



Swami Rama Himalayan University

NAAC A+

ADMISSION BROCHURE

2026

SCHOOL OF
BIO SCIENCES



LIMITLESS VISION, BOUNDLESS INSPIRATION

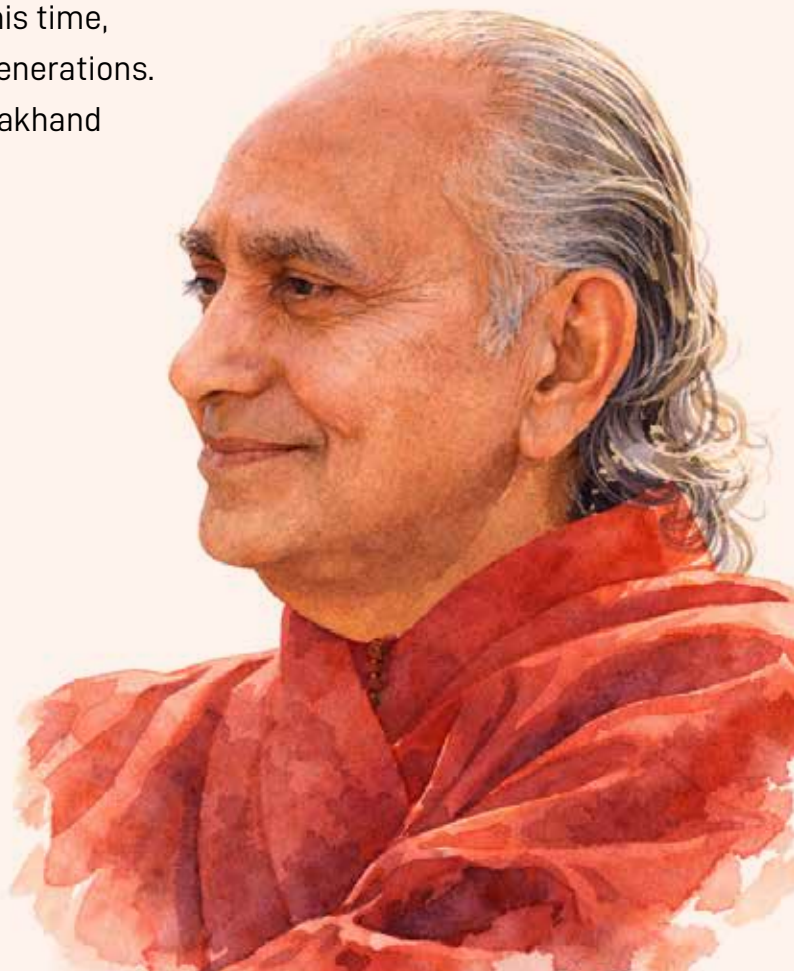
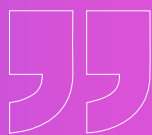
Born in 1925 in Uttarakhand, H.H. Dr. Swami Rama was a Yogi, philosopher, scientist, and humanitarian. Mentored by luminaries like Mahatma Gandhi, Sri Aurobindo and Rabindranath Tagore, he pursued higher studies in India and Oxford before serving as a medical consultant in London and conducting parapsychological research in Moscow.

Guided by his master, he journeyed worldwide on a quest to bridge science and spirituality. Along the way, he founded an array of top-tier spiritual and medical institutions. In the 1970s, he established the Himalayan Institute of Yoga, Science & Philosophy in the U.S., pioneering research that proved the mind's power over the body. His yogic feats were featured in Encyclopedia Britannica (1973), influencing holistic medicine and biofeedback therapy.

Returning to India, he founded the Himalayan Institute Hospital Trust (HIHT) in Dehradun, transforming healthcare and education landscape of Uttarakhand. A sage ahead of his time, Swami Rama's legacy continues to inspire generations. His mission was to serve the people of Uttarakhand in the field of health, education, rural development and more.



**YOUR REAL EDUCATION BEGINS
WHEN YOU LEARN TO EXPLORE
AND DISCOVER YOURSELF.**





SCHOOL OVERVIEW

The School of Biosciences is dedicated to excellence in teaching, research, and innovation in the field of life sciences. It offers multidisciplinary programs that integrate fundamental biology with emerging areas such as biotechnology, microbiology, biochemistry, food sciences, and environmental science. The school focuses on developing skilled professionals through modern laboratories, research-driven learning, and collaborations with academic and industrial partners. Faculty members actively engage in cutting-edge research addressing challenges related to health, agriculture, food and environmental sustainability. By fostering scientific curiosity, critical thinking, and innovation, the School of Biosciences aims to prepare students to contribute effectively to scientific advancement and societal development.



