

## Department of Life Sciences

### Message from the HODs desk:



Welcome to our world; it's a wonderful place to be!!! :)

As the study of “Life” itself, Life Sciences is a subject that draws the interest of almost everyone. Our understanding of the foundations of Life is constantly growing, becoming more nuanced and sophisticated every year. As a broad-based Biological Sciences department, we are a community dedicated to understanding the natural world from global ecosystems down to molecular interactions. We discover new knowledge and train budding scientists!!! From the very outset we had 100% results, with a majority of the students being placed A-grade and O-grade.

The department has vibrant and interactive faculty having varying specializations. The faculty perform cutting-edge research addressing questions of relevance to Life Sciences; Microbiology, Botany, Biotechnology, Environmental science, etc. Our department couples this foundational understanding with opportunities to perform hands-on research alongside our expert faculty and to present your findings at University or National conferences. We also encourage participation in community outreach activities and student organizations, to ensure that you graduate well rounded and career ready.

Our Board of Studies includes eminent Scientists, Industrialists and experts from the corporate sector that help us constantly updated our curriculum keeping in mind the demands of Research Institutes as well as the Industry. Through Innovative Teaching-Learning methods and pedagogy,

we instil in our students not only knowledge of biological sciences but also a research temperament, communication skills, critical-thinking skills and soft skills required for them to be successful in their personal and professional lives.

~ Niloufer K. Kotwal

### **About the department:**

The Department of Life Sciences was established in 1992. The department has teachers with varying specializations in biosciences to meet the demands of the wide-ranging topics that are included under its umbrella. It has been the endeavor of the members of the faculty to organize and host meetings of academic enlightenment.

Life Sciences, an interdisciplinary subject, uses the principles of chemistry, physics, and mathematics, to help answer some important questions in biological sciences. Topics included are as diverse as Developmental and Reproductive Biology, Biotechnology, Neurobiology, Forensic Science, Genetics & Genetic Engineering, Immunology, Biochemistry, Biostatistics, Bioinformatics, Human Physiology, Plant Science, Animal Science and Environmental Science. A graduate in Life Sciences can obtain a Masters in Life Sciences with specialization in: Biotechnology, Neurobiology, Applied Medicine, Reproductive biotechnology, Genetic engineering, Environmental science, Macromolecular biology, Immunology, Bioanalytical Science, D.M.L.T., Clinical Research, Bioinformatics, MBA in Pharmaceutical Management, or pursue an M.Sc. by research.

The Department has a society named **“IRIS” (INSIGHT, RESILIENT, INNOVATE, SUCCESS)**. Under the aegis of IRIS, the Department organizes various activities like workshops, excursions, internships, AAA courses, Alumni Connect seminars, and publishes an e-magazine.

### **Best practice of the Department: “The Golden Hour”**

During “The Golden Hour”, a fixed hour students based on their time-table, the Teachers make it a point to be present in the department to solve any queries, doubts or difficulties faced by the students – whether they are academic or personal in nature. This has helped many students to be more forthcoming and learn some good values in life which stand them in good stead in the years ahead.

**USP of the Department:**

**“A Unified Discipline in Biosciences!”**

Rigid boundaries in science are breaking down. Life Sciences offers a child the opportunity to learn and conceptualize the basics of all the diverse branches of biological sciences so as to make our students the best and most broad-minded academicians and researchers.

**Contact us:**

E-mail: [lifescience.jaihind@gmail.com](mailto:lifescience.jaihind@gmail.com)

Instagram: [https://instagram.com/cell\\_e\\_brata.science?igshid=MzRIODBiNWF1ZA==](https://instagram.com/cell_e_brata.science?igshid=MzRIODBiNWF1ZA==)

YouTube: [Department of Life Sciences, Jai Hind College - YouTube](#)

**Faculty details:**

**(1) Niloufer K. Kotwal**



**Designation:** Head of the Department

**Qualification:** MSc (Microbiology), SET (Life Sciences)

**Specialization:** Molecular Biology, Biochemistry, Bioinformatics, Medical Microbiology, Genetics, and Genetic Engineering.

