

# NEEDS

## ISSUE

# TIME



$$\Delta t = \frac{\Delta t_0}{\sqrt{1 - \frac{v^2}{c^2}}}$$



from point a to point b.  
a mechanised motion to the next possible stop.



aesthetic version of time

loops and cycles  
walking always  
onward

|| vastness of it all, suddenness of it all ||

time  
won't  
fly it's  
like i'm paralysed  
by it



of in reverse

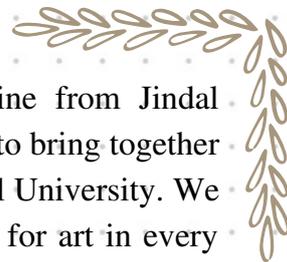
THERE IS NO  
SPACE BIG ENOUGH

time time  
time time time  
time  
so much so  
less so little so  
long  
longing want  
nostalgia and  
when mythical  
materialize

sometimes want to go  
back and change it all  
but it's would be today  
simply just a continuation  
of the moments of their  
life how do i decide to catch  
any of it

regret not savoring  
the moment more.

the  
assumption  
was that more  
moments like that were  
coming.



Needle is a biannual, student-run creative arts magazine from Jindal School of Liberal Arts and Humanities (JSLH) that seeks to bring together voices from all the different schools of O. P. Jindal Global University. We offer a unique platform that is rooted in a common love for art in every shape and form. We welcome contributions of poetry, short prose, art, photography, visual essays, or any other original creative work that exceeds our ordinary imagination. We release a new theme at the beginning of every new issue and consider all submissions that adhere to the theme and the submission guidelines.



**The Creative Arts Magazine of JGU**  
**From JSLH**

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*(1st*

*November,*

*2021)*

*growth*

*noticed*

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I recently re-entered a phase of playing, in an endless loop, Taylor Swift songs I used to listen to in my early teens. A practice I abandoned in my early years of high school, it later assumed the form of a dreamy memory that I could look back on, with heavy undertones of nostalgia. Years spent playing these songs were times I'd desperately try to make sense of the way friendships, popularity and obedience worked. Now, their re-exploration is inevitably triggered by the music of that moment, and the previously random interpretations coalesce into clearer, more logical ones. The music acts as a portal, allowing accessibility of times otherwise irretrievable. It, also, grants me the ability to grow increasingly aware of the growth I've undergone since the age of 13, and with it, the rapid change in the space around me.

Nostalgia and the realizations resulting therefrom are just two of various interpretations of Time that Needle's first issue attempts to examine. Created for the purpose of gathering ideas and experiences, the magazine's introductory issue is a collection of works that explore time through science, love, continuity, and loss.

**Ira Sinha, Co-founding Editor**

EDIT  
LET



# TIME'S



# BREATH

BECAUSE WHAT  
IS A LIFETIME  
IF NOT A  
BREATH OF  
TIME IN THE  
COSMIC  
UNIVERSE?

**KOPAL ARORA**

**M**y feet are fixated on the ground. I am standing, at the centre and the world around me continues to spin. My legs feel more numb than yesterday, my shoulders hang a smidge lower, my arms feel heavier across my ribs and my knees creak a little more. The stars in my eyes sparkle less and my smile grows a millimetre shorter. But the world around me is younger than it was before. Its pace is quicker, the words flow faster, and the sky feels taller. There seem to be new avenues everywhere. Life runs past the imagination of what's beyond naked vision. There are the lush trees of spring, with the enthusiastic chirping of the birds. The star touching buildings next to the ones reaching beyond. There is the song of the living with the melody of nature. But with each passing second, my lungs are starting to feel full with the breath I have been holding. The heaviness is settling on my chest with another glaring realisation. The world is running at the same speed as it was yesterday, but my time has paced itself. My vision is duller for the world which was once enough, my ears are deaf to the continuing song, my heart is beating slower than the new world's rhythm. As I inch closer to the oxygen in my organs running out, the memories of my breath's youth surround me. The realisation is driven home, that the world continued on its pace but my step, my time started to falter. With the last iota of my held breath escaping me, I collapse on my feet in the centre of the world, laying lifeless on the ground. I take with me the memories of many worlds with different times, fit in just one. Only the next second I take another breath and stand fixated on my feet. The world around remains the same, spinning around me, now just my pace is quicker to keep my step up with it.

Because what is a lifetime if not a breath of time in the cosmic universe?



