

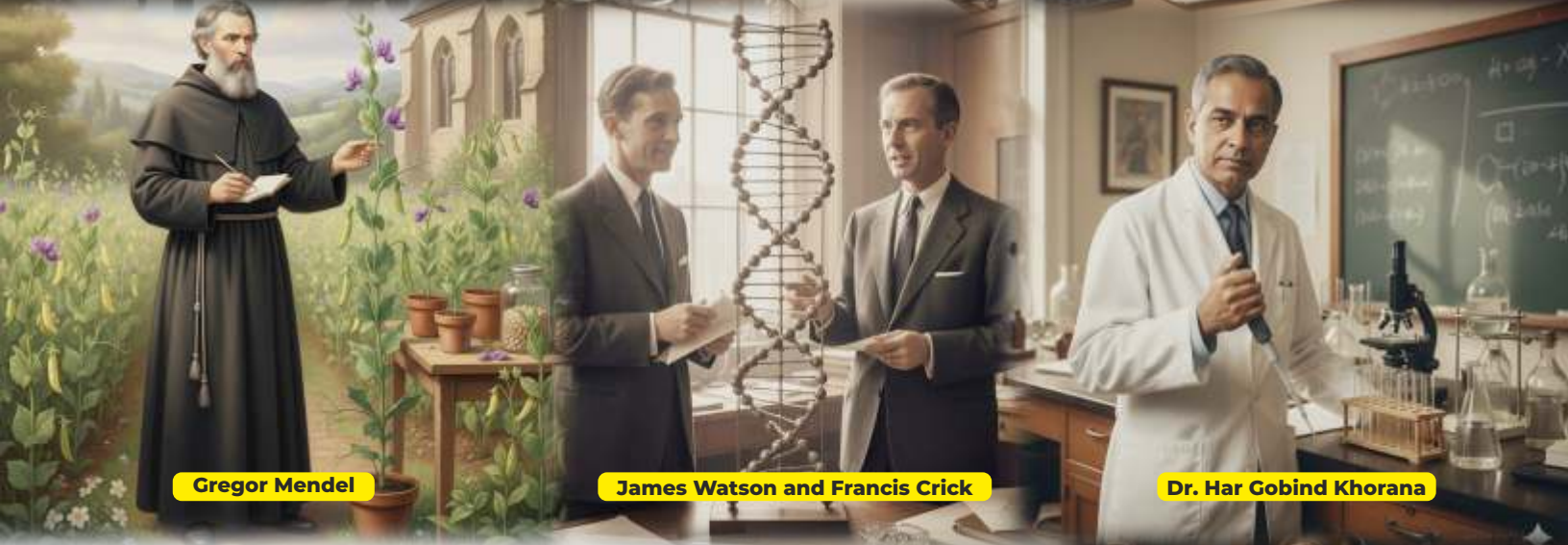
Genetics Scientists & Their Contributions