**Experience:** Teaching at Jai Hind College since 2003. MSc recognized Teacher.

**Research:**

**a. Research Publications:**

1. Extraction of Plasmid from Low-density Polyethylene degrading Bacterium and its Transformation into *E. coli DH5 $\alpha$* , **Kotwal, N. K.** and Vaidya, R. B., Journal of Plant Science Research, Vol 38 (1), June 2022, p103–110.
2. Function-oriented synthesis of fluorescent chemosensor for selective detection of Al<sup>3+</sup> in neat aqueous solution: Paperstrip detection & DNA bioimaging, Gokul Ganesan, B. Pownthurai, **Niloufer K. Kotwal**, Mukeshkumar Yadav, Prabhakar Chetti, Atul Chaskar, Photochemistry and Photobiology A: Chemistry 425, March 2022, p113699.
3. Fruto-Technology for Removal of Copper and Lead from Water, Devashri Kadam, **Niloufer K. Kotwal**, Different Strokes DS JHC Vol 5., April 2021, p 34-42.
4. Study of effect of feminine washes on some microorganisms, Zeenia Avari, **Niloufer K. Kotwal**, Different Strokes DS JHC Vol 5., April 2021, p 7-16.
5. Ultrasound Assisted Synthesis, Molecular Docking Studies and in Vitro Biological Activity of Azine Derivatives as Potential Antifungal Agents, Gokul Ganesan, **N. K. Kotwal**, S Dasgupta, Journal of Innovative Sciences and Research Technology; April 2019, 4(4), p686-688.
6. Comparative study of antimicrobial activities of azines and 1, 4-diazabutadienes to establish the pharmacophore in the lead, Gokul Ganesan, **N. K. Kotwal**, S Dasgupta, Journal of Life Sciences Research; April 2019, 7 (2), p279-282.
7. Isolation, Phylogenetics and Growth response of Low-Density Polyethylene (LDPE) degrading bacteria, **Kotwal Niloufer & Vaidya Rajnish**, International Journal of Life Sciences, Sp. Issue A8, September 2017, Page nos. 7-13.
8. The Effect of music on the growth of *Escherichia coli* and *Staphylococcus aureus*, **Niloufer K. Kotwal**, Juhi Damani and Janhavi Damani, International Journal of Recent Scientific Research, Vol. 7, Issue 8, August 2016, Page Nos. 13205-13208.

**b. Oral/Poster presentations:**

1. A molecular docking study: Comparative drug analysis (anti-RdRp drugs) for SARS-CoV-2, Jaansi Bhansali, Varisha Khan & **Niloufer K. Kotwal**, UGC-STRIDE Research Meet, Mumbai, 10<sup>th</sup> and 11<sup>th</sup> June 2021.

2. Bioplastic: The Problem Solver, Nandini Chandak & **Niloufer K. Kotwal**, Water Resources: Remediation and Rejuvenation, Mumbai, 26<sup>th</sup> February 2020.
3. Synthesis of water-soluble fluorescent probe for aluminium and application to fluorescent imaging of DNA, Gokul Ganesan & **Niloufer K. Kotwal**, Indian Chemical Society 30<sup>th</sup> Research Scholars Meet 2018, Mumbai, 9<sup>th</sup> and 10<sup>th</sup> February 2018.
4. Effect of Salt (KCl) Concentration on generation of current in Microbial fuel Cell (MFC), Avni Rao, Divya Goel & **Niloufer K. Kotwal**, Advances in Biological Sciences, Mumbai, 3<sup>rd</sup> February 2018.
5. Isolation, Identification and Evaluation of Efficacy of Low-Density Polyethylene degraders, **Niloufer K. Kotwal** & R. B. Vaidya, DBT-sponsored National Conference on Recent Trends in Biotechnology and Biodiversity, Amravati, 22<sup>nd</sup> and 23<sup>rd</sup> September 2017.
6. Development of Antibiotic Resistance in *Escherichia coli* exposed to Triclosan containing Hand Sanitizer, Mahalakshmi M. & **Niloufer K. Kotwal**, Sajjan Gupta-Konark Memorial Research Meet, Mumbai, 18<sup>th</sup> January 2017.
7. Cactus: A water purifier and natural oil dispersant, Sarrah Kapasi, Devashri Kadam & **Niloufer K. Kotwal**, Sajjan Gupta-Konark Memorial Research Meet, Mumbai, 21<sup>st</sup> January 2015.
8. Solar Disinfection of water (SODIS), Shweta Patel & **Niloufer K. Kotwal**, Sajjan Gupta-Konark Memorial Research Meet, Mumbai, 23<sup>rd</sup> December 2013.
9. Isolation of Low-Density Polyethylene Degradars, **Niloufer K. Kotwal** & Dr. V. Vaidya, Research Scholars Meet: The Institute of Science, Mumbai, 28<sup>th</sup> February 2013.

