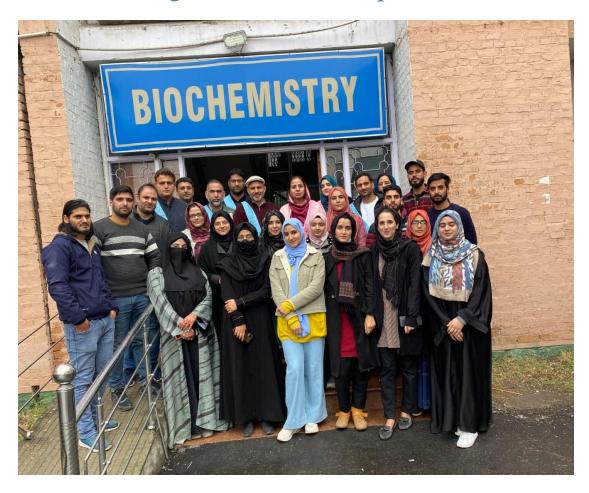


# Placement Brochure Department of Biochemistry University of Kashmir

# The Carrier approach

Department of Biochemistry

Transitioning from student to professional life



# About the Department

The Department of Biochemistry was established in the University of Kashmir in the year 1982. The Department offers 2 year Msc. Degree for students. Students get advanced level of theory and practical courses in various modern fields of Biochemistry. Students are also required to present recent seminars on journal papers on diverse topics. In addition, numerous co-curricular events, including annual educational trips, are organized for the overall development of the students.

The Department admits students for Ph.D. degree on the basis of whether the students have qualified the NET/JRF & GATE exams and through a competitive institutional level entrance examination. Ph.D. students in the department are offered high quality training and are encouraged to publish papers in peer-reviewed prestigious international journals, attend conferences and symposiums, present posters and actively participate in all departmental events. The faculties guide Ph.D. students with specialized focus on development of molecular strategies for understanding and combating human diseases.

Every year majority of the students of the department qualify competitive exams like CSIR-JRF, DBT-JRF, ICMR-JRF etc. The research scholars of the department get selected for highly competitive international fellowships like Newton-Bhabha fellowship and Indo-U.S. Genome Engineering/Editing Initiative (GETin) overseas fellowship. Under these programs, the scholars do a part of their PhD research in the best labs of UK and USA.

The Department receives grant under FIST from DST and various funding agencies like JKDST, DST, DBT, ICMR, DHR (Ministry of Health and Family Welfare, Government of India), World cancer research fund International—UK (WCRF), etc for its research projects. The department is equipped with the state of art facilities that helps the research scholars to conduct meaningful and thorough comprehensive research. Every year the research projects submitted by the faculty members of the department are funded by different funding agencies. This helps in the continuous evolvement, progress and development of the department in terms of infrastructure, instrumentation, reagent availability etc

The Ph.D. program offers a broad education in molecular and cancer biology, and is remarkable for the scope of research it encompasses. Current areas of research include:

- Protein Biochemistry, Cancer research and epidemiology
- Regulation of the cell cycle protein-nucleic acid interactions
- Apoptosis, Autophagy
- Protein structure and function
- Mechanisms of signal transduction and molecular dynamics.

#### **Head's Desk-MESSAGE**



Biochemistry is the point where chemistry, biology and medicine meets and it deals with the molecular interactions between various intra and inter cellular compartments of living organisms and diseases. In short, Biochemistry is a fascinating subject which deals with understanding chemistry of life at molecular level.

The Department of Biochemistry at University of Kashmir is a fascinating place to enroll for Masters Program. We have a dedicated faculty who are well trained and are authortative experts in the field. We nurture incoming students in such a way that after completion of their course from the department, they are ready to begin their career in top notch institutions of the country and abroad. In addition to the Masters program, the department offers an Integrated Ph.D. program in the fields of cancer Biology, cell signaling, ubiquitin biology and reproductive biology.

Prof. Shajrul Amin Head of Department

# **Brief overview of Department**

The Biochemistry department is involved in postgraduate teaching for science students. The Department of Biochemistry is run by a group of experienced and talented faculty who provide quality education and scientific temper. Faculty and post graduate students are encouraged to do research and publish scientific papers.

#### **Mission**

- Provides excellent, pedagogically effective classroom/laboratory training for students.
- Provides caring, individualized advising for our majors that helps prepare them for success in their chosen careers and in life
- Develops innovative educational resources

#### Vision

• Changing the world through scientific discoveries and empowering educational experiences for all students.

