Quisqualis 2014

The Magazine of

Antheia

The Botanical Society

Miranda House, University of Delhi

Antheia

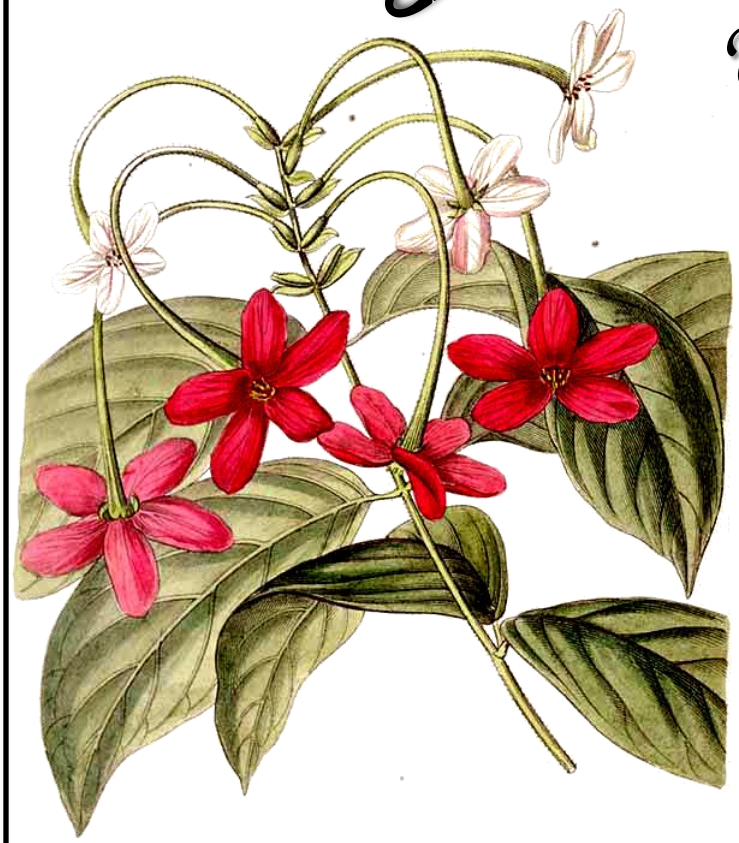
Antheia was one of the Charites, or Graces, of Greek mythology and was the goddess of flowers and flowery wreaths. She was depicted in Athenian vase painting as one of the attendants of Aphrodite.

Her name, which is derived from the ancient Greek word 'anthos', means 'flower' or 'blossom'. The Romans knew her as Anthea. Her centre of worship was on the island of Crete. The name Antheia was also given to Hera and connected to the Horae, under which she had a temple at Argos. It was also an epithet of Aphrodite at Knossos. She was the goddess of vegetation, gardens, blossoms, especially worshipped in spring and near lowlands and marshlands, favorable to the growth of vegetation. She was also the goddess of human love.

Antheia is also the Greek name of Ancient Sozopolis in modern Bulgaria, and another Antheia was a village, which was later, adopted into Patras around 1000 BC.

Source: Wikipedia.com

Why Quisqualis



Why Quisqualis?

Translated from the Latin, Quisqualis means Who? What? A fine definition of curiosity. This is exactly what the magazine is about.

Can I find it? Can I make it work in my life? How do they do it "there"? How can I make or find or do ...? Not a bad approach, but it could be daunting.

What is Quisqualis?

Botanically, Quisqualis indica is the Rangoon creeper. This large growing vine spends the start of its life as a bush. In the early days one plant explorer would send samples of leaves, stem and flower to his sponsor and describe the plant as a bush. A second explorer would collect the same samples and send them in described as a vine. It also develops spines as it ages.

To add to the confusion, Quisqualis flowers open white and age to red! Eventually a taxonomist, with a sense of humor, must have scratched his head and named the mixed samples "Quisqualis."

Foreword

I am extremely happy that Quisqualis, the publication of the Botanical Society of Miranda House, has been brought out after a gap of ten years. The publication was an annual one till the session 2003-04. With rapid advancements in information and communication technology, and the cost involved in bringing out a printed publication, somehow the relevance of Quisqualis seemed to take a back seat. Yet, the zeal and teamwork of the current students of B.Sc. (Hons) Botany III and II Year, and FYUP Botany I Year has enabled them to revive the magazine.

It is needless to say that writing is a very good way of channelizing one's creativity, and contributing even a single article for a magazine hones one's writing skills and improves originality. The academic year 2013-14 has historic significance because the Botanical Society has been christened with a beautiful and befitting name Antheia, who in Greek mythology is the Goddess of flowers and flowery wreaths. The students have been wanting to name the Society since long but September 2013 was probably the destined time for our Society to get a name. It is coincidental that the name suggested by the President Anvekshaa Rao was the one selected from among the several names received. She has also been instrumental in designing the logo and creating a website for Antheia.

I have seen the editorial board members meeting and working even after the final practical examinations had begun. The cover is a modified version of the cover in the previous years, more appropriate for Antheia. The students, especially Anvekshaa Rao, Ninadini Sharma and Vinca Yadav, have painstakingly worked on the cover design and edited the articles on a wide-range of topics. The publication also gives a detailed report of the activities and achievements of the students of the Department.

The effort of the students is highly commendable, and I hope that this in-house publication would evoke curiosity among students, and encourage them to improve their reading habit and writing ability. The present volume has been possible only because of the remarkable varied talents and hidden potential, and resourcefulness of the students, especially the editorial board. I thank the authors, and the editorial board for effectively weaving the contributions. I congratulate the editorial board for bringing this volume to fruition..

I thank all the faculty members and laboratory staff of the Department of Botany for their involvement, cooperation, and participation in the Society activities. The Staff Advisors Dr. Rashmi Shakya and Dr. Renuka Agrawal have very ably managed the Society activities during the year, and I extend my special thanks to them. I am grateful to Dr. Pratibha Jolly, the Principal, for her interest and support.

Dr. Janaki Subramanyan
Teacher-in-charge

Editorial

"Life, but is a walking shadow, a poor player that struts and frets his hour upon the stage and then is heard no more. It is a tale told by an idiot, full of sound and fury, signifying nothing."

- William Shakespeare

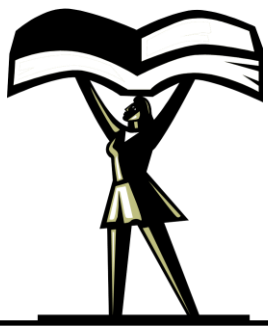
Why we mention this famous saying here is because we wonder whether it is nothing that life is, besides a 'walking shadow'. Is man here to just play a character, signifying nothing? Then how did the world come to exist the way it does? Man has definitely come a long way from being Homo habilis *to* Homo sapiens. *This wheel of evolution has been the result of intelligent role-play. Chance has had its role too, but then limited to initiating the motion of progression, Neanderthals died out of antiquated survival. That was an indicator for today that is an epoch of an eventful every day, it is fatal to lead an ignorant life.*

Time is constantly spinning itself to weave out a web of complicated and eventful existence. Several events that may or may not be important enough to grab our attention occur every minute throughout the globe. A year full of events marking the emergence, rise and fall of various tides of time, obviously would occupy a sizeable portion of youngsters that "Quisqualis" has tried to reflect.

There comes a time when the mind takes a higher plane of knowledge but can never prove how it got there. We know how it gets there. The teachers, the faculty, the administration, the college is what gets us there. Their silent enterprises come in myriad forms, accompanied with unrelenting encouragement. Therefore, it must not be forgotten that no matter how much "Quisqualis" has been the product of students' ingenuity, it is actually the behind-the- scene support and learning that has enabled us to go this far.

Creativity and innovation at its best, we bring you here the latest edition of "Quisqualis".

Happy reading!



The Editorial Team

Ninadini Sharma
Chief Editor

Anvekshaa Rao

Vinca Yadav

Guruaribam Vijayalaxmi

Kavya Chandra

Shubhra Rajput

Anita Kumari

Elizabeth Huidrom

Ruchi Bhatt

Office Bearers

Dr. Janaki Subramanyan
Teacher-in-Charge

Dr. Rashmi Shakya
Staff Advisor

Dr. Renuka Agrawal
Staff Advisor

Anvekshaa Rao
President

Vinca Yadav
General Secretary

Shubhra Rajput
Class Representative
III Year

Rebita Haobam
Class Representative
II Year

Diksha Tomar
Class Representative
I Year

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Dr. Anita Sehgal

Dr. Madhu Khanna

Dr. Minakshi Sethi

Dr. Sushma Moitra

Dr. Janaki Subramanyan

Dr. Madhu Bajaj

Dr. Saloni Bahri

Dr. Rashmi Shakya

Dr. Renuka Agrawal

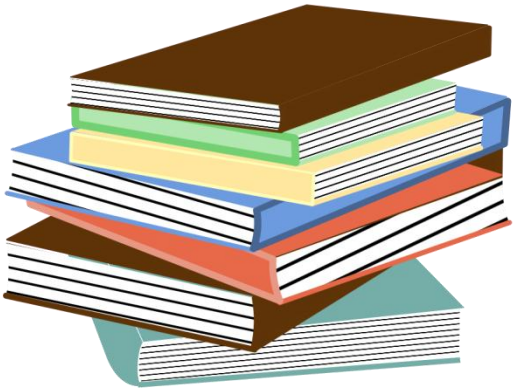
Dr. Somdatta S. Roy

Dr. Monika Jaggi

Dr. Lalit Kumar

Laboratory Staff

First Row: Mr. Uttam Singh Rawat, Mr. Satish Ch. Bhardwaj, Mr. Ravinder Sharma, Mr. Binod Kr. Mahto
Second Row: Mr. Dinesh Kumar, Mr. Sonu Giri, Mr. Vijay Kumar, Mr. Umesh Ch. Joshi, Mr. Sohan Lal



Third Year

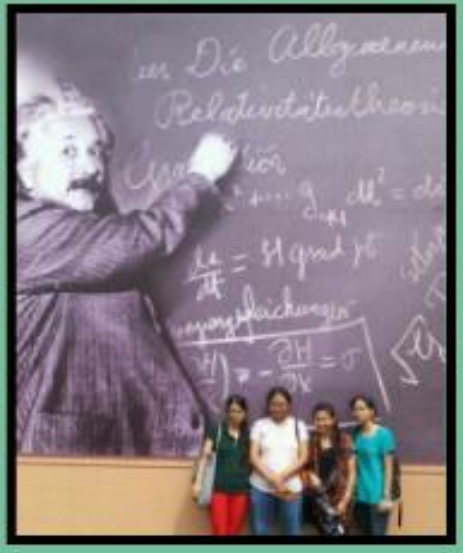
First Row: Kavya, Neha, Pritha, Sudeshna, Elcy, Dolly, Renu, Pragati, Memthoi, Sonam
Second Row: Nitika, Ayushi, Sonam K., Priyanka, Monica, Shubhra, Shiva, Kirti, Tingneilhai, Vijayalaxmi, Merinashwari
Third Row: Payal, Awantika, Amrita, Anvekshaa, Jorita, Surpini, Soneja
Absent: Memem, Swati

Second Year

First Row: Priya, Moni, Rebita, Gunjan, Julia, Meria, Pepe, Elizabeth, Mohsneen
Second Row: Shrilata, Nimisha, Neha, Ruchika, Sonali, Priyanka, Karuna, Roseny, Depiya, Puspa
Third Row: Divya, Pratibha, Anita, Sheetal, Vinca
Absent: Shabana

First Year

First Row: Priyanka B., Diksha, Zinnia, Helena, Olivia, Rajkumari Bubby, Jeebika, Bhavya, Archana, Ruchi, Shreya, Priyanka Y., Lorinda, Ninadini
Second Row: Thoi Thoi, Dhanamanjuri, Anisiya, Diksha T., Hiteshwari, Ritika, Mancy, Sakshi, Phalguni, Siwangi, Sanju
Absent: Amelda, Anu, Anuma, Bidyarani, Diksha P., Divya, Garjana, Jyoti, Jyotsana, Kirti, Neha, Nivedita, Preshita, Rhythem, Sumedha, Sunidhi, Swati, Y. Priyanka




NANOPARTICLES AND PLANT SYSTEMS:
IN VITRO AND IN SILICO STUDIES
NANOPARTICLES
PLANT TISSUE CULTURE


9.


Anthsia
Anthsia

Koshika

2014















Achievements

Participation in Inter-College Competitions:

- *Guruaribam Vijayalaxmi Devi, Kavya Chandra* and *Shubhra Rajput* bagged the second prize in the quiz competition held in **Biotikos** – a symposium on '*Current Challenges ot Bioinformatics in Biotechnology'*, organised by TERI University on 10 April 2013.

- A number of students from the department of Botany won prizes in competitions held on 5 March in **Koshika 2013** (the annual festival of the botanical society of Miranda House, in association with the life sciences society, *Tricord*).
  - *Depiya Thoudam* won the first prize in the cartoon making competition.
  - *Awantika Singh* and *Shubhra Rajput* won the first prize in rangoli making competition; and the second prize was shared by two teams, consisting of *Kavya Chandra* and *Payal Negi*, and *Monika Swaran* and *Nitika Gupta* respectively.
  - *Anita Kumari* and *Vinca Yadav* bagged the third prize in the quiz competition.

- In **Orchidz 2014** – the inter-college botanical festival of *Vasundhara*, the botanical society of Daulat Ram College:
  - *Guruaribam Vijayalaxmi Devi, Konsam Memthoi Chanu*, and *Merinashwari K.* won the first prize in the botanical quiz competition and *Anita Kumari, Divya Jain* and *Vinca Yadav* won the third prize.
  - *Depiya Thoudam* bagged the second prize in the poster making competition.
  - *Guruaribam Vijayalaxmi Devi* and *Merinashwari K.* won the third prize in the salad dressing competition.

- *Julia Thingnam* won the second prize in the eastern flower arrangement competition held in **Antardhvani**, the annual festival of the University of Delhi, held in February 2014.

- Prizes won by our students at **Srishti 2014**, the annual festival of *Medini*, the botanical society of Kirori Mal College:
  - *Ninadini Sharma* was adjudged the best speaker in the paper reading competition.
  - A team comprising of *Guruaribam Vijayalaxmi Devi, Konsam Memthoi Chanu* and *Shubhra Rajput* won the third prize in the botanical quiz competition.

- In **Koshika 2014** (the festival of *Antheia,* the botanical society of Miranda House), held on 26 February, students from the department of Botany won a number of prizes once again.
  - *Monica Swaran* won the first prize in the online photography competition.
  - *Shamurailatpam Elcy Devi* won the first prize in *Slice It Thin!* (section cutting and identification competition) and *Chanambam Surpini Devi* won the second prize.