**c. Research projects:**

1. "A comparative study of Microalgal species as a potential Biofuel energy crop". Funding by BCUD, 2019-20.
2. "Extraction and characterization of plasmid from polyethylene degrading bacteria." Funding by BCUD, 2016-17.
3. "Isolation of Polyethylene Degradars". Funding by BCUD, 2011-12.

**d. Research Area of Interest:** Microbiology, Cell and molecular biology, Genetics, Bioinformatics, Bioremediation.

**E-mail Id:** niloufer.kotwal@jaihindcollege.edu.in

**(2) Sakina Garothwala**



**Designation:** Assistant Professor

**Qualification:** MSc (Life Sciences), SET (Life Sciences)

**Specialization:** Physiology, Biostatistics, Neurobiology, Developmental Biology

**Experience:** Teaching at Jai Hind College since 2018

**Research:**

**a. Oral/Poster presentations:**

(1) Effect of beta-Estradiol on the developing Zebrafish embryo, **Garothwala Sakina** and Tendulkar Radhika, International Science Conference titled “From Health to Well-being: An

Interdisciplinary Approach”, Mumbai, 9<sup>th</sup> to 11<sup>th</sup> January 2019.

**b. Research Area of Interest:** Developmental Biology, physiology.

**E-mail Id:** sakina.garothwala@jaihindcollege.edu.in

**(3) Zeenia Avari**



**Designation:** Assistant Professor

**Qualification:** MSc (Life Sciences)

**Specialization:** Physiology, Anatomy, Evolution, Ecology, Environmental Science

**Experience:** Teaching at Jai Hind College since 2021

**Research:**

**a. Research Publications:**

1. Study of effect of feminine washes on some microorganisms, **Zeenia Avari**, Niloufer K. Kotwal, Different Strokes DS JHC Vol 5., April 2021, p 7-16.

**b. Oral/Poster presentations:**

1. Effects of Risperidone on the Developing Chick Brain. **Zeenia Avari** & Dr. Hemalatha Ramachandran, presented at the Indian Academy of Neuroscience (IAN), Bhubaneswar, Odisha in October 2017.

2. Effects of pesticides on the Regeneration of the tail fin & behavioral pattern of Zebra fish. **Zeenia Avari** & Aashani Shah, presented at the Inter-collegiate Avishkar research convention. (University level) in 2015.

3. Effect of Feminine Washes on Various Microorganisms. **Zeenia Avari** & Niloufer Kotwal. presented at the Sajjan Gupta-Konark Memorial Research Meet, Mumbai in 2016.

**c. Research Area of Interest:** Neurobiology, Physiology, Evolution, Ecology, Environmental Science

**E-mail Id:** [zeenia.avari@jaihindcollege.edu.in](mailto:zeenia.avari@jaihindcollege.edu.in)

**(4) Kajal Sankhala**



**Designation:** Assistant Professor

**Qualification:** MSc (Life Sciences), NET (Life Sciences)

**Specialization:** Life Sciences

**Experience:** Teaching at Jai Hind College since 2023

**Research Area of Interest:** Immunology, Cell biology, Neurology, Molecular Biology and Pharmacology.

**E-mail Id:** [kajal.sankhala@jaihindcollege.edu.in](mailto:kajal.sankhala@jaihindcollege.edu.in)



**Supporting Staff:**

- (1) **Siddhesh Raut:** Laboratory Assistant since 2016
- (2) **Rupesh Gawde:** Laboratory Attendant since 2004
- (3) **Maharaj Singh:** Laboratory Attendant since 2019