# Alumni

Dr. Khurshid Andrabi



Dr. Khurshid Andrabi an alumni of Department of Biochemistry University of Kashmir has been Vice Chancellor of University of Kashmir, India (Oct 2014 - Aug 2018) and worked as Professor and Head, Department of Biochemistry and as well as Biotechology Departments of University of Kashmir, Srinagar J&K.

Dr. Manzoor Bhat



Dr. Manzoor Bhat, alumni of Department of Biochemistry is Professor and Vice Dean for Research in Department of Cellular and Integrative Physiology at University of Texas, USA.

Dr. Dimpy Koul



Dr. Dimpy Koul is Associate Professor, Department of Neuro-Oncology - Research, Division of Cancer Medicine, The University of Texas MD Anderson Cancer Center, Houston, TX.

Dr. Ashok Kumar



Dr Ashok Kumar has been Director, IIT Kanpur - La Trobe University Research Academy Professor of Bioengineering at Indian Institute of Technology Kanpur, Kanpur, UP, INDIA.

Dr. Mohammad Ayoub Mir



Mohammad Ayoub Mir is Associate Professor at Western University of Health Sciences College of Veterinary Medicine, California, USA

Dr. Renu Razdan



Dr. Renu Razdan is eminent alumni of this department and she has served as the Chief Operating Officer Max Neeman International, responsible for oversight of Operations Departments as well as heading the Business Development team in India for client relations in Europe and South East Asia. Dr. Razdan is currently the Vice Chairperson of the Association of Contract Research Organizations (ACRO).

Dr. Manzoor Zargar



Dr. Manzoor Zargar is Scientific Review Officer at National Institutes of Health, Bethesda, Maryland, United States

Dr. Anita Saraf



Anita Saraf joined the Kansas University in Kansas City, Missouri, where she is serving as Director at Mass Spectrometry & Analytical Proteomics Laboratory center.

Dr. Mohd. Afzal Zargar



Dr Mohd Afzal Zargar Worked as Professor and Head Department of Biochemistry University of Kashmir also remained as Chief Proctor of University of Kashmir. Dr Afzal Zargar is currently in Central University Kashmir working as Registrar.

Dr. Rabia Hamid



Dr. Rabia Hamid is Head, Department of Nanotechnology, University of Kashmir. She is also GATI-Pilot Project-Women in STEMM (DST sponsored in partnership with British Council) and is working as Nodal Officer & PI for University of Kashmir.

Dr. Khalid Majeed Fazili



Dr Khalid Majeed worked as Head of Department of Biotechnology of University of Kashmir and Dean Unani Medicine University of Kashmir.

Dr. Bashir A. Ganie



Professor (Dr.) Bashir Ahmad Ganai is Director Center of Research for Development (CORD) & Head Department of Environmental Science, University of Kashmir, Srinagar.

Dr. Muzzafar Mir



Dr Muzaffar Mir has done his Maters in Biochemistry from this Department in 1982 and is currently Professor and Chairman of Clinical Biochemistry Department, College of Medicine, University of Bisha, Kingdom of Saudi Arabia.

Dr. Mudasar Andrabi



Dr. Mudasar Andrabi is Head, Department of Clinical Biochemistry at SKIMS, Soura.

Dr Sabhiya Majeed



Dr Sabhiya Majeed is Professor & Head, Deptt of Biochemistry, Govt Medical College Srinagar

Dr. Mohd Jamal Dar



Dr. Mohd Jamal Dar is Senior Principal Scientist, Pharmacology Division, CSIR – Indian Institute of Integrative Medicine, Jammu J&K.

Dr. Abid Hamid Dar



Dr Abid Hamid is Head, Department of Biotechnology, School of Life Sciences, Central University of Kashmir. He has also worked as senior Scientist in Indian Institute of Integrative Medicine (CSIR) in Jammu, J&K.

Dr. Aashiq H Kachroo



Dr Aashiq H Kachroo is Principal Scientist at PearlBio. Former Associate Professor at Concordia University, Canada Research Chair in Systems and Synthetic Biology.

Dr. Umar Jan



Dr. Umar Jan, has done his Maters in Biochemistry from this Department in 2002, and is currently serving as President, European Operations, Sabinsa Europe GmbH, Europe.

Dr. Ishfaq Ahmad



Dr Ishfaq Ahmad is currently working as Associate Professor and Coordinator at Kansas City Community College, Kansas City, United States, KCKCC

Dr. Mohd Altaf Bhat



Dr. Altaf Bhat is currently Coordinator (Centre for Interdisciplinary Research & Innovations) in University of Kashmir.