- *Guruaribam Vijayalaxmi Devi* and *Merinashwari K.* won the second prize in the best-out-of-waste competition.
- *Ninadini Sharma* and *Priyanka* won the second prize in the botanical quiz competition.
- *Ninadini Sharma* and *Ruchi Bhatt* won the first prize in *Ad-Mad* and *Konsam Memthoi Chanu* and *Shubhra Rajput* won the second prize.
- *Guruaribam Vijayalaxmi Devi, Philem Dolly Devi, Shamurailatpam Elcy Devi* and *Tingneilhai Chongloi* won the treasure hunt competition.

- In a competition '*Naming The Trees'* organized by **Gandhi Bhawan**, University of Delhi on 4 March 2014, two teams from the department comprising of *Kangabam Soneja Devi* and *Merinashwari K;* and *Konsam Memthoi Chanu, Philem Dolly Devi* and *Shamurailatpam Elcy Devi* won the second prize. Another team consisting of *Guruaribam Vijayalaxmi Devi* and *Tingneilhai Chongloi* bagged the third prize.

Participation in Workshops/Projects:

- *C. V. Neha* is a summer intern of **Project Oriented Biological Education programme (POBE)** organized by **Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR)**. *Ninadini Sharma* has also been selected to join POBE from May 2014 onwards.

- *Anvekshaa Rao and Ayushi Sharma* attended the 1st **Summer School on Bioinformatics organised by the Department of Biophysics, University of Delhi** in May-June 2012. *Vinca Yadav* attended the 2nd Summer School on Bioinformatics in 2013.

- *Shubhra Rajput* worked as a summer research intern at the **D. S. Kothari Centre for Science and Education Research**, Miranda House in May-June 2012. *Divya Jain, Mohsneen Khan, Monica Swaran, Nitika Gupta, Pragati Singh, Pritha Pande* and *Sonam Kumari* worked here as summer research interns in 2013.

- *Anita Kumari, Divya Jain, Guruaribam Vijayalaxmi Devi, Kavya Chandra, Mohsneen Khan, Sheetal, Shubhra Rajput, and Vinca Yadav* attended **Biotikos** – a symposium on '*Current Challenges of Bioinformatics in Biotechnology'*, organised by TERI University from 9 to 10 April 2013.

- *Anita Kumari and Vinca Yadav* also attended a workshop on '*Understanding Proteins: Structures and Functions*' organised by the D.S. Kothari Centre for Science and Education Research under the **DBT Star College project** from 15 to 18 July 2013.

- *Anita Kumari, Guruaribam Vijayalaxmi Devi, Mohsneen Khan* and *Shubhra Rajput* took active part in the **Delhi Youth Summit on Climate Change (DYSoC)** 2013, organised by Delhi Greens, a non-profit organisation, in collaboration with Miranda House on 24 and 25 August. *Vinca Yadav* acted as a youth facilitator and social media communicator in the event.

- *Anvekshaa Rao* and *Kavya Chandra* attended the **YUVA Meet 2014 – Youth Unite for Voluntary Action** on '*Innovations for a Sustainable Future: Transforming Learning into Action*' organised by The Energy and Resources Institute (TERI) on 3 and 4 February 2014.

- *Vinca Yadav* has been selected for the **Summer Research Program 2014** at the **Indian Institute of Science Education and Research (IISER)**, Mohali.

Innovation Projects of the University of Delhi:

Students of the Botany department are involved in two active research projects under the Innovation Projects of the University of Delhi, viz. '*Eureka! MyLab*' and '*Nanoparticles and Plant Systems: In-Vitro and In-Silico Studies*'.

- The students participating in *Eureka! MyLab* are *Anita Kumari* and *Vinca Yadav*.
- The students participating in *Nanoparticles and Plant Systems: In-Vitro and In-Silico Studies* are *Divya Jain, Ninadini Sharma, Nivedita Sinha Borthakur* and *Ruchi Bhatt*.

Baseline Test:

- *Shubhra Rajput* secured the 2nd rank in the Baseline Test for Biology conducted by D.S. Kothari Centre for Science and Education Research for the session 2012-13.
- In the session 2013-14, all the three ranks in the Biology Baseline Test were secured by students of the department of Botany.
    - 1st rank – *Vinca Yadav*
    - 2nd rank – *Ninadini Sharma*
    - 3rd rank – *Priyanka Rawat*

In the final round of the Baseline Test (the presentation round), *Vinca Yadav* was adjudged the '*Best Interjector*'.

Quest:

- *Konsam Memthoi Chanu* was a part of the four-member team from Miranda House participating in **Quest 2014,** organized by **Centre For Science Education and Communication**, *University of Delhi*. The team won the second prize in the competition.

Academic Awards:

- INSPIRE Scholarships:
  - The following students are recipients of the INSPIRE Scholarship awarded by the Department of Science & Technology (DST), Govt. of India:
    - I year: *Ninadini Sharma* and *Nivedita Sinha Borthakur*
    - II year: *Elizabeth Huidrom, Laikhuram Chanu Pepe, Sheetal* and *Soibam Puspa Chanu*
    - III year: *Guruaribam Vijayalaxmi Devi, Kangabam Soneja Devi, Konsam Memthoi Chanu* and *Tingneilhai Chongloi*

- College Awards:
  - Academic Prizes:
    - *H. Jaishree Subrahmaniam* received the University Rankers Prize for obtaining the 2nd university rank in B.Sc. (Honours) Botany in the north campus and the Academic Prize for obtaining the highest marks in the college in B.Sc. (Honours) Botany Part I, II and III examinations.
    - *Dhara Arora* received the University Rankers Prize for obtaining the 1st university rank in M.Sc. Botany in the north campus.
    - *Konsam Memthoi Chanu* received the Academic Prize for obtaining the highest marks in B.Sc. (Honours) Botany Part I and II examinations.
  - Kanta Venugopal Medal in Genetics:
    - *Monica Lamba* received this prize for securing an aggregate of above 60% in the university examination of B.Sc. (Honours) Botany along with the highest marks in the Genetics paper.
  - Lakshmi Krishnaswami Prizes:
    - M.Sc.: *Parna Saha* was awarded with this prize for securing the highest marks in M.Sc. Botany previous examination.
    - B.Sc.: *Konsam Memthoi Chanu* was also awarded with this prize for securing the highest marks in the Part I and Part II examinations in B.Sc. (Honours) Botany.
  - Shyam Deviki Kaul Memorial Award:
    - This award was given to *Tingneilhai Chongloi*, who was selected by the teachers of the Botany department among outgoing students of the third year.

- Meritorious Awards:
  - The following students have been granted the Science Meritorious Book Grant for the year 2013-14:
    - B.Sc. (H) I year: *Diksha, Ninadini Sharma, Nivedita Sinha Borthakur, Priyanka Bulla, Rhythem* and *Swati*
    - B.Sc. (H) II year: *Anita Kumari, Depiya Thoudam, Rebita Haobam* and *Vinca Yadav*
    - B.Sc. (H) III year: *C.V. Neha, Konsam Memthoi Chanu* and *Tingneilhai Chongloi*
    - M.Sc. (P): *H. Jaishree Subrahmaniam*

- M.Sc. (P): *Parna Saha*

Other Achievements:

- *Anvekshaa Rao* was selected as the **Google Student Ambassador** of Miranda House for the session 2012-13.

- *Elizabeth Huidrom* is a member cum volunteer at **NECEER**, and helped organise the NECEER national conference on biodiversity 2012. She is also the editor of an online magazine called *'Passion Photography'.*

- *Mohsneen Khan* is an active member of a student initiative called **BloodConnect**.

- *Nimisha Chauhan* is a member of the **NSS**, and attended a health camp and a self-defence course organised by the same. She also attended the JDMC creative writing competition and participated in the IIT-Delhi literary fest.

- Many students of the department are active members of not-for-profit youth movement - Leaders For Tomorrow (LFT). *Anvekshaa Rao* and *Sakshi Singh* are the core team members of the LFT Miranda House Unit.

- *Vinca Yadav* is a volunteer at **Delhi Greens**, an environmental NGO. She is also the campus ambassador of Miranda House for **Plants Guardian**, a foundation that strives to save the environment.

Participation In College Societies:

- Anukriti – The Hindi Dramatics Society: *Mancy Tomar* is a member.
- Bluestockings – The Creative Writing Club: *Nimisha Chauhan* is a member.
- DebSoc – The Debating Society: *Ninadini Sharma* is a member.
- Gender Sensitization Cell, College Complaints Committee (CCC): *Hiteshwari Dhaka, Pragati Singh* and *Vinca Yadav* are **student representatives**.
- MH Vatavaran – The Environment Society: *Anita Kumari, Guruaribam Vijayalaxmi Devi, Konsam Memthoi Chanu, Merinashwari K., Mohsneen Khan, Shubhra Rajput* and *Tingneilhai Chongloi* are members. *Vinca Yadav* holds the position of **joint secretary** for the session 2013-14.
- Proctorial Committee: *Anvekshaa Rao* is a **student representative** at the proctorial committee of Miranda House.
- Tanz – The Western Dance Society: *Payal Negi* is the **president** for the session 2013-14.
- Sports Department: *Archana Maurya* and *Swati Bisht* are active students of the sports department.

Events 2012-14

Farewell:

- The Batch of 2013 was heavy heartedly bidden adieu on 3 April, 2013. *Victoria Rajkumari* was awarded the prize for being the best student.
- Our senior-most teacher, Dr. Anita Sehgal was bid farewell on 31 January, 2014.

Freshers' Welcome:

- The freshers were given a hearty welcome on August 27, 2013 in a party themed *Angels and Demons*.

Inaugural Lecture:

- **Dr. Prithipal Singh**, former Associate Professor, Department of Botany, Kirori Mal College, University of Delhi, delivered the inaugural lecture on '*Understanding Biodiversity: My Interesting Journey'* on 18 September, 2012.
- **Dr. Sanjay Kapoor**, Associate Professor, Department of Plant Molecular Biology, University of Delhi (South Campus), delivered the inaugural lecture on *'Fluorescence and Confocal Imaging: Methodology, Applications and Relevance'* on 17 September 2013. The Botanical Society also got a name for itself on the very day of the Inaugural Lecture. The Society is now known as ***Antheia***. The name *Antheia* was suggested by Anvekshaa Rao, the president of the society, who was also rewarded for the same.

Mansi Ram Memorial Lecture:

- **Dr. S. Natesh**, formerly Senior Advisor, Department of Biotechnology, Govt. of India, New Delhi, delivered the Mansi Ram Memorial Lecture on '*From Biosiences To Bioenterprises: Imagining A New India'* on 1 March 2013.
- **Dr. Alok Bhattacharya**, Professor, School of Life Sciences, Jawaharlal Nehru University (JNU) delivered the Mansi Ram Memorial Lecture on '*How Do Cells Take Up Particles?*' on 23 January 2014.

Koshika (The Annual Festival of The Botanical Society):

- The annual festival of the department, **Koshika 2013** was jointly organized with the Life Sciences Society, *Tricord* on 5 March. **Dr. Anita Sehgal** delivered a lecture on *'Podostemaceae – The Unique Angiosperms'*. Students participated in a number of inter-college competitions such as Rangoli Making, Poster Making and Botanical Quiz and won prizes. An interactive session on waste management was also conducted by **Swechha** which is a Delhi based, youth-run and youth-focused NGO, engaged in environmental and social development issues.

- **Koshika 2014** was organized on 26 February, 2014. In addition to seven competitive events including those mentioned above, the students put up stalls with articles for sale in the college. The event saw huge participation from colleges across the university, including those in the South Campus.

Educational Trips:

Outstation:

- A botanical excursion of B.Sc. (Hons.) Botany II year and III year (of the academic year 2012-13) was organized to the **Keoladeo National Park**, formerly known as the **Bharatpur Bird Sanctuary** in Bharatpur, Rajasthan, which is a famous avifauna sanctuary that plays host to thousands of birds. Agra and Fatehpur Sikhri were also visited as part of this trip during the second week of October 2012.

Local:

- Students of the department visited the **3rd National Level 2013 Exhibition and Project Competition** during the mid-semester break in September 2013.

- A local excursion to the **National Bureau of Plant Genetic Resources (NBPGR)** was also organized for III year students (of the academic session 2013-14) studying Environmental Management to become more familiar with Gene Banks and Herbarium Collections in October 2013.

- Students of II year (of the academic session 2013-14) were taken to the **Orchid Exhibition** put up in **India International Centre** in the month of February 2014.

INSPIRE *Internship Programme:*

- An internship programme for school students all over Delhi-NCR in collaboration with the *Innovation in Science Pursuit for Inspired Research* (INSPIRE) Programme of DST, Govt. of India, was held from 15 to 20 December 2013. Two workshops under this were organised in the Botany department, viz. *The Cell: Life's Playground* and *DNA: Close Encounters*.

DBT *Star College Project Workshop:*

- A workshop on '*Molecular Cloning'* was conducted for B.Sc. (Hons.) Botany students from 30 January 2013 to 1 February 2013.
- Another workshop on '*Tissue Culture'* was held for the students of III year (of the academic session 2013-14) of B.Sc. (Hons.) Botany and B.Sc. Life Sciences.

Result Analysis

UNIVERSITY POSITIONS

Name	Semester	Rank
H. Jaishree Subrahmaniam	VI	II
Victoria Rajkumari	VI	IX
Kavya Agarwal	VI	X
Tingneilhai Chongloi	IV	III
Konsam Memthoi Chanu	IV	VI
Guruaribam Vijayalaxmi Devi	IV	X
Depiya Thoudam	II	I
Rebita Haobam	II	VI
Vinca Yadav	II	VIII
Anita Kumari	II	IX

Beyond Miranda : Batch of 2013

Name	College/University
Bushra Ejaz	Department of Botany, DU
Garima Gupta	Kurukshetra University
Garima Vashist	CIE, DU
Gyanabati Salam	Forest Research Institute (FRI), Dehradun
H. Jaishree Subrahmaniam	Department of Botany, DU
Hidangmayum Olivia Devi	Department of Botany, DU
Himani Upadhyay	Kurukshetra University
Himanshi Tyagi	Nanital University, Nanital
Jayaluxmi Lukram	Department of Botany, DU
Kavya Agarwal	Department of Botany, DU
Komal Joshi	Kumaoon University
Kshetrimayum Menaka Devi	Department of Botany, DU
Monica Lamba	Indraprasth University (IP)
Monika Sharma	Kurukshetra University
Naoroibam Monica	Department of Botany, DU
Parnasha Banerjee	Tata Institute of Social Sciences (TISS), Mumbai
Pratishtha Singh	Department of Botany, DU
Sameena Malik	Amity University
Sandhya Choudhary	Amity University
Sumita Bhattacharyya	Forest Research Institute (FRI), Dehradun
Sumita Duara	Department of Botany, DU
Sweta Bharti	Department of Botany, DU
Tripti Sharma	Department of Botany, DU
Victoria Rajkumari	Department of Botany, DU

Contents

Dedicated To All Our Wonderful Teachers

This song is for those, who inspire us today,
who always lend a helping hand, and help show the way.
This song is for those, who see their students through,
in the tough times in their life, for that we say thank you.

