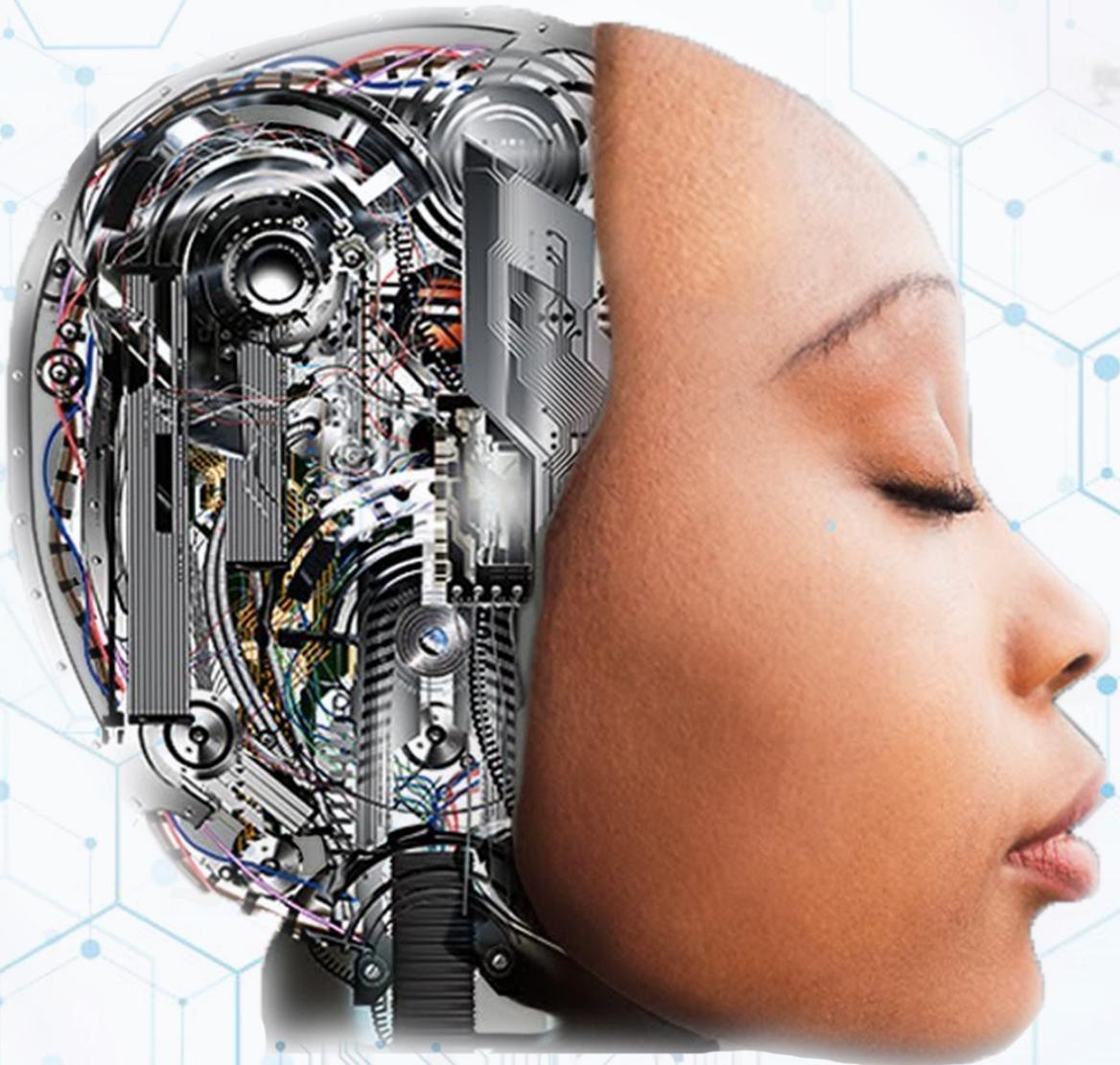




NEWSLETTER

BIOMEDICAL DEPARTMENT

(JULY 2020 - DECEMBER 2020)



MESSAGE FROM HEAD OF DEPARTMENT



DR. VIMAL PRAJAPATI

- DESIGNATION: HEAD OF DEPARTMENT
- QUALIFICATION: PH.D. IN MECHANICAL ENGINEERING
- EXPERIENCE : 21 YEARS
- AREA OF INTEREST : BIOFUEL AND RENEWABLE ENERGY SOURCES

“Education doesn’t mean just to fill your head; it’s meant to inspire your mind. Always keep learning new things and try to know your inner-self”

Warm greetings to everyone!!!