Dr. Tanveer Ahmad



Dr Tanveer Ahmad is Assistant Professor at Jamia Millia Islamia, India.

Dr. Imran Noorani



Dr. Imran Noorani is consultant Paediatic Clinical Psychologist at Sir Ganga Ram Hospital Delhi.

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# Other important alumni

1	Dr. Sameer Mohammad	Senior Scientist	KAIMRC, Saudi Arabia
2	Dr. Mehboob ul Hussain	Associate Prof. Biotechnology	University of Kashmir
3	Dr. Mahrukh Hamid	Associate Prof. Genetics	SKIMS, Srinagar, Kashmir
4	Dr. Ajazul H Wani	Assist. Prof./ Wellcome Trust Fellow, Biotechnology	University of Kashmir
5	Dr. Zahid Mirza	Assist. Prof. Biotechnology	Shri Mata Vaishno Devi University
6	Dr. Mubarak H. Syed	Assist. Professor	University of New Mexico, USA
7	Dr. Reyaz A. Mir	Assist. Prof. Biochemistry	AIIMS, New Delhi
8	Dr. Zahoor A Parrey	Senior Scientist	IIIM, Srinagar, Kashmir
9	G.Q. Lone	Senior Teacher	Education Deptt. Jammu & Kashmir
10	Dr. Fouzia Kounser	Lecturer, Biochemistry	Higher Education Deptt. Kashmir
11	Dr. Minu Balkhi	Lecturer, Biochemistry	Higher Education Deptt. Kashmir
12	Dr. Abdul Wajid Bhat	Assistant Prof/Ramanujan Fellow, Clinical Biochemsitry/CIRI	University of Kashmir
13	Dr. Ehtisham ul Haq	Associate Prof. Biotechnology	University of Kashmir
14	Mohd Yunis Malik	KAS, Developmental Comissioner	Govt. of Jammu & Kashmir
15	Dr. Showket A. Ganie	Assist. Prof. Clinical Biochemistry	University of Kashmir
16	Bilal A. Reshi	Assist. Prof. Biotechnology	University of Kashmir
17	Dr. Abrar Qureshi	Assist. Prof. Biotechnology	University of Kashmir
18	Dr. Zia Fazili	Research Chemist	National Center for Environmental Health, USA
19	Dr. Shafat Qadri	Director, Oncology	Merck Research Laboratories, Washington DC, USA
20	Dr. Syed Sameer	Associate Prof.	King Saud Bin Abdul Aziz University, Saudia Arabia