Maurice Wilkins and Rosalind Franklin

Thomas Hunt Morgan

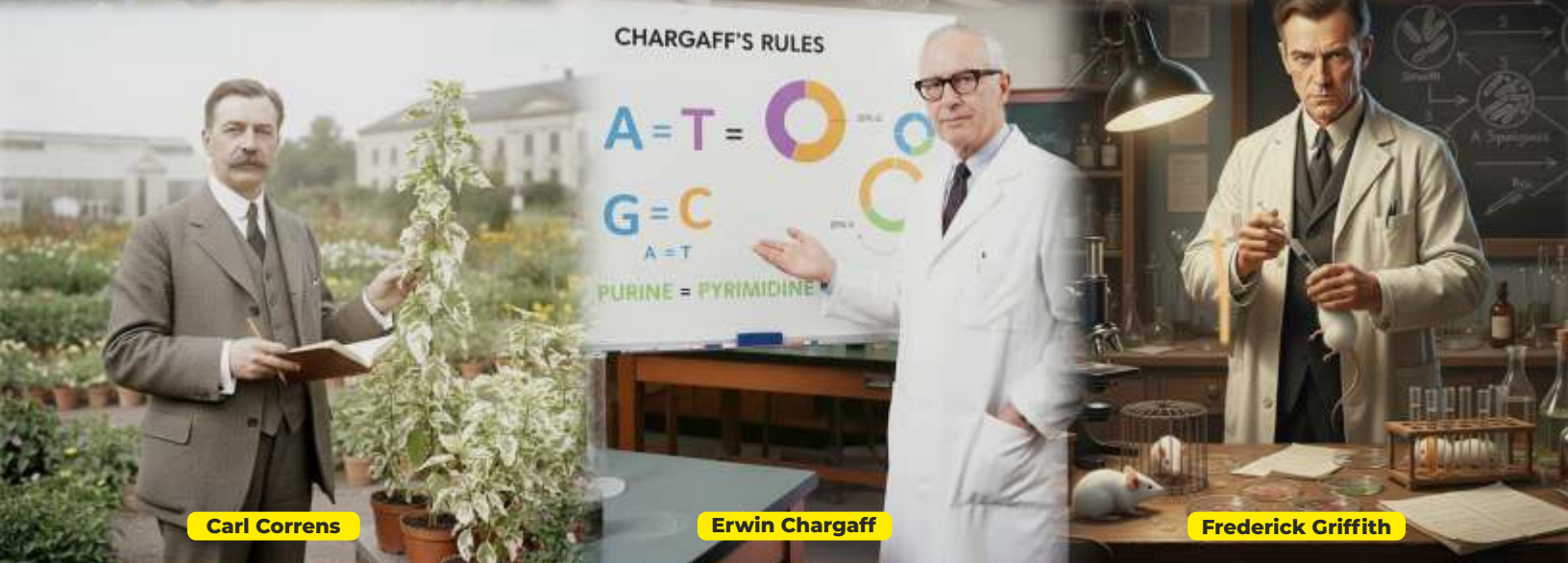
Alfred Hershey and Martha Chase



Gregor Mendel

James Watson and Francis Crick

Dr. Har Gobind Khorana



Carl Correns

Erwin Chargaff

Frederick Griffith

CHARGAFF'S RULES



NARAYANA JAIPUR CENTER RESULT

LEADERSHIP REDEFINED IN JAIPUR

All **City Toppers** of **JEE & NEET in 2025**
from Narayana Jaipur only !

AIR
20

Yearlong Classroom Student

AIR
14

Yearlong Classroom Student

AIR
46

Yearlong Classroom Student



JEE Main 2025

AYUSH SINGHAL



NEET UG 2025

SOMYA SHARMA



JEE Adv 2025

BHAVYA JETHANANDANI



SCIENTISTS AND THEIR CONTRIBUTIONS IN
PRINCIPLES OF INHERITANCE AND VARIATIONS

Scientists	Contributions
Gregor Mendel	He conducted hybridization experiments on garden peas for seven years (1856-1863) and proposed the laws of inheritance in living organisms.
Reginald C. Punnett	British geneticist who proposed Punnett Square . It is a graphical representation to calculate the probability of all possible genotypes of offspring in a genetic cross.
Hugo de Vries, Carl Correns and von Tschermak	In 1900, three Scientists (de Vries, Correns and von Tschermak) independently rediscovered Mendel's results on the inheritance of characters.
Walter Sutton and Theodore Boveri	Walter Sutton and Theodore Boveri noted that the behaviour of chromosomes was parallel to the behaviour of genes and used chromosome movement to explain Mendel's laws. Sutton and Boveri argued that the pairing and separation of a pair of chromosomes would lead to the segregation of a pair of factors they carried. Sutton united the knowledge of chromosomal segregation with Mendelian principles and called it the chromosomal theory of inheritance .
Thomas Hunt Morgan	Morgan carried out several dihybrid crosses in <i>Drosophila</i> to study genes that were sex-linked. Morgan discovered the physical association or linkage of the two genes and coined the term linkage to describe this physical association of genes on a chromosome and the term recombination to describe the generation of non-parental gene combinations
Alfred Sturtevant	Alfred Sturtevant, the student of Morgan, used the frequency of recombination between gene pairs on the same chromosome as a measure of the distance between genes and 'mapped' their position on the chromosome.
Henking	Henking (1891) could trace a specific nuclear structure all through spermatogenesis in a few insects, and it was also observed by him that 50 per cent of the sperm received this structure after spermatogenesis, whereas the other 50 per cent sperm did not receive it. Henking gave a name to this structure as the X body but he could not explain its significance.
Langdon Down	The cause of Down's syndrome , a chromosomal disorder, is due to the presence of an additional copy of the chromosome number 21 (trisomy of 21). This disorder was first described by Langdon Down (1866).