**Courses offered:**

Sr. No	Course name	Degree / Diploma / Certificate	Aided/Self-financed
1.	BSc – Life Sciences	Degree	FY and SY Aided, TY Self-financed

**SOCIETIES/CELLS****IRIS: The Life Sciences department Society**

In 2005, the Department of Life Sciences established its own society. After a lot of contemplation, the society was named “**IRIS**” (**INSIGHT, RESILIENT, INNOVATE, SUCCESS**). Every year, one topic relevant to the current scenario and the latest global trends is selected, and students are enlightened regarding the same. Eminent speakers and senior scientists who have excelled in their fields and have national and international repute are invited to share their expertise and knowledge with our young minds to keep them abreast of the new developments in various allied fields and pave the way for their future progress.

**Activities under the aegis of IRIS:****(1) Seminars / Workshops:**

Year	Title
2005 – 06	“Infertility Conquerable.....?” (Based on Reproductive Biology)

2006 – 07	“Neuroscience & Forensic Science”
2007 – 08	“On the Brink.....?” (Based on Environmental Science)
2008 – 09	“I– Talk” (Based on Immunology)
2009 – 10	“Planet – G” (National Interdisciplinary Seminar based on Genetics in collaboration with the National Science Academies)
2010 – 11	Planet Earth.. Take Care... Take Charge
2011 – 12	Bioinformatics: Know your sequence
2012 – 13	Biostatistics: Enigma of Numbers
2013 – 14	Evolution: Tree of Life
2014 – 15	Stem Cells: Cellular Renaissance
2015 – 16	Intelligent Intelligence (Forensic Science)
2016 – 17	Perception v/s Recognition (Neuroscience)
2017 – 18	Part I – Bioinformatics, Biostatistics & Molecular Biology Part II – Nanobiotechnology & Reproductive Biology
2018 – 19	Diseases, Diagnostics & Drugs
2019 – 20	Two-day Recent advances in Stem Cells Research – Biomedical applications (Sponsored by Science Academies’ Education Program)
2022 – 22	Virtual Study Tour to EART (Embryology Academy for Research & Training) IVF center

2022 – 23	Emerging trends in Health and Life sciences
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**JAI HIND COLLEGE, AUTONOMOUS**  
 Dept. of Life Sciences  
 Presents  
**"Emerging trends in Health & Life Sciences"**

**Talk 1:**  
 Speaker: Dr. Usha Padmanabhan,  
 Director, Haffkine Institute,  
 Mumbai.  
 Title: Phase II Clinical trial for  
 Evaluation of BCG as potential  
 therapy for COVID-19.

**Talk 2:**  
 Speaker: Dr. Roshan D'Souza,  
 Head of Zoology Dept, Sophia  
 College Autonomous, Mumbai.  
 Title: Zebrafish & C. elegans as  
 Model Organisms.

REGISTER AT:  
 AV room, 4th floor, Main building  
 10:00 am onward  
 Friday, 3rd February 2023

**Department of Life Sciences, Jai Hind College**  
 presents  
*Science Academies' Education Program*  
**Short-Duration Workshop**

**Titled: Recent advances in Stem Cells  
 Research – Biomedical applications**

Date : 12<sup>th</sup> & 13<sup>th</sup> July 2019  
 Time : 10:00am to 4:30pm  
 Venue : Audio-Visual Room,  
 4<sup>th</sup> floor, Jai Hind College

**Resource Persons:**  
 Dr. Maneesha Inamdar, JNCASR, Bengaluru  
 Dr. Deepa Subramanyam, NCCS, Pune  
 Dr. Lohika Mondal, IISER, Mohali  
 Dr. Abhijeet Bopandkar, Ree Labs Pvt. Ltd., Mumbai  
 Dr. Oleksandr Kukharчук, Ree Labs Pvt. Ltd., Mumbai  
 Mr. Pradeep Somalapur, Ree Labs Pvt. Ltd., Mumbai

**Co-Coordinator:**  
 Dr. K. Sriharsha  
 Dept. of Life Sciences,  
 Jai Hind College

**Coordinator:**  
 Dr. L. S. Shankalbharana  
 Professor & Coordinator,  
 Biology, IISER, Pune

**(2) Academic Excursion:**

The Department conducts an annual excursion to sensitize the students to the natural environment, where they study the rich biodiversity of sanctuaries in India and are made aware of the pressing need to conserve the bounty of nature.

