

## Kumaun University, Nainital

### Curriculum Vitae

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Name : **Santosh Kumar Upadhyay**

Designation : Assistant Professor

Department : Biotechnology

Contact Information

- Email Address : upadhyaysk97@gmail.com
- Mobile No : 8979715215

LinkedIn Profile (Optional) :

ORCIDID : <https://orcid.org/0000-0003-0603-2727>

Scopus ID : 57093194700

Vidwan ID : <https://vidwan.inflibnet.ac.in/profile/508064>

#### Educational Qualification:

Degree	University	Subjects	Year
Ph.D.	Jamia Millia Islamia, New Delhi & CSIR-IGIB Delhi	Bioscience	2010
M.Sc.	Kumaun University Nainital	Biotechnology	2003
B.Sc.	Kumaun University Nainital	Zoology, Botany, Chemistry	2000

#### Work Experience:

Position	Department	University/Organization	Year
Assistant Professor	Biotechnology	Kumaun University Nainital	2013-till date
Post-Doctoral Research Scientist	Department of Pharmacology & Therapeutics	Roswell Park Cancer Institute (RPCI)-Buffalo, USA	2012-13
Post-Doctoral Research Scientist	Perelman School of Medicine	University of Pennsylvania– Philadelphia, PA, USA	2009-13

#### Administrative Responsibilities:

Position	Nature of responsibility	University/Organization	Year
Deputy Director (Development & Planning Cell)	Development & planning related tasks	Kumaun University Nainital	2023-till date
Member of Institutional IPR cell	Dealing IPR related matters	Kumaun University Nainital	2020-23
Member of Institutional Animal Ethics Committee	Evaluating applications related to animal research work	Kumaun University Nainital	2016-20
Member of Institutional Biosafety Committee (IBS)	Evaluating proposals having biosafety components	Kumaun University Nainital	2016-till date
Member of Departmental Anti-ragging cell	To ensure prohibition of ragging with other members	Dept. of Biotech, Kumaun Univ. Nainital	2016-till date

Member of Departmental Women cell	Dealing with issues related to gender discrimination & related issues within the dept.	Dept. of Biotech, Kumaun Univ. Nainital	2016-till date
Member of Departmental Admission Committee	Dealing with issues related to admission of new students	Dept. of Biotech, Kumaun Univ. Nainital	2016-till date
Member of departmental Grievance Committee	Dealing with Grievances at the Department	Dept. of Biotech, Kumaun Univ. Nainital	2024-till date

### Research Interests:

I have my research training (Doctoral & Post-Doctoral) on **Molecular biology of Infection, Tumor-Virology and Anti-Cancer therapeutics**. Presently, my research group works on ‘**Molecular bioprospecting of Himalayan biodiversity for human health**’, and we have adopted **diverse molecular approaches for identification of ethno-medicinally important flora and characterization of their medicinal potential**.