# A TAPE OF MEMORIES



As she lay there, practically motionless, except for the faint movement of her chest rising up and down, her lips tilted up in a slight smile. Her body was on the verge of giving up on her, but her mind wasn't yet ready. It was as though her life had turned into a long tape of a film – one that kept flashing and changing the scene, and eventually settling down with one precious memory. Her eyes shut for what felt like a fraction of a second, and soon enough she was in a different world altogether.

Her modestly small house looked so much grander than it really was on this day. Never before, be it any occasion, had they put in so much effort into decorating their house. It was her wedding day, perhaps that's why her father was so keen making a show out of it. There she could see him, in the centre of the room, sitting behind her with a proud smile donning his face and teary eyes accompanying the wide smile. A small purdah divided the miniscule room into two sections. She still vividly remembered every detail of the room. She glided across the cold, tiled floor, a sensation that brought back a flood of memories with it. Resting her eyes on the light-green purdah that was just opaque enough to tease the two lovers, she let a small giggle escape her lips. Lightly running her fingers across it, she gazed down at a slender woman dressed in a beautiful dark-green Anarkali that

hugged her in all the right places while she watched the dark-brown mehendi on her hands dry. How perfect everything looked, she thought while looking down and marveling at the woman she once was.

As her eyes turned towards the shiny decorations that embellished her otherwise-unadorned house, she thought to herself - why did this day suddenly feel so different? Was it because she could finally gaze at it with a more mature sight? All of a sudden, the fear, anxiety and nervousness of the day vanished. At last, she could experience the day as it was, without the distress that haunted her in the days leading up to the wedding. But, before she could push herself further, the scene suddenly changed to a more heart-rending one.

She could see her 24-year-old self, holding a tiny figure in her arms. She'd always dreamed of this day, wondering how holding her tiny baby in her arms would feel. However, this day surpassed all the expectations she ever held. As the doctor stood before her young self, explaining to her the consequences of a heart-disease in a day-old baby, her mind only rushed to one question – why bring him in my life at all? If he was to be taken away so early, why did She allow her to get attached to him after all?

Even now, her ghostly figure ached to touch him one last time. Yet again, before her pale hands could touch his white and bloodless skin, the stage shifted. But this time to a relatively happy scene.

Her eyes followed her 30-year-old figure. She could distinctly recall this very specific moment. The last six years had been spent in agony. She still couldn't decipher why her body had given up on her. Why her body refused to hold in a child. But now, as her illusory shape walked closer to the adoption home, she realised that time and destiny were leading her to this very moment. To the time when she finally met her baby girl. The girl she would go on to cherish for the rest of her life. As tears brimmed, both her spectral and her earthly figure, she took in the scene in front of her. She would only realise the significance and the sea of emotions that this moment held much later on in her life.

As the stage in front of her kept changing to the different scenes of her life, she was finally brought back to the present – or what felt like the present. They say that your life flashes in front of you when you edge closer to death.

But this certainly did not feel like death. At least not the concept of death that she'd been made to understand over the years. She soon came to realize that her time on earth was truly over, but her journey wasn't yet complete. Maybe she was just starting to experience life, as it was truly supposed to be experienced. All she could wish for, in her 'last few moments', was a hope that she could hold onto these memories – forever.