21	Dr. Rafeeqa Echkoti	Associate Prof	Biochemistry, Govt. Medical	
			College, Srinagar	
22	Dr. Roohi	Associate Prof.	Biochemistry, Govt. Medical	
			College, Srinagar	
23	Dr. Rabia Farooq	Assist. Prof	University of Bisha, Saudi	
			Arabia	
24	Dr. Ariful Qadri	Senior Scientist	Astrazeneca, Maryland, USA	
25	Dr. Mohd Sayed Ahanger	Post doctoral fellow	University of Leeds, UK	
26	Dr. Bilal Rashid Malik	Assist. Prof.	The Sheffield	
		5 1 1011	College, Sheffield, UK	
27	Dr. Mohamamd Saleem Dar	Post doctoral fellow	Perdue University, USA	
28	Dr. Sameer Ullah Khan	Post doctoral Fellow	MD Anderson Cancer	
			Center, USA	
29	Dr. Parvaiz Qazi	Senior Scientist	IIIM, Srinagar	
30	Mukhtar Ah. Mir	Assistant Prof.	Higher Education, Jammu &	
			Kashmir Govt.	
31	Tehseena Sajad	Lecturer	Education Dept. Jammu &	
			Kashmir Govt.	
32	Prof. Javaid Iqbal	Head, Environmental	SKUAST-K, Shalimar,	
22		Science	Srinagar	
33	Prof. Imtiyaz Murtaza	Head, Biochemistry	SKUAST-K,Shalimar,	
2.4		D 0	Srinagar	
34	Fouzia Shafi	Assist. Prof.	SKUAST-K, Shalimar,	
25	D 0 :D :1	Biochemistry	Srinanagar	
35	Dr. Qazi Danish	Assist. Prof.	Higher Education, Jammu &	
26	D. A. (6 D. 11.)	D4-141 C-11	Kashmir	
36	Dr. Asif Bakshi	Post doctoral fellow	New York University, Abu	
27	D. T Al I	Assist Due C	Dhabi	
37	Dr. Tanveer Ahmad	Assist. Prof.	Jamaia Millia Islamia, New	
20	Dr. Ornais A. Bhat	Domestin accordani	Delhi Control University of	
38	Dr. Owais A. Bhat	Ramalingaswami	Central University of	
39	Dr. Nisar Ahmad Wani	Fellow/Scientist D	Kashmir, Ganderbal Central University of	
39	Di. Nisai Aliillau Walli	Ramalingaswami Fellow/Scientist-D	Central University of Kashmir, Ganderbal	
40	Muzamil Mushtaq	Ph.D student	University of Illinios,	
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41	Dr. Javid Ahmad Dar	CEO, Khorasan	Pulwama, Kashmir	
71	Di. Javid Allillad Dal	Biotech	i diwama, Kasimin	
42	Dr. Ishtiyaq A. Khan	Post doc fellow	Rutgers University, Newark	
43	Dr. Zeeshan Hamid	Sr. Associate Scientist	Charles River Labs,	
73	Di. Zeeshan Hanna	51. 1 issociate selentist	Michigan, USA	
44	Dr. Sameer A. Mir	Post Doc Fellow	NIH, Bethesda, USA	
45	Dr. Rohina Bashir	Scientist-B	SKIMS, Srinagar	
46	Dr. Nasreena Bashir	Research Fellow	Children's Hospital, Boston	
47	Dr. Mohsin Hassan	Scientist	Boehringer Ingelheim,	
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40	D C 1D 11 1 1	т ,	Germany
48	Dr. Syed Rakhshanda	Lecturer	Higher Education, Jammu &
			Kashmir
49	Dr. Mubashir Qayoom	Assistant Prof	Higher Education, Jammu &
			Kashmir
50	Dr. Mohd Iqbal Rather	Assistant Prof.	Higher Education, Jammu &
			Kashmir
51	Dr. Huma Habib	Assistant Prof.	Islamia College of Science
			and Technology, Srinagar
52	Dr. Abid Mirza	Head of Deptt.	Islamia College of Science
		1	and Technology, Srinagar
53	Dr. Abrar Bhat	Post doc fellow	Stanford University, USA
54	Mourifat Ahmad	Research Assistant	IISc Bangalore
55	Dr. Kulsum Akhter	Assistant Prof.	Higher Education, Jammu &
			Kashmir
56	Dr. Peerzada Tajamul	Post doc fellow	University of Nebraska, USA
57	Dr. Riyaz A. Shah	Post doc fellow	University of Copenhagen,
			Denmark
58	Dr. Bilal A Rah	Post doc fellow	University of Sharjah
59	Dr. Ishraq Husssain	Associate Professor	SKUAST-K
60	Dr. Hilal A Wani	Assistant Prof.	Higher Education, Jammu &
00	Di. Imai A Waiii	Assistant 1101.	Kashmir
61	Dr. Muzaffar Jan	Assist. Prof.	Higher Education, Jammu &
01	Di. Wuzariai Jan	Assist. 1101.	Kashmir
62	Dr. Mehvish Showkat	Assist. Prof.	Cluster University, Srinagar
63	Dr. Sajad Ahmad	Post Doc fellow	University of Pennsylvania
64	Dr. Shabir Zargar	Postdoc fellow	NIH, Bethesda, USA
65	Dr. Touseef Rafeeqi	Scientific Officer	RRIUM, Srinagar
66	Faisal Khan	PhD student	Karl Franzens University
	T disdi Kildii	The student	Graz, Austria
67	Dr. Syed Qaaifah Geelani	Postdoctoral fellow	Helmonltz Zeutrum
			Munchea, Munich Germany
68	Dr. Sheikh Burhanuddin	Postdoctoral fellow	Stanford University, USA
	Farooq		
69	Dr. Mudabir Abdullah	Postdoctoral fellow	National Human Genome
	Zii ii dadii i i dadiidii	2 35560 2 601 at 10110 W	Research Institute, Bethesda,
			Maryland
70	Dr. Misbah un Nisa	NPDF	
71	Misbah Khan	PhD student	University of Turku, Turkey
72	Dr. Asif Qazi	Scientist	IIIM, Srinagar
73	Asif Ali	PhD student	Ulster University, Northern
'3	1 2011 1 311	THE BUILDIN	Ireland
74	Dr. Rukhsana Jabeen	Scientist	UC Davis Health, Calfornia,
'-	Di. Rumibulu Juocii	Soloming	USA
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#### Student skill set

Biochemistry students should demonstrate proficiency in the foundational concepts of the discipline and possess the skills needed to practice as professionals. To ascertain the skills that should be required, groups of Biochemistry educators met in several focused workshops to discuss the expectations with the ultimate goal of clearly articulating the skills required.