OUR PHILOSOPHY

The School of Biosciences is committed to advancing scientific knowledge and innovation in the life sciences through excellence in education, research, and societal engagement. Its philosophy centers on fostering critical thinking, interdisciplinary learning, and ethical scientific practices to address global challenges related to health, environment, and sustainability.

By integrating fundamental biological principles with emerging biotechnological approaches, the school aims to nurture skilled scientists and responsible citizens. Emphasis is placed on curiosity-driven research, innovation, and collaboration with industry and academia. The School of Biosciences strives to translate scientific discoveries into practical solutions that contribute to sustainable development and improve the quality of life.



VISION

To become a renowned institution by inculcating scientific temper and values among learners in thrust area of biological sciences.



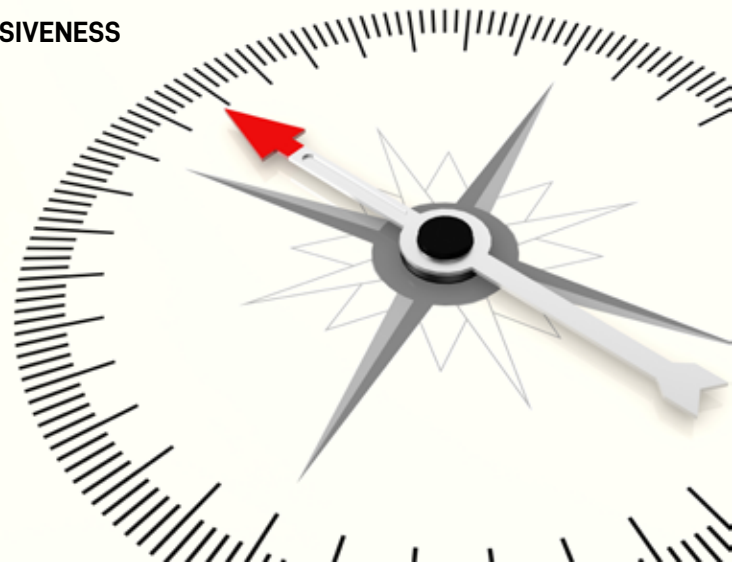
MISSION

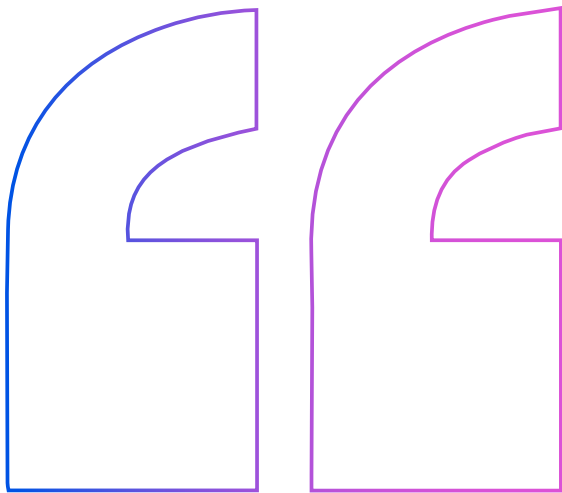
To develop a scientific attitude among learners in the field of biological sciences enabling them to deal with challenges of healthcare, food environment, agriculture and allied sectors for overall well-being of society.



CORE VALUES

- INTEGRITY • EXCELLENCE • INNOVATION • INCLUSIVENESS
- ACCOUNTABILITY • SOCIAL RESPONSIBILITY





MESSAGE FROM PROFESSOR & DEAN



At the School of Biosciences, we are committed to nurture scientific curiosity through a strong integration of high-quality teaching and cutting-edge research. Our academic ecosystem is designed to empower learners and researchers to address real-world biological challenges with rigor, innovation, and social relevance.

Our teaching philosophy emphasizes conceptual clarity, experiential learning, and interdisciplinary exposure, supported by well-structured curricula and dedicated mentorship. Students are trained not only in foundational biological sciences but also in advanced tools and analytical approaches relevant to contemporary research and industry needs.