Year	Excursion to
2004 – 05	Lakshadweep Islands
2005 – 06	Nainital – Corbett National Park
2006 – 07	Goa

2007 – 08	Coimbatore – Ooty – Mysore – Mudumalai – Bandipur
2008 – 09	Pachmarhi – Jabalpur – Kanha – Bandhavgarh
2009 – 10	Ranthambore – Bharatpur – Agra – Jaipur
2010 – 11	Jabalpur – Narara Island – Gir
2011 – 12	Coorg – Medikeri – Nagarhole
2012 – 13	Chikhaldara
2013 – 14	Kerala – Varkala – Allepy – Thekkady
2014 – 15	Nainital – Corbett National Park
2015 – 16	Chandigarh – Shimla – Manali – Amritsar
2016 – 17	Jabalpur – Narara Island – Gir
2017 – 18	Delhi – Haridwar – Rishikesh – Nainital – Corbett National Park
2018 – 19	Delhi – Manali – Chandigarh
2019 – 20	Kerala, Mahabaleshwar



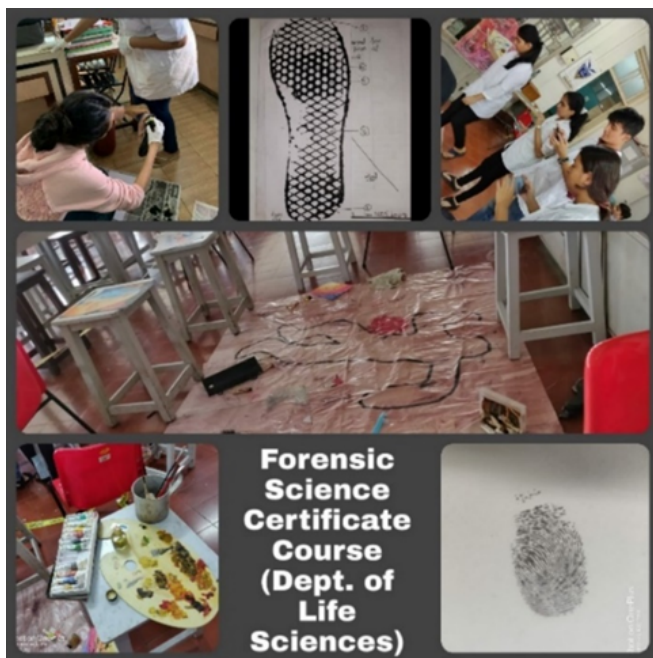
### **(3) Internships for students:**

The department believes in providing students with opportunities for co-curricular learning that complements the classroom experience. Over the years, our students have been sent for summer internships in “Basic Stem Cell Research” “Basics of Immunology and Blood Banking” and “Assisted Reproductive Technology”.



**(4) AAA Courses:**

- (1) A course in forensic science that is conducted by the department in collaboration with FACTS (Forensic Advice Consultancy and Training Services).
- (2) “Biohacking the Brain!” teaches how to bring about changes in their regular routine, diet, and sleep to improve health and live a healthy life.