- The results of these discussions highlight the critical importance of experimental, mathematical, and interpersonal skills including collaboration, teamwork, safety, and ethics.
- The groups also found experimental design, data interpretation and analysis and the ability to communicate findings to diverse audience to be essential skills.
- To aid in the development of appropriate assessments these skills are important, Process of Science, Communication and Comprehension of Science, and Community of Practice Aspects of Science.
- Finally, the groups worked to align these competencies with the best practices in both teaching and in skills assessment.

# **Strengths**

- Broadly engage Biochemistry community in efforts to improve diversity and inclusion across department activities
- Improve communication of department values and efforts
- Increase awareness of equity/inclusion challenges in science by diverse communities
- Increase Departmental diversity at all levels, especially among students and faculty

#### **Achievements**

- Strong graduate student diversity
- Vibrant participation in science and technology fields so as to share an emphasis on innovation, problem-solving, and critical thinking
- Increased funding to support diversity/inclusion efforts
- Formation of small "working groups" to address challenge areas.

# **Scope of Biochemistry**

#### **Health sector**

Medical science cannot really exist without biochemistry. Without the scientific breakthroughs made by biochemists, we wouldn't have the precise chemical knowledge to create the vital drugs, therapies and diagnostic tools that are used every day.

#### Research

Biochemistry research scientists are professionals who specialize in the field of biochemistry, which is the study of the chemical processes and substances that occur within living organisms. Biochemistry plays a crucial role in the field of clinical research, particularly in the pharmaceutical, biotechnology, and medical device industries. It leads to development of Research Scientists, Biomedical Scientist, pharmaceutical scientists, Clinical Research Associate and many more. Who can play their role in medicine, genetics, metabolisms, DNA technology, forensic science, agriculture, food industries, and academia.

#### **Organizational**

Biochemists are predominantly employed across the life sciences sector (including pharmaceuticals, biotech, toxicology, food technology and vaccine production). They are also frequently employed in research roles in academic and government institutions.

#### **Roles of Biochemist**

Biochemistry is probably the only basic science which has a gamut of ramifications. Apart from it being incorporated in areas such as Microbiology, Genetics, Physiology, Molecular Biology and others, it also comprises of areas such as plant biochemistry, animal biochemistry and medical biochemistry, to name a few. Biochemistry related to human health and diseases is known as medical/clinical biochemistry. Clinical chemistry involves the application of biochemical knowledge to medicine.

A biochemist has major roles to play in the professional life. The roles of a biochemist can be divided into three:

- Role as an academician
- Role as a laboratory professional and
- Role as a researcher

# **Academic Programmes offered**

MSc Biochemistry	Biomolecules, Cell Biology, Metabolism,	
	Molecular biology, Physiology and Clinical	
	Biochemistry, Immunology, Biochemical	
	Techniques, Biotechnology, Plant	
	Biochemistry, Enzymology, Microbiology,	
	Protein Biochemistry, Genetics, Nutritional	
	Biochemistry and Endocrinology	
Ph.D Degree	Protein Biochemistry, Reproductive Biology,	
	Cancer research and epidemiology	
	Regulation of the cell cycle protein-nucleic	
	acid interactions	
	Genomic instability and ubiquitin biology	
	Protein structure and function	
	Mechanisms of signal transduction and	
	molecular dynamics.	

# **Faculty Expertise**

#### Prof. Shajrul Amin

Shajrul Amin has done her Ph.D from University of Kashmir. She is involved in teaching graduate students and has more than 20 years of teaching experience. She also serves as a research mentor and mentors research scholars about medicinal drug discovery and plant-based drug design. Her work focuses on understanding how plant extracts at a molecular level, playing critical roles in controlling and prevention of diseases in particular metabolic disorders (Diabetes and Polycystic ovarian syndrome). She uses that information to develop new drug therapies. She has trained over 20 postgraduate students, Ph.D. students and postdoctoral students who have gone on to teach graduate students of colleges/medical colleges as well as students who have make successful careers in academia and industry and who are involved in biomedical research.

#### **Ongoing Research Projects**

• Elucidating the role of angiopoietin 11/angiopoietin-2 system in infertility in polycystic ovarian syndrome (JKST & IC, Govt of India).

