THE CAMPUS CHRONICLES

THE ECHOES OF OUR JOURNEY





THE CAMPUS CHRONICLES















FROM THE ADVISORS'S DESK

பலசொல்லக் காமுறுவர் மன்றமா சற்ற சிலசொல்லல் தேற்றா தவர்

They will desire to utter many words, who do not know how to speak a few faultless ones.

The long-cherished dream, to start our own Newsletter -"Campus Chronicles"-is a welcome move to establish a veritable collection of information about our esteemed Campus. This periodic publication shall enhance the frontiers of MMC and is an essential part of our growth curve.

I am indeed honored to be part of the Editorial Board, as Chief Advisor, and glad about my involvement in the preparation, publication, and release. At this juncture, I thank the Dean MMC, Editor - in – Chief, and the editorial team, who have strived hard to ensure that this new endeavor succeeded and was transformed from an idea into reality. I personally witnessed team "Campus Chronicles" put in long hours sourcing, collecting, editing, correcting information, and meticulously working to create the "Campus Chronicles" to its present state. It is a good platform to start with and can be modified to suit our future needs.

I wish to quote Sir Isaac Newton here.

"I HAVE SEEN FURTHER THAN OTHERS, IT IS BY STANDING UPON THE SHOULDER OF GIANTS"

"We dwarves see more and farther than our predecessors, not because we have keener vision or greater height, but because we are lifted up and borne aloft on their gigantic stature."

Every one of us has seen and will continue to see further, riding on the shoulders of our Giant Teachers. I personally feel our "Campus Chronicles" is a dedication to all our Teachers as a mark of our love, admiration, gratitude, and respect, we have for them.

Thanks and Regards

Prof. Raghavendran R

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IMPLEMENTATION OF ENTRUSTABLE PROFESSIONAL ACTIVITIES FOR

PATHOLOGY POSTGRADUATE TRAINEES

Institute of Pathology, Madras Medical College, Chennai.

When was the last time we confidently allowed a postgraduate to perform a task independently, without feeling the need to step in and crosscheck it?

Are we training our postgraduate residents to perform a task independently?

These questions made us work on the development and implementation of Entrustable Professional Activities [EPAs] for the postgraduate residents in Pathology at Institute of Pathology, Madras Medical College, Chennai.

Introduction:

EPAs are units of professional practice that can be fully entrusted to the trainee as soon as he/she demonstrates necessary competence to execute the activity unsupervised. It helps in the operationalization of competencies. It aids in recognising learner's progression from novice toward mastery. They are derived from core tasks taken directly from the day-to-day responsibilities of a practicing

pathologist.EPAs offer a structured path by creating a sense of ownership among the PGs for their own learning.

What was done?

We prepared a list of 80 EPAs in alignment with the programme outcomes and competencies laid down by the National Medical Commission. This was circulated among 20 senior Professors and they were asked to shortlist based on how important they consider that activity for a resident to be able to perform during the training.

35 EPAs were shortlisted as Mandatory. Validation of these 35 EPAs were done using the EQual rubric with 14 items. The shortlisted EPAs 200 being piloted among the postgraduate residents and the results are being collected, documented and analyzed.

It has made the facilitators to be more observant and articulate. The informal perceptions from the learners and faculty are very much encouraging.

National Newborn Week Celebration in ICH

The National Newborn Week is celebrated every year from 15th November to 21st November to re-affirm India's commitment to improve Newborn survival and to promote holistic child development.

It serves as a vital platform to strengthen care around birth, promote safe practices and advance evidence-based interventions for preterm and low-birth-weight babies..

The theme for the year 2025 is "Newborn safety, Every Touch, Every Time, Every baby.

The week's celebration was focused to enroute the awareness at all levels of care.

On the last day, the valedictory function was held. Felicitation of NICU graduates along with their parents who were true warriors who faced a lot of turmoil and successfully surviving as healthy infants.