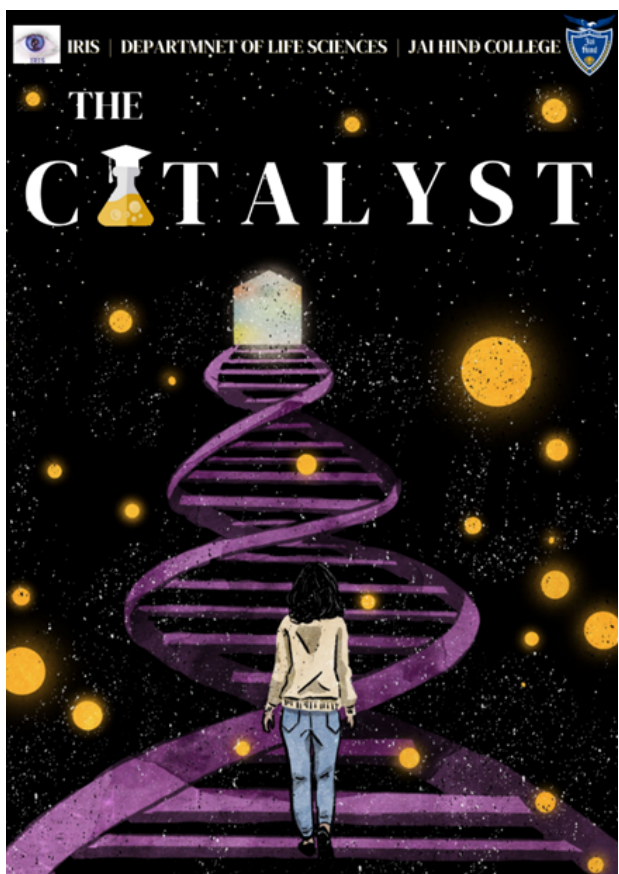


### **(5) Research:**

Department encourages the students for research. Many of our students are actively involved in research and have been presenting their research work in various competitions and National-level research conventions including Avishkar, Jigyasa, IIT-B, etc. A number of our students have won prizes at these Research meets and have also published their research work in e-journals and compendiums.

### **(6) “The Catalyst”—Department E-Magazine:**

In 2020-21, the department started publishing their E-Magazine “The Catalyst”. This magazine is of the students, for the students, and by the students, and is an amalgamation of all the research projects, literature surveys, and other studies curated and creatively put together. After a whole year's work, this magazine is a portrayal of the versatility of the students and faculty of the department, and we take pride in putting “Life into Science” and “Science into Life”.



## (7) Alumni Connect Series:

In 2022-23, the department started a series called “**Humans of JHC Life Sciences,**” wherein we invited our alumni to interact with and give our current students career guidance and also guide them for entrance exams.

JAI HIND COLLEGE, AUTONOMOUS

Dept. of Life Sciences presents  
**Humans of JHC Life Sciences**  
SESSION: 01

**MS. IMAAN JAVAN**  
Director (Suntuity REI)

EXPERIENCED DIRECTOR OF OPERATIONS WITH A HISTORY OF WORKING IN THE RENEWABLES AND ENVIRONMENT INDUSTRY. STRONG OPERATIONS PROFESSIONAL WITH A MBA FROM CARDIFF METROPOLITAN UNIVERSITY.

Saturday, 21st Jan. 2023  
1:30 pm  
Room no. 2A (New Bldg.)

REGISTER AT

JAI HIND COLLEGE, AUTONOMOUS

Dept. of Life Sciences presents  
**Humans of JHC Life Sciences**  
SESSION: 02

**MR. MEHERSHAD WADIA**  
Researcher at Queensland Brain Institute

MOLECULAR BIOLOGY POST-GRADUATE FROM THE UNIVERSITY OF QUEENSLAND, CURRENTLY PURSUING NEUROSCIENCE RESEARCH AT THE QUEENSLAND BRAIN INSTITUTE.

Saturday, 4th Feb. 2023  
2:00 pm  
AV Room, 4th Floor, Main Bldg

REGISTER AT

## Student Achievements:

### Year 2018 – 19:

### Accomplishments in Research:

Jigyasa Research Meet at KC College on February 25<sup>th</sup>, 2019:



**1<sup>st</sup> Prize:** Akshat Mohanani and Siraj Khan: Algal filter with drumstick oil and coconut charcoal to make an eco-friendly filter.

**3<sup>rd</sup> Prize:** Burhanuddin Khambati: Antioxidant Protection Against Ultraviolet Radiation in *Staphylococcus aureus* and *Escherichia coli*.