Equally, the School maintains a vibrant research culture with active programs in biochemistry, biotechnology, food science and technology, microbiology, molecular biology, genomics, regenerative medicine, oncology, plant sciences, environmental biology, and translational biosciences. Faculty and scholars engage in nationally funded research, high-impact publications, and meaningful collaborations across academia, industry, and society.

We believe that the synergy between teaching excellence and research leadership is essential for developing future scientists, innovators, and thought leaders. We warmly invite you to explore opportunities to learn, collaborate, and grow with us.

We look forward to the possibility of welcoming you to our academic community.

With best wishes,

PROF. (DR.) Sanjay Gupta



DISTINGUISHED FACULTY



Dr. Daniel Segal

Professor, Shmunis School of Biomedicine and Cancer Research, Tel Aviv University, Israel



Prof. Subhra Chakraborty

FNA, FNASc, FNAAS
Former Director, National Institute of Plant Genomics and Research-DBT, New Delhi,
Visiting Professor



Dr. Shashi Bala Singh

FNAMS, FNASc, FIAN,
Former Director General (Life Sciences) at DRDO HQS
Former Director, NIPER, Chair Professor, Translational Research in Biosciences School of Biosciences, SRHU



Prof. Kiran Katoch

FNA, FNASc
Former Director of ICMR -National Jalma Institute of Leprosy & Other Mycobacterial Diseases (NJIL&OMD),Agra
Visiting Professor

INDUSTRY MENTORS



Dr. Pradeep Kumar

General Manager-Research & Development, Production at Meril Lifesciences Ltd -India



Dr. Shashi Ranjan

Vice President, R&D and International Business Development, Natural Herbs and Formulations Ltd., Roorkee



Dr. Vijay Bhooshan Kumar

PhD Nano Chemistry,
Senior Manager
Advance Engineering, Ashok Leyland



PROGRAMMES OFFERED

B.Sc. Microbiology/ B.Sc. (Hons.) Microbiology/ B.Sc. (Hons.) Microbiology with Research

Duration: 3 Years /4 Years (Semester System, NEP2020)

B.Sc. Biotechnology/ B.Sc. (Hons.) Biotechnology/ B.Sc. (Hons.) Biotechnology with Research

Duration: 3 Years /4 Years (Semester System, NEP2020)

B.Sc. (Food Science & Tech.)/B.Sc. (Hons.) Food Science & Tech./

B.Sc. (Hons.) Food Science & Tech. with Research

Duration: 3 Years /4 Years (Semester System, NEP2020)

M.Sc. Microbiology

Duration: 2 Years (Semester System, NEP2020)

M.Sc. Biochemistry

Duration: 2 Years (Semester System, NEP2020)

M.Sc. Biotechnology

Duration: 2 Years (Semester System, NEP2020)

M.Sc. Environmental Sciences

Duration: 2 Years (Semester System, NEP2020)

M.Sc. Pharmaceutical Chemistry

Duration: 2 Years (Semester System, NEP2020)



B.Sc. Microbiology
B.Sc. (Hons.) Microbiology
B.Sc. (Hons.) Microbiology with Research
B.Sc. Biotechnology
B.Sc. (Hons.) Biotechnology
B.Sc. (Hons.) Biotechnology with Research
B.Sc. Food Science & Technology
B.Sc. (Hons.) Food Science & Technology
B.Sc. (Hons.) Food Science & Technology with Research

PROGRAM SNAPSHOT

Duration: 3 Years / 4 Years (Semester System, NEP2020)

Mode: Full-time, Regular

Career Pathways: Molecular biology, microbiology, biotechnology fields, food industry, quality & safety, research, higher studies

ELIGIBILITY

10+2 with Science (PCB/PCM) from a recognized board with a minimum of 50% marks or equivalent grade (45% Marks or equivalent grade for Scheduled Caste/ Scheduled Tribes), or as per university norms.

NEP-2020 ALSO ENABLES STUDENTS TO:

- Pursue higher education (M.Sc., MTech, MS, MBA, MPH)
- Prepare for competitive exams (NET, GATE, DBT-BET, CSIR)
- Engage in entrepreneurship, start-ups, and incubation programs

EMPLOYABILITY

Opportunities are available for B.Sc. Microbiology / Biotechnology graduates in public funded laboratories and in the field of drug and pharmaceutical research, chemicals, environment control, waste management, energy, food processing, bio-processing, healthcare, agriculture, forensic studies and bio-farming. The list below provides a synoptic overview of possible career paths.