### Publications:

#### a) Research Papers:

Authors name	Title of the paper	Vol, page no	Year
R. Gahtori, A.H. Tripathi, G. Chand, A. Pande, P. Joshi. R.C. Rai* & <u>S.K. Upadhyay*</u>	Phytochemical screening of <i>Nyctanthes arbor-tristis</i> plant extracts and their antioxidant and antibacterial activity analysis.	<i>Applied Biochemistry and Biotechnology</i> 196: 436–456 (I.F.= 3.09)	2023
R. Gahtori, A.H. Tripathi, A. Kumari, N. Negi, A. Paliwal, P. Tripathi, P. Joshi. R.C. Rai & S.K. Upadhyay	Anticancer plant-derivatives: deciphering their oncopreventive and therapeutic potential in molecular terms	Future Journal of Pharmaceutical Sciences, 9:14 (ISSN: 2314-7253; DOI: 10.1186/s43094-023-00465-5)	2023
N. Saklani, V. Chauhan, J. Akhtar, S.K. Upadhyay, R. Sirdeshmukh & P. Gautam	In-silico analysis to identify novel ceRNA regulatory axes associated with gallbladder cancer	Front. Genet. 14:1107614. (I.F.= 4.77)	2023
N. Ahmed, A. Athavale, A.H. Tripathi, A. Subramaniam, S.K. Upadhyay, A.K. Pandey, R.C. Rai & A. Awasthi	To be remembered: B cell Memory Response against SARS-CoV-2 and its Variants in Vaccinated and Unvaccinated Individuals	Scandinavian Journal of Immunology 99(2):e13345 (I.F.= 3.9)	2023
N. Negi, G. Chand, R. Gahtori, S.K. Upadhyay, P. Joshi	Synthesis, Antioxidant, and Antibacterial Potential of New Curcumin-Coumarin Hybrids	Indian Journal of Heterocyclic Chemistry, 33 (02):183-189 (I.F.= 0.3)	2023
A.H. Tripathi, A. Kumari, G. Chand, R. Kumar, A. Durgapal, L. Mahajan, P. Joshi & S.K. Upadhyay	An overview of phytomedicinal, ethnobotanical applications and phytochemical constituents of four major Agave species: <i>Agave americana</i> , <i>Agave sisalana</i> , <i>Agave cantala</i> , and <i>Agave tequilana</i> .	Indian Journal of Natural Products & Resources (IJNPR) 14(2) <a href="https://doi.org/10.56042/ijnpr.v14i2.4199">https://doi.org/10.56042/ijnpr.v14i2.4199</a> (I.F.= 0.5)	2023
A.H. Tripathi, A. Kumari, R. Anand, R.C. Rai, P. Gautam, P. Joshi, S.K. Upadhyay	Elucidation of the Anti-inflammatory, Anti-proliferative and Epithelial Mesenchymal Transition Inhibiting Potential of <i>Cichorium intybus</i> -Extract on Human Cancer Cell Line(s)	Pharmacogn. Res., 15(4):1-7	2023
N. Negi, G. Chand, D. Kholia, R. Anand, S.K. Upadhyay, G. Tewari, P. Joshi	Recent Development in the Structural Modifications of Monocarbonyl Analogues of Curcumin and their Improved Biological Activities: A Review.	Pharmacognosy Reviews, 17(34):247-254	2023
G. Upadhyay, S. Koranga, D. Pandey, L. M. Tewari, G. Tewari, V. Lodhiyal, D. Upreti, S.K. Upadhyay, A. Kumari, N. C. Pandey	Investigation on the Phytochemical Analysis and Biological Activity of <i>Daphne papyracea</i> Wall. ex Steud. Leaf Extracts from Kumaun Himalaya.	Letters in Applied NanoBioScience, 12(4): 109; <a href="https://doi.org/10.33263/LIANBS124.109">https://doi.org/10.33263/LIANBS124.109</a>	2023
A. Kumari, A.H. Tripathi, R. Anand, L.M. Tewari, Y. Joshi, R. Bajpai, D.K. Upreti, P. Joshi, S.K. Upadhyay	Streamlined and Cost-Effective Genomic DNA Extraction Method for Lichens, Mushrooms, and Endolichenic Fungi: Enabling DNA Barcoding and Molecular Research.	Journal of Advanced Zoology, 44 (S-5): 674-685	2023