It gives me great pleasure presenting our department’s newsletter. This issue highlights the notable activities in the department of Biomedical Engineering. It also highlights the accomplishments of faculty and students during the months of July to Dec 2020.

This year was one of the toughest year so far

Enough scary moments...

Enough threats...

Enough worries...

And Enough stress too

I thank the Almighty for keeping us healthy and alive to face the upcoming year strongly. Another new year... Another new decade... Another new beginning...

Let’s pray for more strength, courage, empathy and maturity to treat all with respect and live life more gratefully

- Dr. Vimal V. Prajapati

STUDENTS RELATED ACTIVITIES

Department has established dedicated Higher Studies Cell and following activities are continuously being conducted in form of session/personal counselling:

- University, Course and Country Selection
- Process Level counselling for Application – For Foreign Universities
- Tips for Writing State of Purpose

The cell is co-ordinated by **Prof. M. P. Patel** & **Prof. M. M. Nanavati**

EXTRA ORDINARY ACHIEVEMENT BY STUDENTS

VOHARA MINAZ

Passout student of 2020 secured overall 1st Rank (GTU Branch Topper) for B.E – Biomedical Engineering Discipline.

SOMANI SHRUSTI AND KISHAN MAKWANA

Student of 7th semester and 5th semester respectively participated in online Quiz on “Basics of Biomedical Engineering” organized by Parul Institute of Technology, Parul University

JAY SONI

Student of 5th semester participated in various online courses in domain of Python Programming, Machine Learning and Artificial Intelligence by Coursera.

PATEL DARSHAN & PATEL SMIT

STUDENTS OF 7TH SEMESTER PARTICIPATE IN WORKSHOP ON “DEEP LEARNING ALGORITHMS FOR MEDICAL IMAGING” ORGANIZED BY SRM UNIVERSITY BETWEEN AUGUST 26-28, 2020.

PATEL SMIT

Student of 7th semester participated in 5 day workshop on “Digital Image Processing & Its Application (DIPA – 2020)” organized by NIT, Arunachal Pradesh between August 24-28, 2020.

MANSI CHOKSHI

Student of 7th semester has completed online non-credit course on “Machine Learning for All” offered by University of London through Coursera in August 2020.

SAHIL HUDDA

Student of 7th semester has completed course on “Ortho Career 101” offered by Ortho Career Coach between September 1-5, 2020

KRESHA DIXIT

Student of 5th semester has completed online non-credit course on “Electrical Power Systems” offered by University at Buffalo & The State University of New York through Coursera in August 2020.

EVENTS ORGANIZED (EXPERT LECTURE/ INDUSTRIAL VISIT)

Session on Tips, Scopes and Opportunities: GATE in Biomedical Engineering was conducted on August 29, 2020 which was delivered by Mr. Jay Bhanusali and approximately 107 students of Final year and Pre-final took part in the same. The session was co-ordinated by Prof. M. M. Nanavati

Session on "Top skills to acquire during Biomedical Engineering" was conducted on August 30, 2020 which was delivered by Mr. Rahil Engineer (Business Development Manager, Indimedi Pvt. Ltd.) and approximately 137 students of Final year and Pre-final took part in the same. The session was co-ordinated by Prof. P. V. Patel

Online webinar on topic "Lukemia Detection using Backpropagation Network" in associated with Pantech E-Learning was organized on September 5, 2020, more than 700 participants took benefit of the same. The session was co-ordinated by C. P. Shah