#### **Recent Publications:**

- Rasool SUA, Nabi M, Ashraf S, **Amin S**. Insulin Receptor Substrate 1 Gly972Arg (rs1801278) Polymorphism Is Associated with Obesity and Insulin Resistance in Kashmiri Women with Polycystic Ovary Syndrome. **Genes** (Basel). **2022** Aug 17;13(8):1463. doi: 10.3390/genes13081463.
- Nabi M, Andrabi SM, Rasool SUA, Ashraf S, Majid I, **Amin S**. Androgen receptor coregulator long noncoding RNA CTBP1-AS is associated with polycystic ovary syndrome in Kashmiri women. **Endocrine**. **2022** Feb;75(2):614-622.
- Ashraf S, Rasool SUA, Nabi M, Ganie MA, Jabeen F, Rashid F, Amin S. CYP17 gene polymorphic sequence variation is associated with hyperandrogenism in Kashmiri women with polycystic ovarian syndrome. Gynecol Endocrinol. 2021 Mar;37(3):230-234.
- Ashraf S, Rasool SUA, Nabi M, Ganie MA, Masoodi SR, Amin S. Impact of rs2414096 polymorphism of CYP19 gene on susceptibility of polycystic ovary syndrome and hyperandrogenism in Kashmiri women. Sci Rep. 2021;11(1):12942. doi:10.1038/s41598-021-92265-1.

- Rasool SUA, Ashraf S, Nabi M, Masoodi SR, Fazili KM, Amin S. Clinical Manifestations of Hyperandrogenism and Ovulatory Dysfunction Are Not Associated with His1058 C/T SNP (rs1799817) Polymorphism of Insulin Receptor Gene Tyrosine Kinase Domain in Kashmiri Women with PCOS. Int J Endocrinol. 2021;2021:7522487. Published 2021 Dec 6. doi:10.1155/2021/7522487
- Dar KB, Bhat AH, **Amin S**, Reshi BA, Zargar MA, Masood A, Ganie SA. Elucidating Critical Proteinopathic Mechanisms and Potential Drug Targets in Neurodegeneration. Cell Mol Neurobiol. **2020** Apr;40(3):313-345.
- Dar KB, Bhat AH, Amin S, Anjum S, Reshi BA, Zargar MA, Masood A, Ganie SA. Exploring Proteomic Drug Targets, Therapeutic Strategies and Protein - Protein Interactions in Cancer: Mechanistic View. Curr Cancer Drug Targets. 2019;19(6):430-448.
- Rasool SUA, Ashraf S, Nabi M, Rashid F, Fazili KM, **Amin S**. Elevated fasting insulin is associated with cardiovascular and metabolic risk in women with polycystic ovary syndrome. **Diabetes Metab Syndr**. **2019** May-Jun;13(3):2098-2105
- Manzoor S, Ganie MA, Amin S, Shah ZA, Bhat IA, Yousuf SD, Jeelani H, Kawa IA, Fatima Q, Rashid F. Oral contraceptive use increases risk of inflammatory and coagulatory disorders in women with Polycystic Ovarian Syndrome: An observational study. Sci Rep. 2019 Jul 15;9(1):10182.

#### Prof. Nazir Ahmad Dar

Prof. Nazir Ahmad Dar has done his Ph.D from Sher-i-Kashmir Institute of Medical Sciences (SKIMS). He is Professor in Biochemistry and is currently serving as head of Centre for Career Planning and Counseling in University Of Kashmir. He is expert in Molecular biology and Cancer biology. He is teaching biochemistry to the graduates from almost 17 years and has mentored at least 15 graduate and Ph.D students who are working in different research institutions worldwide. His overarching aim is to get deeper insights into etiology and the processes of carcinogenesis, which may help, in its prevention, identification of new drug targets or in the improvement in the prognosis. Currently, his lab is working on unraveling the new drug targets involved in regulatory pathways of cancer. He also has immensely worked, contributed and has deep knowledge on the prognosis and etiology of esophageal cancer.

#### **Ongoing Research Projects**

- Elucidation of possible underlying epigenetic mechanisms in the development of aggressive angiogenesis in esophageal squamous cell carcinoma.
- Relation of phase-1 xenobiotics metabolizing gene variants with esophageal squamous cell carcinoma patient survival.
- Role of histone acetylation in esophageal squamous cell carcinoma and neovascularization.
- Role of HSP70-Rhoa axis in cell migration during metastasis.