P. Thathola, V. Agnihotri, A. Pandey & S.K. Upadhyay	Biodegradation of Bisphenol A using Psychrotolerant Bacterial Strain <i>Pseudomonas palleroniana</i> GBPI 508.	Archives of Microbiology 204(5):272 (I.F.= 2.67).	2022
N.S. Bisht, A.H. Tripathi, M. Pant, S.K. Upadhyay, N.G. Sahoo, S.P.S. Mehta & A. Dandapat	A facile synthesis of palladium nanoparticles decorated bismuth oxybromide nanostructures with exceptional photo-antimicrobial activities.	Colloids and Surfaces B: Biointerfaces, 217, p.112640 (I.F.= 5.99)	2022
A.H. Tripathi*, N. Negi*, R. Gahtori, A. Kumari, P. Joshi, L.M. Tewari, Y. Joshi, R. Bajpai, D.K. Upreti & S.K. Upadhyay	A Review of Anti-Cancer and Related Properties of Lichen-Extracts and Metabolites.	Anti-Cancer Agents in Medicinal Chemistry 22(1):115-142. (doi: 10.2174/1871520621666210322094647) (I.F.=2.53)	2022
P.K. Sharma, N.S. Lotani, R. Gahtori, S.K. Upadhyay & C.S. Negi	<i>Ophiocordyceps robertsii</i> (Ophiocordycipitaceae: Ascomycetes) from Kumaun Himalaya, Uttarakhand, India	Bionotes, Vol.24 (1&2):136-140	2022
R. Gahtori, A. Paliwal, G. Chand, R. Anand, R. Bajpai, D.K. Upreti, P. Joshi, L.M. Tewari, Y. Joshi, S.K. Upadhyay	Lichens biodiversity in Uttarakhand and significance of precise species identification for promoting lichen conservation and trade.	Journal of Biodiversity and Environmental Sciences, Vol. 21 (4):118-139	2022
A. Kumari*, A. H. Tripathi*, P. Gautam, R. Gahtori, A. Pande, Y. Singh, T. Madan & S. K. Upadhyay	Adhesins in the virulence of opportunistic fungal pathogens of human.	Mycology 12(4):296-324, DOI: 10.1080/21501203.2021.1934176 (I.F.=4.1)	2021
G. Upadhyay, L. M. Tewari, G. Tewari, N Chopra, N.C. Pandey, S. K. Upadhyay & R. Gahtori	Evaluation of Antioxidant Potential of Stem and Leaf Extracts of Himalayan <i>Tinospora cordifolia</i> Hook.f. & Thomson.	The open bioactive compounds journal 9, (Suppl-1, M2) 2-8; DOI: 10.2174/1874847302109010002	2021
A. Paliwal, R. Gahtori, A. Kumari, Negi N., Chand G., Joshi P., Tewari L.M., Joshi Y. & S.K. Upadhyay	Applications and roles of Lichens in the conservation of Himalayan environment.	ENVIS Bulletin Himalayan Ecology 26:47-52.	2018
H. C. Jha, Z. Sun, S. K. Upadhyay, D.W. El-Naccache, R.K. Singh, S.K. Sahu & E.S. Robertson	KSHV-Mediated Regulation of Par3 and SNAIL Contributes to B-Cell Proliferation.	PLOS Pathogens; DOI:10.1371/journal.ppat.1005801 (I.F.=7.6)	2016
A.H. Tripathi, R. Gahtori, N. Negi, A. Paliwal, P. Joshi and S.K. Upadhyay (2016).	Epithelial-Mesenchymal Transition (EMT), Cancer Progression and Role of Aromatase.	J Chem Eng Chem Res. 3(11): 1067-1074; (Print ISSN: 2333-9195, Online ISSN: 2333-9209).	2016
P. Gautam, D. Mushahary, W. Hassan, S.K. Upadhyay, T. Madan, R. Sirdeshmukh, C. S. Sundaram, P.U. Sarma	In-depth 2-DE reference map of <i>Aspergillus fumigatus</i> and its proteomic profiling on exposure to itraconazole.	Journal of Medical Microbiology, 54(5):524-36. (I.F.=3.2)	2016
A. Saha, H.C. Jha, S.K. Upadhyay & E.S. Robertson	Epigenetic silencing of tumor suppressor genes during in vitro Epstein-Barr virus infection.	PNAS, 112(37): E5199-207. (I.F.=12.779)	2015
A. Srivatsan, J. R. Missert, S.K. Upadhyay & R.K. Pandey	Porphyrin-based photosensitizers and the corresponding multifunctional nanoplatfoms for cancer-imaging and phototherapy.	J. Porphyrins Phthalocyanines, 19: 1-26. (I.F.=1.9)	2015
S.K. Upadhyay*, A. Verone*, S. Shoemaker, M. Qin, S. Liu, M. Campbell, and P. A. Hershberger	1,25-Dihydroxyvitamin D3 (1,25(OH)2D3) Signaling Capacity and the Epithelial-Mesenchymal Transition in Non-Small Cell Lung Cancer (NSCLC): Implications for Use of 1,25(OH)2D3 in NSCLC Treatment	Cancers, 5: 1504-1521. (PMID: 24217116), (I.F.=6.57)	2013
S.K. Upadhyay*, H. C. Jha*, M. P. Aj, J. Lu, Q. Cai, A. Saha, E. S. Robertson	H2AX phosphorylation is important for LANA-mediated Kaposi's sarcoma-associated herpesvirus episome persistence.	J. Virol. 87(9):5255-69 (PMID 23449797), (I.F.=6.55)	2013
A. Saha, J. Lu, L. Morizur, S.K. Upadhyay, M. Prasad, E.S. Robertson	E2F1 mediated apoptosis induced by the DNA damage response is blocked by EBV nuclear antigen 3C in lymphoblastoid cells.	PLoS Pathog. 8 (3): e1002573. (I.F.=7.6)	2012
Q. Cai, B. Xiao, H. Si, A. Cervini, J. Gao, J. Lu, S.K. Upadhyay, S.C. Verma, E.S. Robertson	Kaposi's sarcoma herpesvirus upregulates Aurora A expression to promote p53 phosphorylation and ubiquitylation.	PLoS Pathog. 8 (3): e1002566. (I.F.=7.6)	2012
A. Saha, S. Halder, S.K. Upadhyay, J. Lu, P. Kumar, M.	Epstein-Barr virus nuclear antigen 3C facilitates G1-S transition by stabilizing and enhancing the function of cyclin D1.	PLoS Pathog. 7(2):e1001275. (I.F.=7.6)	2011