All participants and winners of the Newborn Week were appreciated with a certificate by the Director of ICH.





Government Hospitals in Tamil Nadu: Transforming Child Healthcare

Government hospitals in Tamil Nadu - especially the Institute of Child Health and Hospital for Children (ICH) in Egmore, Chennai - have been at the forefront of performing complex surgeries for congenital (birth) defects in children.

Serving as the premier referral centre for pediatric care in Tamil Nadu, ICH surgical unit performs more than 300-400 surgeries annually and the referral comes from all over Tamilnadu and also from neighbouring states.

Under the Chief Minister's Comprehensive Health Insurance Scheme, these life-saving procedures are provided completely free of cost, ensuring that even families from underprivileged backgrounds can access world-class pediatric surgical treatment.

Specialized Surgeries for Congenital Defects

At ICH, **free and timely surgeries** are performed for a wide range of congenital anomalies, including:

- Tracheoesophageal Fistula (TEF) abnormal connection between the trachea (windpipe) and esophagus (food pipe)
- Hirschsprung's Disease absence of nerve cells in parts of the large intestine leading to intestinal obstruction
- Atresia blockage or absence of a part of the body, such as intestinal or esophageal atresia
- Pelvi-Ureteric Junction Obstruction (PUJO) blockage at the junction between the kidney and ureter
- Hydrocephalus accumulation of cerebrospinal fluid in the brain
- Neural Tube Defects (NTDs) malformations of the spinal cord or brain
- Congenital Diaphragmatic Hernia (CDH) defect in the diaphragm allowing abdominal organs into the chest cavity
 Early detection and surgical correction of these defects allow children to lead normal, healthy lives, while preventing organ damage or long-term health complications.

Patient Stories: Healing with Precision and Compassion

1. Tracheoesophageal Fistula (TEF)

Children born to mothers Dhanalakshmi, Gajalakshmi, and Shalia were diagnosed prenatally with TEF, where the trachea and esophagus failed to separate properly. Soon after birth, the babies exhibited frothy saliva and breathing difficulties.

Within the first 24 hours of life, surgeons at ICH performed emergency fistula repair and connected the esophagus. Despite being preterm and low-birth-weight infants (2–2.5 kg), they made full recoveries due to expert neonatal medical and surgical care.

2. Hirschsprung's Disease

Infants of Kamala and Subalakshmi did not pass **meconium** (first stool) within 24 hours of birth and presented later with **abdominal** distension and constipation. These patients presented at day 6 and day 20 of life with above symptoms.

At ICH, **contrast enema and rectal biopsy** confirmed Hirschsprung's disease - a condition where part of the intestine lacks nerve cells, preventing normal bowel movement.





Unlike conventional multi-stage surgery(Totally 3), ICH specialists performed a **single-stage pull-through surgery**, avoiding the need for a temporary colostomy and reducing post-operative complications.

3. Pelvi-Ureteric Junction Obstruction (PUJO)

Babies of Bhuvaneshwari and Gayathri were diagnosed during prenatal scans with **hydronephrosis** (swelling of the kidneys) due to PUJO. Although initially monitored, the infants later developed **abdominal swelling and palpable lumps**.

Surgeons performed **pyeloplasty**, a reconstructive procedure to remove the blockage and restore urine flow from the kidney to the ureter. Early intervention prevented **progressive kidney damage**, ensuring full recovery and normal renal function.

A Lifeline for Children and Families

The Institute of Child Health, Egmore, stands as a beacon of hope - combining advanced pediatric surgical expertise with compassionate, government-supported healthcare. These surgeries are done under guidance of Professor C. Sankarabharathi (Pediatric surgeon) and Chief ananesthesiologist Professor Ebenazar .

By providing **timely**, **free**, and **high-quality surgical care**, ICH continues to save countless young lives and uphold Tamil Nadu's reputation as a leader in public healthcare.