Soura Bikash Pal

# TIME nslaved.

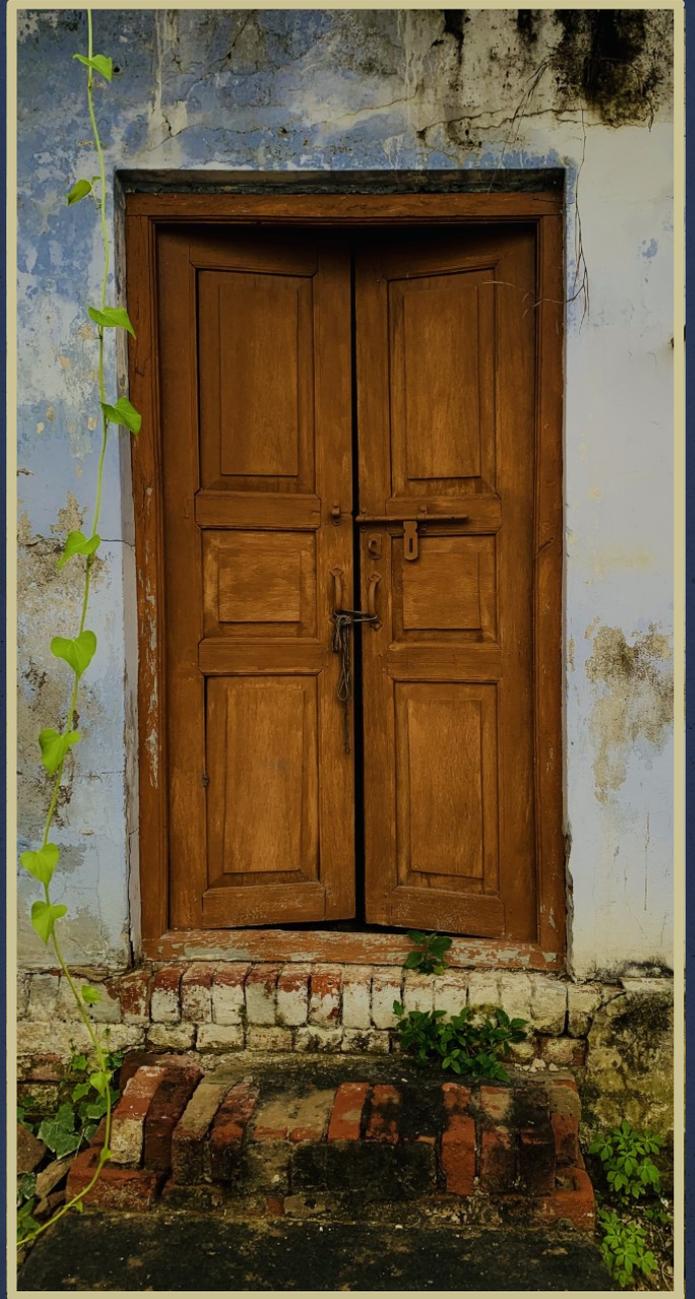


HELPLESSNESS

DECODING

# AN ODE TO HOME

Anjali Tripathi







of the innocent Blood of the innocent  
od of the innocent Blood of the in  
he innocent Blood of the innocent



Jagnoor Singh

od of the innocent Blood of the in  
the innocent Blood of the innocent  
Blood of the innocent Blood of

# NEEDLE'S PLAYLIST

Junk, [Paul McCartney](#)

Yellow Submarine, [The Beatles](#)

Start Me Up, [The Rolling Stones](#)

Fields Of Gold, [Sting](#)

Time, [Pink Floyd](#)

Radio Ga Ga, [Queen](#)

Dreamer, [Ozzy Osbourne](#)

Bitter Taste, [Billy Idol](#)

Forever ... (Is a Long Time), [Halsey](#)

The Man Who Sold The World, [David Bowie](#)

These Are The Days Of Our Lives, [Queen](#)

Willow, [Taylor Swift](#)

Ribs, [Lorde](#)

Comfortably Numb, [Pink Floyd](#)

Goodbye Yellow Brick Road, [Elton John](#)

Back In '64, [The Rutles](#)

'39, [Queen](#)

Yesterday, [The Beatles](#)

Secrets from a Girl (Who's Seen it All), [Lorde](#)

Our Last Summer, [ABBA](#)

Vienna, [Billy Joel](#)





Young And Beautiful, [Lana Del Rey](#)

Time in a Bottle, [Jim Croce](#)

Time, [Hans Zimmer](#) (from Inception)

The Times They Are A-Changin', [Bob Dylan](#)

Landslide, [Fleetwood Mac](#)

Back In Time, [Huey Lewis & The News](#)

Hurt, [Johnny Cash](#)

Lost In Yesterday, [Tame Impala](#)

Time Passes Slowly, [Bob Dylan](#)

If It Wasn't For The Nights, [ABBA](#)

One Day At A Time, [Sam Smith](#)

Dog Days Are Over, [Florence + The Machine](#)

12:51, [The Strokes](#)

Le Temps de L'amour, [Françoise Hardy](#)

When The World Was At War We Kept Dancing,  
[Lana Del Rey](#)

Feels Like We Only Go Backwards, [Tame Impala](#)

The Path, [Lorde](#)

505, [Arctic Monkeys](#)

Autumn Leaves, [Leslie Odom Jr.](#)



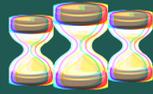
# JUMP, FREEZE!