- Pharmaceutical industries
- Biotechnology industries
- Food and dairy productions
- Beverage industries
- Quality assurance
- Production support
- Fermentation units
- Microbiological testing laboratories
- Environmental monitoring agencies
- Wastewater treatment plants
- Agriculture-based industries
- Biofertilizer or biopesticide units
- Also provides a strong pathway to higher education (M.Sc., Ph.D.)



B.Sc. Food Science & Technology

B.Sc. (Hons.) Food Science & Technology

B.Sc. (Hons.) Food Science & Technology with Research

A skill-driven undergraduate program integrating food science, technology, quality, and safety for global careers.

PROGRAM SNAPSHOT

Duration: 3Years/ 4 Years (Semester System, NEP2020)

Eligibility: 10+2 (Science – PCB / PCM)

Mode: Full-time, Regular

Career Pathways: Food Industry | Quality & Safety | Research | Higher Studies

EMPLOYABILITY

- Food & Beverage Manufacturing Companies
- Nutraceutical & Health Food Companies
- Food Processing Industries
- Quality Testing & Analytical Laboratories
- Fast-Moving Consumer Goods (FMCG) Companies
- Food Packaging Industries
- Cold Chain, Storage & Supply Chain Companies
- Start-ups & Food Innovation Companies
- Government Organizations & Public Sector Units
- Hospitality & Catering Sector
- Retail & Supermarket Chains
- Academic & Research Institutions



M.Sc. Microbiology

PROGRAM SNAPSHOT

Duration: 2 Years (Semester System, NEP 2020)

Mode: Full-time, Regular

Career Pathways: Biochemical Sciences, Molecular biology, microbiology, biotechnology fields, food industry, quality & safety, research, higher studies

ELIGIBILITY

The student shall be eligible for admission to a M.Sc. Microbiology Program after he/she has successfully completed a three years B.Sc. undergraduate degree with microbiology/ biotechnology/ biochemistry/ botany/ zoology/ medial laboratory technology/food science and technology/pharmaceutical sciences/biological sciences as one of the subjects or earned with not less than 50% marks or equivalent grade prescribed number of credits or through the examinations conducted by university as equivalent to an undergraduate degree.

EMPLOYABILITY

M.Sc. Microbiology graduates have strong employability across diverse sectors due to their specialized knowledge, laboratory skills, and research training. Besides research, they can get suitable teaching positions in Colleges and Universities as an Assistant Professor after qualifying National Eligibility Test (NET).

The list below provides a synoptic overview of possible career path:

- Healthcare Industry
- Diagnostics Research
- Food and dairy Industries
- Distillery and Wineries
- Drug Manufacturing Industries
- Public Health Entities
- Industrial Laboratories
- Research Departments
- Educational Institutes
- Environmental Pollution Control
- Agriculture and Fisheries
- Hospitals
- Public Health Laboratories
- Cosmetic Industries
- Genomics Industries
- Diagnostics and Testing Industries
- Entrepreneurship in microbiology-based startups



M.Sc. Biochemistry

PROGRAM SNAPSHOT

Duration: 2 Years (Semester System, NEP 2020)

Mode: Full-time, Regular

Career Pathways: Biochemical Sciences, Molecular biology, microbiology, biotechnology fields, food industry, quality & safety, research, higher studies

ELIGIBILITY

The student shall be eligible for admission to a M.Sc. Biochemistry Program after he/she has successfully completed a three years B.Sc. undergraduate degree with microbiology/ biotechnology/ biochemistry/ botany/ zoology/ medical laboratory technology/food science and technology/pharmaceutical sciences/ biological sciences as one of the subjects or earned with not less than 50% marks or equivalent grade prescribed number of credits or through the examinations conducted by university as equivalent to an undergraduate degree.