**Scholarships received:**

Sumitomo Scholarship: Pooja Gupta and Shraddha Kakadiya

Priyadarshini Scholarship: Tasneem Kapasi and Siddhant Naicker

**Year 2019 – 20:**

**Accomplishments in Research:**

(1) Nandini Chandak:

Title of Project: Bioplastic, It's Fantastic!"

Presented at the 14<sup>th</sup> inter-collegiate "AVISHKAR" research convention.

Selected for the final round and presented at the zonal level.

(2) Shikha Motwani:

Title of Project: MFC: An Alternative source of Energy

Presented at One day national conference on "Water Resources: Remediation and Rejuvenation".

Won the "Best Innovative Researcher" award.

(3) Nandini Chandak:

Title of Project: Bioplastic, The Problem Solver!

Presented at the Research Poster Presentation Competition at IIT- Bombay. Won the second prize.

**Scholarships received:**

Sumitomo Scholarship: Aastha Somani, Shraddha Kakadiya, Varisha Khan and Simran Udeshi

**Year 2020 – 21:**

**Accomplishments in Research:**

(1) Seven students, Navin Chawathe, Varisha Khan, Jaansi Bhansali, Kunal Jagetiya, Neha Vadagbalkar, Indeira Rohra, and Hibah Mulla, presented at the 15th Inter-collegiate “AVISHKAR” research convention.

Navin Chawathe was selected for the final round and presented at the zonal level.

(2) Varisha Khan, Jaansi Bhansali, and Roshni Keshwani bagged the 2nd prize at the UGC STRIDE National Research Paper Presentation Competition.

(3) Jaansi Bhansali, Varisha Khan, and Jiban Gogoi published articles in the Compendium of Research Insights of Life Science Students.

**Competitive exams aced:**

Kunal Jagetiya is pursuing MSc integrated PhD at TIFR Hyderabad

**Scholarships received:**

Sumitomo Scholarship: Varisha Khan, Simran Udeshi and Avani Dave.

**Year 2021 – 22:**

**Accomplishments in Research:**

(1) 06 students Avani Dave, Richs Mishra, Roshni Keshwani, Shruti Anand, Yogita Tiwari, Zarhaan Khambatta presented at 16th Inter-collegiate “AVISHKAR” research convention.

(2) Roshni Keshwani published an article in the Compendium of Research Insights of Life Science Students.

**Competitive Exams aced:**

Avani Dave ranked in GATE-XL and Riddhesh Ahire ranked in IIT-JAM

**Scholarships received:**

Sumitomo Scholarship: Avani Dave and Manali Chakraborty

Priyadarshini Scholarship: Shruti Anand

**Year 2022 – 23:****Accomplishments in Research:**

Six students, Mudita Adaniya, Hibah Mulla, Neha Thorat, Roshani Gupta, Sanika Naik, and Tanaya Salvi, presented at the 17th Inter-collegiate “AVISHKAR” research convention.

Mudita Adaniya and Hibah Mulla were selected for the final round and presented at the zonal level.

**Scholarships received:**

Sumitomo Scholarship: Vipra Parekh and Mudita Adaniya

ANGC Scholarship: Khushi Singhanian

**Ex-Teaching Staff:****(1) Dr. K. Srilatha:**

**Designation:** Assistant Professor

**Qualification:** MSc (Botany), SET (Life Sciences)

**Specialization:** Cell biology, Biochemistry, Immunology, Fermentation Technology

**Resigned in:** January 2023

**Experience:** Teaching at Jai Hind College from June 2008 to January 2023

**Research Publications:**

(1) Genetic diversity analysis of *Oroxylum indicum (L) Vent*, an endangered and important medicinal plant using Inter Simple Sequence Repeat (ISSR) markers. **K.Srilatha Srinivas**, Aparna Saraf (2018), International Journal of Botany Studies, Volume 3; Issue 3; May 2018; Page No. 78-81.

(2) Phytochemical and Elemental Profile of *Embelia ribes* Burn. F. **K.Srilatha Srinivas**, Amit Saraf (2016), Research Journal of Pharmaceutical, Biological and Chemical Sciences, 471-477.