Mohammed Anas Islam Khan

# The Wait



Manya Kumar



# DOES TIME FLOW?

## Views of Physics

Sudip Patra

Time seems to be as natural as breathing. But it seems, through the deeper understanding of science and philosophy, that perhaps nothing is that 'natural'. Time need not even exist, but may only be an illusion of the mind. If we consider the most basic Newtonian (or more correctly Hamiltonian) equations of motions, or dynamical 'laws' which evolve deterministically in a predefined 'phase space' then we are in a perfect position to challenge the 'poetic' vision of time flowing like a smooth river. Most of such basic equations of motions, which seem to describe every day classical world, are inherently time symmetric, which means they would just be equally applicable in 'reverse' order of time, so where does this vision of the flow of time generate from?

There is always a profound difference between appearance and reality. Science

began its journey, say roughly when Galileo turned his 'legendary' telescope to the heavens to see the gods but, in the process, found only the unfolding drama of inert planets and space. Newton, standing on the shoulders of the giants, dived deep into abstract logical reasoning to 'discover' (or should we say invent?) that space-time might be a vast, passive stage on which nearly an infinitude of drama of cosmic life unfolds, as if Shakespeare were observing entries and exits of ephemeral role players, at the backdrop of the palpable permanent passive space and time. Hamilton, another mathematical prodigy, further concretized the Newtonian world view with the vision of phase space. If, say, any immortal and infinitely wise god or demon (La Place's demon), set all the dimensions which are to be there in the fixed space and time platform, and then track every atom of existence on absolutely

deterministic trajectories, then the vast evolutionary story of life could be fully predictable. No need for speculations. No scope of pondering: to be or not to be? Any sort of pondering might only emerge due to our 'ignorance'.

Now one can easily see that in this 'fixed phase space' cosmos view, time is passive and physically does not 'mess' with living itself, just measures the decay of life from outside. However, this passivity of space and time view underwent much transformation, as the legend goes, when a young, unknown man at a Patent office in Berlin, stubbornly against 'establishment views', wrote, and with good difficulties published a few papers in 1905 – his name, Albert Einstein. Particularly his paper, *The Moving Bodies of Electrodynamics*, exploring the apparent mismatch between Newtonian dynamics and Maxwellian classical electromagnetism, introduced the novel vision of relativity of space-time. Since then, the explosion in the fields of special and general relativity has in some ways ingrained the idea in popular imagination that space-time is some sort of 'soup', 3 spatial and one temporal dimension are actually a 4 D space-time (more technically Minkowskian space-time for example) with some symmetry between them.

Wonderful visions of time travel were suddenly abound (though visionary

writers like H.G. Wells and scientists like Acharya Jagadish Bose in India, had similar conceptions). Various mathematical solutions of gravitational field equations generated 'interpretations and imaginations' of black holes and wormholes. Time travel, and the stopping of time altogether near the black hole 'singularity' – which were all brain children of general relativity-caught the minds of creative writers and film makers alike. Shakespeare would have been quite amused to see how his gigantic passive space and time platform was now interacting actively with role players themselves.

However, time seems to have hidden cards up her sleeves. Another revolution in scientific panorama erupted during 1920s; quantum mechanics. The ideas of quantum physics, the surprisingly strange world of 'microcosm' or atoms, was already germinating since 1900's with Planck and, later, Einstein proposing models based on 'discrete' or 'quanta' nature of energy emission, transmission and absorption. It was under the legendary leadership of the Danish genius Neils Bohr that the stupendous and surprising atomic world started surfacing. The so called Copenhagen school of quantum science and philosophy emerged: Werner Heisenberg, Erwin Schrödinger, Pascal Jordan, Max Born, Paul Dirac, and W Pauli being their major icons. Certainly

there were conflicts of world views among them. Heisenberg thought in terms of observables and relations between physically measurable quantities only, whereas Schrödinger introduced the near 'mythical' wave function concept. Since then quantum physics has been an enigma – on the one hand unmatched in the success of prediction, and usability in all kinds of industries (nuclear weapons to smart gadgets), and on the other hand its 'mysticism' (most often misplaced). So much so that Richard Feynman, one of its greatest scholars, mused in frustration: nobody understands quantum mechanics!

Time according to quantum mechanics is mysterious and it is still a work in progress. Carlo Rovelli, a poet, philosopher and one of the most noted quantum-gravity experts explores some of the exciting ideas about quantum space-time in his books: the order of time, or Helgoland more recently. Space-time they might be granular or quantized at the smallest scales: often termed as the Planck scale. Hence, our age old beliefs, stories, and divine classical music constructions based on continuity of space and time have faced deep challenges, first from relativity and then from quantum revolutions.