INFOGRAPHICS

INSTITUTIONAL INSIGHTS

REGIONAL INSTITUTE OF OPHTHALMOLOGY

- 1. World sight day 2025 awareness talk and students' interaction at Bentinck Hr Sec School, Purasaiwalkam by Chief Dr V Savithri
- 2.A guest lecture on "Research logistics deliberation" by Professor Dr. Vanathi, editor of Indian Journal of Ophthalmology was held on 06/10/2025
- World sight day talk, Vision screening & Student interaction @ St Antony's Hr sec school, Pudupet





HEPATOLOGY

Dr. Rajat Pande, Hepatology postgraduate secured first prize in oral paper presentation at the Indian Liver Society National Conference, Chandigarh and second prize in oral paper presentation at AIG conference in Hyderabad



DIABETOLOGY

1.08.10.2025 - CME on Islet Cell and Pancreas Transplantation was held with Chief Guest: Dr.N.Gopalakrishnan.,MD.,DM (nephro), Member Secretary, TRANSTAN

ANESTHESIOLOGY

- 1.16.10.2025 As part of Anaesthesia Day 2025 celebrations, we organised a CPR Awareness Rally to promote life-saving skills and raise awareness about the importance of timely medical interventions. The event saw enthusiastic participation from students, faculty, and staff.
- 2. PG achievements STANLEY WORLD ANAESTHESIA DAY Conducted on : October 12 2025 : 2nd place in poster presentation: Dr. Tamizh Selvan
- 3.11.ANAES SURGE Conducted on: November 1 2025:1st place in Quiz: Dr.Tamizh Selvan





COMMUNITY MEDICINE

- 1. RAHAT- RurAl HealthcAre Transformation initiative codesign workshop, 07.10. 2025 and 08.10.2025 at New Delhi. Capacity building of medical students through trained staff, digitally enabled clinics-telemedicine platform, climate smart health facility recommendation, improved quality and completeness of AN care.
- $2. Family\ Adoption\ Program\ Visit\ for\ Undergraduates,\ 01.11.2025$

INFOGRAPHICS

INSTITUTIONAL INSIGHTS

THORACIC MEDICINE

- 1.18.06.2025 CME with academic session on "Pulmonary Function Tests Beyond Spirometry", delivered by Dr. K. Thiruppathi, Senior Consultant Pulmonologist, SIMS Hospital, Vadapalani. The event was moderated by Prof. Dr. D. Ranganathan, Former Director of ITM, and was followed by a superannuation felicitation for Dr.G.S Vijayachandar.
- 2.18.07.2025 CME on "How to Read ECG" by Dr. Ajitha V., DNB (Internal Medicine), Senior Consultant, CSI Kalyani Multispeciality Hospital, Chennai moderated by Prof. Dr. D. Nancy Glory from ITM.
- 3.22.08.2025 A workshop on Endobronchial Ultrasound (EBUS) was held under the patronage of Dr. Vinod Kumar (Director & HOD), with Dr. Nancy Glory T as the organizing chairperson and Dr. S. Sindhu Ramapriya as the scientific committee chairperson. The scientific committee included Dr. P. Rajendra Prasad, Dr. Deepak Arjun, and Dr. V. Senthil Kumar.
- 4.28.08.2025 AIRTN Chennai Crackles & Chronicles The Crackles & Chronicles - August 2025 academic meet organized by AIRTN Chennai in association with ITM. The session was graced by Chief Guest: Prof. Dr. D. Ranganathan and chaired by Prof. Dr. V. Vinod Kumar, Director of ITM.
- 5.25.09.2025 ITM conducted the Clinical Society Meeting combined with Crackles & Chronicles – September 2025, in collaboration with AIRTN Chennai with Chief Guest: Prof. Dr. C. Chandrasekar, President of APT and HOD of Respiratory Medicine, ACS Medical College. The session was chaired by Prof. Dr. V. Vinod Kumar, Director of ITM.