(3) Effect of Malathion on the concentration of primary metabolites from *Vigna radiate* and *Trigonella foenum-graecum*. **K.Srilatha Srinivas**, Janhavi Damani (2016). Bulletin of environment, Pharmacology and Life Sciences, Vol 5(7).

### **Research projects:**

- (1) Chemical fingerprint profile of medicinal plant – *Oroxylum indicum* L(Vent)
- (2) Establishing the medicinal potential of *Psidium guajava* (Linn.).A tropical plant through chemical profiling and radical scavenging technique

### **(1) Yogita Walke:**

**Designation:** Assistant Professor

**Qualification:** MSc (Biotechnology), NET (Life Sciences)

**Specialization:** Anatomy, Physiology, Evolution, Environmental Science

**Resigned in:** March 2021

**Experience:** Teaching at Jai Hind College from June 2016 to March 2021

### **FAQs:**

**Question: How can I contact the department members?**

**Answer:** You can email to the HOD or teachers on their official email ID's or mail to the department email id [lifescience.jaihind@gmail.com](mailto:lifescience.jaihind@gmail.com)

You can also follow us on the following handles to know our activities.

Instagram: [https://instagram.com/cell\\_e\\_brata.science?igshid=MzRIODBiNWF1ZA==](https://instagram.com/cell_e_brata.science?igshid=MzRIODBiNWF1ZA==)

YouTube: [Department of Life Sciences, Jai Hind College - YouTube](#)

**Question: What are the qualifications to get into life sciences?**

**Answer:** As per rules mentioned by University of Mumbai and the College prospectus.

Note: Having Biology as a subject in 12<sup>th</sup> standard is a must.

**Question: What are the subjects covered under Life Sciences?**

**Answer:** Molecular and cell biology, anatomy, physiology, genetics, biotechnology, immunology, developmental biology, neurobiology, biochemistry, biostatistics, bioinformatics, evolution, EVS, plant science, animal science and microbiology.

**Question: What makes Life Sciences at Jai Hind College special?**

**Answer:** We provide holistic education with equal importance for co-curricular & extra-curricular growth. We strive to provide opportunities for internships, excursions, industrial visits, seminars/workshops to broaden your scope and knowledge of the subject. We also provide opportunities to hone communication skills, soft-skills and creative skills via our E-magazine, assignments, etc.

**Question: What are the avenues post BSc Life Sciences?**

**Answer:** You can pursue the following post BSc in Life Sciences

**1. Masters in Life Sciences (University of Mumbai):**

St. Xavier's College, Sophia College, Ruia College, UDLSc (Kalina Campus)

**2. Masters in Biological Sciences / Biotechnology: (Integrated PhD)**

- ü JNU (Jawaharlal Nehru University) Entrance Exam: JNUEE
- ü NCBS, TIFR, etc. Entrance Exam: JGEEBILS
- ü IIT Entrance Exam: JAM
- ü NMIMS
- ü Symbiosis School of Biological Sciences

**3. Masters in Food Nutrition/Food Processing and Preservation:**

- ü SNTD Juhu, SNTD Pune, SNTD Matunga, Nirmala Niketan, Symbiosis (Pune), Manipal University, Lady Irwin College (Delhi), Mangalore University

**4. Masters in other specializations:**

- ü Bioinformatics
- ü Stem Cell & Tissue Engineering
- ü Environmental Sciences
- ü Genetic Counselling
- ü Forensic Science
- ü Clinical Research

**5. Career in IVF:** MSc in Life Sciences followed by course in Embryology or Masters in IVF abroad ([www.ivf.net](http://www.ivf.net))

**6. IPR & Patent Law** – GLC, KC, Symbiosis

**7. MBA in Hospital and Healthcare** – D.Y. Patil Institute

**8. Post Graduate Diploma in Pharmaceutical Management** – SIES College of Management Studies, NMIMS

**9. Teaching –**

School = BSc – B.Ed.

Junior College = MSc – B.Ed.

Degree College = MSc – NET/SET

IB Schools = May not require B.Ed