More so from quantum, since the suggestion that the world is inherently uncertain (ontological uncertainty rather

than innocent ignorance uncertainty), non-local (where the concept of locality holds that there should not be action or correlation at a distance, some time must elapse for any action to be felt. and contextual (that even in 'natural' science experimental outcomes are guided by contexts only). Such blows to Greek symmetrical space and time views forced Einstein to exclaim, "I am at all events convinced that He does not play dice."

Going back to our basic question – where does the order in time emerge – our possible hint derives itself from the second law of Thermodynamics. As in, why do we remember the past and not the future? The 'law' states 'entropy' or 'disorder' always increase. This is an inequality rather than equality which is the essence of most of the fundamental equations. Does this inequality generate the order in time? For critical minds we can refer to Roger Penrose's *The Road to Reality* or *Cycles of Time. Cosmology* (Big Bang cosmology) has in its heart a serious problem called past hypothesis, which states that the universe seems to have started off in a phase with a very low degree of entropy. This is still open, calling for fresh works.

### **Further discussion**

I would like to conclude – or rather open up for discussions – by observing the

deep impacts of physics on social science theories or more particularly what might become of thinking about time in social science theories.

When Leon Walrus came up with his systems of equations view of general equilibrium in economy, one can imagine Newton or Hamilton or La Place smiling silently. Certainly the general equilibrium view became a huge enterprise over time in economics, with the rise of neoclassicals and with the seminal works of Ken Arrow and Debrue, alongside mathematical economics of Paul Samuelson, for example. Indeed Adam Smith would be very surprised to see what has become of his rather innocent ‘invisible hand’ proposition in *The Wealth of Nations*. But has this general equilibrium view not tried to freeze the concept of history and time in economic analysis?

Hence in the response to the ahistorical approach of general equilibrium theory, ‘path dependency’ arose. The whole literature of ‘complex adaptive’ systems is a response to the fixed phase space view which influenced neoclassicals so deeply. Path dependence theory is based on the so called path integral formulation of quantum mechanics, as championed by Dirac and Feynman. More recently, there has been a surprising rise in quantum-like paradigm in decision science (CEASP, JSJP for example). We hold that re

Alices and Bobs are not classical but quantum-like agents. We do not know if quantum physics really constructs human brain, but at least revealed behaviors are better described by quantum-like formulation of mental states.

I would like to end with the Zeno’s paradox. Zeno in ancient Greece challenged Pythagorean constructs of space, time and motion. If someone could, in principle, monitor a flying arrow every moment in time, it would appear to be frozen, or, rather, it would stop – Just by observation you may stop the flow of time!

Modern quantum revolution has an off shoot called: Quantum Zeno Effect. If continuous measurements are made on an initial quantum state, then in the limit it would freeze, and not evolve. There have been numerous experiments with overall positive results. Can the mind, which is more quantum-like, use a version of Zeno effect to freeze the brain?

#### General references

1. Penrose, Roger (2005), *the road to reality*, Vintage.
2. Rovelli, Carlo, (2017), *the order of time*, penguin.
3. Rovelli, Carlo, (2020), *Helgoland*, River side books.
4. Various conference proceedings of Santa Fe institute.
5. CEASP, JSJP.