Murakami, Q. Cai, E.S. Robertson			
S.K. Upadhyay, P. Gautam, H. Pandit, Y. Singh, S.F. Basir, T. Madan	Identification of Fibrinogen-binding proteins of <i>Aspergillus fumigatus</i> using proteomic approach	Mycopathologia. (PMID: 21870122). (I.F.=3.79)	2011
S.K. Upadhyay*, P. Gautam *, W. Hassan, T. Madan, R. Sirdeshmukh, C.S. Sundaram, W.N. Gade, S.F. Basir, Y. Singh, P.U. Sarma	Transcriptomic and proteomic profile of <i>Aspergillus fumigatus</i> on exposure to artemisinin.	Mycopathologia. 172(5):331-46. (I.F.=3.79)	2011
S.K. Upadhyay, L. Mahajan, Y. Singh, S. F. Basir, T. Madan	Identification and characterization of a laminin binding protein of <i>Aspergillus fumigatus</i> : Extracellular thaumatin domain protein (AfCalAp).	Journal of Medical Microbiology, 58(Pt 6):714-22. (I.F.=3.2)	2009
S.K. Upadhyay, J. Shankar, Y. Singh, S. F. Basir, T. Madan, P. U. Sharma	Expressed sequence tags of <i>Aspergillus fumigatus</i> : Extension of catalogue and their evaluation as putative drug targets and/or diagnostic markers.	Indian Journal of clinical biochemistry (A Springer Journal) 24 (2) 131-136. (I.F.=2.1)	2009

b) **Patents:** None

c) **Books:**

Authors name	Title of the book	Publisher	ISBN	Year
G. Tewari, D. Pant, P. Joshi, L.M. Tewari & S.K. Upadhyay (Ed.)	Sustainable Utilization and Conservation of Biological Wealth.	Indu Book Services Pvt. Ltd	978-93-91377-88-5	2023

