



## LIFE E-NEWSLETTER

NOVEMBER 28

> BCONSCIOUS NIND

# FROM THE EDITOR'S DESK

Written by Subha

#### Hey bibliophiles,

Team Life is back with another edition for you. Team Life is an initiative taken by the Department of Zoology to keep the students updated on the field of biology. Are you ready to explore the Newsletter? In this edition, you will be able to explore the experience of our college student who assisted in the work of bird survey in the Tansa Wildlife Sanctuary. You will also find articles on the theme of the year that is 'subconscious mind' and on the noble prize in the physiology of this year won by two noble laureates. All the articles in this Newsletter are contributed by our college enthusiasts.

"Whatever we plant in our subconscious mind and nourish with repetition and emotion will one day become a reality ." - Earl Nightingale Subconscious mind

Into the wild

Noble prize in physiology and medicine 2021

Subconscious awareness

Photo Galleria





## SUBCONSCIOUS MIND

Do you remember the first time you tried cycling? Have you ever tried to master a new instrument? The first attempt to attend a new complex working set is always tough. With further experience, these movements bear lower mindfulness until effects start to flow naturally. Shifting gears isn't tough if you have driving experience. You do not have to suppose about it. Everything flows unconsciously. Subconscious geste can be turned into conscious geste when we suppose about it. The subconscious mind is a data bank for everything that isn't on your mind. It stores our beliefs, our former gests, and our recollections. Everything we saw, did, and allowed was also there. This is also our guidance system. The subconscious mind is an important secondary system that governs everything in our lives. You start to breathe deeply, stop to control it, and your subconscious mind begins to do so. No more thinking. Breathing remains relaxed until another encouragement (similar to stress) changes it. Everything is controlled from the reverse of your head. Another illustration of subconscious work is sensitive information. Hundreds of megabytes of information per alternate deluge the brain. He will explode if he has to check everything and deal with it. This is why you have an intermediate hedge, the subconscious. Which takes care of everything and only transmits information that's presently applicable to you. The stylish comparison of the subconscious is the monkey mind. He does not get tired snappily, so he can run like crazy all day. And it can pass arbitrary information to the major corridor of the brain. Or it could make itself busy with achieving the pretensions and bringing the information that you need to succeed (openings). Ultramodern sundries of the subconscious were constructed by a notorious psychoanalyst named Sigmund Freud as part of his proposition of psychoanalysis. Freud and his followers believed that our personality and geste depended monstrously on our subconscious. Our subconscious isn't an unthinking autopilot that needs to be pacified by rationality, but a purposeful, active, and independent companion to geste. We all have an inner critic. Occasionally this voice can be really helpful and motivate you to achieve your pretensions.

For illustration, when reminding us that the food we eat may be unhealthy or that what we're trying to do maybe illogical. Still, this voice can do further detriment than good. This is especially true when entering the realm of inordinate injustice. This is known as negative tone-talk and can actually discourage us. The first step to employing the power of your subconscious mind is to get relieved of negative thoughts - beliefs.





Your fear frequently becomes a reality, especially when we're veritably emotional about it. This is why negative tone- talk can be so dangerous. Getting relieved of these negative studies or facing them as soon as possible is a veritably important step. There are stories of guardian angels who always follow you. When you say to yourself, "My life is terrible," you're establishing a terrible life. When you say my job is boring, you're writing down the boring effects. And if you say my body is unattractive', you write down your unattractive body. And it goes on and on because all those solicitations are full of strong feelings (sadness, disappointment, remorse, tone- abomination). This angel is your subconscious mind. The coming time you find yourself in an analogous situation, stop and say to yourself I will be fine "or" This will be better than I allowed. "Your subconscious mind will act according to the studies conveyed by desire. Under the influence of desire, the subconscious mind will do everything to gain the object of desire. It also opens all available channels so that the knowledge knows how to do it. By aligning your subconscious mind with the task corroborated by this strong emotion, you can see life's openings to guide you towards your thing. The athletes do not compromise on their practice because of their desire to be number one. They do not want anything different in life other than this. Eventually, our subconscious mind is like this sharp tool. Knowing how to use it rightly will help you overcome any problems and unwanted disturbances that arise.