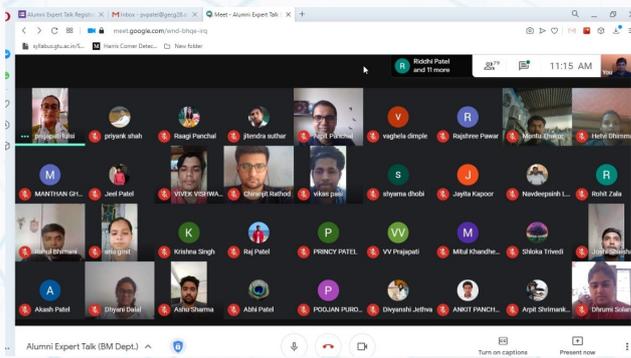
Session on "How to Select and Sustain Startups" was conducted on October 22, 2020 which was delivered by Ms. Siddhi Vora (Founder, Dbreath Medical Devices) and approximately 150 students of Final year and Pre-final took part in the same. The session was co-ordinated by Prof. P. V. Patel

Session on "Job Opportunities in Biomedical Field" was conducted on October 23, 2020 which was delivered by Ms. Kalpesh Prajapati (CAD Designer, Uteshiya Medicare Pvt. Ltd.) and approximately 25 students took part in the same. The session was co-ordinated by Prof. C. P. Shah

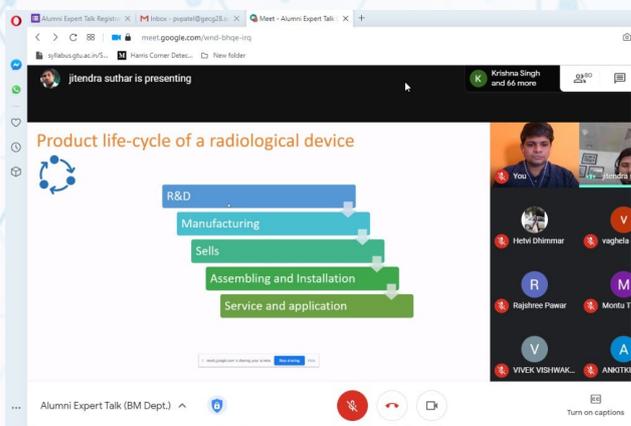
One day workshop on "Soft skills required during and after engineering" was organized on November 06, 2020, approximately 55 students participated in the same and it was co-ordinated by Prof. P. V. Patel and Prof. C. P. Shah

Session on "Career Guidance - Counseling" for final year students was organized on September 06, 2020 by Departmental Higher Studies Cell highlighting opportunities at job level and higher studies was discussed and more than 40 students participated. The session was overall co-ordinated and moderated by Prof. M. P. Patel and Prof. M. M. Nanavati

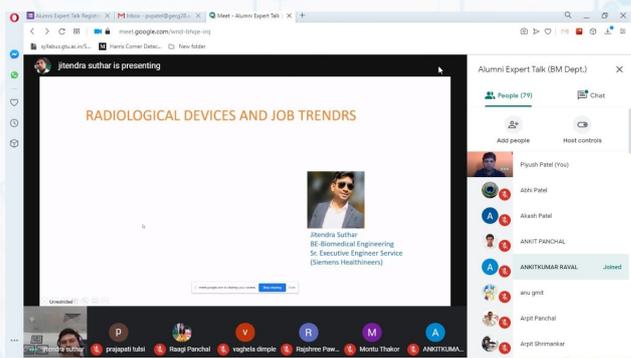
ALUMNI MEETING/EXPERT TALK



The Department of Biomedical Engineering had organized an alumni meeting for all batches on 11th October, 2020 on the Google Meet Platform. Expert talks on different topics were delivered by alumni experts. Total 80 participants including alumni, current students and teachers participated in the event. Students and staff shared the memories, most of them volunteered to render services for the benefit of the current students of BM departments. The event was stimulating and enjoyable and simultaneously profitable as all insights came up.



Details of Alumni Expert:



Speaker Details:	Topic Details
Mr. Arpit Panchal (Batch - 2009) Sr. HR Manager, Reliance Industries, Mumbai.	Journey of Biomedical Engineer to HR Manager
Ms. Tulasi Prajapati (Batch – 2018) R&D Officer – IPR Section (Patent) Meril Lifesciences Pvt. Ltd., Surat.	Opportunities and Skills in IPR field for Biomedical Engineers
Mr. Jitendra Suthar (Batch - 2015) Sr. Executive Engineer, Siemens Healthineers, Germany.	Radiological Devices and Job Trends