d) **Book chapters:**

Authors name	Title of the book	Publisher	ISBN	Year
A.H. Tripathi, S. Mehrotra, A. Kumari, R. Bajpai, Y. Joshi, P. Joshi, L.M. Tewari, R.C. Rai, & S.K. Upadhyay	Lichens as bioremediation agents: A review. In: Synergistic Approaches for Bioremediation of Environmental Pollutants: Recent Advances and Challenges	Elsevier USA DOI: 10.1016/B978-0-323-91860-2.00015-4	ISBN:9780323 918602	2023
D. Upreti, L. M. Tewari, M. Durgapal, G. Tewari, S.K. Upadhyay, A. Kumari, N.C. Pandey, G. Upadhyay, V. Lodhiyal, G.C. Kharkwal & D. Pant	Assessment of Antioxidant and Antimicrobial Potential of Leaf Extracts of <i>Pogostenton benghalensis</i> (Burm.f.) Kuntze from Kumaun Western Himalaya. In: Modern Trends in Medicinal and Aromatic Plants	Indu Book Services Pvt. Ltd., New Delhi	ISBN: 978-93-81377-78-6	2023
A. Kumari, S. Phutela, G. Chand, P. Joshi, M. Vaid, R.C. Rai & S.K. Upadhyay	Autophagy in Infection mediated Cancers. In: Autophagy and Metabolism: Potential target for cancer therap	Elsevier USA	ISBN: 978032399879 6	2022
A.H. Tripathi, S. Mehrotra, A. Kumari, R. Bajpai, Y. Joshi, P. Joshi, L.M. Tewari, R.C. Rai, & S.K. Upadhyay	Lichens as bioremediation agents: A review. In: Synergistic Approaches for Bioremediation of Environmental Pollutants: Recent Advances and Challenges	Elsevier USA	ISBN: 978032391860 2	2022
G. Chand, D. Kholia, K. Kumar, R. Kumar, S.K. Upadhyay & P. Joshi	The Role of Microorganisms in Bioremediation, In: Waste Management: Strategies, Challenges and Future Directions	Nova Science Publishers, Inc. New York	ISBN: 978-1-68507-394-7; e-book	2022
A.H. Tripathi, N.S. Bisht, A. Dandapat & S.K. Upadhyay	Advancement towards Sustainable Management and Utilization of Agriculture Wastes in the Global Economy; In: Waste Management: Strategies, Challenges and Future Directions	Nova Science Publishers, Inc. New York	ISBN: 978-1-68507-394-7; e-book	2022
A.H. Tripathi, A. Bhatt, A. Kumari, G. Chand, H. Tewari, R. Kumar, P. Joshi, & S.K. Upadhyay	Improving the tumor avidity of photosensitizers used in photodynamic therapy (PDT). In: Recent Advances in Cancer Biology	Genome Biotech Publication	ISBN: 978-81-929995-9-3	2021
A. Paliwal, R. Gahtori, A. Kumari, A.H. Tripathi, H. Tewari, R.C.	A survey of studies on ethnic use and medicinal potential of Himalayan	Nova Science Publishers, New	ISBN: 978-1-53618-140-1	2020

Rai, Y.C. Joshi, L.M. Tewari, P. Joshi and S.K. Upadhyay	lichens. In: Natural Products and their Utilization Patterns;	York. Pages: 351-372		
N. Negi, G. Chand, D. Kholia, R. Gahtori, S.K. Upadhyay, R. Anand & P. Joshi	Curcumin nanoparticles in Cancer therapeutics. In: Natural Products and their Utilization Patterns	Nova Science Publishers, New York. Pages: 321-338	ISBN: 978-1-53618-140-1	2020
S. K. Upadhyay, R. C. Rai, R. Gehtori, A. Paliwal, P. Gautam, P. Joshi	Drug Resistance in Cancer; in: Drug Resistance in Bacteria, Fungi, Malaria, and Cancer	Springer, USA	ISBN 978-3-319-48682-6	2017
P. J. Bhetariya, N. Sharma, P. Singh, P. Tripathi, S.K. Upadhyay, P. Gautam	Human fungal pathogens and drug resistance against azole drugs; in: Drug Resistance in Bacteria, Fungi, Malaria, and Cancer	Springer, USA	ISBN 978-3-319-48682-6	2017
T. Dogra, L. Mahajan, S.K. Upadhyay, P. Gautam	Human Pathogenic fungi and their Survival Mechanisms in the host; in: Industrial Microbiology	Nova Publications, USA	ISBN 978-1-63484-491-8	2016
L. Mahajan, S.K. Upadhyay, A. Archana, P. Gautam	Gut Microbiota and human health; in: Industrial Microbiology	Nova Publications, USA	ISBN 978-1-63484-491-8	2016
R. Joshi, T. S. Bisht, L. Mahajan, P. Gautam, A. Verone-Boyle, S.K. Upadhyay	Use of Microbes in the Production of Vaccines; in: Industrial Microbiology	Nova Publications, USA	ISBN 978-1-63484-491-8	2016
S.K. Upadhyay, H. C. Jha, A. Saha, E.S. Robertson	Lymphocryptoviruses: EBV and Its Role in Human Cancer, In: Cancer Associated Viruses, 1st edn.	Springer, USA	ISBN: 978-1-4419-9999-3	2012