#### **Recent Publications:**

- Rasool MT, Hafiz A, Banday SZ, Dar IA, Akhter S, Qureshi MZ, Geelani S, Dar NA.
   ABO Blood Group and the Risk of Esophageal Squamous Cell Carcinoma in Kashmir, a
   High Risk Region. J Gastrointest Cancer. 2021 Jun;52(2):696-700
- Shah R, Sharma V, Bhat A, Singh H, Sharma I, Verma S, Bhat GR, Sharma B, Bakshi D, Kumar R, Dar NA. Mass ARRAY analysis of twelve cancer related SNPs in esophageal squamous cell carcinoma in J&K, India. BMC Cancer. 2020; 20(1):497. Published 2020 Jun 1.
- Nabi S, Bhat GA, Iqbal B, Lone MM, Lone GN, Khan MA, Dar NA. Association of Activity Altering Genotypes Tyr113His and His139Arg in Microsomal Epoxide Hydrolase Enzyme with Esophageal Squamous Cell Carcinoma. Nutrition and cancer. 2019; 71(5), 806–817.

#### Dr Shaida Andrabi

Shaida Andrabi has done his Ph.D from TUFTS University, USA and Post-Doctoral Research, from Dana Farber Cancer Institute, USA and is currently working as an Associate Professor at Department of Biochemistry. He is teaching biochemistry from past 15 years and has mentored both graduate and Ph.D students during this time.

His research efforts are focused on understanding the molecular mechanisms that lead to cellular transformation, ultimately leading to cancer. He also studies the role of various oncogenes and tumor suppressors that regulate cell cycle progression. He combines various genetic,

biochemical, molecular and cell biology approaches to identify the cellular proteins that allow the "abnormal cells" to repair anomalies and overcome apoptosis. In addition, his lab also studies the role of kinases and phosphatases in the regulation of cell division (particularly mitosis), apoptosis/ cell survival and resistance against cell death during tumorigenesis.

#### **Ongoing Research Projects**

• Lipin-1: investigating its role in mitotic regulation and relevance to tumorigenesis (DST SERB- Govt of India, Project)

#### **Recent Publications:**

- Un Nisa M, Gillani SQ, Nabi N, Sarwar Z, Reshi I, Bhat SA, **Andrabi S**. Lipin-1 stability and its adipogenesis functions are regulated in contrasting ways by AKT1 and LKB1. **J Cell Commun Signal**. **2022** Nov 15.
- Sarwar Z, Nabi N, Bhat SA, Gillani SQ, Reshi I, Un Nisa M, Adelmant G, A Marto J, Andrabi S. Interaction of DBC1 with polyoma small T antigen promotes its degradation and negatively regulates tumorigenesis. J Biol Chem. 2022 Feb;298(2):101496. doi: 10.1016/j.jbc.2021.101496.
- Gillani SQ, Reshi I, Nabi N, Un Nisa M, Sarwar Z, Bhat S, Roberts TM, Higgins JMG, **Andrabi S**. PCTAIRE1 promotes mitotic progression and resistance against antimitotic and apoptotic signals. **J Cell Sci. 2022** Feb 1;135(3):jcs258831.
- Gillani SQ, Nisa MU, Sarwar Z, Reshi I, Bhat SA, Nabi N, **Andrabi S**. Regulation of PCTAIRE1 protein stability by AKT1, LKB1 and BRCA1. **Cell Signal**. **2021** Sep;85:110032.
- Reshi I, Nisa MU, Farooq U, Gillani SQ, Bhat SA, Sarwar Z, Nabi N, Fazili KM, Andrabi S. AKT Regulates Mitotic Progression of Mammalian Cells by Phosphorylating MASTL, Leading to Protein Phosphatase 2A Inactivation. Mol Cell Biol. 2020 Apr 28;40(10):e00366-18.
- Bhat SA, Sarwar Z, Gillani SQ, Un Nisa M, Reshi I, Nabi N, Xie S, Fazili KM, Roberts TM, Andrabi S. Polyomavirus Small T Antigen Induces Apoptosis in Mammalian Cells through the UNC5B Pathway in a PP2A-Dependent Manner. J Virol. 2020 Jul 1;94 (14):e02187-19.

#### Dr. Mohd. Ashraf Dar

Mohd. Ashraf Dar has been working as an Assistant Professor at the Department of Biochemistry since 2016. He has received his Ph.D degree from Jawaharlal Nehru University, India and Post doctorial training from USA. He has published his work in reputed international journals. He is teaching biochemistry in department from past 7 years and has mentored graduate and Ph.D students. He is particularly intrigued to explore the biology of cell cycle, DNA damage response, apoptosis and autophagy. He is also studying regulatory mechanism underlying Ubiquitin-proteasome system and it role in apoptosis and autophagy.