You have made a difference and shaped our minds.
You have changed the world, one child at a time.
You have always been there, in everything we do.
I hope that you are proud of me, as I'm proud of you.

This song is for those, who heard the silent cries,
who stepped in to wipe tears from their children's eyes,
for those who gave us a safe place to grow.
Place for us to call our home, forever we will know.

You have made a difference and shaped our minds.
You have changed the world, one child at a time.
You have always been there in everything we do.
I hope that you are proud of me, as I'm proud of you.

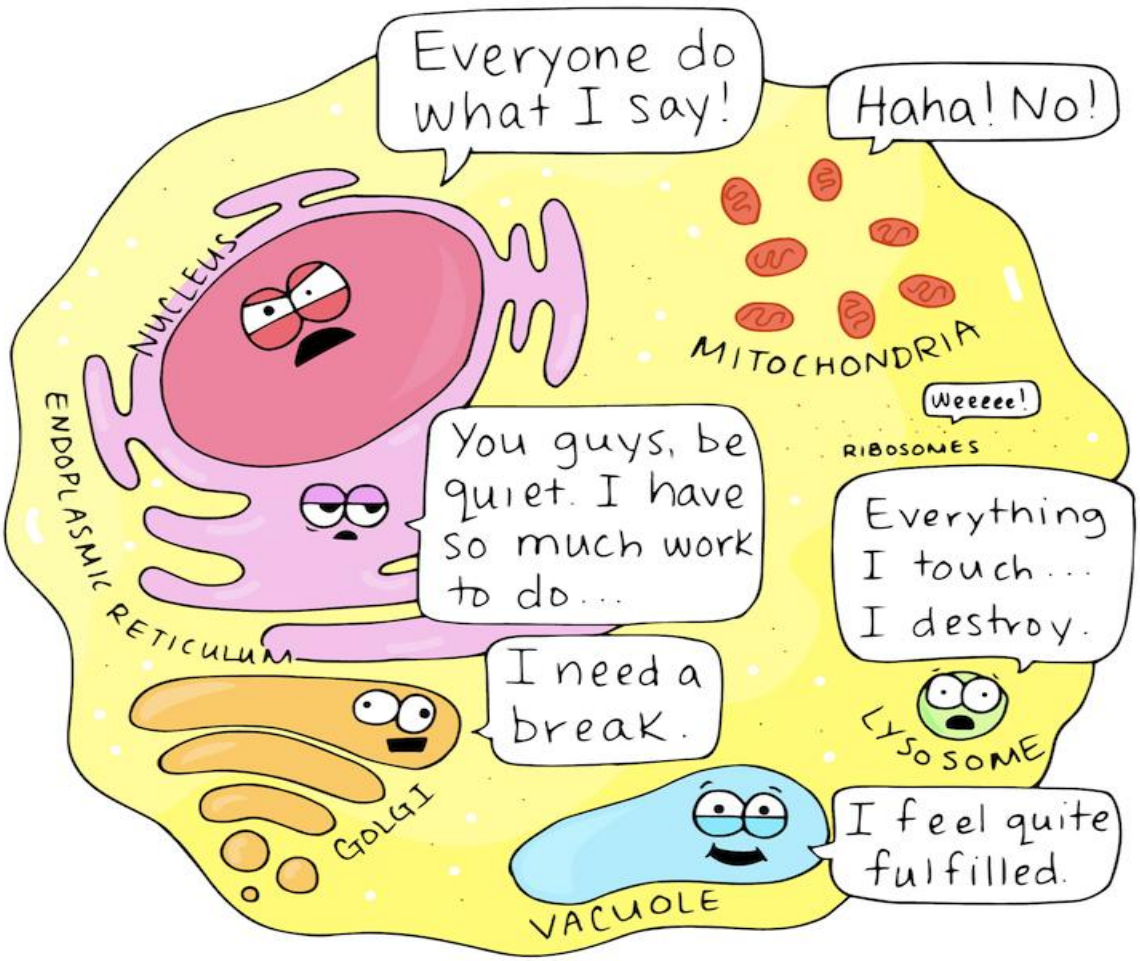
This song is for those who taught us right from wrong,
who taught us more than their craft, helped our minds to grow strong.
This song is for those who got us through and through,
So that we can make our lives, for that we say thank you.

You have made a difference and shaped our minds.
You have changed our worlds, one child at a time.
You have always been there in everything we do.
I hope you are proud of me, as I'm proud of you.

As I look forward in my life, to the path you have shown,
I hope even I can change a life, all I should do is try,
to look at the world through the children's eye.

A mother can be for only her children but,
teachers like you are mother for all their students.
A teacher can shape the future of their students.
We hope we can make you proud because
We are proud of you.

H. Jaishree Subrahmaniam
Batch of 2013



If organelles could talk.

Beatrice the Biologist

My Journey

When a person is exposed to a different place and atmosphere he experiences and undergoes a lot of changes and Miranda House has definitely had a huge impact on my attitude and my life. I have a whole new perspective of life which I think I would have not had, had I not been in this college.

First year of college was a bit of struggle, as I had to take decisions on my own, it was something I had never done before. Everything was new and very different.

My biggest fear was to speak and express myself in front of people, let alone so many new people but eventually I was able to overcome this with the help of my teachers and friends.

I have deep love and respect for my teachers. They were strict, warm and understanding, all at the same time.

I attended a lot of workshops, volunteered in the fest and gave my best in the NCC tour. I also got the opportunity to meet and interact with many celebrities. Most importantly I made a lot of friends in this college whom I'm going to cherish forever and will fondly remember the days spent with them. What I loved the most was making rangoli in every department function and being fondly addressed by my juniors as 'rangoli wali di'.

This college has taught me how to take a stand for myself and that women are no less than men in any front of life. Miranda House has given a new shape to my thoughts and ideologies for which I shall always remain grateful.

"They say that he can even fix nitrogen."

Sakshi Srivastava
Batch of 2013

Do Cool Things That Matter

The day of September 03, 2012 was rolling like any other day of my life until I received a call from a number I thought I knew and shrieked with joy even before answering it. The lady on the other side of the phone congratulated me on being selected as a **Google Student Ambassador for 2012-13** from **Miranda House**. That was it and the next moment my friends saw me jumping around like the craziest freak ever.



On the morning of September 07, 2012 I headed towards the airport to catch my flight for Goa to attend the two day long '*Google Student Ambassador Summit 2012*' with hundreds of other super excited students coming from different parts of the country representing their institutes/colleges. Around 25 of the GSAs were boarding the same flight from Delhi and in the span of a few hours those never-seen-before faces became so known, I guess it was our excitement and anxiety that clicked us together. Our anxiety only increased when we were received from the Goa Airport and given accommodation in the *Hotel Double Tree by Hilton*.

The Google Student Ambassador Program is an opportunity for students to act as liaisons between Google and their institutes. As ambassadors we learn about innovative Google products and programs, plan and host fun events on campus, act as a campus contact for Google teams and help Google better understand each institute's culture. Only one Ambassador is selected from each college through a process of online application and phone interviews.

The Summit started with the delicious food that was served to us, followed by engrossing talk-sessions delivered by awesome Googlers. We discussed about all that is cool and exciting at Google and learned more about the various programs and products like Google Drive, Google Docs, Google+, YouTube to name a few.

Not to forget, we received amazing Google goodies like Google Bag, T-shirt, Notepads, and our very own GSA ID Cards and many more. The nights were spend exploring the beaches (using Google Maps as none of us knew anything about Goa), dancing till we dropped dead and experiencing the calm winds that brushed the sea by just wetting our feet in the tides. I made some wonderful friends on this trip and clicked a million pictures to keep my memories alive. The two day summit was definitely an experience that I can never forget in my life. Apart from learning about things that I never knew could prove so helpful academically, I also developed a better understanding of working together, learning from one another and appreciating the same.

After coming back to college I started off by forming our very own GSA Team of Miranda House which comprised of three volunteers. We conducted two events namely Going Google and Map It, which were actively participated in by students of various departments. Both the events were highly appreciated and enjoyed by participants which was pretty evident by the jam packed event venue and pin drop silence during the seminar.

These events were just a means to apply and share my experience and skills with my peers and '**do cool things that matter**' as that is the motto we follow at Google.

Anvekshaa Rao
3rd Year

Google Student Ambassador Program

Bioinformatics: The New Amoeba!

"Bioinformatics is like an amoeba; it comes in various shapes and sizes."
– Nancy Lorenzi

Bioinformatics represents a new field at the interface of the twentieth-century revolutions in molecular biology and computers. A focus of this new discipline is the use of computer databases and algorithms to analyze proteins, genes, and the complete collections of deoxyribonucleic acid (DNA) that comprises an organism (the genome). The tools of bioinformatics include computer programs that help to reveal fundamental mechanisms underlying biological problems related to the structure and function of macromolecules, biochemical pathways, disease processes, and evolution. The **University of Delhi** organized its first '**Summer School on Bioinformatics**' in 2012, which aimed in training a selected number of students to deal with various tools and software of bioinformatics. **Dr. Manish Kumar** and **Dr. Manisha Goel**, Associate Professors of the Department of Biophysics, University of Delhi – South Campus, were the coordinators of the workshop. 20 students were selected from different science-courses, years and colleges of DU on merit basis and among those 20 were *Ayushi Sharma* and *myself*, representing **Miranda House** in the crowd. The workshop was scheduled for 10 working days (28th May – 8th Jun 2012). The first day of the workshop had **Dr. D Mohanty** (NII, New Delhi) and **Dr. GPS Raghava** (IMTech, Chandigarh) as keynote lecturers, introducing bioinformatics. The following days were split into theory and practical hours, covering a wide spectrum of bioinformatic tools. Some of the topics dealt in theory classes were *Structure Determination and Structure Visualization; Structure Prediction and Molecular Modeling; Drug Designing and Phylogenetics*. The practical periods comprised of hands-on session on various programs like *PDBViewer, ClustalW, Docking, Swiss Model*. The last day of the workshop gave us the opportunity to take a peep inside the workings of a **Bioinformatics Company – 'LeadInvent'**. Working on our own (allotted) MacBooks, taking long walks from the Department of Biophysics to the Mess, being in south campus and surrounded by post-graduates was nothing less than pride for undergraduates like us.

It only added to the tremendous experience of blending biology into computers.

Carrying forward the trend, Vinca Yadav attended the second 'Summer School on Bioinformatics' organized in the year 2013.

Anvekshaa Rao
3rd Year

Inspiring Through INSPIRE

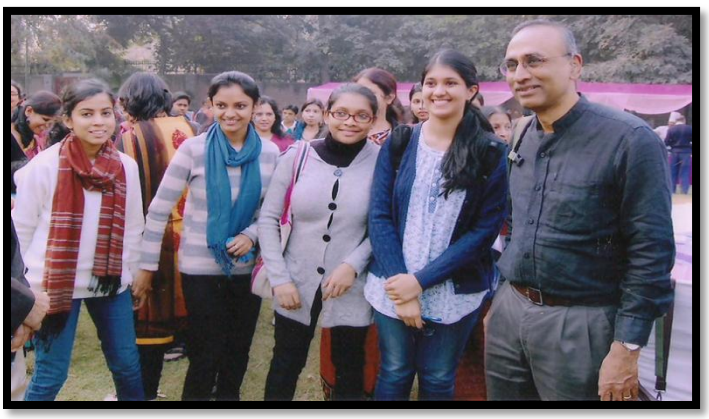
I had volunteered for the ***Innovation in Science Pursuit for Inspired Research (INSPIRE) Internship Programme 2013***. This programme was aimed at inculcating an interest and enthusiasm among young school students to pursue science.

The Cell: Life's Playground was one of the many workshops organised in the programme. This workshop was conducted under the supervision of Dr. Janaki Subramanyan and Dr. Saloni Bahri. Students from different schools all over Delhi-NCR attended the workshop. We had three workstations in our workshop, for experiments titled *The Onion Lab*, *Pollen Germination* and *A Study of Certain Enzymes in Coconut Water*. Our work was to enhance and polish students' knowledge by conducting these experiments about which they just read in their textbooks.

Though it was an arduous job, teaching even the minutest detail to the students, both in theory and practical, I learnt a lot through this program and it really was a great experience. The most motivational part comprised of the lectures given by two Nobel laureates who visited our college during this program, Sir Paul Maxime Nurse and Dr. Venki Ramakrishnan, and other professors from renowned institutes and universities.

The whole program was a perfect combination of learning and sharing knowledge. As Louis Pasteur said, "Science knows no country because knowledge belongs to humanity and is the torch which illuminates the world."

Pritha Pande
3rd Year



Putting Up A Stall In TEMPEST

Sitting in the central row of room no. 136, we were talking (it was the coffee break) when suddenly Tai showed us a handmade brooch which she had bought. Goodness! It was beautiful. This was when something clicked in all our minds at once: to put up a stall during Tempest (the annual cultural festival of Miranda House). Creative thoughts went echoing through all of us when at last we decided we'd do it for real. That day it suddenly seemed hard to concentrate on lectures and every time we saw each other we'd start talking about our ideas. It was only a few weeks from the fest and we started making to-do lists for that much awaited day. Finally we came to the conclusion that we would put up a game stall cum Manipuri cuisine mini food stall cum accessories stall which would include our own handmade roses.

When only a week was left, we got really busy. We went to Sarojini Nagar to buy accessories like clutches, bags, earrings and headed to Janpath for more earrings! The next day, we started making those hand-made roses under the supervision of our two experts Memthoi and Merina. Both of them taught us how to do it and we just tried to copy them the best we could. I admit it was pretty hard for me and I'm sure all the roses with misplaced petals were mine! The roses looked very beautiful (they almost looked real when seen as a bunch). I took care to 'hide' the ones I made in the middle of the bunch or somewhere they'd remain inconspicuous. After that we made small paper chits and tags for the game we'd planned which we named 'The lucky dip' where one had to pick a chit from a box and get an article labeled with a number matching the number on the chit. We made preparations for the food just one day before the fest. Our food stall was to sell *Singju* (a vegetable salad with fermented fish, chilli - preferably red, gram flour and ground sesame seeds), *Killi Chana* (soaked yellow pea seeds fried with a small amount of gram flour) and *Cha Ngang* (red tea with ginger and bay leaves with a little lemon squeezed over to add taste).