INSTITUTE OF CHILD HEALTH

ICH diabetes clinic organised the Diabetes day on November 2025. The event was marked by food expo under the theme 'healthy snacks for diabetics ' by our nutrition and Yoga and Naturopathy departments. There was a demo of yoga by students coordinated by Latha madam

The program was presided over by Prof. S. Mathivanan, director incharge and was attended by Dr Pooja from UNICEF and Mr Prashant mani and Dr Priya from type 1 diabetes foundation of Tamilnadu. The program was attended by around 40 T1D children along with their parents. Children with good glycemic control were presented with medals. The program was marked by cultural performance by children.

Lancets and stationary kits were given as compliment to participating children. The program ended with mass insulin administration by T1D children.





BIOCHEMISTRY

- 1. Dr. Srinivasan. J second year postgraduate has won 1st prize in eposter competition at CHET CRINOCON by Chettinad Hospital and Research Institute.
- VON GEYZEL MEDAL EXAM 29.09.2025
 Medal exam for 24 batch MBBS students was conducted. 58 students have participated. Adarsh chandramouli has won the medal.



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Campus Voice

MESSAGE TO THE FUTURE

Tackling Internal Medicine: The crux of MBBS with Dr.C.Hariharan, Director of Internal Medicine

The editorial team met our Director of Internal Medicine, Dr.C.Hariharan, as part of "Campus Voice" for an insightful conversation where, the Director shared his views on the approaches to internal medicine and provided the students with nothing short of a holy grail to follow in their postings.

When asked about how he realised Internal medicine was his one true calling, the Director reminisced about his first time entering a clinical ward.

"I had an interest created when I entered the clinical wards. Those days, we used to have four months of posting in medicine. The atmosphere, how to interact with the patients, how the classes were taught for us and how we were involved in all the activities made a difference. There was something called as sign a day, when I was in KMC where we used to at least learn one sign every day. Thus, I showed interest in medicine - always the backbone of all departments, the mother of all departments."

The Director also emphasised how the holistic approach to patients drew him in, and the discussions with the excellent faculty during grand rounds and case presentations bolstered his love towards internal medicine since 1985 – his first year of clinical postings.

"The interest came only because of the learner and the teachers of those days. Some of them were Dr.Jayanthi Ramarao or JRR, Professor G. Ananthasubramaniam, Dr. M. S. Ramachandran. They were the stalwarts of the period; we had the opportunity to attend their class even in first clinical postings."

The Director then talked about how some memories where still cemented in his mind – answering all the questions asked by his chief in grand rounds, presenting cases before a hundred people, these core events shaped him into the clinician he is today.

When asked about how different clinical years should approach studying and maximize the use they get from the wards, the Director gave everyone a fool proof plan to follow.

" Second year postings, I feel still are the important days – the Early clinical exposure "

In second year while still reading the basic science subjects like pathology it is crucial to use the time from 8.30 to 11.30 in the wards. The basic methodology of history taking and examination is a must learn in this period along with simple symptom analysis.

"I still say that collect one sign a day. I think that will be useful for you to learn medicine in second year."

In subsequent postings in third year, the key word the Director recommended is OBSERVATION.

"Just observe how the seniors or the residents see the patient, how they communicate to the patient, how they examine the patients, how they order investigations. First comes simple observation then application of knowledge"

Despite the hoards of resources in the current climate, patient communication remains the heart of medicine with bedside teaching being of prime importance.

He also recommended visiting patients is small groups in the evening hours and having fruitful interactions with peers. Of course, discussions with postgraduates, faculty and the chiefs remain paramount.

In final year a longitudinal approach is mandatory.

"Think about which drug the patient is getting. When you come to final year, you are going to read about every angle of the medicine, isn't it? So, you should ask why this drug for this patient? And read about therapeutics. You should also learn about lab investigations and the treatment. Whether the patient improves with treatment or not? And daily when you come to the ward, at least take up one or two cases per week, follow the case regularly. One simple case, another is maybe a complicated or sick case. A simple case, could be a coma also."