EMPLOYABILITY

Biochemistry is a career oriented, high demand fundamental course with applications in all biological research, be it plants, animal, human and microbes. Students can peruse basic research work in research institutes or universities by qualifying various exams for research fellowships. Students can also work in pharmaceutical and applied biotechnological fields. It provides opportunity to students to develop their career in the following positions/areas:

- Research Scientist
- Clinical Biochemist
- Biotechnologist
- Clinical Research Associate
- Pharmaceutical Scientist
- Quality Control and Quality Assurance Specialist
- Regulatory Affairs Executive
- Medical Writing and Scientific Communication
- Teaching and Academia
- Entrepreneurship and Diagnostics Startups



M.Sc. Biotechnology

PROGRAM SNAPSHOT

Duration: 2 Years (Semester System, NEP 2020)

Mode: Full-time, Regular

Career Pathways: Biochemical Sciences, Molecular biology, microbiology, biotechnology fields, food industry, quality & safety, research, higher studies

ELIGIBILITY

The student shall be eligible for admission to a M.Sc. Biotechnology Program after he/she has successfully completed a three years B.Sc. undergraduate degree with microbiology/ biotechnology/ biochemistry/ botany/ zoology/ medical laboratory technology/food science and technology/pharmaceutical sciences/biological sciences as one of the subjects or earned with not less than 50% marks or equivalent grade prescribed number of credits or through the examinations conducted by university as equivalent to an undergraduate degree.

EMPLOYABILITY

- Research Scientist / Junior Scientist
- Research Associate / Project Fellow
- Molecular Biologist
- Clinical Research Associate (CRA)
- Bioprocess and Production Scientist
- Quality Control (QC) / Quality Assurance (QA) Manager
- Bioinformatics Analyst
- Genomics and Proteomics Specialist
- Regulatory Affairs Executive
- Scientific Officer / Technical Officer



M.Sc. Environmental Sciences

PROGRAM SNAPSHOT

Duration: 2 Years (Semester System, NEP 2020)

Mode: Full-time, Regular

Career Pathways: Environmental Sciences, renewable energy, remediation sciences, quality & safety, research, higher studies

ELIGIBILITY

The student shall be eligible for admission to a Master's Degree Program in Environmental Science after he/she has successfully completed a three-year B.Sc. undergraduate degree with Microbiology/Biotechnology/ Environmental science/Botany/Zoology/Chemistry as one of the subjects or earned with not less than 50% marks or equivalent grade prescribed number of credits or through the examinations conducted by university as equivalent to an undergraduate degree.

EMPLOYABILITY

Graduates of the M.Sc. Environmental Sciences program have strong employability across government, industrial, research, and non-governmental sectors due to their interdisciplinary knowledge and practical training. The list below provides a synoptic overview of possible career path:

- Environmental consultancy firms (EIA, audits, compliance)
- Pollution control & environmental testing laboratories
- Renewable energy & clean technology companies
- Waste management & recycling industries
- Water & wastewater treatment companies
- Sustainability, ESG & CSR consulting firms
- Industrial & manufacturing units (EHS roles)
- Environmental NGOs & international organizations
- Government departments & regulatory bodies
- Research institutes & academic organizations
- Climate change & carbon management companies
- Green startups & environmental entrepreneurship



M.Sc. Pharmaceutical Chemistry

PROGRAM SNAPSHOT

Duration: 2 Years (Semester System, NEP 2020)

Mode: Full-time, Regular

Career Pathways: Pharmaceutical chemical sciences, pharmaceutical biology, pharmaceutical microbiology, pharmaceutical biotechnology fields, nutraceutical industry, quality & safety, research, higher studies

ELIGIBILITY

The student shall be eligible for admission to a Master's Degree Program in Pharmaceutical Chemistry after he/she has successfully completed a three-year B.Sc. or B. Pharm. undergraduate degree with chemistry as one of the subjects or earned with not less than 50% marks or equivalent grade prescribed number of credits or through the examinations conducted by university as equivalent to an undergraduate degree.

EMPLOYABILITY

MSc Pharmaceutical Chemistry graduates can pursue diverse careers in pharmaceuticals, research, quality assurance, and regulatory sectors, leveraging skills in drug synthesis, analysis, and molecular drug design. Opportunities span industry, academia, government, and emerging fields like biotech and environmental monitoring.

- Research chemist, medicinal chemist, quality control analyst, and formulation scientist in pharmaceutical companies.
- Regulatory affairs specialists.
- Roles such as research scientist, analytical chemist, or clinical research associate involve designing new molecules, conducting trials, and optimizing formulations in R&D labs.
- Pharmacovigilance and drug safety.
- Teaching at universities and colleges, alongside pursuing Ph.Ds.
- Government jobs include quality control officers at agencies like FSSAI.
- Environmental chemists.
- Sales/marketing roles like medical science liaison.