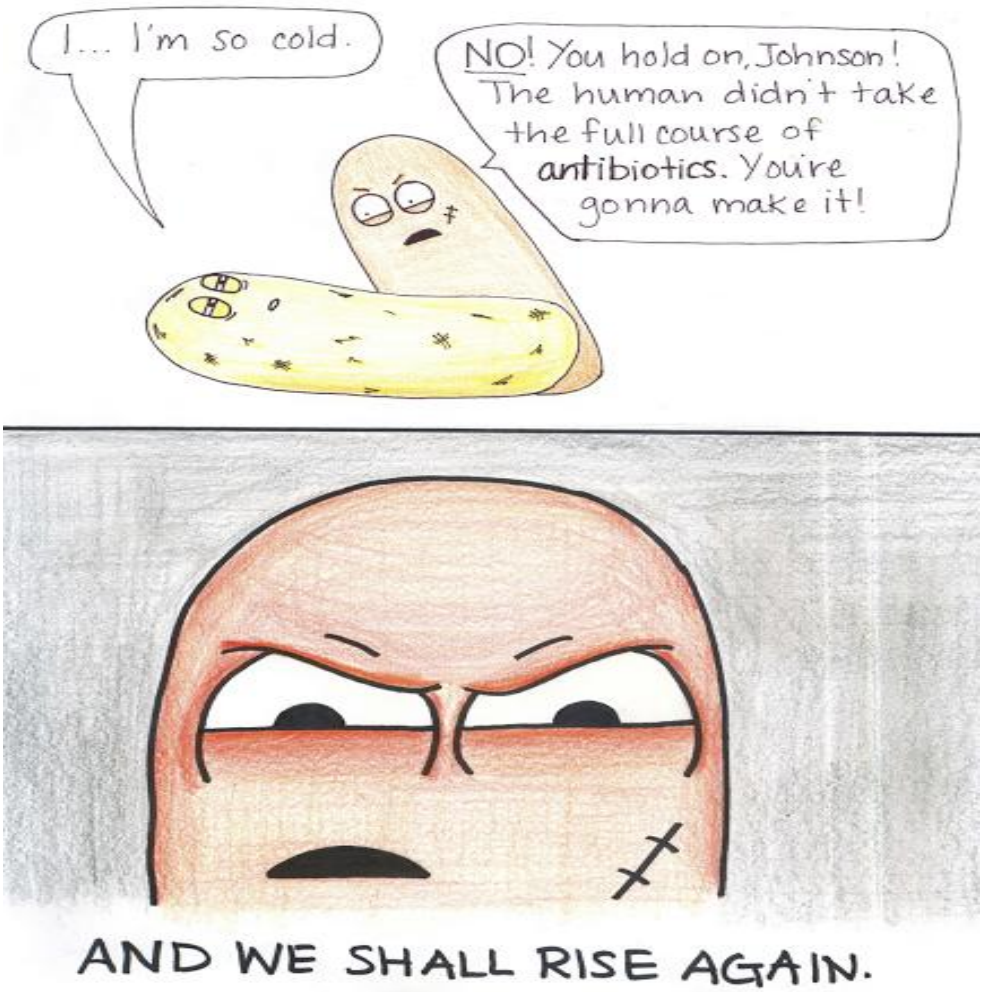
Then came 7th February, the first day of the two-day Tempest. Many stalls had been put up by different groups from different places, and

we were the only ones from our college there. Unfortunately the ground was muddy due to rain the previous night but we managed well, nevertheless.

We didn't get much of a crowd till 1 p.m. but after that people came swarming to us like bees to flowers. The same schedule followed the next day except that we finished off early to relax and enjoy ourselves with some music, dance and photo sessions with our folks.

We had a very good experience of sales and marketing from those two days and enjoyed a lot. Putting up the stall was worth all the travel and hard work that we'd put in.We also managed to earn a profit! This was an amazing experience added to the fresh start of the new year of 2013 which is embedded in my heart and album pages. It was one of the best times of my college life and no matter how far apart we shall be, this memory will remain as fresh as ever in our minds. The people who'd set up the stall: Merina, Memthoi, Tai, Dolly, Elcy, Soneja, Surpini, Jorita, Memem, and I.

Guruaribam Vijayalaxmi Devi.
3rd Year



Summer Internship

Destiny of India is now being shaped in her classrooms. This, we believe is no mere rhetoric. On the quality of education being provided in our schools and colleges will depend our success in the great enterprise of national reconstruction, the principal objective of which is to raise the standard of living of our people.

D. S. Kothari Centre for Research organized summer internship program for undergraduate science students during the month of June 2013. This research centre is devoted to promoting creativity and excellence in science with special focus on attracting young students to choosing careers in science and nurturing their innate talent. It aims to act as a nodal centre which will provide easy access to resources for undertaking innovative and inspiring science activities, giving an early exposure to the scientific process and the joys of discovery.

We worked under the supervision of Dr. Janaki Subramanyan, Head of the Botany Department - Miranda House, who constantly guided and enlightened us with her expertise in the field of science, imparting the contemporary knowledge regarding the subject. Our team comprised of five students – Nitika Gupta, Pragati Singh, Pritha Pande, Sonam Kumari and myself.

The project focused on mitochondria found in plant cells. Various plant materials like *Allium cepa, Hydrilla verticillata, Portulaca umbraticola and Tradescantia fluminensis* were used to study the same. The selection of these materials was based on easy availability and ease of study of whole mount leaf peel. To understand the experiment and its observations better, light microscopy technique was used along with stains like Iodine reagent, safranin, crystal violet (followed by mordant iodine reagent), Rhodamine B and Janus green. Succinate dehydrogenase was used as marker to study the enzyme activity.

This project provided a hands-on experience in the use of light microscopy, study of organelles and learning new scientific facts and their applications. I would highly encourage other students to come up, participate and be a part of a life changing experience at DSKC.

Monica Swaran
3rd Year

Trip to Keoladeo National Park

It was a fine morning in the month of October when a group of second and third year students accompanied by our teacher in charges, Dr. Sushma Moitra, Dr. Renuka Agrawal, Dr. Govinda Pyari, Dr. Anuradha Sinha and Sonu Sir bid adieu to their monotonous life and embarked on a two day (13th-14th Oct. 2012) journey, which I believe is worth calling a Journey of a lifetime. 7: 00 AM is usually the time I get out of my bed but on this momentous day my friends and I were already comfortably seated in our Volvo Bus to leave for Rajasthan.

Our destination was Keoladeo National Park, Rajasthan. Within a few minutes, girls could be heard singing songs enthusiastically, playing games, gossiping and some had already started taking pictures. We traveled through the Yamuna Expressway and then Mathura and Agra. It was hot dry afternoon when we checked in a hotel got fresh had our meals. All of us were beyond excited and amazed to see the World Heritage Site. We were provided with a guide who was born and brought up in Rajasthan. I felt like a toddler absorbing every miniscule of information given to us. It was quite overwhelming.

The Keoladeo National Park or Keoladeo Ghana National Park formerly known as the Bharatpur Bird Sanctuary in Bharatpur, Rajasthan, India is famous as one of Asia's finest birding areas, with over 380 resident and migrant species, including the Common, Demoiselle and the rare Siberian Cranes. It is also an excellent place to watch mammals like Golden Jackal, Striped Hyenas, Fishing Cat, Jungle Cat, Nilgai, Sambar, Blackbuck and wild Boar. The park derives its name from the temple of Keoladeo (Shiva) and 'ghana', which locally means dense, implying the nature of the vegetation. During the cool winter months it is also possible to see large Indian Pythons sunning themselves.

We kept treading the path that came before us and were so awestruck that we didn't even realize how tired we had become.

It was a spellbinding moment to stand amidst species we had neither seen nor heard about. The spirit of adventure had been imbibed in us for we were no longer afraid of the thick woods or the bleak darkness. No one could forget about that marvellous site, chirping of birds was still alive, that picture of our rich heritage would never fade away.

The next day called for another journey, a visit to Fatehpur Sikri, which was one served as the capital of Mughals. The buildings of Fatehpur Sikri show a synthesis of various regional schools of architectural craftsmanship. The building material used in all the buildings at Fatehpur Sikri, palace-city complex, is the locally quarried red sandstone, known as 'Sikri sandstone'. The sloping levels of the city were connected into terraces which were utilised for various complexes such as Jami masjid, Buland-Darwazah and tomb of Sheikh Salim Chishti; Khass Mahal, Shahi-Bazar, Mina-Bazar, the Panch-Mahal, Khwabgah, Diwan-i-Khass, Anup-Talao, Chaupar and Diwan-i-Am. The efficient system of drainage and water-supply adopted here suggest an extremely intelligent town-planning by the Mughal emperor. The architecture of Fatehpur Sikri is prolific and versatile Indo-Muslim composite style, which is a fusion of the composite cultures of indigenous and foreign origins. All the Mirandians were completely enchanted by the splendour and the self-sufficiency of the city.

I am grateful to our Botany Department and college for giving us this opportunity to visit such a wonderful place which is not less than an open treasure. One will never ever forget the experience. I would love to go back and get lost again in the lap of nature.

Swati Bisht
3rd Year

Workshop on Proteomics

D. S. Kothari Centre for Research and Innovation in Science Education and the Department of Zoology, Miranda House, jointly organised a workshop for science students at the D.S.K.C. laboratory in Miranda House from 15 July 2013 to 18 July 2013. The D. S. Kothari Centre for Research and Innovation in Science Education aims to support and supplement science education at the college level. It frequently organises activities to engage the undergraduate science teacher and student population of the University of Delhi. The centre is sponsored by the Department of Science and Technology, Government of India.

Dr. Sadhna Sharma and Dr. Monika Sharma, teachers of the Zoology department were the workshop co-ordinators. This was my first workshop on a topic relating to proteins. Five students from our department attended the workshop along with twelve students from different departments of our college and two students from Hindu College. Our first day started with a session by Dr. Aseem Mishra from the International Centre for Genetic Engineering and Biotechnology (ICGEB), New Delhi. He spoke about the beauty in protein structures. Though we were all aware of the general protein structure, most of us had only viewed it in 2D, but I was able to truly understand and visualise the 3D structure of proteins for the first time that day. On the second day, a lecture on 'Systems Biology' was delivered by Dr. Anshu Bhardwaj from the Open Source Drug Discovery (OSDD) team, followed by a lecture on 'Homology Modeling and Drug Discovery' by Dr. Jasmita Gill from the Regional Centre for Biotechnology (RCB) the next day. On the last day, Prof. Yogendra Singh from the Institute of Genomics and Integrative Biology (IGIB) delivered a lecture on 'Bacterial Pathogens: Designing Proteins Toxins'. Our workshop ended with the last lecture on 'Protein Folding, Misfolding and Diseases' by Dr. Laishram Rajendra Singh from Dr. Ambedkar Centre for Biomedical Research (ACBR). Among the lectures which were given during the workshop, my favourite was the one on homology modeling and drug discovery by Dr. Jasmita Gill, after

which we had a hands-on session on sequence alignment, homology modeling, functional annotation and molecular docking. The main objective was to investigate the structure of the assigned protein and to determine homology between protein structures.
This was the main event that sparked an interest in bioinformatics for me and led me to choose bioinformatics as a subject in the fifth semester.
The workshop provided us with hands-on experience in protein isolation, purification, western blotting technique and protein structure modeling.
The interactive lectures, demonstrations, group discussions and conceptual evaluation, all made up a fruitful experience where we became aware about the newer and contemporary field of proteomics. The only disheartening part was that the time allotted to us for the experience was barely enough for some experiments.
The overall experience of the workshop was great and we enjoyed each and every moment of it. The lectures were great and enlightened us with a lot of knowledge. The workshop helped me lot, mentally and intellectually. It has also led me to questioning and reasoning with myself. I would definitely recommend my batch mates and juniors to participate in such workshops.

Merinashwari K.
3rd Year

"Don't mind Ashley. After looking through a microscope all day, anything large startles him."

YAMUNA: The Poisoned River

The Yamuna arises from the Yamunotri glacier in the great Himalayas. It rushes through the snow-clad mountains with vigor and mellows down as it touches the foothills of the *dev bhoomi*, Uttarakhand. Here, it dawns the status of a Goddess. Its banks are the site for many religious ceremonies. The river also serves as a source of livelihood for the local farmer who uses its waters to irrigate his fields . As it traverses through the plains of Uttar Pradesh it forms the highly fertile alluvial zone between itself and the Ganges which sustains all forms of agriculture in the Indo- Gangetic plain.

The national capital itself sits on the banks of Yamuna and satiates its needs from the Yamuna waters. Considering the importance this river holds in the lives of the people, it's little wonder that the river has been worshipped through the ages. But there is also a darker side to the picture. The river water is soiled by huge amounts of wastes and toxic substances which get disposed into the river. Everything from sewage wastes to industrial effluents gets drained into the Yamuna. New Delhi produces around 500 million gallons of sewage every day. Although many Sewage Treatment Plants (STPs) have been setup across the city, yet the sewage from many areas of Delhi remains untreated and is drained directly into the Yamuna. Industrial effluents, generally toxic and abundant in heavy metals, are drained into the river without being treated. Anthropogenic activities like washing of laundry on the banks of the river, bathing of herds of cattle, post-cremation riots, dumping of construction of debris and rubble, etc into the river are also sources of pollution.

Consequently, the level of pollution of Yamuna is ever on the rise. The deteriorating quality of Yamuna waters has proved to be a bane for the aquatic forms of life. Beyond Okhla, Yamuna hardly supports any vegetation. The polluted water has also poisoned the soil on the river banks. Crops grown on the river banks accumulate heavy metals from the polluted soil. Consumption of these crops by the locals leads to accumulation of heavy metals in their bloodstream. Thus, the water is absolutely unsuitable for irrigation. Also, polluted water is unsightly and may issue bad odour, hence decreasing the aesthetic appeal.

While the Delhi government had been debating on what needs to be done to clean the river, the pollution levels have only worsened. The 22-km stretch of the Yamuna, which is barely 2 per cent of the length of the river basin, continues to contribute over 80 per cent of the pollution load in the entire stretch of the river. There is also no water in the river for virtually nine months. Delhi, impounds water at the barrage constructed at Wazirabad where the river enters Delhi. What flows in the river subsequently is only sewage and waste from Delhi's 22 drains. In other words, the river ceases to exist at Wazirabad. This also means that there is just no water available to dilute the waste.

Treatments of all sewage and industrial wastes before drainage into the river, stringent laws safeguarding the river from various anthropogenic activities and penalties to those who do not abide by them are some ways through which Yamuna can be saved. As of today, the river which is believed to rid us mortals from the torments of death, is no more than a giant poison carrying drain itself.

Kavya Chandra
3rd Year

I Like Myself Now

I was all of eighteen when I entered the college. When I was in school, 'college' was scary and the thought of it did unpleasant things to my stomach. In spite of that I was ready to go off to college – to be by myself and meet new people. But I found myself in an awkward situation when I entered the college.

Yes, I didn't have any college experience. But still, I was excited and a little afraid. I was no more a great student once I entered the college. I was fractious and careless about most things; be it studies, dressing or any other personal care. I had become a silent difficult teenager. I never figured out why and how all these transitions took place. The trouble with me was that I lacked self-confidence.