The Director also stressed the importance of avoiding a purely exam centric learning process. Exam cases are important but they may not necessarily be the simple problems you encounter in your daily clinic.

When asked about the differences in the MBBS curriculum from when he was a student, the Director pointed out that learning has now become more student centric with movement towards skill-based medicine and clinical judgement is key rather that rote memorization. However, the well established practise of pure faculty experience-based teaching was still useful and must never be neglected.

For postgraduate entrance exam preparations, the Director suggested covering basic subjects first to build a strong foundation since medicine after all is a coveted temple built upon the vestiges of pre and para clinical sciences.

Team CC departed with a forceful parting message from the Director.

"A confident clinician is the one who can shine better in the future. To inspire faith in the patients your level of confidence should be very high. That can happen only if you communicate with patients. And that can happen only during postings."

STUDENT INTERVIEW : AN OPEN TAKE ON THE FIRST YEAR UNIVERSITY EXAMINATION

University examinations can feel like an Olympic event you never signed up for. One minute you're happily existing, and the next you're printing a hall ticket that looks like it holds the fate of your entire year. From last-minute review book shopping (because your friend swears this one has "all the repeated questions"), to consulting question banks that contradict each other, to listening to unsolicited advice from seniors, cousins and neighbours.

And of course, packing all your stationery with military precision, only to discover at the exam hall that you somehow forgot the one pen you needed most.

So, in the midst of this chaos, we sat down with a bunch of students from the Batch of '24, fresh off their first university exams, battle-scarred but victorious. We asked them about their experience, and they did not hold back.

1. What aspect of college did you like more when compared to your schooling?

Flexibility was an aspect everyone felt resonated with them. Some felt it was a boon to be able to choose and learn and apply according to one's wish.

"I feel college gives me far more freedom than my school, there are not much stringent rules, uniforms and it offers a flexible schedule"

Some felt this flexibility was more of a bane with no one to impose restrictions and timeline,

"It was definitely different, no expectations from staff to excel, no one to personally look after me, it was liberating and definitely humbling"

2. What were your favourite subjects, the ones that felt like a walk in the park while preparing?

We got varied responses when asked. Physiology lovers said it all made sense.

"Physiology because understanding the human body in detail felt logical and directly connected to clinical medicine"

Anatomy they felt was like holding a mirror to their body

"Dealing with cadavers, observing the structures as soon as we learn in class made it very interesting"

Biochemistry enthusiasts apparently do exist.

- "Biochemistry because I have always taken an interest towards organic chemistry"
- 3. How were your practical exams? Did you find it challenging or excilarating?
- "Practical exams were surprisingly better than I imagined, but the challenging part was spontaneously answering during viva"

The viva voce experience continues to remain undefeated in horror value. One minute you're confident; the next, you forget your own name.

4. What advice would you give your juniors?

"Consistency, from day one even reading 2 pages per subject a day, because that is what I didn't do and I had lots of backlogs"

We got similar responses from everyone we interviewed and I'm sure everyone has felt the same.

It's one of the vicious cycles of academics.

Make a study plan - Buy highlighters- Forget plan
Pray for exam postponement
Some traditions never change.

5. Overall how would you rate your college experience? We got a solid 7.5/ 10. Some took home lessons of life.

"It was actually a great experience for me since I got to be the greatest decision maker of my life after coming to college. I got to know the weight and consequences of the decision I made."

Some felt it was a challenging ride with peer pressure being a double edged sword

"As a whole first year has been very challenging to be honest, as I took so long for me to manage getting oriented to the vastness of the subjects, weird new names your professors assume "your should've already heard about" and a whole lot of people who are very competitive"

Some found friendships for a lifetime

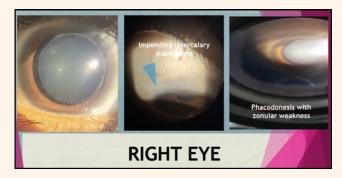
"If you find the right set of people nothing can stop you from having fun in college"

While the first year is sure to be a bit bumpy, it sure does set the pavement in which the rest of your college. No matter what the future holds, we are sure the memories (both good and bad) will stick with you long after the last exam bell rings.