Post Graduates from School of Biosciences are also well-prepared for:

- Ph.D. and advanced research programmes (India and abroad)
- Competitive examinations (CSIR-NET, GATE, DBT-BET, ICMR-JRF)
- Academic careers and teaching
- Entrepreneurship, start-ups, and innovation-driven ventures



GLOBAL COLLABORATIONS

Through school-led collaborations and university-level MoUs, the School of Biosciences connects students and faculty with leading research institutions and industry partners. These alliances promote academic exchange, collaborative research, and skill development, fostering innovation while creating meaningful societal impact.



IIT Roorkee



TRUEVET
Animal Nutrition,
Srinagar



CSIR-IHBT
Palampur



筑波大学
University of Tsukuba



University of
Rostock,
Germany



Biotech
Consortium
India Limited



ELSEVIER



CSIR-NBRI



AIIMS Rishikesh



CSIR-CIMAP



Indian Institute of Management
Ahmedabad

*Annual contract agreement for case studies

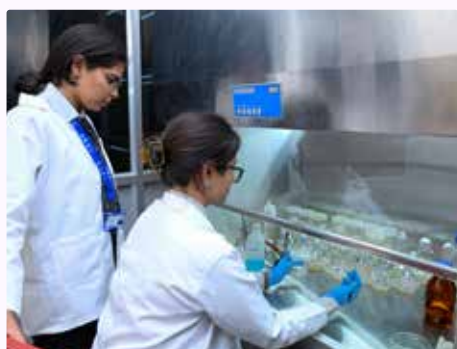


CENTRES OF EXCELLENCE:

Cancer Biology & Immunology Lab

Established through joint funding from the Department of Health Research (DHR) and the University, with an aim to understand the cellular, molecular, and immunological mechanisms underlying cancer initiation, progression, metastasis, and immune response, and to translate these insights into impactful diagnostic, prognostic, and therapeutic solutions.

The laboratory maintains over seven cancer cell lines, including lung, liver, breast, skin, and macrophage models with focus on advanced research in cancer biology, epigenetics, cancer immunology, and biomarker discovery, contributing to innovations in diagnosis and therapy. Within the past year, the laboratory has secured two intramural and one industry-sponsored extramural grant, reflecting its growing research excellence and collaborative strength.



Advance Molecular biology Lab

The Advance Molecular biology Lab was established to investigate biological structures and processes at the molecular level using cutting-edge techniques from fields like genetics, biochemistry, biophysics, and computational biology and translate this knowledge into solutions for human health.

The lab focuses Technical & Research Excellence i.e. Advanced molecular methods including DNA/RNA analysis, PCR & RT-PCR, sequencing, real-time qPCR, gene editing (CRISPR), epigenetic studies, and synthetic biology, as well as Molecular & Structural Insights i.e. Computational and structural analysis biomolecules such as proteins and nucleic acids.



Plant Biotechnology

Plant Biotechnology lab was established to develop and standardize protocols in plant tissue culture and microbial research, with a focus on medicinal and commercially important species, and to translate these into scalable and sustainable applications.

The focus of the lab is on the following:

- Protocol Development: Standardization of plant tissue culture techniques for key species such as *Rheum emodi*, *Bacopa monnieri*, and *Ocimum tenuiflorum* (Badri Tulsi)
- Microbial Research: Isolation and characterization of endophytes from economically important plants
- Medicinal & Commercial Applications: Work on high-value species including *Cordyceps* and *Gymnema sylvestre*
- Upscaling & Innovation: Process scale-up in collaboration with the SRHU Innovation Center and external partners; expansion supported by the State Government

Emerging Initiatives of the lab are:

- Development of a Hydroponics Laboratory for Tulsi, tomato, and local fruits
- Research in mushroom cultivation and medicinal fungi
- Advancements in plant-microbe interactions, including endophyte-driven micronutrient biofortification in crops like finger millet



LEADING RECRUITERS



LIFE @ SRHU

The campus is thoughtfully designed to blend with the natural surroundings, creating a picturesque setting that is both inspiring and serene. Abundant green spaces attract numerous species of birds, adding to the tranquillity of the environment. This natural beauty provides an ideal backdrop for yoga and meditative practices, allowing students to find solace and inner peace.