The first thing that I notice in the college is the workload. It is heavier and more intense than what I've ever experienced .The major challenge is the large volume of reading to be done within the short deadlines. To me, college is about making mistakes. And once you are an adult you can't be making those same mistakes again and again. So my advice is that it is okay to make mistakes as long as you learn from them, not repeat them. College is a pivotal point in life. While it is a time of learning, it is also a time of experiencing many new things. College experience is about the experience of becoming an adult. What you learn and do in college will set you up for the first few steps of your adult life. It's where you find your identity, make most of your friends and decisions that will impact your life course. There is no part of life that doesn't contain lessons. As long as you are alive, there are lessons to be learned. I prepare myself for everything. I own everything about me – my body , including everything it does ; my mind, including all my thoughts and ideas, and my feelings, whatever they might be – anger, joy, frustration, love, disappointment, etc.

I own my fantasies, my dreams, my hopes and my fears.

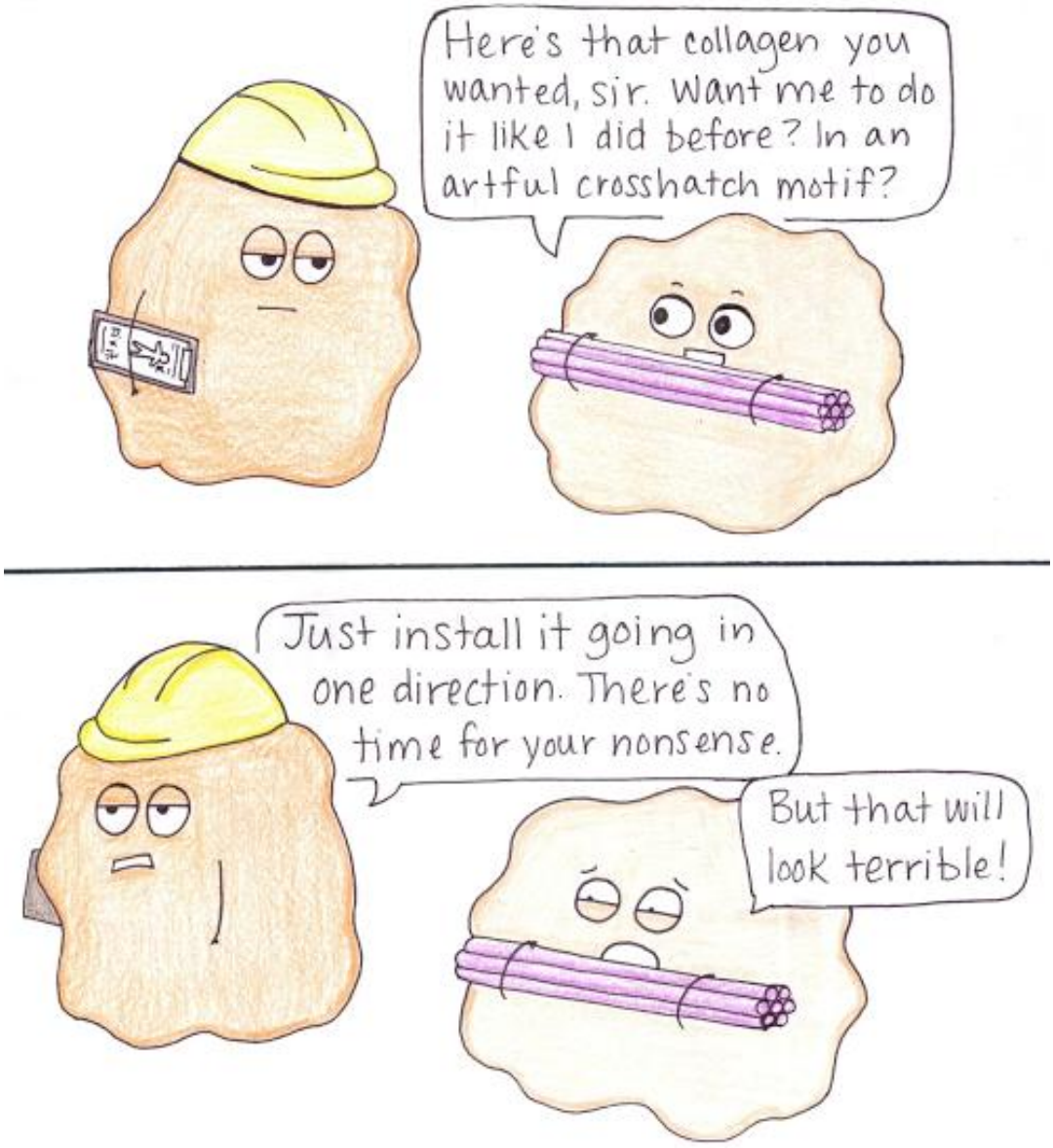
I own all my triumphs and successes, all my failures mistakes.

I own me and therefore i can engineer me.

I am me and I am okay now. I feel satisfied and at peace with myself. I have gained roots and wings - roots to strengthen my aim and wings to fly …

The path was worn out and slippery. My foot slipped from under me, knocking the other one out of the way but I recovered and said to myself "it's a slip not a fall."

Priya Dahima
2nd Year



How scar tissue is made.

Koshika 2014

Every even semester is quite a hit with us, the students, for it is full of activities and there's never a dull moment when there's nothing to do. And sure enough, this semester too brought along one such event, that every student of the Botany department eagerly waits for, every year. Koshika - the annual festival of Antheia, the botanical society of Miranda House. Preparations began in full swing well ahead of time, for, they say – 'Well begun is half done.' And so, teams were formed, duties assigned and tasks distributed. This year, there was more to the fest – the stalls. In addition to the competitive events, we'd put up six stalls – for food, accessories, games, hair styling, bookmarks and mehendi tattoos. I shall come to these in a while. Now, the hardest part about organising any event on a large scale, I believe, is looking for sponsors. We formed many teams and spread out like officers of a special task force. We heard a lot of 'No's, but also got reassuring enthusiasm from a number of organisations, and the problem was solved. The sponsors for Koshika 2014 were – GatewayRail, Gyan Bindu Academy, Indus Flavour, Micro Media System and Mohan Photostate.

Once the finances were dealt with, the real work began. The event heads started making arrangements for their events. There were seven competitive events – the online photography competition, *Slice It Thin!* (section cutting and identification), rangoli making, best out of waste, botanical quiz, *Ad-Mad* and treasure hunt. Provisions were well under way for the stalls too, in the meanwhile. We put up posters of Koshika 2014 in all the colleges of the University of Delhi which offer the course B.Sc. (Honours) Botany. There were sixteen such colleges (including Miranda House). Our website for Antheia was up and running (still is) and online registration for competitive events was made mandatory. We received an overwhelming response from colleges across the university, even from the colleges in south campus! Delighted as that made us, we made sure not to leave any stone unturned to make the festival a grand one. When 26 February 2014 finally arrived, everything had been taken care of.

The registration desk had been put up and was functional, the decoration was complete, the stalls were ready with eager stall keepers (the students), the entries of the online photography competition put up for exhibition on the board and the rest of the events ready to be conducted. I must put in a word here about how splendid the decoration was; the students really worked hard at it and their efforts shone. We got a huge participation from a lot of colleges (the people who had registered did actually turn up, and right on time too!).

Every event was conducted smoothly and judged by the teachers in our department. The treasure hunt had a remarkably dramatic finish, for two teams were very, very close to the final clue and the competition was really close. Food coupons were given to all the participants, which were redeemable in the college cafeteria. Now, coming back to the stalls. They were such a hit! And they looked so beautiful, each one of them. The stalls with food, accessories and book marks had their articles sold out in no time, because students as well as teachers flocked to them. The hair styling and mehendi tattoo stalls seemed to be very popular with the students; and it was amusing to watch even teachers have fun at the games stall. The profit earned at these stalls will be donated to an orphanage very soon.

When all the events were over and the stalls out of things to sell, it was time for the prize distribution ceremony. The results were greeted with happy faces and a lot of cheering. In the end, we heard a few words from Dr. Janaki Subramanyan (the teacher-in-charge), Anvekshaa Rao (the president), Dr. Renuka Agrawal and Dr. Rashmi Shakya (the staff advisors), who thanked everyone for all their support and enthusiasm. And thus, Koshika 2014 came to an end.

I can positively say that Koshika 2014 was quite a success and turned out to be one of the more 'hit' botanical festivals in the university. There are so many people I want to thank personally for helping out with everything, but I guess I would end up naming every student, teacher and laboratory staff in the department, because every single person made a significant contribution.

And the minute details about everything that happened – I could just go on and on! I hope Koshika is bigger, better and grander next year. We'll work hard and try our best to make it that way.

Vinca Yadav
2nd Year

Event	I[st] prize		II[nd] prize		III[rd] prize	
	Name	**College**	**Name**	**College**	**Name**	**College**
Online Photography	Sanidhya Lakhera	Sri Venkateswara College	Aakash Gurnani	Sri Venkateswara College	Monica Swaran	Miranda House
Slice It Thin!	Elcy Devi	Miranda House	Surpini Devi	Miranda House	Archana	Sri Venkateswara College
Rangoli Making	Neha and Ruchika	Miranda House	Depiya Thoudam and Rebita Haobam	Miranda House	Mary Eliza and Shivani Mahato	Maitreyi College
Best Out Of Waste	Aribam Indira and Priya W.	Daulat Ram College	Vijayalaxmi Devi and Merinashwari K.	Miranda House	Jennifer B. Thomas and Deeksha Chauhan	Sri Venkateswara College
Botanical Quiz	Mutup Tashi and Pradeep Kumar	Ramjas College	Ninadini Sharma and Priyanka	Miranda House	Aditi Tailor and Praveen Kumar	Hans Raj College
Ad-Mad	Ninadini Sharma and Ruchi Bhatt	Miranda House	Memthoi Chanu and Shubhra Rajput	Miranda House	Archana Kumari and Shruti Sharma	Sri Venkateswara College
Treasure Hunt	Vijayalaxmi Devi, Philem Dolly, Elcy Devi and Tingneilhai Chongloi	Miranda House	-	-	-	-

"AS YOU KNOW, WE PUT SARDINE GENES IN POTATOES, AND POTATO GENES IN SARDINES. THE RESULTS ARE IN. WE WON'T DO ANYTHING LIKE THAT AGAIN."

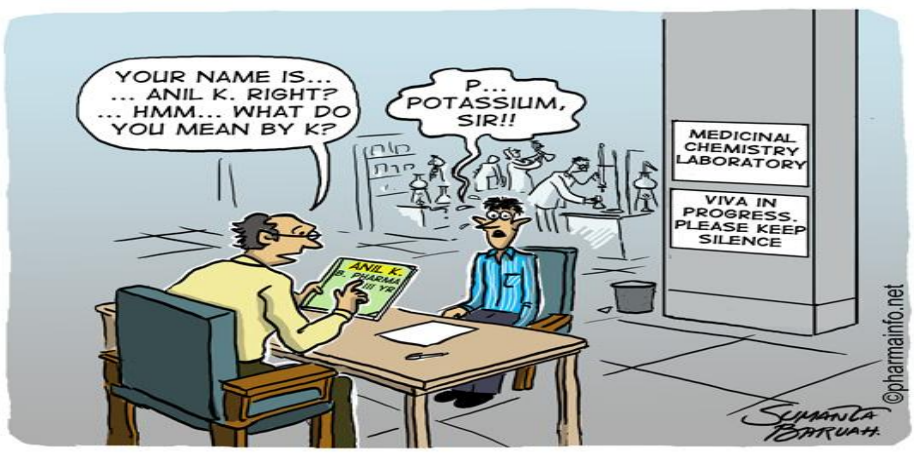
Let Us Know Our Environment

World Environment Day is observed in all parts of the world on 5th June of every year. But do we really understand our environment? Since time immemorial the survival of human species has been depending on the environment. For our living we change our environment. But the changes that are occurring today are major and rapid as compared to the past. If we go on devastating the natural endowments recklessly, they are capable of upsetting the mechanism of natural regulation and balance which could endanger our very existence.

Modern technology and science have increased our ability to change our environment according to our wants. It is important to realize that many changes take place inadvertently due to the complex pattern of inter-relationship between various elements of environment. Due to over exploitation, much of the tropical forests are lost forever and these forests contain nearly half the species of the earth's flora and fauna (jungles, wetlands, tundra and even ice fields) for the ever increasing needs of human populations. Countless flora and fauna have disappeared beyond recall. Indiscriminate release of carbon dioxide and climate changes are the result of soil destruction and deforestation.

So it is imperative and mandatory on our part to understand the relationship between man and environment in order to ensure a good quality of life and longevity of the human race. Therefore, understanding our environment is the need of the hour.

Depiya Thoudam
2nd Year



Miranda Magic

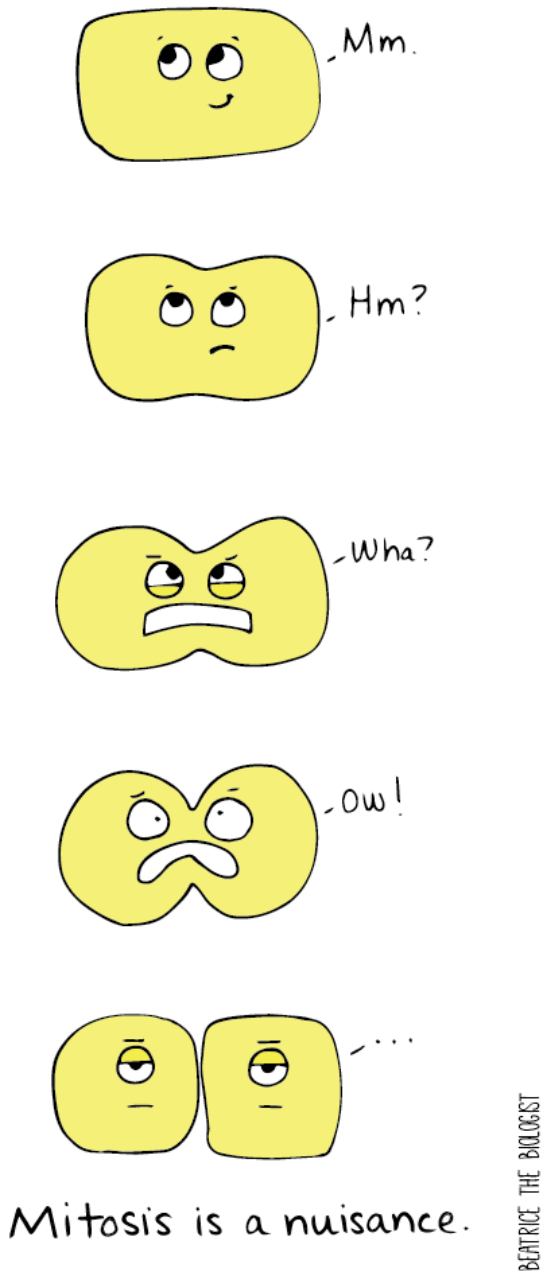
Since I was a kid I had only three dreams. First, get a good degree. Second, buy an Aston Martin and third, be taller than 5'8. Well, for the first one, I am still working on it, the second one is not possible till I earn a few millions and the third one is likely only if God and my genes work together. Let's just focus on the first one for the time being. Coming to Miranda House was the biggest transition of my life from a spoon fed school kid to a college girl and I just loved it here. With all those tall green trees and the red bricks I was smitten. After I finally got over the hangover of being really here, I met my batch mates and the amazing teachers. There were so many things to do and so many societies to join that I couldn't pick one and didn't join any.