FACULTY ACHIEVEMENTS/PARTICIPATION IN CONFERENCE/WORKSHOP/SEMINARS



Dr. V. V. Prajapati has attended Online Training Program (FDP) on "COMPREHENSIVE ONLINE INTELLECTUAL PROPERTY RIGHTS (IPR)" conducted by "i-HUB Gujarat" from July 06, 2020 to September 14, 2020. Also, he attended Online Training Program on "UDAYAM E-Content Development Course" conducted by " Knowledge Consortium of Gujarat, Ahmedabad, and HRDC, Gujarat University" from July 28, 2020, to August 18, 2020

Prof. G. D. Parmar has attended Online Training Program (FDP) on "COMPREHENSIVE ONLINE INTELLECTUAL PROPERTY RIGHTS (IPR)" conducted by "i-HUB Gujarat" from July 06, 2020, to September 14, 2020. Also, he attended Online Training Program on the "UDAYAM E-Content Development Course" conducted by the " Knowledge Consortium of Gujarat, Ahmedabad, and HRDC, Gujarat University" from July 28, 2020, to August 18, 2020.



Prof. P. V. Patel has attended Online Training Program (FDP) on "COMPREHENSIVE ONLINE INTELLECTUAL PROPERTY RIGHTS (IPR)" conducted by "i-HUB Gujarat" from July 06, 2020 to September 14, 2020. Also, he attended Online Training Program on the "UDAYAM E-Content Development Course" conducted by " Knowledge Consortium of Gujarat, Ahmedabad, and HRDC, Gujarat University" from July 28, 2020, to August 18, 2020.

Dr. M. B. Patel has attended Online Training Program (FDP) on "COMPREHENSIVE ONLINE INTELLECTUAL PROPERTY RIGHTS (IPR)" conducted by "i-HUB Gujarat" from July 06, 2020 to September 14, 2020. Also, he attended Online Training Program on the "UDAYAM E-Content Development Course" conducted by the " Knowledge Consortium of Gujarat, Ahmedabad, and HRDC, Gujarat University" from July 28, 2020, to August 18, 2020.



Dr. M. B. Patel delivered online lecture on " How to crack GATE 2021" at Ganpat University on September 06, 2020



Dr. V. P. Dave has attended Online Training Program (FDP) on "COMPREHENSIVE ONLINE INTELLECTUAL PROPERTY RIGHTS (IPR)" conducted by "i-HUB Gujarat" from July 06, 2020 to September 14, 2020. Also, he attended Online Training Program on the "UDAYAM E-Content Development Course" conducted by the " Knowledge Consortium of Gujarat, Ahmedabad, and HRDC, Gujarat University" from July 28, 2020, to August 18, 2020.

Dr. V. P. Dave and his students published an article on "Computational modeling of NMDA receptor response in Alzheimer's disease" in *Microsyst Technol* (Springer Nature) in October 2020.

Dr. C. P. Shah has attended Online Training Program (FDP) on "COMPREHENSIVE ONLINE INTELLECTUAL PROPERTY RIGHTS (IPR)" conducted by "i-HUB Gujarat" from July 06, 2020 to September 14, 2020. Also, he attended Online Training Program on "UDAYAM E-Content Development Course" conducted by " Knowledge Consortium of Gujarat, Ahmedabad and HRDC, Gujarat University" from July 28, 2020 to August 18, 2020



Prof. M. P. Patel has attended Online Training Program (FDP) on "COMPREHENSIVE ONLINE INTELLECTUAL PROPERTY RIGHTS (IPR)" conducted by "i-HUB Gujarat" from July 06, 2020 to September 14, 2020. Also, he attended Online Training Program on the "UDAYAM E-Content Development Course" conducted by the " Knowledge Consortium of Gujarat, Ahmedabad, and HRDC, Gujarat University" from July 28, 2020 to August 18, 2020.

Prof. H. K. Mehta has attended Online Training Program (FDP) on "COMPREHENSIVE ONLINE INTELLECTUAL PROPERTY RIGHTS (IPR)" conducted by "i-HUB Gujarat" from July 06, 2020 to September 14, 2020. Also, she attended Online Training Program on the "UDAYAM E-Content Development Course" conducted by the " Knowledge Consortium of Gujarat, Ahmedabad, and HRDC, Gujarat University" from July 28, 2020, to August 18, 2020. Prof. H. K. Mehta has attended an Online Training Program on "WOMEN ENTREPRENEURSHIP & STARTUPS" conducted by "National Institute of Technical Teachers' Training and Research, Bhopal" during the Month of September 19-23, 2020.