# GROWTH



Tanisha Lamichhane

Ritika Modi



**I'VE BEEN BEEN CIRCLING**

# Apprehensions at Dusk



Aishwarya Iyer

# STALEMATE

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Ananyaa Murthy

# The Yearning to Freeze



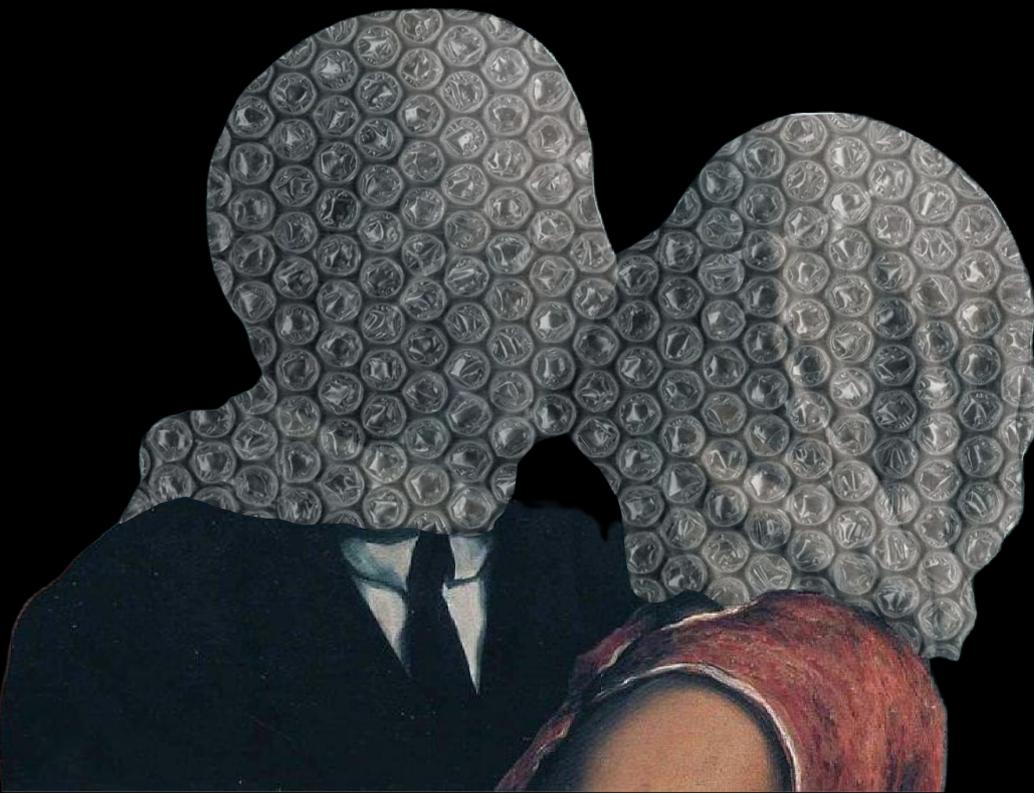
a Moment of Contentment

Avril Dias

# STILL AND BREATHELESS

Priyal Kothari

Standing still amidst the sky  
Where time stands still.  
Togetherness of your belongings  
Conceptualizing you and your fun.  
Your undivided attention pondering over  
Has my whole world consumed in you.  
The memories are casketing  
In cemeteries of the past  
Heart still wrenching to breathe with you  
But still kept where it was left.  
Breathless in the world of happenings,  
Unaware of the time which has just stilled.  
Delving deep into your eyes and looking beyond  
Falling and diving a little more every day.  
Time has passed with stillness and no breathless counts  
As if you have stopped the clock and the heart.



# ACKNOWLEDGEMENTS

The past few months with Needle have flown by only to remind us of why we chose the current theme — the constant fleeting nature of time despite its eternal presence. These months have been absolutely frantic — what with brainstorming, coordinating, planning, disagreeing, and ultimately, developing what we are proud to call the first edition of the Needle Magazine.

These efforts have been immense, and we would like to thank everyone for the same. We would be remiss in our duties if we did not begin by thanking Professor Maaz Bin Bilal of the Jindal School of Liberal Arts and Humanities. Professor Maaz has been with us from the inception of the idea until the publication of the piece and seen it through despite his schedule.

We thank every contributor for choosing to trust us with their ideas — regardless of whether or not they bore fruit in terms of publication. We thank them for their promptness and correspondence throughout the duration of our curation.

We hope you find as much joy in these snippets as we did.



## *Contributors*

Prof. Aishwarya Iyer, JGLS  
Anjali Tripathi, JGLS  
Avril Dias, JSLH  
Jagnoor Singh, JGLS  
Kopal Arora, JGLS  
Manya Kumar, JSLH  
Mohammed Anas Islam Khan, JSES  
Priyal Kothari, JGLS  
Ritika Modi, JSLH  
Soura Bikash Pal, JSIA  
Srishti Kumar, JSLH  
Prof. Sudip Patra, JSGP CEASP  
Tanisha Lamichhane, JSLH

## *Editorial Team*

Ananyaa Murthy, JGLS  
Ira Sinha, JSLH  
Kamya Vishwanath, JGLS  
Oishika Sen, JSLH  
Ruhi Nadkarni, JSLH  
Sriyanshi Bhatt, JGLS  
Varun Issarani, JSLH

## *Faculty Advisor*

Prof. Maaz Bin Bilal, JSLH

