



SAARTHI • सारथी

करियर मार्गदर्शन पोर्टल • Career Guidance Portal

"सही मार्गदर्शन, उज्ज्वल भविष्य।"

करियर शीट • CAREER SHEET

आनुवंशिकीविद्

A Geneticist studies genes, DNA and heredity — to understand how traits are inherited and how diseases arise. They work in medicine, agriculture, biotechnology and forensics on research, diagnosis and crop/breed improvement. It...



Scan for everything on this career

Salary, exams, colleges, the routes in and the steps after — all on the portal.

career.gsssjethantri.in/#/career/eng-4702

राजकीय उच्च माध्यमिक विद्यालय, जेठन्तरी

Govt. Sr. Sec. School, Jethantri • ब्लॉक समदड़ी • बालोतरा (Block Samdari • Balotra)

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सुशील कुमार शर्मा

प्रधानाचार्य, रा.उ.मा.वि. जेठन्तरी • मास्टर ट्रेनर
Principal, GSSS Jethantri • Master Trainer



श्री चेनाराम चौधरी

प्रधानाचार्य, डाइट बाड़मेर
Principal, DIET Barmer



श्रीमती संघमित्रा

वरिष्ठ व्याख्याता, डाइट बाड़मेर (सहयोग)
Sr. Lecturer, DIET Barmer (Support)



भरत चौधरी

अभिकल्पना व विकास • व्याख्याता (इतिहास)
Designed & developed • Lecturer (History)

विशेष धन्यवाद • SPECIAL THANKS



सुरेन्द्र सिंह राठौड़

व्याख्याता (इतिहास) • रा.उ.मा.वि. कानाना



सुरेश कुमार सैन

व्याख्याता (भूगोल) • रा.उ.मा.वि. रामसीन मूंगड़ा



वनिता कुमारी

व्याख्याता (इतिहास) • रा.उ.मा.वि. रामसीन मूंगड़ा



कमलेश चौधरी

व्याख्याता (राजनीति विज्ञान) • रा.उ.मा.वि. टापरा

करियर मार्गदर्शन कार्यशाला, डाइट बाड़मेर (14-17 जुलाई 2026) में विकसित व लोकार्पित
Developed & unveiled at the Career Guidance Workshop, DIET Barmer (14-17 July 2026)

यह एक स्वतंत्र परियोजना है, जो सरकार की आधिकारिक करियर-मार्गदर्शन सामग्री पर आधारित है। • An independent project based on the Government's official career-guidance content.

1 About this career

A Geneticist studies genes, DNA and heredity — to understand how traits are inherited and how diseases arise. They work in medicine, agriculture, biotechnology and forensics on research, diagnosis and crop/breed improvement. It is a deep, science- and lab-based research career.

2 At a glance

Minimum qualification	Bachelor + Master in Genetics/Biotech
Work mode	Lab and research, mostly 9-5
Demand	Rising — health, agri & genomics
Top earning	₹3,00,000+/month

3 What you need

INTERESTS

- Deep interest in biology and science
- Analysing problems and data
- Experimenting and researching

ABILITIES

- Analytical, curious thinking
- Patience and precise lab work
- Strong attention to detail

KEY SKILLS

- Molecular biology and DNA techniques
- Operating laboratory instruments
- Research writing and grant proposals
- Genome sequencing and analysis
- Bioinformatics and data analysis
- Statistics and the scientific method

4 How to get there

- 1 Pass 10+2 with science (Physics, Chemistry, Biology).
- 2 Do a bachelor's in Genetics, Biotechnology, Life Sciences or Biological Sciences.
- 3 Complete a master's in Genetics/Molecular Biology/Human Genetics.
- 4 Do a PhD for research; for medicine, MD (Medical Genetics) after MBBS.
- 5 Start as a research assistant/junior scientist.
- 6 With experience and publications, become a senior scientist/professor.