Prof. R. P. Nayak has attended Online Training Program (FDP) on "COMPREHENSIVE ONLINE INTELLECTUAL PROPERTY RIGHTS (IPR)" conducted by "i-HUB Gujarat" from July 06, 2020 to September 14, 2020. Also, she attended Online Training Program on the "UDAYAM E-Content Development Course" conducted by the " Knowledge Consortium of Gujarat, Ahmedabad, and HRDC, Gujarat University" from July 28, 2020, to August 18, 2020. Prof. She has also attended Online Training Programme on "NURTURING INNOVATION AND STARTUP ECOSYSTEM (NISE)" Conducted by I hub conducted from September 8, 2020, to October 23, 2020.

Prof. M. M. Nanavati has attended Online Training Program (FDP) on "COMPREHENSIVE ONLINE INTELLECTUAL PROPERTY RIGHTS (IPR)" conducted by "i-HUB Gujarat" from July 06, 2020 to September 14, 2020. Also, he attended Online Training Program on the "UDAYAM E-Content Development Course" conducted by the " Knowledge Consortium of Gujarat, Ahmedabad, and HRDC, Gujarat University" from July 28, 2020, to August 18, 2020.



Prof. P. K. Shah has attended Online Training Program (FDP) on "COMPREHENSIVE ONLINE INTELLECTUAL PROPERTY RIGHTS (IPR)" conducted by "i-HUB Gujarat" from July 06, 2020 to September 14, 2020. Also, he attended Online Training Program on the "UDAYAM E-Content Development Course" conducted by the " Knowledge Consortium of Gujarat, Ahmedabad, and HRDC, Gujarat University" from July 28, 2020, to August 18, 2020.

Prof. N. V. Limbad has attended Online Training Program (FDP) on "COMPREHENSIVE ONLINE INTELLECTUAL PROPERTY RIGHTS (IPR)" conducted by "i-HUB Gujarat" from July 06, 2020 to September 14, 2020. Also, he attended Online Training Program on the "UDAYAM E-Content Development Course" conducted by the " Knowledge Consortium of Gujarat, Ahmedabad, and HRDC, Gujarat University" from July 28, 2020, to August 18, 2020.



Prof. M. R. Khandhedhia has attended Online Training Program (FDP) on "COMPREHENSIVE ONLINE INTELLECTUAL PROPERTY RIGHTS (IPR)" conducted by "i-HUB Gujarat" during July 06, 2020 to September 14, 2020. Also, he attended Online Training Program on "UDAYAM E-Content Development Course" conducted by " Knowledge Consortium of Gujarat, Ahmedabad and HRDC, Gujarat University" from July 28, 2020 to August 18, 2020.

WRITE-UP FROM STUDENTS

THE ONLINE OUTREACH

Engineering, a field that primarily focuses on innovation, application, and the most important aspect of it, Technology. The year 2020 has been a roller coaster for everyone and as the situation stands, circumstances aren't going to be the same as they were. Taking a look back one can observe, not much has been done particularly in the field of technology because the whole community was focusing on resisting the pandemic and were persistent on saving their lives as it mattered the most in that span of time, but there were some noteworthy contributions done by the people India, namely:

- 1) NIGHTINGALE 19
- 2) Eco-friendly Agri-sprayer

July can be considered as the introductory phase into the online world, as the nation went under the "Unlock" period each and every sector was trying to adapt to the guidelines established by the governing bodies. Multinational companies, Educational Institutes, grocery stores even pharmacy shops started their online services. The best thing about the introduction to the online world was that it gave the opportunity to even the small vendors to expand their network and widespread their business on a national scale. With the shutting down of the physical world, to get on with one's daily needs and fulfill any individual's requirements, it became necessary for everyone to be equipped with a smartphone and internet which was turned out to be a downfall, as not every layman can have the luxury to afford those items, but on the contrary, those who weren't familiar with the online world, have been introduced to new technologies and different methods to approach, that they weren't even aware of. No doubt, with the affiliation of Covid-19, the equilibrium of earth's ecosystem was disturbed heavily, but it was with patience and with new innovations and methods in every shape and form, the social human life works on the "Online mode" and is not eradicated from the atmosphere.