And if nothing else, you'll always remember that one pen you forgot.

By NIVETHA V

A Lens on Genetics: The mystery of Traboulsi syndrome



Background

Traboulsi syndrome is an extremely rare autosomal recessive genetic disorder caused by mutations in the candidate gene ASPH, which encodes an enzyme aspartyl/asparaginyl beta-hydroxylase involved in the hydroxylation of the epidermal growth factor domain (EGFD). Characterized by facial dysmorphia, lens dislocation, anterior-segment abnormalities, spontaneous filtering blebs and occasional systemic manifestations, ASPH gene plays a crucial role in the development and maintenance of the lens. The prevalence is less than 1 in 1 million births, making it an extremely rare genetic disorder. As of recent reports, fewer than 30 cases have been documented globally. Diagnosis of Traboulsi syndrome is typically made clinically based on the characteristic ocular and facial features. Genetic testing is used to confirm the diagnosis and identify the specific ASPH gene mutation.

Case Presentation

A 33-year-old female presented with a two-month history of progressive painless swelling in the left eye which had remained stable for the last two weeks without redness. She reported sudden onset defective vision in the left eye for one month. She had worn corrective spectacles since the age of 12 and last updated her prescription one year ago. There was no history of ocular trauma, prior surgeries, systemic illness, or medication use. She is the only child born to non-consanguineous parents, has no family history of similar illness, is married in a non-consanguineous union, and has no children yet.

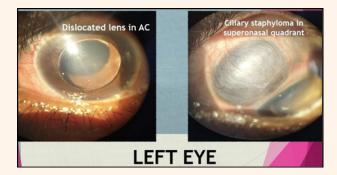
Salient General and Ocular Examination

Examination revealed short stature of height 124 cm, normal intellect, flat malar region, and beaked nose. Facial features and fingers were unremarkable. Ocular assessment showed no abnormal head posture or facial asymmetry. Visual acuity was 6/12 -15D sph NIP in the right eye and ½/60 NIG NIP in the left eye. Intraocular pressure was 15 mmHg in the right eye and 14 mmHg in the left. A-scan ultrasonography showed axial lengths of 25.64 mm (right) and 26.01 mm (left). Slit-lamp biomicroscopy revealed impending intercalary staphyloma in the right eye conjunctiva and superonasal ciliary staphyloma in the left eye. Corneas were clear bilaterally; anterior chamber depth was normal in both eyes. The pupillary reaction was brisk in the right eye and sluggish in the left. Lens examination showed phacodonesis with zonular weakness in the right eye and anterior chamber lens dislocation in the left.

Differential Diagnosis

Differential diagnoses considered were Weill-Marchesani syndrome, homocystinuria, a possible Marfan syndrome variant, and other systemic connective tissue disorders. These were based on the presence of short stature, facial dysmorphism, high myopia, lens instability, and scleral changes overlapping with features seen in heritable connective tissue and metabolic syndromes.

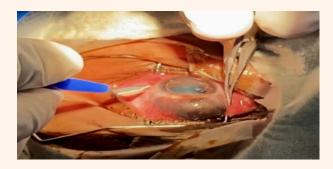
By: Varshitha KK and K Poojamalini, 3rd year MBBS, MMC