Having lived in Delhi since my birth, I have always loved this city and would have fought anyone who said Mumbai was better. But lately with the increasing incidents and that particular case, I have stopped taking so much pride in this city and now from the moment I leave my home in the morning I am like a super alert ninja on the roads all the time. But as soon as I enter the gates of Miranda I know that I can take my guard down as no one is going to attack me here. No one will make a judgement about me just by looking at my clothes and no one will try to put me in my place, as they say.

So this is a way of showing my gratitude to all the strong, beautiful and amazing women who have contributed in making this place what it is today. The willingness of these women to not give up even when the society and their families are against them is a great source of inspiration. I hope to follow the footsteps of these extraordinary women one day.

For the time being, I will have to step out of the campus and get back out on the roads, so pray that I reach home safely as I do for every women in this big scary city that I used to love so much. Thinking about all the women struggling to get their voices heard, I am happy to have Miranda house as my silver lining in the dark and the second safest place in the city for me after my home.

Divya Jain
2nd Year



Mother Nature's Abode

This is my favorite place in the entire college. Everything about this place is remote; cast away-a canopy of trees pertaining to the tropical rain forests. The pine needles could remind you of the pine forests of Manali, or other hill stations in India. The sudden play of light and shade is also reminiscent of places high atop mountains.

This place is as if virgin, untouched by the hustle of a pacing human life which otherwise surrounds it. Its beauty lies in this very nuance.

I come here when I want to unwind. Here, is where Mother Nature reclaims what she has given away, and to watch it do so, is a rare beauty a human eye can encounter. The frenzied activity of animals is the fastest thing you'll discover here, and try hard as you may, you won't be able to capture it.

Nor will success come to you in capturing the majesty of the Banyan tree, which stands as a roof on top of this little abode.

The only thing you must remember to beware of is the racing rows of ants to which this Banyan is a dear, old father providing shelter, and in whose arms they like to rest and play. Some possessive kids they are, won't let you come within a feet's radius of him! And yes don't forget to spare the omnipresent mosquitoes (so to say if they spare you).

So much for Mother Nature's benevolent little abode!

Nimisha Chauhan
2nd Year

My Connections With Botany

It may seem funny, but I've been associated with the subject since I was born. My mother, for one, had a doctorate in botany; and I grew up in houses having such diversities of plants, you could call them mini botanical gardens. While other children were being taught dancing and singing and the like, I was being shown the ventral surface of leaves of ferns bearing sori; and how to tear dicot leaves carefully from the lower side to observe the stomata in them. I admit I never was interested in any of it, apart from tearing the leaves carefully. I was so adept at it that by the time I was about eight years old, it was like an acquired skill I could show off in front of my playmates. I resented it that my innocent childhood was being inflicted with such torturous and horrid things as sori and stomata that I did not really understand.

And then there's my name. Vinca. It's actually a genus of six species in the family Apocyanaceae. In India the plant is known as sadaphuli/sadabahaar/baramasi meaning "always flowering". Doesn't really go too well with my surname, but apparently I'm always blooming. Anyway, I grew up hating biology in general; and opted for it as a subject in +2 because my family seemed to think it was an excellent idea. I slept through biology classes in the eleventh grade and did not do very well in the subject. Physics was my favorite subject at that time. In the twelfth grade I suddenly developed an interest in biology because the topics in the course really appealed to my curiosity; and with the help of a couple of my friends, I managed to do fairly well in it.

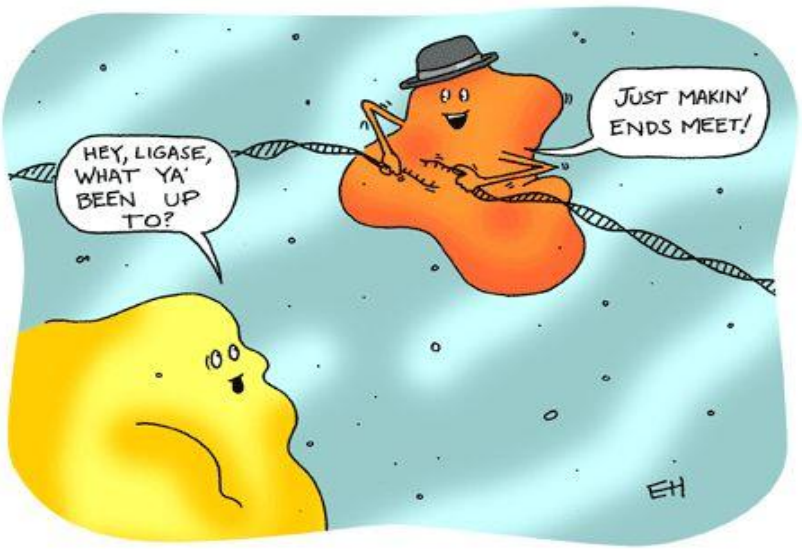
But of course, I belong to an Indian family; and the great career drama ensued. I felt writing was something I was decent at, and was fairly serious about wanting to get into mass communication. However, the family said I should become a doctor; and I gave in to their rants. I prepared for the MBBS entrances for a year, managed to clear some, but did not live up to people's expectations. But the one thing that my family still does not know is I was overjoyed when I did not perform excellently in the MBBS entrances. For, halfway through my preparation, I had lost all interest in the other subjects and had developed this unexplainable fondness for botany.

And I kept thinking to myself, "If I don't get through the AFMC entrance, I'm going to study botany" (I really wanted to study at AFMC, but only because I have a strong affinity for the Indian defense); and that's what I did. My family was apprehensive about it, but this time I took a firm stand; and said this was what I wanted to do, not because I was bipolar and couldn't decide, but only out of love for the subject. Now every family wants the best for its members, so I was allowed to study the course of my choice; and here I am, doing just that.

I remember the day of my admission at Miranda House. The teachers receiving our forms were quite amused with my name, much to my embarrassment at that point. And on the very first day that college started (23 July 2012, I remember), I decided I did not want to be on the wrong side of the teachers. I was terrified of them, but once they started teaching, I forgot about everything else in the world and focused only on what they were saying. But then you can't impart both lessons of botany and life (like punctuality) without scaring your students a little, I've come to believe. I was rather flattered when a couple of teachers remembered my name when I came to college on the first day after admission (benefits of having a botanical name when you're studying botany).

Now the first year has come to an end and we're almost through the second, having performed decently enough to not be hanged in the front lawns (now that was a joke, our department isn't THAT cruel); and we're trudging along. And I can say I'm glad I chose botany.

Vinca Yadav
2nd Year



Visit To The Science Exhibition

On the 8th of October 2013, a team of eleven students and four teachers from the Department of Botany, Miranda House visited the 3rd National Level Exhibition and Project Competition as a part of an educational tour. It was held at Pragati Maidan, New Delhi. The team was guided by Dr. Janaki Subramanyan, Dr. Renuka Agrawal, Dr. Rashmi Shakya and Dr. Prabha from the Department. The student team included Elcy Shamurailatpam, Konsam Memthoi Chanu, Tingneilhai Chongloi, Guruaribam Vijayalaxmi, Depiya Thoudam, Priyanka Rawat, Laikhuram Chanu Pepe, Soibam Puspa, Julia Thingnam, Elizabeth Huidrom and me, from the second and third year.

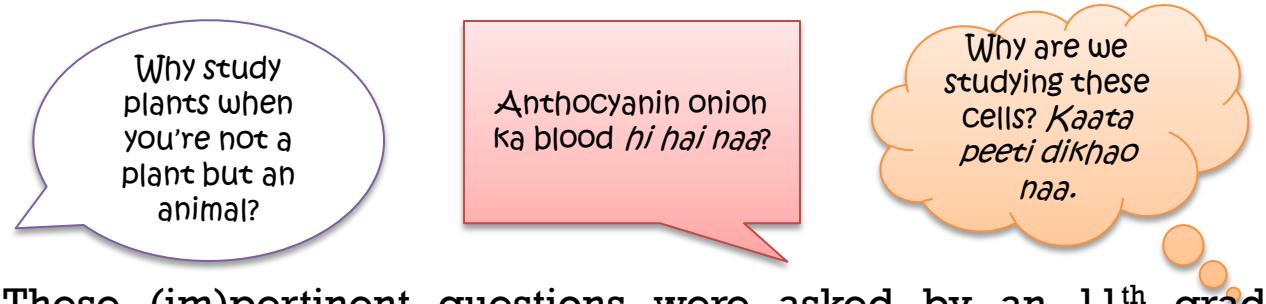
The journey began at around 10 am. After getting the gate passes we entered the exhibition centre. There were four large halls in which over 400 models were exhibited by participants from different states of India. Various innovative ideas of the young minds, which I think can be implemented on a large scale, were exhibited through their models there. Among them was Border Protective Device which uses LDR (Light Dependent Register) to activate a siren; Flood Alarm, which sensors the water level the trigger an alarm; street light controller; urban farming without sunlight and soil; hydroponics; aeroponics and low cost infant warmer with photo therapy unit. The participants were eager to explain their ideas (which I appreciated a lot) to everyone who visited their stall and asked for the much-valued feedback from the visitors.

After refreshments, at around 2:30 pm we got to interact with Sir A. Mukhyopadhyay, a scientist at the Department of Science and Technology. We were joined by some of the Zoology students of our college. Sir talked how expressing our ideas can mean a difference to us and to the world at large.

I am really grateful to sir for choosing to spend some of his precious time to interact with us Mirandians in spite of his busy schedule.

Rebita Haobam
2nd Year

A Meaningful Conversation



These (im)pertinent questions were asked by an 11th grader during the INSPIRE Internship Programme when we had to demonstrate the experiments to an aloof non-biology lot of students to which I was becoming borderline blasé about. He probably asked it after trying to focus a slide the third time but he just couldn't bring himself to do it.

But these questions are being asked all around the world and since an appropriate answer to them is never procured they end up becoming rhetorical and continue to diminish my subject; Botany. Through this passage, I wish to clear the dubious clouds of confusion that unfortunately dim the true meaning of biological science.

To start with, Botany doesn't only translate to plants. It includes algae, fungi, microbes and almost every range of seen and unseen scientific discipline that connects them. It is way more complex than it sounds.

The increasing human populations, modern technology, and industrial and agricultural practices are causing many environmental problems that are likely to become worse with time. Ultimately, man is dependent on plants for fresh air, food, fibre, medicine, building materials and aesthetic environments. Botanists can help the world to use plants in a sustainable manner and to address many of these environmental problems. Botany permeates our everyday life. On a grass root level, everything you eat, wear, watch, live in, use and breathe leads up to the Botany. While an artist walking through a potato field sees nothing but regular rows of green plants, a botanist in the same field is aware of many problems which involve the success or failure of the crop. The botanist may recognize the slight discoloration of some of some leaves as a symptom of disease.

It is this combination of skill in observation and an awareness that comes from training which enables a scientist to recognize problems that may be solved by scientific methods. This may and has revolutionized the ancient agricultural systems in our country.

The importance of anything we study must end in its contribution in welfare of mankind. An area where Botany gives maximum input. Hence, the relevance. Hence, the need to study.

Why do you study the alphabet when you know you won't go around saying something as rudimentary as letter? You study it because they build words. And these powerful words build sentences. When you combine that, it creates a force so potent that can, as said by Patrick Rothfuss "Words can light fires in the minds of men. Words can wring tears from the hardest hearts." All his revolutionary energy is derived from something that doesn't even take a second to trickle out of your lips: The good ol' alphabet.

Put his analogy into science, cells are the alphabets. Maybe, much more powerful than the alphabet than you can ever fathom. The complexity of even the simplest known cell is so immense that its silent existence becomes almost indistinguishable from a miracle. These tiny workers assume insurmountable power as they keep extending their empire by "divide and rule" (pun intended) to form an outstandingly intricate life form. To understand something so complex, one needs to get their basics right.

The answer to the last question, I shall not give. We need to be asked these silly questions on a regular basis for us to take out a jovial second to laugh our hearts out!

Ninadini Sharma
1st Year

If it's green or wriggles, it's biology.
If it stinks, it's chemistry.
If it doesn't work, it's physics!

Botany And Chess

As a Mirandian, I have achieved a lot in the game of chess. From my childhood I have always been fascinated by the game. This obsession made me very ambitious. Chess is one of those games, which make one's mind sharp and enhances the ability to take a decision on the spot in a given frame of time. Because of this, I have achieved a lot of faith in myself. The applause and appreciation I receive after winning a match becomes a source of power for not even the next matches but also to face any tough task in my life.

During my first semester at Miranda House, I played chess a lot of times. Sometimes, I had to face a lot of consequences but I never lost my own trust. I believe in fortune and always try to reinforce my faith by consulting my parents and teachers. I represented MH at the 'Lady Shri Ram College Sports Festival 2013' and bagged the third position in the tournament, which lasted for 3 days. I was also a part of an Inter-College Chess Tournament where I got the first position. But I could not get any position at Miranda House's own Chess Tournament.

Apart from chess, I also participated in Cross Country Race and The Salwan Marathon. Currently, I'm at the 70th position out of 350 players. I am very thankful to Miranda House for giving me such opportunities to prove my mettle.