-Vedant Khokrale, FYBSC C



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# INTO THE VINOD KULAL, SYBSC A

Hey Peeps, I am Vinod Kulal and I will be sharing with you the thrilling experience which I experienced in Tansa Wildlife Sanctuary while doing a Bird Survey. So we started off with an Online Meeting where Mr. Kedar Gore who was the Incharge of Rapid Biodiversity Assessment of Wildlife Parali Range, Tansa Sanctuary enlightened us about this survey and what we will be doing in this survey. After that, Mr. Daniel Miranda who is an MSc holder in Biodiversity Conservation gave us information on 'How to start with Bird watching' and 'What are the ethics and morals of Bird Watching'.





The main objective of this survey was to create awareness. Soon there would be a Dam constructed on Gargai River which would end up in cutting thousands of trees of the Deciduous Forest of Tansa. To avoid this, a survey was the only hope left. On 13 July 2021, we started our journey to Tansa WLS. We reached our rest point which was Suryamal by Evening. That area was full of amazing scenery. We settled down and started interacting with each other to enhance ourselves about each other which would make teamwork easier. We found some caterpillars and reptiles around our restroom. We had some good food made by the fellow villagers which was delicious and made with love. The next morning, we got ready to get through the 'Mysterious Jungle of Tansa'. Despite Rainy Weather, we proceeded with our survey. We were able to get some astonishing sightings. In Four Days of Survey, we were able to see 65 Species of Birds. From the Beautiful 'Greater Racket Tailed Drongo' to the elusive 'Jungle Owlet'. From the tiny 'Brown Capped Pygmy Woodpecker' to the Beautiful Singing Sensation 'Tickell's Blue Flycatcher'. We were also lucky to see 'Eurasian Sparrowhawk' which was a rarity for the area. Other Highlights included White-eyed Buzzard, Crested Treeswift, Indian Cuckoo, Rufous Woodpecker, White-naped Woodpecker, etc.







Along with birds, we were also looking for Butterflies, Dragonflies, Moths, Reptiles, etc.

We saw 38 species of Butterflies which included the massive gathering of Tiger and Crow Butterflies, 14 species of Moths and 7 species of Dragonflies, etc.

Kedar Sir provided us with some amazing information on them. Daniel, who was a senior in our team, helped us in the documentation of birds, helped us to identify Reptiles, and shared some of his valuable experience with us. Due to some reason, we had to return home but after a week or so we resumed our work and completed some more trails which were yet to be explored. After returning we got to meet a wonderful spider expert, Mr. Rajesh Sanap. Under his guidance, we were able to see the beautiful world of Spiders and obtained information about them. We recorded 31 species of Spiders during the survey. He also gave some insight into Macro Photography.

Because of this Survey, I personally got 15 lifers in Birds (Lifer here means birds which I have seen for the first time). I was also guided by the experts to career in pursue my Zoology. I also learned to document birds and make list of them in а а systematic manner.



It was like a boon to be with such experienced people who are giving their everything to conserve Wildlife.





It was an amazing experience to do some good work for Mother Nature. We should also try our best to conserve nature as Children of Mother Nature.

Just jump into the world of Wildlife and enjoy it to its fullest and if you think that the next generation should also enjoy this then come forward, take a step to conserve Wildlife.