**e) Conference Publications/Proceedings:**

<b>Authors name</b>	<b>Title of the paper</b>	<b>Conference name</b>	<b>Year</b>
Santosh K. Upadhyay	"Molecular Assessment of Biodiversity of Himalayan Flora and Bioprospecting for Anticancer Agents"	3 <sup>rd</sup> International Conference of Integrative Chemistry, Biology & Translational Medicine (ICBTM 3.0)	2024
R. Gahtori, A. Paliwal, R. Anand, Y. Joshi, P. Joshi, L. M. Tewari, <u>S.K. Upadhyay</u>	Studies on Lichen Biodiversity in Uttarakhand	National Conference SUTBC-January 06, 2019	2019
A. Paliwal, R. Gahtori, N. Negi, G. Chand, P. Joshi and <u>S.K. Upadhyay</u>	A survey of studies on phytomedicinal potential of lichens.	National Conference SUTBC-January 06, 2019	2019
R. Gahtori, A. Paliwal, N. Negi, R. Anand, G. Chand, Y. Joshi, P. Joshi and <u>S.K. Upadhyay</u>	Promoting the Lichen trade and conservation in Uttarakhand through facilitating precise species identification.	<i>International Conference ACMAP-2019</i>	2019
R. Gahtori, A. H. Tripathi, N. Negi, P. Joshi, <u>S.K. Upadhyay</u>	Molecular systematic identification and anti-bacterial activities of <i>Nyctanthes</i> and <i>Perilla</i> plant-extracts isolated from Kumaun region of Uttarakhand	12 <sup>th</sup> Uttarakhand state council for science & Technology (UCOST), Dehradun	2018
R. Gahtori, N. Negi, A. Paliwal, G. Chand, P. Joshi, <u>S.K. Upadhyay</u>	"Molecular identification by DNA barcoding and assessment of the anti-oxidative and anti-bacterial activities of <i>Nyctanthes arbo-tristis</i> "	4 <sup>th</sup> India International Science festival (IISF), Lucknow.	2018
H. C. Jha, <u>S. K. Upadhyay</u> , A. Saha, Q. Cai, S. Banerjee, J. Lu, M. P. Aj, E. S. Robertson	EBNA3C mediated stabilization of aurora kinase B contributes to oncogenesis	'International congress on oncogenic herpesviruses and associated diseases'. Philadelphia, Pennsylvania August 1-4, 2012	2012
S. Canfield, H.C. Jha, <u>S. K. Upadhyay</u> , M. Shirley, E.S. Robertson.	<i>Helicobacter pylori</i> facilitates EBV infection of gastric cancer cell line.	6 <sup>th</sup> Annual conference of GI and Ball diseases, UPENN Medical School, 2012	2012

S. K. Upadhyay*, P. Gautam*, W. Hassan, T. Madan, R. Sirdeshmukh, C. S. Sundaram, W. N. Gade, S. F. Basir, P. U. Sarma <i>*Equal contribution</i>	"Studies on molecular mechanisms of amphotericin B and artemisinin against <i>Aspergillus fumigatus</i> using transcriptomic and proteomic approach"	5th AOHUPO (Asia Oceania Human Proteome Organization) <u>International</u> conference held from 21st-25th Feb 2010 at Hyderabad, India.	2010
S.K. Upadhyay, S.F. Basir, T. Madan	"Identifying anchors of menacing mold: extracellular thaumatin domain protein characterized as a potential adhesin of <i>Aspergillus fumigatus</i> "	Poster presented in 3 <sup>rd</sup> Advances against Aspergillosis ( <u>International</u> ) conference (January 16-19, 2008, Miami Beach, Florida), organized by University of California, San Diego School of Medicine.	2008
S.K. Upadhyay, S. F. Basir, T. Madan	Characterization of cell wall Galactomannoprotein (Mp1) as a potential adhesin of <i>Aspergillus fumigatus</i> .	<u>International</u> conference, 'American Academy for Allergy Asthma and Immunology (AAAAI) Meet-Philadelphia, 2008'	2008
J. Shankar, S. K. Upadhyay, S. Gupta, S. F. Basir, P. U. Sharma, T. Madan	Global gene expression profile of <i>Aspergillus fumigatus</i> conidia during interaction with murine macrophage	<u>International</u> Conference, 'American Academy for Allergy Asthma and Immunology (AAAAI) Meet-Philadelphia, 2008'.	2008