Archana Maurya
1st Year

Bright Future For Synthetic Biology

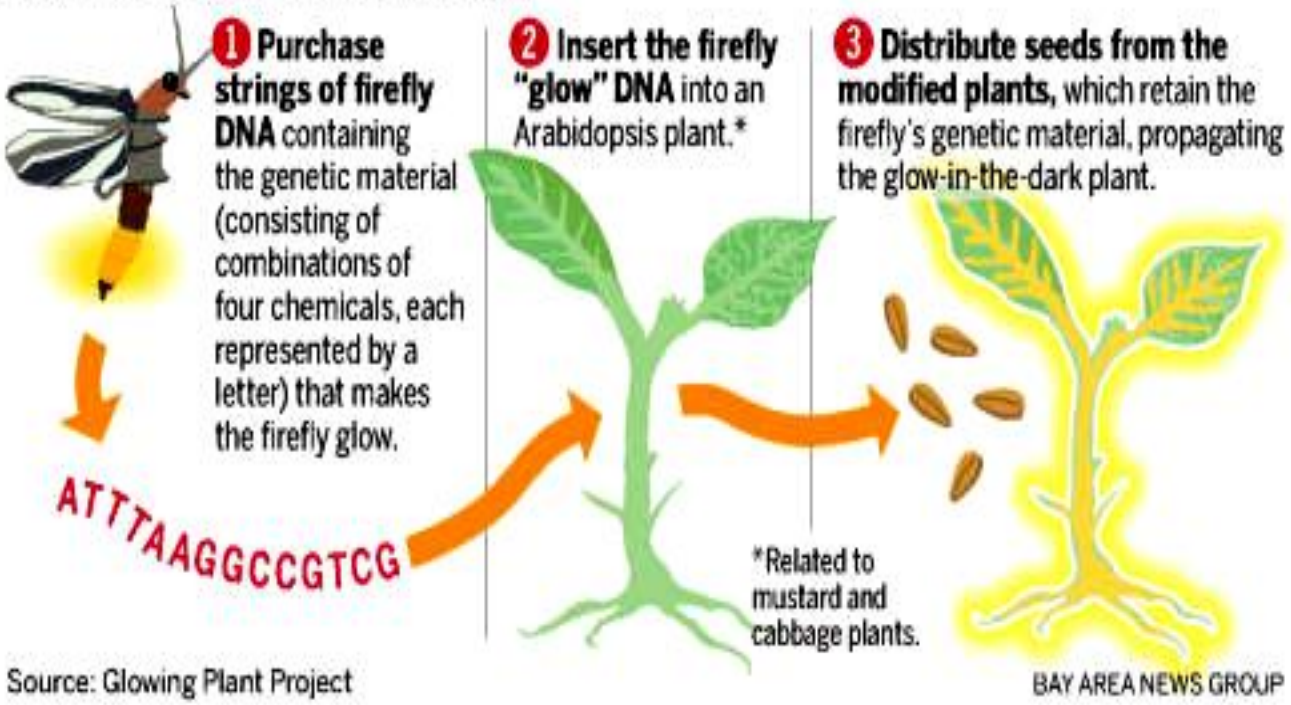
A team of researchers from Stanford University in California continued to develop an unapproved genetically modified plant that literally glows to generate light. The so called ‘‘Glowing plant project’’ has already raised nearly a half a million dollar from the online kick-starter program. Researchers hope to continue pulling in the dollars so they can one day unleash the technology on the commercial scale. The GM glowing plant contains genes that are artificially spliced from other species. In this case, fireflies and certain bacteria that glow are the sources from which the DNA strands that generate light are extracted and subsequently injected into the plants. By these techniques along with the principles of modern engineering, scientists are using computers and laboratory chemicals to design organisms that do new things. Bioluminescence has also been refined to allow for more and new methods of rapid genetic manipulation. As far as the GM glowing plant is concerned, technologies that combine modern methods of DNA printing with advances in gene compiling have made it more feasible than ever for even amateur scientists to reengineer nature into their own image. The printed DNA will be inserted into a special type of bacteria which can insert its DNA into the plant. Flowers of the plant are then dipped into a solution containing the transformed bacteria. The bacteria injects that DNA into the cell nucleus of the flowers which pass it onto their seeds which we can grow until they glow!". This is one of the best alternative by which electricity can be generated in upcoming years.

Source: www.glowingplantproject.com

Shreya Gupta
1st Year

Mass-producing the glow-in-the-dark plant

A group of young bioengineers in San Francisco raised almost $500,000 in Kickstarter funds to design and distribute to contributors genetically modified seeds and kits for growing glow-in-the-dark plants. Here's their plan:



Source: Glowing Plant Project

BAY AREA NEWS GROUP

ENVIRONMENTAL SAFETY

Scientists are exploring the possibility of adding a **biocontainment** feature to the glowing plant to address environmental concerns. For instance, they could make the plant deficient in biotin (Vitamin B7) so that owners of the plant would have to feed the plant biotin on a regular basis. If the plant were to escape into the wild, it would likely not survive.

Ecology & Culture of Uttarakhand

Look all around you and see,
that the Lord has made everything so beautiful

'Ecology is permanent economy'. This slogan has been rightly coined, which depicts the accurate importance of ecology. The Environment has been used in several ways be it as a source of food, fodder or be it as a source of CO2 cycle , H2O cycle or any other use for that matter. It has always been exploited by man to satisfy his never-ending greed.

Now the humans have realized that the loss of flora and fauna is irreparable. Thus now several methods are being thought of and implemented to protect our Environment. Studies and researches reveal that the methods which are indigenous and constitute our culture are more successful in this objective.

Uttarakhand is a small state in India, yet it has a rich and diverse culture. It mainly comprises of hilly areas with a temperate weather condition. The two regions, namely Kumaon and Garhwal constitute quite interesting customs and practices in their culture.

Some varieties of flora indigenous to Uttarakhand are Phephar (*Tagopyrum esculentum*),Mandua (*Eleusine coracana*), Jhanagora (*Panicum frumenlaceum*). Certain plants even possess medicinal value like *Acotinum,* Galamansi, Gugul. The hilly areas are covered with lush green, coniferous forests, mosses and lichens. Several species of fauna like Snow leopard, Sambar, Barking deer are also found here. With such a rich and beautiful biodiversity it is necessary that the local inhabitants come forward and actively participate in protecting their Environment.

Our ancestors knew the importance of our Environment and were quite sensitive towards the environment so they made certain customs and practices which mainly constitute our culture. Thus through their intelligence and concern our ancestors made us aware to save our environment- our very source of survival.

Some important customs that are instilled in our culture are as follows-

Prevalence of planting trees on special occasions.

Whenever a marriage takes place, it is obligatory for the bride to plant a tree at her home as well as her husband's house. Moreover, whenever a person celebrates his/her birthday, he/she plants a tree and looks after it. This practice not only ensures active participation of the masses but also helps in afforestation and in the long run saving the environment. Planting trees is considered a great work in the eyes of the almighty. The fear and respect towards the culture makes it a successful practice for saving the environment.

Rustic folk songs

These songs are rustic, simple and pure. They beautifully explain the importance of the Ecology and make the local people aware of the importance of public participation. Some folk songs like-

Kana bhala lagada pahar ki danda
Baj, Burans devdaar ki kadla.

Emphasize on the aesthetic beauty of my state while some teach lessons bringing in ecological awareness like-

Treat every tree as your son, nourish it,
The son can deceive you in future, but the trees will not!

" If the trees are cut down, the soil will erode- if soil erosion takes place, houses, fields and godowns will collapse, water sources and their branches will lose their water – then how will you quench your thirst?"

According to these songs, the forests are very important for the survival and very existence of man.

Growing indigenous crops

'The Beej Bachao Andolan' was a major step towards reviving the indigenous varieties. This was helpful as these wild relatives were otherwise facing stiff competition and were on the verge of extinction. Activists like Vijay Gardhari, Kunwar Prasun and Swlesha played an important role in this movement. This in turn had good impact on agriculture and has thus been beneficial for both the people as well as the environment.

Chipko movement

This was one of the famous movements initiated by the local inhabitants and was indeed a successful movement. The people protested against the indiscriminate felling of the trees and hugged them, to protect them. Gaura Devi and several other women, realizing the importance of these forests, tried their best and thus were successful in protecting their Fauna. Thus if culture incorporates certain practices, they are taken seriously and are followed heartily by people. If the people actively participate and show interest in saving their ecology, we can surely save our depleting resources. We should not be self-centered, instead , we should keep in mind the coming generations. Let us pledge to do our part and save our environment thereby making this planet a better place to live in.

Ruchi Bhatt
1st Year

La Vie en Rose

My journey from being a High School Hotshot to a College Fuchcha

I am going to take a little stroll down the memory lane, inspired by a re-watch of Dead Poets' Society. It was the month of June, the month of swimming, eating ice creams, gossiping and showing resilience to the scorching heat. But to me, June meant one thing- Board Results. A day to be "awaited with dread, endured with courage and forgotten with haste". With trembling fingers, a racing heartbeat and a flurry of panic, I typed in my board roll number into my computer screen only to be pleasantly surprised in disbelief, I had a decent percentage! Farfetched, I had scored 97 in three subjects! Ecstatic would be an understatement.

This was followed by the dog days of college hunting. I gladly chose Miranda House, an emotion which the college reciprocated. I babbled with seniors, siblings and friends to absorb in any tips and forewarns for my college life. I was told that College was one big leap from high school and was going to be really different. Different, in a bad way. In a way that drives you crazy because no matter how dead your social life becomes and the never ending late night studies you pull through, you'll be in a permanent state of confusion. I became cynical about the whole purpose of college education. This was so not what I had seen in the movies. But hey, I'd rather have a mind opened by wonder than one closed by belief.

Then came into the picture, me leaving my hometown. This was a bigger blow to me than the ending of Shutter Island (which was really something!). College gives us beautiful experiences, but fate chose me to see them without the comfort of my parents being close by for supervision and daily consultation. My days were full of wishful thinking and nights ended with prayers of having Miranda House in Jaipur. After my silent acceptance with the present and future, I left my beautiful and ever loving Jaipur for seemingly leery Delhi. Entering the premises of MH and soaking in all its beauty I was constantly reminded of alma mater, Maharani Gayatri Devi Girls' School. This made me very optimistic. It was as if a part of my past was still along with me, like a protective blanket in the cold.

My nascent weeks at MH were a colourful amalgamation of emotions. I was overwhelmed by the amount of studies (Courtesy :FYUP) and the myriad number of societies. I feared losing touch with my high school friends and teachers. I didn't know how I should behave just to fit in. I doubted whether I made the right decisions. But, I was more than excited to find the new avenues of college life, make lifelong friends and most importantly, to find myself. Greater independence, self-responsibility, emotional maturity, and new and different social challenges were all simultaneously introduced which were both thrilling and overwhelming at the same time.

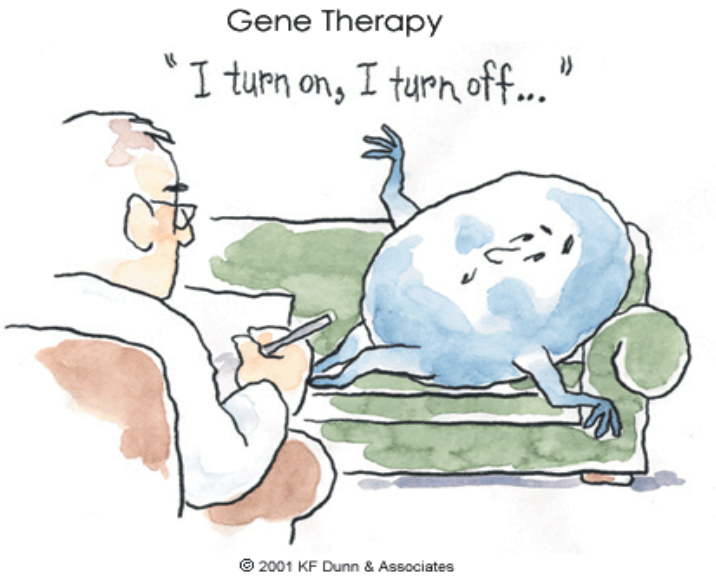
Day after day and week after week I felt belonged. So far, Fresher's Day is the sweetest epiphany etched in my mind. Getting crowned Miss Fresher was exhilarating but realizing that you are in the hands of enthusiastic friends, amiable seniors and dedicated and affectionate teachers was the glory of the day.

Now, after a good three months, I no longer feel that it is an ordeal to go to college.

Every day has a certain sense of liberation and thrill associated with it. College is like a ride in an amusement park. And when you choose to go on it you think it's real because that's how powerful our minds are. And the ride goes up and down and round and round. It has **thrills** and chills and it's very brightly coloured and it's very loud and it's fun, for a while.

Some people have been on the ride for a long time and they begin to question: "Is this real, or is this just a ride?"
And other people have remembered, and they come back to us, they say, "Hey, don't worry, don't be afraid, ever, because this is just a ride." And I believe we all need to have faith in the latter.

Ninadini Sharma
1st Year



New Beginnings

That morning was a bit different than usual, as I had my new college to attend. I woke up early, which was quite unusual especially after the long vacations that had just got over. Obviously, I had to look 1 kg prettier than I looked every day. Although, a lot of them may deny, I think everybody wants to look beautiful and handsome on the first day of college. After reaching college, I found my new classrooms and was so excited to meet my new friends. I entered the class as if I was entering a new world where I felt I knew nobody and without even having a glance at the entire class I quickly grabbed a seat on the third desk of first table. As I did not know anyone in my class and there was some time left for the lecture to begin, I thought of exploring my cell phone menu, and started playing games. I felt really awkward sitting in the class simply doing nothing. Few minutes later, a girl came and sat beside me and her name is Rythem. I need not tell you what happened next.

"When two girls meet as strangers, they either become good friends or end up as great enemies later."

Fortunately, Rythem and I were trying to befriend each other. Soon, chatting with people around me became easy and I made lot of friends and things around me started became easy .The first lecture was about to begin. The teacher, Sethi ma'am entered the class. My seniors told me that she is a nice teacher. She introduced herself and also asked each one of us to introduce ourselves to the rest of the class. It's something that we all are so aware of, yet everybody's heart beats faster till their turn comes. I managed to give a normal introduction of and soon Sethi ma'am's lecture was over .Then second started which was of Janaki ma'am. She is a nice teacher. She also introduced herself and we introduced ourselves to her and soon the last bell rang, which meant college was over. I was happy with my first day in Miranda House. Although, at that point of time I did not find my first day eventful I am sure years later I shall cherish it!

Ritika Jonwal
1st Year

Freshers' Party 2013

In a new strange place where all of us freshers coming from different places congregated, the only thing that brought us together was the fact that none of us knew this place! We needed something, some occasion to interact and communicate with the entire department to help us settle in. That opportunity came in the form of the freshers' party. The very first event of our very first year in Miranda House, was much anticipated by us all. So when the invitation was put up on the notice board, our excitements soared and I still remember the girls rushing to see it. Dear seniors, I would like to thank you for such a warm welcome.

On popular demand, the freshers' party was themed '*Angels And Demons*'. And so preparations began on both sides, of the hosts and of the guests. I believe the seniors must have begun planning (and plotting) while us newbies were yet deciding whether to be an angel or a demon.

The day finally arrived and it was spectacular! Everyone was dolled up. My simple and shy buddies had all transformed in their new avatar. The lab had been converted into a world of black and white where little paper angels and demons were hung all over. While the seniors along with the faculty waited inside for us, us freshers lined up outside to go in one by one so as to introduce ourselves. After a series of fun rounds of introduction, quiz and dares, an angel and a demon were finally crowned. Sneaky seniors had prepared a series of dance and musical numbers showcasing their talents. It was great.

When the teachers left and the place was ours to own, the music was turned up and we had a lot of fun. Everyone clicked pictures trying to capture a part of this party that is best preserved in our memories. What happened next? Well, you have to be a part of our department to know that! <wink>

Sakshi Singh
1st Year

Orchids That Betray!

