



Dutt Laboratory

Newsletter – January 2015

“Arise, Awake and Stop Not Till
The Goal is Reached...”

From mentor...

A recent report by Tomasetti and Vogelstein has attempted to bring to the forefront good scientific evidence to back the stark reality that we have had to deal with every single time a cancer patient asks us the damning question – “Doctor, why me?!” – a question which is met with the usual retort of, “I honestly don’t know”. However, the fundamental question that eludes us is “what triggers off these changes”? Tomasetti and Vogelstein’s report on 22 out of 31 cancers indicates that the trigger is a random event and may just be due to plain old ‘Bad luck’. They did note the role of specific etiological factors in 9 cancers to which clear associations could be derived.

Most cancers are curable when detected at early stages. Focusing on the 22 cancers with random development brings forth a concerning thought – how do we prevent or detect cancers early in the course if we don’t even know why they developed in the first place! Screening has been a tool employed to detect cancers, when they are asymptomatic (and thus hopefully in an early stage) in apparently healthy subjects. The whole process is labour intensive and thus is justifiable only in populations where the incidence of the disease is abnormally high. If the randomness in cancer development is true, then it certainly make us rethink the benefit of screening for all cancers, except for those cancers in areas of high disease prevalence. If we accept this in totality, then theoretically, providing patients any form of therapy (chemotherapy or radiotherapy) other than surgery (that would involve extirpation of the entire tumour), would be a worthless exercise. But the reality is that while surgery remains the mainstay of cancer treatment in, at least, solid organ cancers, not all patients present when their tumours are amenable to complete resection!

Shedding these nihilistic garb and looking at cancer management in a more positive light, there have been considerable improvements in cancer survival and not merely because these cancers have been detected at earlier stages but because of improvements in surgical technique, chemotherapy radiation therapy and targeted therapy. And while it may be true that we may not have every answer to every cancer-related question, such as “why do cancers develop?” or “why don’t all patients with stage 1 cancers get cured by surgery alone” or “why is that some patients with stage 4 cancers live to 5 years while the majority do not make it past the second year from diagnosis”, we do know that well done surgery adhering to oncologic principles and providing adjuvant therapy (chemo- and / or radio-therapy), when indicated, certainly do help to provide good outcomes. As for the cancer researcher, just because we do not have the answers today, certainly does not mean that the answers do not exist. Maybe, the words of Albert Einstein, “If you can’t explain it simply, you don’t understand it well enough” need to be better appreciated in spirit and pursuit— and I wish such deeds may mark and guide our temperament right from the beginning of this New Year 2015.

With best wishes to one and all...!

Good bye to Dr. Jyotirmoi and Dr. Hemant



Creativity corner...!!!

It Happened

I rushed to the place where it happens.
I quickly finished what I was to do.
I went to my usual spot and lowered myself on the table.
Then the wait began.
The first five minutes passed by quickly.
Or what I thought were five minutes.
Then I started humming a tune, but my mind was on
whether it would happen.

I rhythmically tapped the table next to me as I sang.
No one could hear me here.
What would I do if it didn't happen?
What would I change?
I wished I had carried my music player.
It would relieve my anxiety.
I was impatient now.
And tensed.
Sweat droplets lined my forehead.
But my hands were cold.

I thought about the last time it didn't happen.
I hate that feeling.
I had to find out.
I had to find out now.
It must be fifteen minutes no?
Yes it must be.

So then I developed my western blot.
And it finally happened. :)

By Vidya Sethunath

PROFILE READING



Mukul Godbole

PhD student

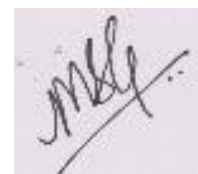
Dr. Amit Dutt laboratory

Life of a researcher is about expectations and outcome. To stay in tune with the world, both of these are essential. But it's not always that we succeed. There are times when our experiments fail and there are times when all steps are followed correctly still we do not get what we expect. These are the times when mind gets low...frustrated...lost! I am no exception to this phase. Renowned poet **Javed Akhtar** says:

Jab jab dard ka baadal chaya, jab ghum ka sayya lehraya
jab aansoo palkon tak aya, jab yeh tanha dil ghabraya
Humne dil ko yeh samjhaya, Dil aakhir tu kyun rota hai
Duniya mein yunhi hota hai
Yeh jo gehre sannate hain, waqt ne sabko hi baante hain
Thoda ghum hai sabka qissa, Thodi dhoop hai sabka hissa
Aankh teri bekaar hi nam hai, Har pal de naya mausam hai
Kyun tu aise pal khota hai, Dil aakhir tu kyun rota hai

When such situations arise, every mind starts searching for hope...strength...calmness. Everyone have their own way to combat this situation. A hobby or a talk with a friend serves as the best medicine! Over the years, the Tabla has played the role of both, a close friend and a hobby to help me combat such situations! Early lessons with the Tabla have helped me understand the beauty of music. Tabla has taught me the necessity of Riyaz (persistence in trying), discipline, patience and strength. For a perfect piece of music, all of these are required. I always will regret that I could not learn more about Tabla. But then I enjoy playing Tabla and love the amalgamation with other musical instruments that I had the honour of playing with! With the everyday life, taking out time for playing Tabla becomes difficult! But then, just listening to music (of any kind) has helped me gain the energy that had depleted in me! This does not mean that every time I listen music or play Tabla that I'm frustrated!! Most of the times I just take pleasure of the rhythm that various instruments create in a song!

Doing an experiment in the lab is like playing Tabla! Unless the mind is calm and patient, the right beats do not come! Every day I try to make the perfect piece of music in my work! In the end, I would say, that a hobby in life is essential. You start a particular thing as a hobby but as time passes it becomes an integral part of life! The association with hobby gives a hope that a low situation is not the end of everything!



Out of the box

Swami Vivekananda and Making modern India



Narendranath Vishwanath Datta

Birth: 12th January 1863 (Calcutta, Bengal Presidency, British India)

Death: 4th July 1902 (Belur Math, Bengal Presidency, British India)

Founder: Belur Math, Ramakrishna Math and Ramakrishna Mission

In several ways, the life and work of Swami Vivekananda (1863-1902) mark the historical process of India rediscovering herself in modern times. As the nation celebrates the 152nd birth anniversary of the Swami, it is only apt that we critically reflect on his life and legacy. Generally speaking, his contribution to India and to the larger world may be summed up in **4** ways.

First, in modern India, it was Vivekananda who first emphasized that our everyday lives would become more meaningful only when spiritualized. For Vivekananda, this spiritual self-realization led to people more fully realizing their own potentialities. Especially in the context of a colonized society like that of 19th century India, this was tantamount to men and women locating greater self-belief in themselves.

Second, even though the Swami rejected political praxis and West inspired social and religious reforms, his essential message was the empowerment of the people: through education, collective thought and action but above all, realizing the underlying unity of all human existence. In the Hindu tradition, ascetic detachment from the world had been criticized even before Vivekananda but it was he who first actively joined the idea of individual renunciation to committed social service. He gave new meaning to institution of sanyas.

Third, there is the love that Vivekananda consistently exhibited for the socially marginalized and oppressed. He could be equally at home in poor homes and princely quarters, be sumptuously hosted by the rich and the powerful and also share the coarse chapatti of a scavenger or share the hookah with a cobbler. It is he, who even before Gandhi, reinvented and effectively used the older religious idiom of God especially residing in the lowly and the poor (daridranarayan).

Fourth, it was the Swami's consistent desire to bring back India's pride of place in the assembly of nations, as a civilization which, notwithstanding momentous historical changes, had yet retained subterranean threads of commonness and unity. As he saw it, mutual kindness and compassion between man and man was more important than that coming from a distant God.

Swami pinned his faith in individuals, not institutions and hence chose a path that was silent, indirect, organic. One can only hope that the more enduring aspects of his life and work continue to inspire us in the days to come.

Happy Makar Sankranti and Pongal



Created by Reshma Patil