### Projects:

Title of the project	Funding agency	Amount (Rs)	Year
To elucidate the potential of small molecule inhibitors (SMIs) in curbing 'epithelial-mesenchymal transition (EMT)' and drug-resistance in lung adenocarcinoma cell-lines	CM's Higher Edu. Research Promotion Scheme	13.32 Lacs	2024-26
DNA-barcoding and bioactivity assessment of Endolichenic fungi isolated from Himalayan lichens: <i>Parmotrema sp.</i> and <i>Usnea sp.</i>	Kumaun Univ Int. Funds for Research (KUIFR)	2.00 Lacs	2024-25
Synthesis of some biologically important heterocyclic compounds	Kumaun Univ Int. Funds for Research (KUIFR)	2.00 Lacs	2024-25
Elucidation of anti-inflammatory and epithelial-mesenchymal transition (EMT)-inhibiting potential of traditionally edible medicinal lichens from Kumaun Himalaya	SERB (DST)	29.49 Lacs	2021-24
DNA-barcoding of ethno-medicinal and high-value plants of Uttarakhand Himalaya and assessment of anti-inflammatory nutraceutical potential of selected phytoextracts	DIBER (DRDO)	9.79 Lacs	2020-21 (Completed)
To establish a DNA-barcoding and chemotaxonomy empowered herbarium of lichen-species of Uttarakhand-Himalaya and development of a resource group for conservation and characterization of lichen-biodiversity	NMHS (MoEF&CC)	60.66 Lacs	2018-21 (Completed)
Development of reporter systems for screening of anti-metastatic and drug-resensitizing phyto-chemicals from Uttarakhand-flora	Kumaun Univ. (UGC) - MRP under 'Innovative Res. Activities Scheme'	1.25 Lacs	2016-17 (Completed)

### Teaching details:

Name of the course/paper	Department	University	Year
M.Sc./Animal Biotechnology	Biotechnology	Kumaun University	2014-till date
M.Sc./Genomics & Proteomics	Biotechnology	Kumaun University	2014-till date

M,Sc./Molecular Virology	Biotechnology	Kumaun University	2014-16
M,Sc./Analytical Techniques	Biotechnology	Kumaun University	2016-till date
B.Sc./Microbiology	Biotechnology	Kumaun University	2024 -till date

### Professional Memberships:

Organization	Position	Year
Indian Association for Cancer Research (IACR)	Life member	NA
Indian Science Congress Association (ISCA)	Life member	NA
Indian Immunology Society (IIS)	Life member	NA
Indian Lichenological Society (ILS)	Life member	NA
Association for Indian Cryptogams (AIC)	Founder Member	NA
European Society for Medical Oncology (ESMO)	Member	2022-till date
International Association of Lichenology (IAL)	Member	2019-20
(International) Microbiology Society	Affiliate Member	2018-till date
American Society for Microbiology (ASM)	Member	2012-13
European Academy of Allergology and Clinical Immunology (EAACI)	Affiliate Junior Member	2011-12
American Academy of Allergy Asthma and Immunology (AAAAI).	Doctoral/post- doctoral in training member	2008-9