#### **Ongoing research projects**

 Regulatory mechanism of homologous recombination by USP-7 (DST-SERB Govt of India)

#### **Recent Publications:**

- Prusty D, Gupta N, Upadhyay A, Dar A, Naik B, Kumar N, Prajapati VK. Asymptomatic malaria infection prevailing risks for human health and malaria elimination. Infect Genet Evol. 2021 Sep;93:104987.
- Kiran S, **Dar A**, Singh SK, Lee KY, Dutta A. The Deubiquitinase USP46 Is Essential for Proliferation and Tumor Growth of HPV-Transformed Cancers. **Mol Cell**. **2018**;72(5):823-835.e5.

#### **Industry collaborations/Internship Hubs**

#### **Internship hubs/collaborations**

- National Centre for Biological Sciences (NCBS) Banglore, India
- Indian Institute of Science (Bengaluru), India.
- CSIR Indian Institute of Integrative Medicine-IIM Sringar/Jammu.
- Sher-i -Kashmir Institute of Medical Sciences (SKIMS Soura, Sringar Kashmir)
- Sher-i-Kashmir University of Agricultural Sciences and Technology (SKAUST-K).
- Govt Medical College Srinagar, Kashmir (GMC, Srinagar).

# Placements in the last 5 years

S.No.	Names of the students	Company/Institution	Year of Placement (2019-2023)
1.	Rabia Farooq	University of Bisha, Saudi Arabia	2019
2.	Rakhsham Nizami	J&K School Education Department	2019
3.	Fazil Zeeshan Ganie	Revenue Department, J&K	2020
4.	Burhan Farooqee	Stanford University USA	2020
5.	Zahida	Panchayat, J&K	2020
6.	Aaliya	GMC Srinagar	2021
7.	Maria Mehraj	J&K, Bank	2021
8.	Tahir Ahmad Bhat	PerfectTalent RPO Pvt. Ltd.	2022
9.	Ayaz Bashir	S.P.College	2022
10.	Nowsheen Amin	SKUAST Kashmir	2022
11.	Mudasir Nabi	GMC Srinagar	2022
12.	Jasiya Qadir	GMC Srinagar	2022
13.	Sumaiya Nabi	GMC Srinagar	2022
14.	Sauliheen Fida	University of Kashmir	2023
15.	Syed Riffat Farooq	IUST	2023
16.	Abid Hussain Dar	Kriti Labs Technologies	2023
17.	Syed Dowhat Yousuf	SKIMS, Soura	2023
18.	Ahlum Mushtaq	GMC Srinagar	2023
19.	Roheena	SKIMS, Soura	2023
20.	Syed Iqra Rizvi	DBT-in STEM Banglore	2023
21.	Rafiq Ahmad Rather	HED J&K	2023
22.	Farruckh Raina Mufti	HED J&K	2023
23.	Gulzar Ahmad Bhat	SKIMS, Soura	2023

24.	Syed Qaaifah Geelani	Helmonltz Zeutrum Munchea,Germany	2023
25.	Arif Hussain Shah	Forensic Lab. Srinagar	2023
26.	Safya Kouser	HED J&K	2023
27.	Rouf Maqbool	University of Texas at San Antonio	2023
28.	Mohmad Iqbal Sofi	HED J&K	2023
29.	Gowhar Ahmad Shah	Department of Fisheries, J&K	2023
30.	Suhail Anees	Department of Fisheries, J&K	2023
31.	Mourifat Ahmad	IISC banglore	2023
32.	Insha Mohidin	MicroCRISPR Delhi	2023
33.	Wasim Gojri	JK Police Department	2023
34.	Asif Khursheed Qazi	IIIM Srinagar	2024
35.	Uzma Rehman	Govt. ANMT School Baramulla	2024
36.	Misbah Un Nissa	DST-SERB GOI	2024
37.	Misbah Un Nissa	CSIR-GOI	2024
38.	Mukaram Bhat	IISC banglore	2024

# **List of Prominent Recruiters**

- Council of Scientific and Industrial Research (CSIR) Ministry of Science & Technology Govt of India.
- Sher-i -Kashmir Institute of Medical Sciences (SKIMS Soura, Sringar Kashmir)
- Sher-i-Kashmir University of Agricultural Sciences and Technology (SKAUST-K).
- Health and Medical Education Department Govt of J&K (UT)
- Higher Education Department, Govt of J&K (UT).

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