MOLECULAR BASIS OF INHERITANCE

Scientists	Contributions
Friedrich Meischer	DNA as an acidic substance present in nucleus was first identified by Friedrich Meischer in 1869. He named it as ' Nuclein '.
James Watson and Francis Crick	In 1953, they together proposed the most accepted model of DNA, the " Double Helix Model "
Maurice Wilkins and Rosalind Franklin	Produced X-ray diffraction data , which formed the basis of double helix model of DNA.
Erwin Chargaff	Proposed Chargaff Rule, according to which, for a double stranded DNA, the ratios between Adenine and Thymine and Guanine and Cytosine are constant and equals one.
Francis Crick	Most important contribution in Double Helix Model of DNA. Proposed the Central dogma in molecular biology , which states that the genetic information flows from DNA→RNA→Protein . Along with Watson, he proposed a scheme for replication of DNA. Crick postulated the presence of an adapter molecule that would on one hand read the code and on other hand would bind to specific amino acids. The tRNA , then called sRNA (soluble RNA), was known before the genetic code was postulated.
Frederick Griffith	In a series of experiments with <i>Streptococcus pneumoniae</i> (bacterium responsible for pneumonia), witnessed a miraculous transformation in the bacteria.
Oswald Avery, Colin MacLeod and Maclyn McCarty	They worked to determine the biochemical nature of transforming principle in Griffith's experiment.
Alfred Hershey and Martha Chase	The unequivocal proof that DNA is the genetic material came from the experiments of Alfred Hershey and Martha Chase (1952). They worked with viruses that infect bacteria called bacteriophages.
Matthew Meselson and Franklin Stahl	They performed an experiment by using <i>Escherichia coli</i> bacteria, heavy nitrogen and CsCl density gradient centrifugation to prove semiconservative replication of DNA.
Taylor	Very similar experiments (as performed by Matthew Meselson and Franklin Stahl) involving use of radioactive thymidine to detect distribution of newly synthesised DNA in the chromosomes was performed on Vicia faba (faba beans) by Taylor and colleagues in 1958. The experiments proved that the DNA in chromosomes also replicate semi conservatively.



George Gamow	A physicist , who argued that since there are only 4 bases and if they have to code for 20 amino acids, the code should constitute a combination of bases. He suggested that in order to code for all the 20 amino acids, the code should be made up of three nucleotides.
Har Gobind Khorana	The chemical method developed by Har Gobind Khorana was instrumental in synthesising RNA molecules with defined combinations of bases (homopolymers and copolymers).
Marshall Nirenberg	He developed a cell-free system for protein synthesis finally helped the code to be deciphered.
Severo Ochoa	Developed an enzyme called as Severo Ochoa enzyme (polynucleotide phosphorylase) was also helpful in polymerising RNA with defined sequences in a template independent manner (enzymatic synthesis of RNA).
Francois Jacob and Jacque Monod	They were the first to elucidate a transcriptionally regulated system. They elucidation of the <i>lac</i> operon.
Frederick Sanger	The fragments were sequenced using automated DNA sequencers that worked on the principle of a method developed by Frederick Sanger. (Remember, Sanger is also credited for developing method for determination of amino acid sequences in proteins).
Alec Jeffreys	The technique of DNA Fingerprinting was initially developed by Alec Jeffreys. He used a satellite DNA as probe that shows very high degree of polymorphism. It was called as Variable Number of Tandem Repeats (VNTR).



NARAYANA JAIPUR CENTER RESULT

JEE (Adv) 2025

Leadership Redefined in Jaipur !

2024-25 was Just the First Year of Narayana Jaipur in the City

From a Small Group of Students in Yearlong Classroom Batches & infinITy SRG Batch, Our Students have Created History !