### Honours and Awards:

Award	Awarding Organization	Year
Best Oral Presentation award	International conference ICBTM 3.0 held at Pacific University Udaipur 8-10 March 2024.	2024
Post-Doctoral Research Fellowships	National Institute of Health (NIH)- -USA @ Roswell Park Cancer Institute-Buffalo (NY).	2012-13
Post-Doctoral Research Fellowships	National Institute of Health (NIH)-USA @ University of Pennsylvania, School of Medicine – Philadelphia (PA).	2009-12
International Society for Human and Animal Mycology (ISHAM) travel award	International Society for Human and Animal Mycology (ISHAM)	2008
<b>Awards/recognition to research scholars/Lab-members:</b>		
Young Scientist Award to Ph.D. Scholar Ms. Garima Chand	National Conf. & Workshop on Food Tech. & Nutrition: Enhancing flavour, health, and well-being through culinary practices: Community College, Kumaun Univ. Campus, Bhimtal (25 Feb 2024)	2024
Young Scientist Award to Ph.D. Scholar Ms. Garima Chand	Uttarakhand Council of Sci. and Tech. (22-24 June 2022)	2022
Dissertation Trainee Mr. Prajesh Tamang received Young Scientist Award (1 <sup>st</sup> Position)	International workshop-cum-conference (online) on Lichen Research (K.U. Campus, Bhimtal; July 2021).	2021
Project Assistant Ms. Himani Tewari received Young Scientist Award (2 <sup>nd</sup> Position)	International workshop-cum-conference (online) on Lichen Research (K.U. Campus, Bhimtal; July 2021).	2021
Ph.D. Scholar Ms. Ankita Tripathi Secured second position in oral presentation	National Conference on 'Current Status and Opportunities in Medicinal Plant Research and Natural Product Research'; Organized by DSB Campus, K.U. Nainital (March 2021)	2021
Ph.D. Scholar Ms. Ankita Tripathi received Young Scientist Award	International conference, ICEFN & SEM-2019, Organized by Nanoscience and Nanotechnology Centre, Kumaun University Nainital (April 2019).	2019
Ph.D. Scholar Ms. Rekha Gahtori received ICMR-SRF	ICMR, GOI	2019
Ph.D. Scholar Ms. Rekha Gahtori received Young Scientist Award	Annual meeting of Uttarakhand Council of Sci. and Tech. (March 2018)	2018

Ph.D. Scholar Ms. Nidhi Negi received Young Scientist Award	Annual meeting of Uttarakhand Council of Science and Technology (March 2018)	2018
Ms. Ankita Tripathi received DST-INSPIRE fellowship	DST, GOI	2017

### Conference Presentations:

Title of presentation	Conference name	Name of the institution	Year
Oral presentation on, "Molecular Assessment of Biodiversity of Himalayan Flora and Bioprospecting for Anticancer Agents"	3 <sup>rd</sup> International Conference of Integrative Chemistry, Biology & Translational Medicine (ICBTM 3.0)	Organized by Pacific University, Univ. of Delhi, KUNTL, & other Univ. at Udaipur, 8-10 March 2024.	2024
"Polymerase Chain Reaction: Variants, Research Applications & Primer designing for PCR"	Guest Lecture Series (8 <sup>th</sup> Module)	Vellore Institute of Technology (VIT): School of Bio Sciences and Technology (SBST): 6 <sup>th</sup> Oct 2023	2023
Invited talk as resource person on, "Biodiversity & Bioprospection studies: filling the lacunae using biotechnological tools"	National workshop (1 week) organized under DST-STUTI program	Organized by Bareilly College, Bareilly & IIT Gandhinagar, Gujarat: 11 Nov 2022	2022
Invited talk as resource person on, "Molecular and Cell-biological Techniques for Understanding Infections and Cancer"	National conference under DBT Star College scheme	Organized (online) by Zakir Hussain College, University of Delhi: 23 <sup>rd</sup> and 24 <sup>th</sup> Dec 2021	2021
Invited talk on, "Challenges and opportunities of biodiversity bioprospection in Uttarakhand: A molecular/cell- biology perspective",	National conference on, "Current status and opportunities in Medicinal Plant Research and Natural Products Research"	Organized by SRICC, Kumaun Univ. Nainital: 6 March 2021	2021
Invited talk as resource person on, "DNA-barcoding based identification of lichens: basic methodological overview",	One week "Field based Hands-on training on Lichen Systematics"	Organized by Indian Lichenological Society (ILS) and CSIR-National Botanical Research Institute, Lucknow	2019
Invited talk on, "Cancer: An Introductory Overview"	"National Seminar on Plants and Environment (NSSAPPE-2017)"	Organized by Department of Botany, D.S.B. Campus, Kumaun University Nainital	2017
Invited talk on, "Vitamin D Signaling Favors Epithelial Phenotype in Non-small Cell Lung Cancers"	International conference, 'Recent Advances in Cancer Prevention and Therapeutics (RACPT-2013)'	Central university of Gujarat, Gandhinagar: November 19-20, 2013	2013

*April 7<sup>th</sup> 2024*

**(Santosh K. Upadhyay)**