MONKEY FACE ORCHID

This species of orchid, aptly named the **Monkey Face Orchid** (*Dracula simia*), was created after Mother Nature decided to do a bit of monkeying around (hah!). These rare orchids only grow in the cloud forests of southeastern Ecuador and Peru at elevations of 1,000-2,000 meters on the side of mountains. In the scientific name, "simia" refers to the monkey face and "Dracula" refers to the two long spurs that hang down, almost like fangs. What makes this flower even cooler (as if it needed to get any more awesome) is that it smells just like a ripe orange when fully blossomed. Incredible!



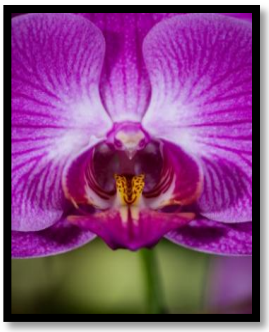
BEE ORCHID

This incredible orchid is called – can you guess? – the **Bee Orchid** (*Ophrys apifera*). It resembles a female bumblebee visiting a pink flower to attract the attention of male bees. Thinking another one of their kind is there, they try to mate with it. In the process they get covered in the orchid's pollen and end up spreading it around as they fly and pollinating other flowers as they go. This process is called as psuedocopulation.



BIRD'S HEAD ORCHID

This Pink Moth Orchid (*Phalaenopsis sp.*) is absolutely gorgeous and amazingly cool for the sole reason that it looks like it has a little bird's head guarding the nectar on the flower. It's so well-formed that it almost looks like a little baby bird fell into the flower and got stuck there. I'm not exactly sure *why* the orchid looks like this but thank God it does!



WHITE EGRET ORCHID

This elegant orchid is called the **White Egret Orchid** (*Habenaria radiata*) because it looks just like a… white egret! The flower looks like the bird is spreading its fluffy white feathers, getting ready to take off.



FLYING DUCK ORCHID

So last but certainly not least is perhaps my favorite of all the orchids on the list – the **Flying Duck Orchid** (*Caleana major*). It's a small orchid, about 50 cm tall that grows in eastern and southern Australia. It's the most remarkable flower – it seriously looks just like a male duck in flight! Nature just amazes me.

Source: http://www.thefeaturedcreature.com

Ninadini Sharma
1st Year

Replying To An Invitation To A Scientist's Ball

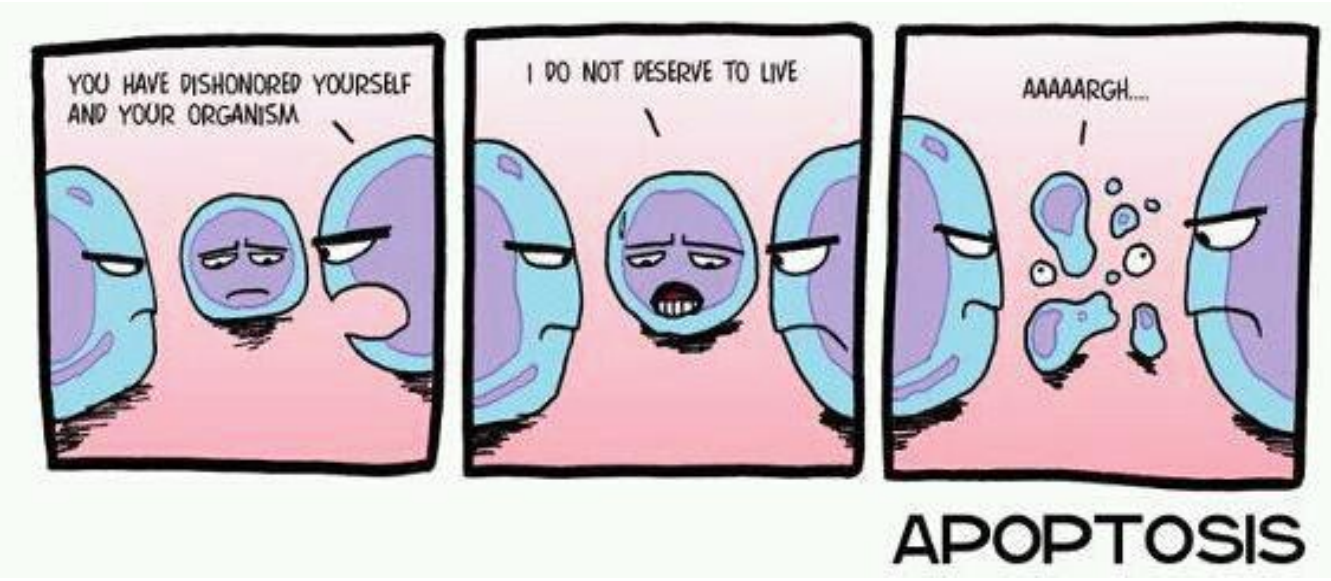
Pierre and Marie Curie were radiating enthusiasm.
Einstein thought it would be relatively easy to attend.
Volta was electrified and Archimedes, buoyant at the thought.
Ampere was worried he wasn't up to current research.
Ohm resisted the idea at first.
Boyle said he was under too much pressure.
Edison thought it would be an illuminating experience.
Watt reckoned it would be a good way to let off steam.
Stephenson thought the whole idea was loco.
Wilbur Wright accepted, provided he and Orville could get a flight.
Dr Jekyll declined — he hadn't been feeling himself lately.
Morse's reply: "I'll be there on the dot. Can't stop now must dash."
Heisenberg was uncertain if he could make it.
Hertz said in the future he planned to attend with greater frequency.
Henry begged off due to a low capacity for alcohol.
Audobon said he'd have to wing it.
Hawking said he'd try to string enough time together to make a space in his schedule.
Darwin said he'd have to see what evolved.
Schrodinger had to take his cat to the vet, or did he?
Mendel said he'd put some things together and see what came out.
Descartes said he'd think about it.
Newton was moved to attend.
Pavlov was drooling at the thought.
Gauss was asked to attend because of his magnetic personality.

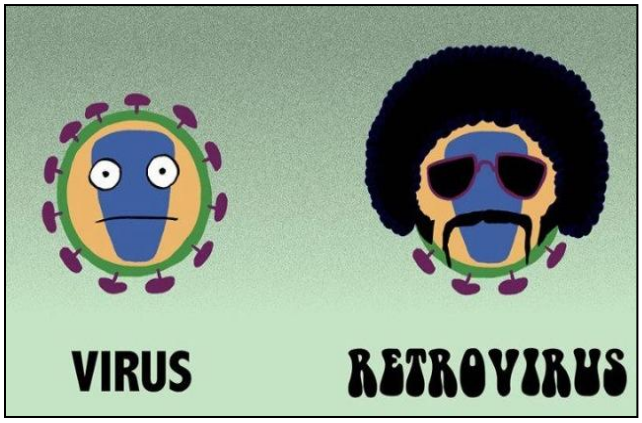
Source: www.science jokesdaily.com

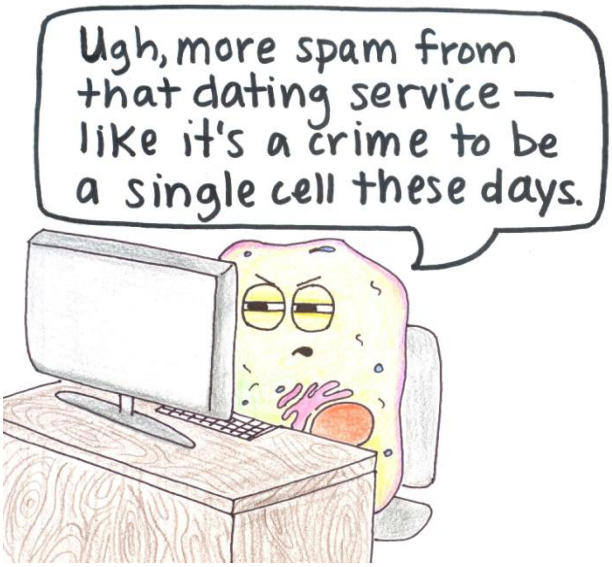
Ninadini Sharma
1st Year

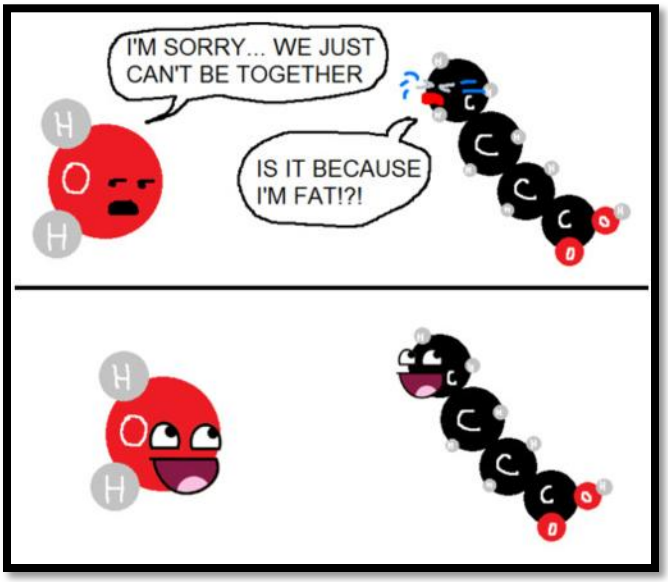
Biologist's Garble

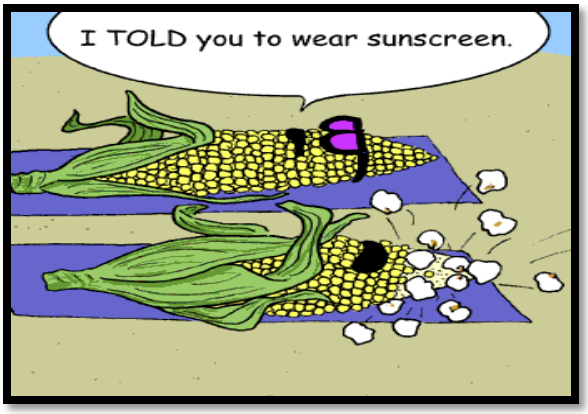
Source: www.lmaohaha.com/biology_humor

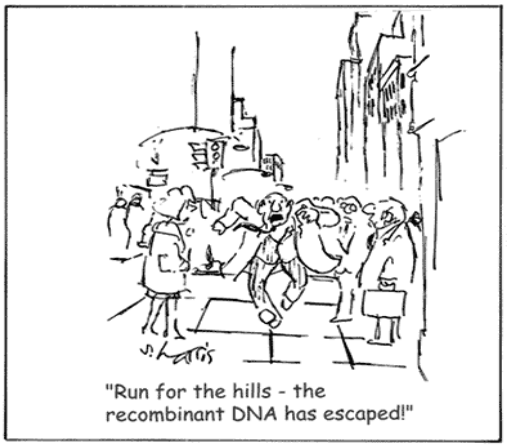


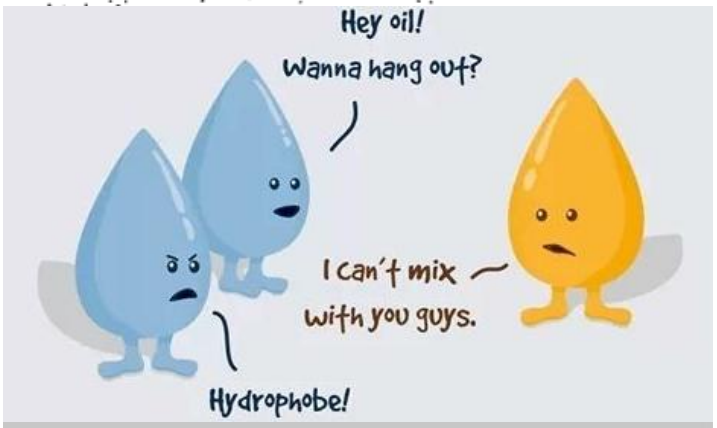


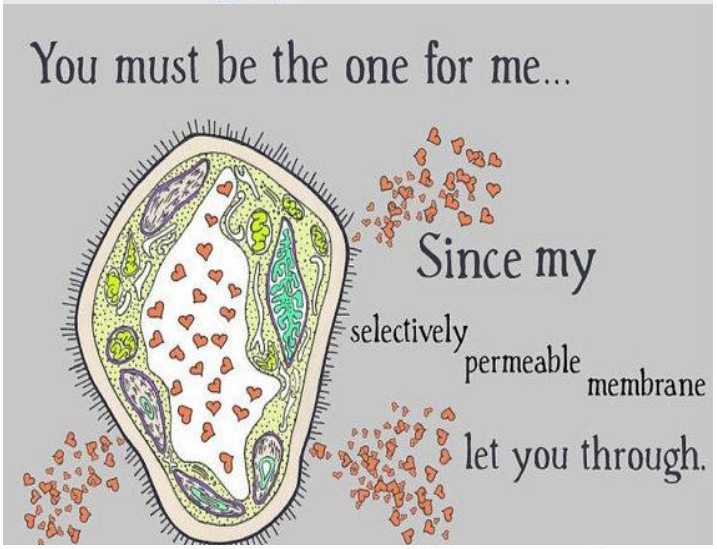


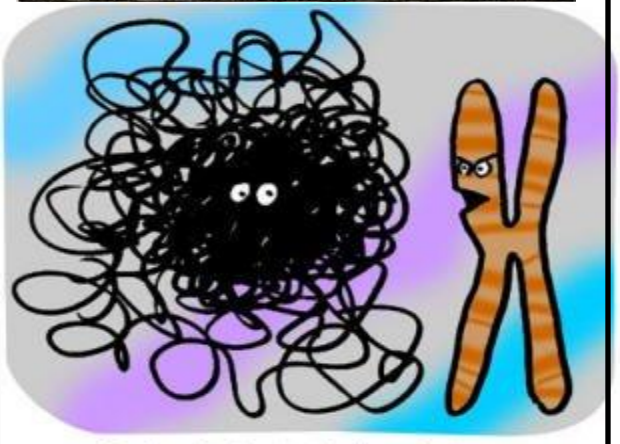




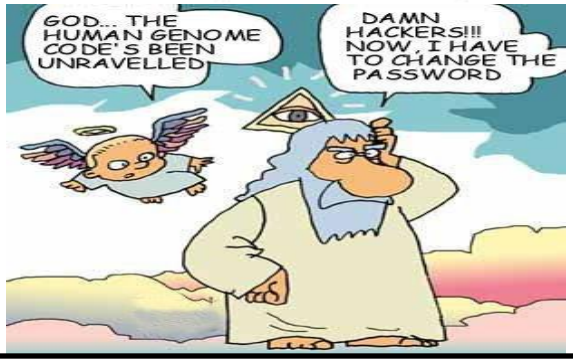








Dude, mitosis starts in five minutes...
I can't believe you're not condensed yet.



Antheia

The Botanical Society of Miranda House

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