- Bhavant Shroff, Sem-5

ACKNOWLEDGE OF SELF POTENTIAL

2020 was a year of uncertainty

But also taught us gratitude.

From Masks on noses

To Vaccines dozes

We all got habituated to the new normal.

Looking back last year at the same time we all were at our homes experiencing the lockdown for the very first time.

Lockdown :This term was a total new concept to us and with that came the other different words like quarantine. This period taught us that how busy we had gotten behind all the materialistic pleasures which was all secondary.

In this time we all learned that family and their health is the most important thing. Be it be mental heath or physical health. Staying home we discovered our inner selves and had the opportunity to bring out our hobbies which we had somehow forgotten due to work and responsibilities. It also taught us management of our resources in crucial time. And that we have the capability to achieve what we desire if we have self confidence and good mental strength

- Dhrumi Solanki, Sem- 5

THE BOY IN MY DREAMS

There's a boy in my dreams, about my age, a bit shorter though, personally, I don't think 5'7" is too bad for his age, it's just average, but he doesn't seem satisfied with it, he wants to be 6 something and he does everything in his power to get there even though it is impossible at this age, I think he knows that and that's what amuses me the most, why does he still keep trying, well... who am I to stop him....

One morning his mom hears a loud thud outside the house when she is preparing breakfast in the kitchen, she immediately runs out to see what's happened and finds her son lying flat on the ground beneath his bedroom window. *RONIN* she shrieks 'Are you ok? What happened, how did you fall down the window?' Ronin is a little embarrassed to tell her that he had fallen down while trying to hang from the window as he had read somewhere online that hanging from a height makes you taller.

DREAM ENDS

The next night once again Ronin comes to my dream, there's something different about him this time, he's tall like 6ft tall, how did he do that! It is scientifically impossible. He still looks sad though, what has he now to be sad about? He gets up from the bed, looks in the mirror sideways, sighs, and goes straight to the kitchen. There he produces a big jar from the cupboard, takes out two full tablespoons of some brown powder, puts it in the milk, and instantly gulps it down. When he moves away from the kitchen shelf I can see the jar clearly, it is some weight gain powder, but it says one tablespoon in one glass of milk, then why did Ronin take two?

On the breakfast table, the family's having toast and eggs along with a glass of orange juice but Ronin has a big chunk of steak on his plate, he is practically having lunch for breakfast. It is evident that he is desperate to gain weight, but why? Again I don't see anything other than ordinary with his body.

The lunch and dinner are the same with him having twice the amount of food on his plate as his family. I have a feeling this is not going to go well for him. And that's what happens he gets very sick the next morning, so much that he has to rush to the hospital.

DREAM ENDS

I spend the whole next day thinking about Ronin, why is he always trying to change himself? Why he is never satisfied with himself? It is getting too intriguing for me, I cannot wait to go back to sleep tonight.

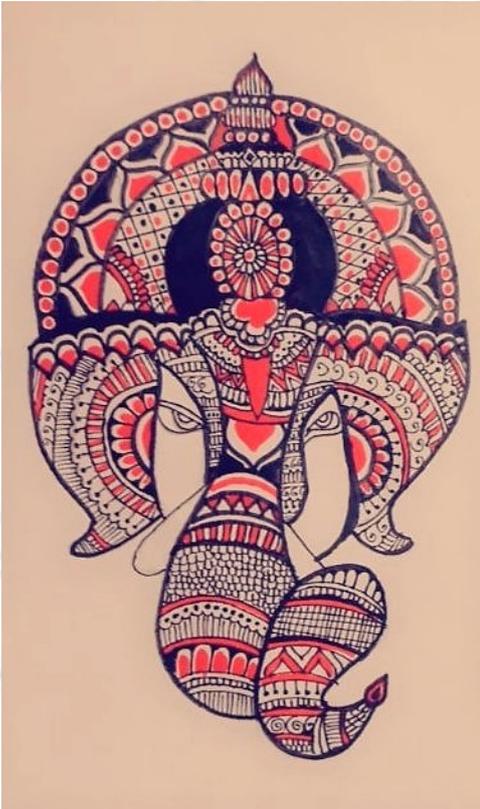
As soon as I fall asleep Ronin wakes up, it's funny how always when I fall asleep he wakes up, maybe it's a dream thing. I am curious to see what insecurity he is fussing over today, I know it is a bit insensitive of me but I can't help it. Ronin looks worried sick today, he is pacing back and forth in his room, constantly checking something on his phone, as if he is waiting on something. His mother calls him for breakfast but he instantly refuses to go and replies 'I can't eat right now, it'll be here any minute.'

