

Programme

Prime Minister Research Fellowship students' teaching requirement
facilitated by the Institute of Smart Structures and Systems



Module PMRF-ISSS042/II/2024

Concepts of Epigenetics

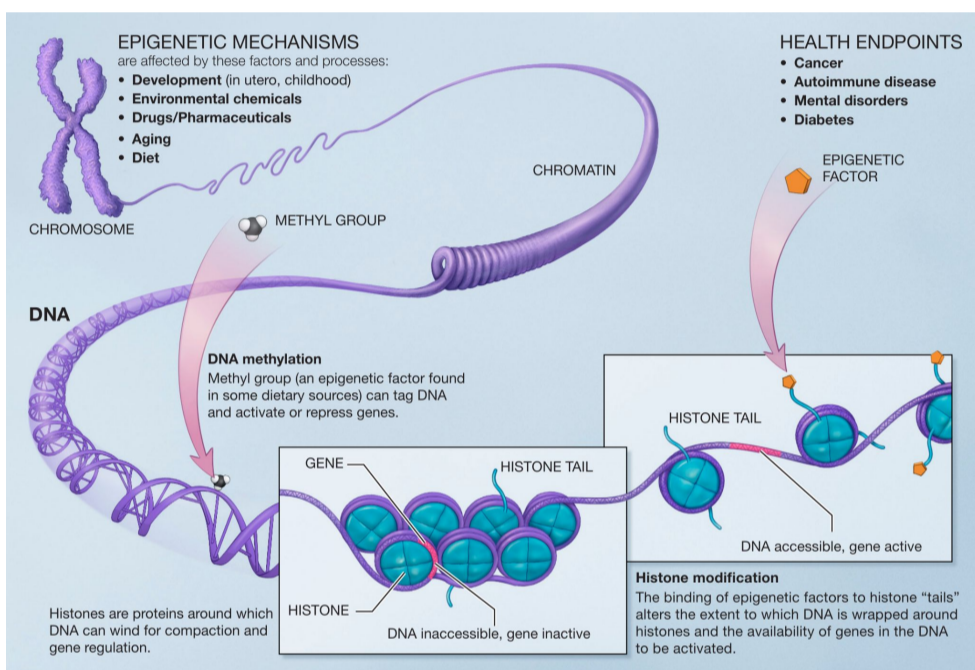
Name of the PMRF student

Harshada Jadhav

Details of the content of the module

Required background of the students taught

Genetics, Biotechnology, Molecular Biology,
Biochemistry



EPIGENETICS:

Overview, DNA methylation, Chromatin structure, Histone variants, Histone Modification, Germ chromatin, Chromatin evolution, RNAi Heterochromatin, Dosage compensation, Genomic Imprinting, Stem cells, Epigenetic and diseases

Reference books:

1. Introduction to Epigenetics by Renato Paro, Ueli Grossniklaus, Raffaella Santoro, Anton Wutz. Springer
2. Epigenetics by C. David Allis, Thomas Jenuwein, Danny Reinberg, Marie Laure Caparros

- References for the research papers will be mentioned in the presentation slides

Nature of the course:

1. Recorded sessions
2. One-on-one discussion twice per week
3. Research paper discussion

Schedule of the module

Start date: 18th March 2024

End date: 1st May 2024

Timings: 9:30- 10:30 pm (Monday to Friday)

Class structure:

- (1) 30 mins: Introduction to the concept
- (2) 30-40 mins: Discussion of a landmark paper related to the concept
- (3) 10-20 mins: Assignment/ QnA/ Conclusion/Summary

Link

Contact email ID: issforum@gmail.com

Registration link:

<https://docs.google.com/forms/d/18rRdG16ZoxloHZ4AT4T43QInnbVeM4V0pztevF4X1jI/edit>