MAIN EXAMS

- JEE Main / REAP / CUET (bachelor's entry)
- NEET and NEET-PG (for the medical route)
- CSIR-UGC NET / GATE (for research and fellowships)

5 Where to study

GOVERNMENT INSTITUTES

- राजस्थान विश्वविद्यालय (जीव विज्ञान/जैव प्रौद्योगिकी) — Jaipur, Rajasthan
- महाराणा प्रताप कृषि एवं प्रौद्योगिकी विश्वविद्यालय — Udaipur, Rajasthan
- भारतीय विज्ञान संस्थान (IISc) — Bengaluru, Karnataka
- दिल्ली विश्वविद्यालय — New Delhi

PRIVATE INSTITUTES

- मणिपाल यूनिवर्सिटी जयपुर — Jaipur, Rajasthan
- अमिटी यूनिवर्सिटी राजस्थान — Jaipur, Rajasthan
- शारदा यूनिवर्सिटी — Greater Noida, Uttar Pradesh

ONLINE

- SWAYAM/NPTEL (जेनेटिक्स व आणविक जीव विज्ञान) — Online (<https://swayam.gov.in>)

FEES

About ₹20,000-1,00,000/year in government institutes; ₹1,50,000-4,00,000/year in private ones. The MBBS route is separate and costlier.

SCHOLARSHIPS

- राष्ट्रीय छात्रवृत्ति पोर्टल / National Scholarship Portal (<https://scholarships.gov.in>)
- Buddy4Study (<https://www.buddy4study.com>)
- विद्यालक्ष्मी शिक्षा ऋण / Vidya Lakshmi Education Loan (<https://www.vidyalakshmi.co.in>)

6 What the work is like

WHERE YOU WORK

Research labs, universities, hospitals and diagnostic centres, agriculture and medical industries, pharma and biotech companies.

WORK CULTURE

Most time in the lab designing experiments, analysing, teaching and writing research. Usually 9-5, but late hours/weekends near deadlines. Opportunities exist for persons with disabilities.

WHO HIRES

- | | |
|---|--|
| • Research institutes (CCMB, ICAR, CSIR) | • Universities and medical colleges |
| • Biotechnology and pharma companies | • Genetic diagnostic labs (MedGenome etc.) |
| • Agriculture and seed research organisations | • Forensic and health departments |

DEMAND (2026)

Rapid growth in genomics, personalised medicine, crop improvement and genetic diagnostics is raising demand for geneticists in 2026, across both research and private sectors.

7 Career growth

- 1 Research Assistant
- 2 Junior / Associate Scientist
- 3 Senior Scientist / Researcher
- 4 Principal Scientist / Professor
- 5 Research Director / Head of Department

EARNINGS

Starting	₹20,000-35,000/माह
Mid level	₹45,000-80,000/माह
Senior level	₹3,00,000+/माह

Source: PayScale and NCS, 2026; much higher in senior research, medical genetics and abroad.

8 The good parts · The challenges

The good parts

- Cutting-edge science and meaningful discovery
- Growing opportunities in health, agri and research
- Paths into teaching, industry and abroad

The challenges

- Long study — a PhD is often needed
- Moderate early research pay
- Patient, repetitive lab work

9 Real-life journeys

Lalji Singh

'Father of DNA fingerprinting in India', former Director, CCMB

Born to a farming family in Kalwari village, Jaunpur, and schooled in a government school, Lalji Singh became a geneticist; he pioneered DNA fingerprinting in India, led CCMB and received the Padma Shri in 2004.

The Week · <https://www.theweek.in/news/sci-tech/prof-lalji-singh-man-of-dreams-courage-and-commitment.html>

Shubha Phadke

Professor & Head, Medical Genetics, SGPGIMS

Dr. Shubha Phadke is Professor and Head of Medical Genetics at SGPGIMS, Lucknow; she is a leader in diagnosing and counselling for genetic disorders and in research, and trains the next generation.

SGPGIMS · <https://sgpgims.org.in/Departments/Genetics1/DrShubhaPhadke.html>

10 Sources & further reading

1. Rajasthan Career Guidance — <https://cg.rajasthan.gov.in/careerguidance/hi/career/%e0%a4%9c%e0%a5%87%e0%a4%a8%e0%a5%87%e0%a4%9f%e0%a4%bf%e0%a4%95-%e0%a4%87%e0%a4%82%e0%a4%9c%e0%a5%80%e0%a4%a8%e0%a4%bf%e0%a4%af%e0%a4%b0-%e0%a4%9c%e0%a5%87%e0%a4%a8%e0%a5%87%e0%a4%9f%e0%a4%bf/>
2. CCMB (Centre for Cellular & Molecular Biology) — <https://www.ccmb.res.in>
3. National Scholarship Portal — <https://scholarships.gov.in>



And 770+ more careers — the whole portal

Interest and aptitude tests, government jobs, skill courses and a CV builder — free, no login, and it works offline.

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