To which his mother replies 'you don't have to be this nervous about your test results, I am sure you have done well, now come on down and have some breakfast with us.' He goes down, his phone still in his one hand. The phone starts buzzing in the middle of breakfast, his friends are texting him asking him about how much did he score. Ronin instantly checks his scores, the color is washed off his face as soon as he sees the numbers, and runs instantly to his room and locks it up. I don't know what he is upset about, he has scored a solid 7.5 out of 10, I would be proud of myself for that. I am infuriated by this, this is way too far, one should not, must not care about grades too much at least not when they are actually this good. 'What is wrong with you bro?' I shout in the dream and to my utter surprise, he hears it and is startled by it. 'Wh-who is it?' he asks. This is my opportunity to tell him that he doesn't need to fuss over his insecurities, because what he thinks people see him as is not actually what they see him as. I didn't even notice that he was short until he tried to hang from a window to get taller or he was thin until I saw his desperate attempts to get fat and 7.5 is a completely perfect score in fact it is better than most. I tell all this to him and what he has to say back shocks me out of my sleep. After I am done speaking he gets up and says 'if that is the case then why do you always hold yourself back and agree with others when you have a chance to give your opinion?, why do you hesitate to speak in front of people? why are you always hesitant to ask questions in front of the classroom? Why?' At this moment I could not handle the pressure and woke up.

Ronin was not just a boy in my dreams but he was a part of my body who was trying to fight against my insecure instincts. In conclusion, I only have to say that 'what you think people perceive of you is not actually what they perceive of you, in fact, most of the time you acting on your insecurities leads them to the perception which was in your mind.'