AIR
46

01 Rank in Top-50

06 Ranks in Top-250

19 Ranks in Top-1000

45 Ranks in Top-5000

59 Ranks in Top-10000

69 Ranks in Top-15000



**CITY
TOPPER
JAIPUR**

BHAVYA JETHANANDANI
Yearlong Classroom



M SREEVARA GANESH
infinITy SRG



AYUSH SINGHAL
Yearlong Classroom



ARYA GUJAR
infinITy SRG



AMOGH BANSAL
infinITy SRG



DIVYANSH AGARWAL
Yearlong Classroom



KRISHIV NUHANWAN
infinITy SRG



VIDIT NAGPURKAR
infinITy SRG



HITANSH GANDHI
infinITy SRG



S ADVAY AMIT
infinITy SRG



HARSHIT RANA
infinITy SRG



PIYUSH DHINGRA
infinITy SRG



ARCHIT KOTALWAR
infinITy SRG



ARYAN NAGARIYA
infinITy SRG



ARYAN SONAYE
infinITy SRG



SIDDHANT PATANKAR
infinITy SRG



PARAM RATHI
infinITy SRG



NIRVAN MAHESHWARI
infinITy SRG



DIVITYA GARG
infinITy SRG



ARYAN ANARKAT
infinITy SRG



RUPASHI BANSAL
Yearlong Classroom



DIYAANSH K
infinITy SRG



SATISH NIKAM
infinITy SRG



VISHRUTH AGARWAL
Yearlong Classroom



DWEEP PATIL
infinITy SRG



SOMAY AGARWAL
Yearlong Classroom



SANYAM AGARWAL
infinITy SRG



PRIYANSHU DEBNATH
infinITy SRG
and many more...

NARAYANA JAIPUR CENTER RESULT

JEE (Main) 2025

Narayana **JAIPUR** Students **DOMINATE** in the City !!!

◆ 1st Year ◆ Limited Students ◆ **BIG Result**

Learn with the Top Performers of Many States Joined at Narayana Jaipur

Leave Others Behind
Join Narayana Jaipur

AIR 961 AIR 151 AIR **20** AIR 415 AIR 972



Divyansh Agarwal
MPS

Arvin Gupta
Rishikul

Ayush Singhal
MPS

Bhavya Jethanandani
Rishikul

Virat Shukla
NKP

All the Rankers in this result are the Proud Students of **Yearlong Classroom Courses** at Narayana Jaipur

2024-25 is the **very first year** of Narayana Jaipur and a **limited number of students** appeared in JEE Main 2025



NARAYANA JAIPUR CENTER RESULT

NEET (UG) 2025

History Created ! Topper & 2nd Topper of Jaipur

01 Rank in Top-20

02 Ranks in Top-100

07 Ranks in Top-500

22 Ranks in Top-5000

36 Ranks in Top-10000

56 Ranks in Top-20000

✓ This was **1st Year of Operations** of Narayana Jaipur in the City ! All these are Classroom Students at Narayana Jaipur

AIR 331 Regular Classroom Student (RT-720 Course)

AIR 163 Yearlong Classroom Student

AIR 66 Yearlong Classroom Student

AIR 14 Yearlong Classroom Student

AIR 151 Yearlong Classroom Student

AIR 327 Yearlong Classroom Student

AIR 447 Yearlong Classroom Student

Only 2 Students from Jaipur in Top-100 & both are Narayanites

2nd CITY TOPPER JAIPUR

CITY TOPPER JAIPUR

DISHITA | ADITYA CHOUDHARY | DEVYANSH ARORA | SOMYA SHARMA | SANSKAR SHARMA | JATIN KUMAR | ANISH KHANDELWAL

AIR 824 | **AIR 865** | **AIR 1108** | **AIR 1224** | **AIR 1853** | **AIR 2045** | **AIR 2296**

JAHNVEE | PRIYANSHU KUMAWAT | YAJAT AGARWAL | RAJVARDHAN SINGH | SACHIN TIWARI | RAMANSH KHURANA | AVNI GUPTA

AIR 2658 | **AIR 3048** | **AIR 3114** | **AIR 3757** | **AIR 3889** | **AIR 3976**

PURVI GOYAL | AVIKA KOOLWAL | KHUSHI YADAV | SWATI YADAV | PRASHANT GOYAL | GIRISHA GUPTA

and many more...

