (E Aljhara State of Kuwait.
M Yasin Bhat	Teacher, Dept of Education, Govt of J&K
Mushtaq Ahmad mir	Auditor at Finance Department J&k,
Zahid Nabi	Teacher J & K Govt, Dept of Education
Shazia Mohammad	Teacher J & K Govt, Dept of Education
M Arif Parray	Teacher J & K Govt, Dept of Education

## Other Student Awards

Year	Name of the Student	position/awarded	Pass
2012	Aijaz A Dar	JRF, AIIMS, new Delhi	
	Hilal Bhat	JRF, AIIMS, new Delhi	
	Hilal Parray	JRF, AIIMS, new Delhi	
2013	Mehrajjudin Bhat	<i>Awarded DBT (Department of Biotechnology, Govt. of India) Travel grant to attend "5th Annual Ubiquitin Drug Discovery and diagnostics Conference" held at Philadelphia, PA, USA during July 22-24,2013</i>	
	Hilal Bhat	JRF Talwar Research Foundation, Neb valley Neb sari, New Delhi	
2014	Abu Imran baba	Research Fellow, Institute of Plant Biology, Biological Research Centre Hungarian Academy of Sciences, Temesvari Krt. 62. Szeged, Hungary H-6726	
	Mehrajuddin Bhat	<i>Young Investigator Award with full travel Bursary:At "Vitamin D And Human Health:From Gamete to the Grave" Conference held from 23rd-25th April,2014 at Queen Mary Unversity, London.</i>	
2016	Muneeb A Faiq	Post Doc. AIIMS	
2017	Muneeb A Faiq	Post Doc. New York University School of Medicine. USA	
	Mehrajuddin Bhat	Postdoc University of South Australia	
2018	Hilal Ahmad Parray Syed Ishfa Andrabi	Post-doctorate fellow, at Niigata University in Japan <b>project JRF</b> , Department of Microbiology, SKIMS	



**(5.2.3) Average percentage of students qualifying in state/ national/ international level examinations during the last five years (eg: NET/SLET/GATE/GMAT/CAT/ GRE/TOEFL/Civil Services/State government examinations)**

**Data Requirement for last five years (Academic years 2012 - 2018)**

Year	NET	SLET	GATE	GMATE	CAT	GRE	TOEFL	Civil Services	State government examinations
2012	04		02			01			
2013	04	02	01				01		
2014							01		
2015	02		01						
2016	05	02							
2017	14		01			01			
2018	-	10	02				01		

**Clinical Biochemistry: Year-wise List of NET/NET JRF Awardees**

Year	Name of the Student	National Level Test Paszd	Passout Batch
2007	Mehrajuddin Bhat	UGC-NET	2008
2008	Mehrajuddin Bhat	CSIR-NET JRF & ICMR-JRF	2008
	Aijaz Rashid	NET	2008
2009	Aijaz Rashid	NET-JRF	2008
	Zaffer Zargar	NET	2009
2010	Javeed Ahmad Dhobi	NET june & CSIR-NET-JRF Dec	2010
	Showkat Malik	NET june & CSIR-NET-JRF Dec	2010
	Zaffer Zargar	CSIR-NET JRF	2009
	Samina Bashir	UGC-NET-LS	2009
	Ershad Ahmad Reshie	NET	2010
	Nomaana	NET	2009
	Aarif A	NET	2010
	Arshid Mattu	NET	2008
	Muzammil A	NET	2009
2011	Touseef Ahmad	NET-JRF june	2011
	Bushra Nisar	NET-JRF june	2012
	Javeed Ahmad	NET-JRF	2010
	Parvaiz Ahmad	NET	2012
	Samina Bashir	GATE	2009
2012	Touseef Ahmad	NET june	
	M Arif Parray	NET - Dec	2012

	Sajad A Sofi	NET	
	M Ishaq Dar	NET-JRF	
	Showkat Malik	GATE	2010
	Adil Bhat	GATE	2012
2013	Aasif Majeed	NET-JRF	2012
	Mohd Younus Bhat	NET Dec	2013
	M Arif Parray	NET-JRF June and Dec	2012
	Hilal A Parray	GATE	2011
	Safoora Rashid	SLET	2011
2015	M Yasin bhat	NET-JRF	2012
	Adil Bhat	NET-JRF June	2012
	Mohammad Ishfaq	GATE	2014
2016	Nida Fatima	NET-JRF	2016
	Misbah Majeed	NET-Dec and SLET	2012
	Younus A Bhat	NET-June	2012
	Usma Manzoor	NET-June	2015
	Ambreen Farooq	NET-Dec	2015
	Saima Nazir	SET	2015
	Ghulam Jeelani Mir	NET-June	2015
2017	Ambreen Farooq	NET-JRF June	2015
	Rukhsana Akthar	NET-June	2015
	Huma Jan	NET-June	2016
	Snober Shabeer Wani	ICAR NET, NET-JRF Dec	2015
	Edriss Yousuf	CSIR-SRF and ICMR-SRF	2013
	Mohammad Ishfaq	UPSC prelimns	2014
	Saima Nazir	GATE and NET-JRF Dec	2015
	Ghulam Jeelani Mir	NET-JRF Dec	2015
	Rabia Bashir	NET-JRF Dec	2016
	Syed Ishfa Andrabi	NET-Dec	2015
	Sheikh Irfan Maqbool	NET-Dec	2014
	Urseela Yasien	NET-Dec	2016
	Javeed Ahmad Wani	NET-Dec	2015
	Sajad Ahmad Najar	CSIR-NET/JRF	2016
	Asia	NET-JRF Dec	2008
2018	Rukhsana Akthar	GATE	2015
	Snober Shabeer Wani	SET	2015
	Usma Manzoor	SET	2015
	Aabid Akbar Shah	SET	2015
	Khalid Bashir Dar	SET	2013
	Suhail Aneess	SET	2013
	Qudsia Fatima	SET	2013
	Afaq Hameed	SET	2014
	Ibtisam Mumtaz	SET	2017
	Ishrat Bhat	SET	2014
	Sheikh Irfan Maqbool	SET	2014
	Sajad Ahmad Najar	GATE	2016

**(5.3.1) Number of awards/medals for outstanding performance in sports/cultural activities at national/international level (award for a team event should be counted as one) during the last five years****Data Requirement for last five years (Academic years 2012 - 2018)**

Name of the award/ medal	Department	National/ International	Sports/ Cultural

Document: Upload award letters and certificates

**(5.3.3) Average number of sports and cultural activities / competitions organised at the institution level per year****Data Requirement for last five years (Academic years 2012 - 2016)**

Name of the activity	Department