- Dharamveer Modi , Sem - 7

CREATIVE CORNER



HETVI DHIMMAR, SEM 5



ANSHU MATHUR, SEM 5



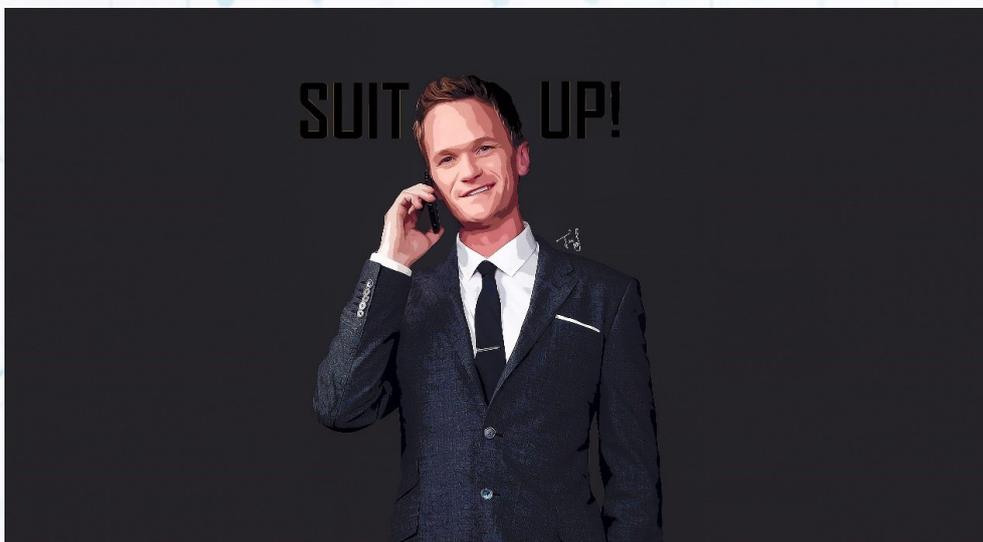
ANSHU MATHUR, SEM 5



ANSHU MATHUR, SEM 5



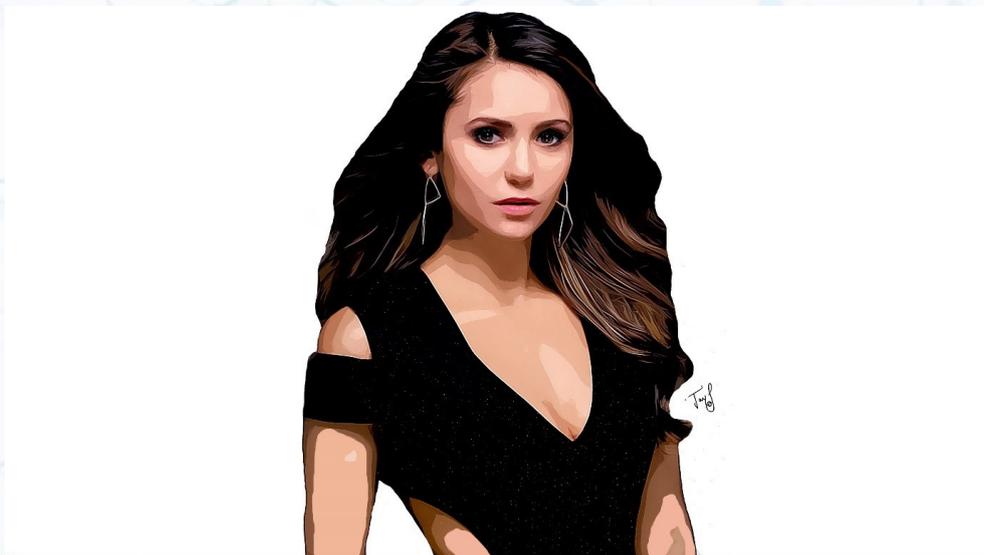
JAY SONI, SEM 5



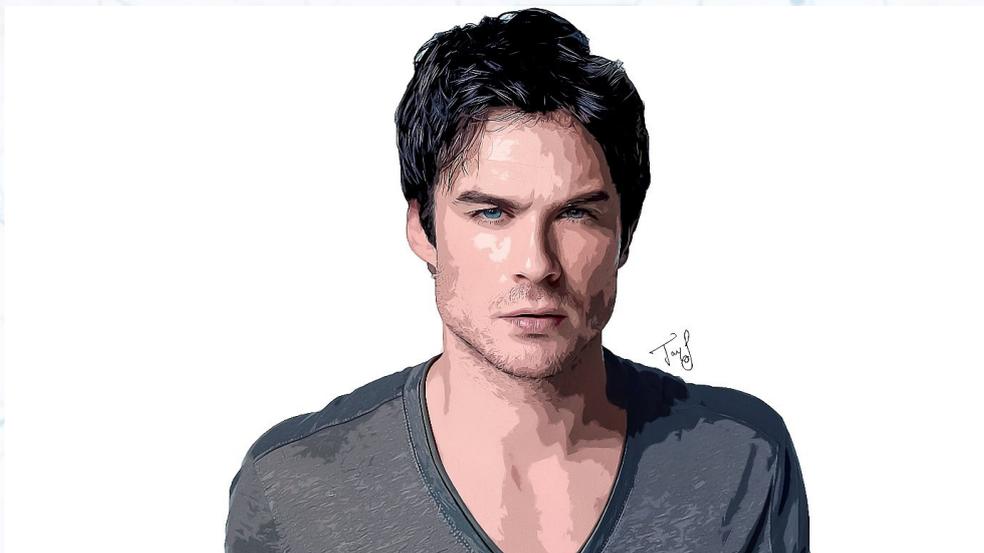
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8 BIO MEDICAL DEPARTMENT

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GOVERNMENT ENGINEERING COLLEGE, GANDHINAGAR

Chariman - Dr. S. P. Dave, Principal

Editor - Dr. V. V. Prajapati, Head of Department, Biomedical Department

Associate Editor - Prof. M. M. Nanavati, Assistant Professor, Biomedical Department

Student Team

Dharmveer Modi- Student Editor

Bhavant Shroff & Dhrumi Solanki - Student Co-Editor

Graphics Design & Layout- Jay Soni & Kunj Patel

Language & Editing - Anshu Mathur, Harshil Thakur & Prince Verma

 7923215965

 gec-gnagar-dte@gujarat.gov.in

NR-ANIMAL VACCINE INSTITUTE
SECTOR-28, GANDHINAGAR, GUJARAT 382028