WELLNESS & MINDFULNESS

- Yoga & meditation-friendly green zones
- Quiet study gardens & shaded walks
- Holistic well-being ethos across campus
- Access to healthcare and counselling support

COMMUNITY & CULTURE

- Management Conclave (e.g., Manthan)
- Annual fests and cultural showcases
- Student-led social outreach and volunteering
- Clubs & interest groups (e.g., Literary, NSS, Open Mic, etc.)
- Dining hubs: cafeterias & canteens

SPORTS & OUTDOORS

- Multi-sport playgrounds and courts
- Parks and open lawns
- Active wellness: gymnasium & fitness
- Recreational hangouts and event lawns



OUR ALUMNI



MANISHA JAYADA

MSc Microbiology (2018-2020)
Livestock Extn Officer & Silk Inspector
Govt. of Uttarakhand



AKANKSHA BISHT

MSc Biotechnology (2019-2021)
Senior Executive (Exports)
Natural Herbs & formulations, Haridwar



ASHUTOSH BHATT

MSc Biochemistry (2020-2022)
Senior Executive Global Quality Assurance/
CMC Regulatory Affairs & Compliance/ QMS/ DQA
Enzene Biosciences Pune



MS. VRINDA GUPTA

MSc Microbiology (2021-2023)
R&D Associate & Research Analyst,
Translumina Therapeutics Pvt Ltd, Uttarakhand



YUKTA NEGI

MSc Microbiology (2021-23)
Executive, Enzene Biosciences, Pune



MS DIVYA RANA

MSc Biochemistry (2022-2024)
Executive Process Quality Assurance
| Biotech | GMP • Documentation • Compliance
Enzene Biosciences Pune



GARGI GAUTAM

MSc Biochemistry (2022-2024)
ICMR JRF
ICMR- National Institute of
Occupational Health, Gandhi Nagar

OUR ALUMNI



VIDUSHI AGARWAL

MSc Microbiology (2022-2024)

PhD Research Scholar IIT Roorkee



TANIYA RAWAT

MSc Biochemistry (2020-22)

PhD China Medical University

Taichung Taiwan



MS. PRACHI BHATNAGAR

BSc (Hons) Microbiology (2018-21)

Junior Research Fellow at Indian

Institute of Technology, Roorkee



AMISHA VERMA

BSc (Hons) Biotechnology (2019-22)

MBA, Indian Institute of

Management, Indore



MANNAT NAGPAL

BSc (Hons) Microbiology

MSc Food Science,

Leeds University, UK



SAVITA KUMAY

BSc (Hons) Biotechnology (2019-22)

Masters in Biotechnology

University of Leeds, UK



HONEY KUMARI

BSc (Hons) Microbiology (2021-24)

Analyst, CHG Healthcare Inc.

New Delhi

OUR ALUMNI



JYOTSANA MALIK

BSc (Hons) Microbiology (2021-24)
MSc Applied Microbiology
BHU, Varanasi



GAURAV BHANDARI

BSc (Hons) Biotechnology (2022-25)
MS (Life Sciences), IISER, Tirupati



SARTHAK BISHNOI

BSc (Hons) Biotechnology (2022-25)
MSc Biochemistry, Central University,
Rajasthan, Ajmer



SCHOLARSHIP AND FEE CONCESSION



Up to 100% Merit Scholarship

for outstanding students scoring above 90%.



Merit-cum-Means Scholarship

50% tuition fee support for students with family income < ₹5 Lakh (min. 70% marks).



Merit-Based Support

75% or 50% fee scholarships available for achievers with 80% and 70%+.



Special Scholarship for Transgender

Differently-abled, and Wards of Non-Commissioned Officers (Up to 100% in UG / 50% in PG).



Free ship for Orphans

One full free seat for the complete duration of the program.



Scholarship for Permanent Residents

of Uttarakhand.



Legacy & Support Benefits

Fee concessions for SRHU staff wards and SRHU alumni pursuing higher studies at SRHU.

For Detailed Fee Structure

please visit the website and contact admission cell.

☎ 9720 444 666 @ admissions@srhu.edu.in



APPLY NOW



Swami Rama Himalayan University

NAAC A+

स्वामी राम नगर, जौलीग्रंट, देहरादून 248016, उत्तराखण्ड, भारत

Swami Ram Nagar, Jolly Grant, Dehradun 248016, Uttarakhand, India.

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