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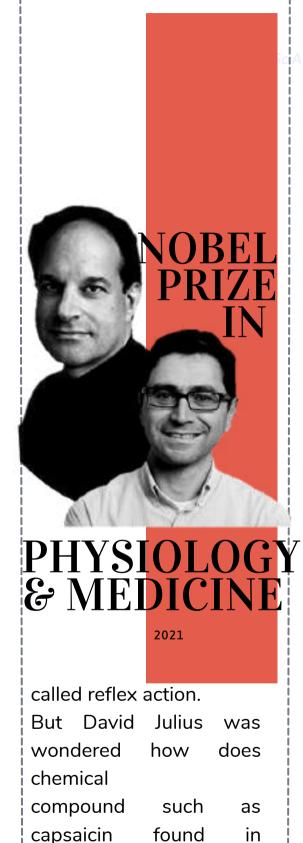
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This year the noble prize in physiology and medicine was awarded jointly to David Julius & Ardem Patapoutian for discoveries their of of receptors temperature and touch. We get to know the world by the sense of touch, smell, taste, sound, sight using our sensory organs. How brain does the recognize these signals from our sensory organs? This was a mystery which solved by our was Nobel laureates of the 2021 year.

Earlier scientists already discovered the sensory neurons which were responsible for passing the signal from sensory neuron to brain and then the motor neuron acts according to the stimuli which is



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produce a stimulus.

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Research summary: David Julius and his colleagues created а library of DNA fragments that were expressed in sensory neurons and were responsible for producing stimuli to heat, touch, and pain. They then introduced genes in cultured cells singly. The cultured cells did not show any reaction to capsicin. After a series of trials. a gene responsible for capsaicin sensitivity was found. The gene encoded a protein that regulates ion channel and produces stimuli. The newly found capsaicin receptor was named TRPV1 later This discovery of TRPV1 paved the way to further research of temperature sensing receptors.

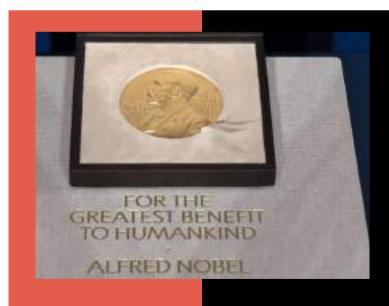






He along with Ardem Patapoutian found a receptor that was activated by cold using menthol. The cold receptor was TRPM8. The receptors TRPV1 AND TRPM8 explained how differences in temperatures can induce signals in the nervous system.

Further Patapoutian and his co-workers found a gene whose silencing led to stimuli of touch. They poked individual cells which produced electric signals. It was found that this mechanism works the same as TRPV1 and TRPM8 which uses ion channels to regulate and produce stimuli. The newly discovered mechanosensitive ion channel was named Peizo 1and Piezo 2 which was similar to Piezo 1. When mechanic force is applied the ion channel opens and produces an electric signal responsible for stimuli. Conclusion: The discoveries of TRPV1, TRPM8, Piezo channels helped to understand how impulses are generated due to stimuli of heat, cold, and touch.



Dec. 8, 2020 file photo of a Nobel Prize medal. The Nobel Prize in Medicine is due to be awarded on Monday Oct. 4, 2021. Credit: AP Photo/Jacquelyn Martin, File

-Subha, SYBSC B





### SUBCONSCIOUS AWARENESS -Subha, SYBSC B

What is awareness? Awareness is a process where information is spread to people via social media, speeches, rallies with a creative idea that makes it easy for people to understand easily and make them aware and think of the current situation. The process of awareness reaching the brain is a complex work. Our subconscious mind makes it easier for us.



When an awareness campaign takes place, people hear, see all the activities done by the activist, all the creative work is recorded in our subconscious mind, while we enjoy the session. Afterward the brain processes and creates awareness of the topic that people have seen or heard. Whenever a situation arrives of the topic of awareness conducted, one acts accordingly if he or she has attended the program. This reaction was only possible cause the subconscious mind has recorded the awareness program in the brain. It's important for us to attend awareness programs so that we can gain knowledge and sense the things happening around us and according to it. Awareness is the first step to change.





# PHOTO GALLERIA



**Plain Tiger** Vinod Shekhar Kulal, SYBSc A



**Leucauge argyra** Gaurav Sunil Kuma Patil , SYBSC A



**Garden snail** Siddhesh Kolambkar, SYBSC B





Henosepilachna vigintiopunctata Vedant Khokrale, SYBSC A

**Glassy tiger butterfly** Felix Sekar SYBSc A



**Common Baron** Vinod Shekhar Kulal, SYBSc A