NARAYANA JAIPUR CENTER RESULT

International Olympiad (Stage II) 2025 Result

05

Selections for Stage-3 Orientation Cum Selection Camp (OCSC)

Indian National Olympiad (INO) 2025 Qualified

As per result declared by HBCSE & Nehru Science Center, NCSM on 05-03-2025



SAISHA JAIN | Class XI

Sarvodaya School



BHAVYAA GUNWAL | Class XI

Narayana E-Techno



NIDHI YADAV | Class XI

Srilal Convent



AYUSHMAN MAURYA | Class IX

Jayshree Periwal G.S.



DIVYANSH BANSAL | Class IX

Cambridge Court

NARAYANA JAIPUR CENTER RESULT



GOLD MEDAL

for India
in **IJSO-2024**

BHAVYAA GUNWAL

Yearlong Classroom Student
CO-SPARK Batch
Narayana Jaipur Center

International Junior Science Olympiad-2024,
Held at Bucharest ROMANIA (2 to 12-Dec., 2024)

OCSC Result IBO-2025

Jaipur Student in **TEAM INDIA** of
International BIOLOGY Olympiad
(IBO-2025)

Regular Classroom Student of Narayana Jaipur

BHAVYAA GUNWAL

Selected in 4-Member

INDIAN TEAM

for

IBO-2025

Philippines

She is also the NATIONAL TOPPER in OCSC Biology Theory

23

Selections for Stage-II (Indian National Olympiad **INO 2024-25)**

4 Students Selected in **Multiple Olympiads**

[Result of National Standard Examination (NSE) in Physics, Chemistry, Biology, Astronomy & Junior Science | Regional Mathematical Olympiad (RMO)]

NSEB	NSEP & NSEC	NSEP	NSEA & RMO	NSEB	NSEB	NSEA	NSEB	NSEA, NSEP & NSEB
Class XII	Class XII	Class XII	Class XII	Class XII	Class XII	Class XII	Class XI	Class XI
								
ABHISHEK VARSHNEY Vardhman International	ARVIN GUPTA Rishikul	AYUSH SINGHAL MPS	BHAVYA JETHANANDANI Rishikul	SACHIN TIWARI Kids Club	SANSKAR SHARMA Impulse School	TULIKKA GARG Bonnie Foi School	AADYA UPADHYAY Orchid International	BHAVYAA GUNWAL Narayana E-Techno
NSEB	NSEB	NSEP & NSEB	RMO	RMO	NSEJS	NSEJS	NSEJS	NSEJS
Class XI	Class XI	Class XI	Class X	Class X	Class IX	Class IX	Class IX	Class IX
								
NIDHI YADAV Sri Lal Convent	PRINCY GARG Cambridge Court	SAISHA JAIN Sarvodaya School	ANURAG SHARMA Narayana E-Techno	SHIVIKA JAIN Bansal Public	ADVAIT GUPTA Neerja Modi	AYUSHMAN MAURYA Jayshree Peritwal G.S.	DIVYANSH BANSAL Cambridge Court	VYOM DEO Indian Public

Jaipur Campus-1



(City H.O.) B-28, 10-B Scheme,
Near Ridhi Sidhi Circle,
Gopalpura Bypass Road

Jaipur Campus-2



B-293, 10-B Scheme,
Rudra Tower,
Gopalpura Bypass Road

Jaipur Campus-3



392, Shri Gopal Nagar,
Near Hotel Grand Safari
Gopalpura Bypass Road

Jaipur Campus-4



Plot A-14 & 36,
Near Khatipura Tiraha
Hanuman Nagar

Jaipur Campus-5






Plot No.4,
Shri Gopal Nagar, Near Zudio,
Gopalpura Bypass

Jaipur Campus-6



3-A, D. L. Tower,
Vidyashram Institutional Area,
Behind RAS Club, JLN Marg

Narayana Jaipur Center (North India Head Quarter)

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 <https://www.instagram.com/jaipurnarayana>  <https://www.facebook.com/jaipurnarayana>

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