Investigations

Ophthalmic investigations included slit-lamp biomicroscopy, anterior segment optical coherence tomography, and ultrasound biomicroscopy which demonstrated lens dislocation, scleral staphylomas, and detailed anterior segment anatomy. Fundus examination of the right eye showed clear media, a cup-to-disc ratio of 0.4 with a myopic crescent, normal retinal vessels, fluid retention in the macula, normal peripheral retina, and a tessellated fundus appearance. The left eye fundus was not visible. B-scan ultrasonography confirmed clear vitreous cavities in both eyes with minimal globe elongation and no posterior staphyloma. Axial lengths measured 24.45 mm (right) and 25.04 mm (left). Cardiac echocardiography showed an ejection fraction of 60% with no structural abnormalities. Further rheumatology and pulmonology evaluations were

unremarkable, excluding systemic connective tissue or pulmonary involvement. Genetic testing via karyotyping identified a mutation in the ASPH gene, confirming the diagnosis of Traboulsi syndrome.



Management and Prognosis

Management focused on early lensectomy for lens subluxation followed by optical correction using gas-permeable contact lenses or spectacles. Incisional surgeries were avoided due to complications associated with prior scleral procedures such as unintentional filtering blebs, persistent aqueous leakage, and ocular hypotony. Visual outcomes improve with timely surgical intervention and optical rehabilitation; however, structural abnormalities like scleral staphylomas and lens instability require lifelong monitoring. Preventive measures rely on genetic counseling for families at risk given the

autosomal recessive inheritance pattern of ASPH mutations.

This case illustrates the diagnostic complexities and clinical significance of Traboulsi syndrome, an extremely rare genetic disorder with distinct ocular and systemic features including facial dysmorphism and connective tissue abnormalities. Molecular confirmation with ASPH mutation highlights the importance of genetic testing in distinguishing this syndrome from other connective tissue and metabolic disorders with overlapping characteristics. Reporting such cases enhances clinical recognition, aids prompt diagnosis, guides management, and ultimately improves patient outcomes.

Under the guidance of Dr Saravanan, Associate Professor, ROI, MMC and Dr G Vidhubala, Assistant Professor, ROI, MMC

The Fascinating Logic Behind Clinical Evidence: Randomisation & p Value

We all nod when someone says "p < 0.05," but hardly anyone asks where that rule came from. It traces back to Sir Ronald Fisher, a statistician and geneticist whose work introduced the very idea of statistical significance - an idea that still governs how we judge results. At the heart of Fisher's framework lies the null hypothesis (H0). It represents the default assumption in any study: that there is no difference between the variables being compared.

At the heart of Fisher's framework lies the null hypothesis (H0). It represents the default assumption in any study: that there is no difference between the variables being compared.

Let us take an example of a study that determines the effect of a nicotine patch in smoking cessation. Here, the null hypothesis would be "A nicotine patch is ineffective in smoking cessation. Any difference in quit rates between 2 groups is purely due to chance". This sets the baseline expectation against which the study's data will be tested. Only if the observed difference is large enough and unlikely to occur by chance do we reject the null hypothesis in favour of a real treatment effect.

But even before we test a hypothesis, there are other problems: confounding and bias.

A confounder is a variable associated with both the exposure and the outcome, capable of creating a false impression of association. A classic example of confounding is the false link observed between coffee consumption and cardiovascular disease (CVD). Data from the Framingham Heart Study revealed that smokers, who are already at an increased risk of CVD, consumed considerably more coffee than non-smokers. This unequal distribution of smoking (confounder), a known CVD risk factor, led to a spurious association being drawn between coffee drinking and CVD.

Bias refers to systematic errors in how the study is designed, conducted, or measured. In the Nicotine Patch study, a selection bias can arise if participants using the patch are more health-conscious and those in the control group are repeated dropouts.

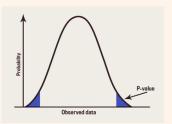
Now we come to the solution, randomisation which ensures that participants are assigned to the intervention group or control group purely based on chance.

This distributes the confounding variables equally across both groups making them comparable. To avoid a false association between coffee and CVD, the participants could be divided into smokers and non-smokers following which random

allocation could be done.

Finally, coming to p value - it tells us the probability that the difference we see in our study could have happened by random chance. If 60% of the nicotine-patch group quits smoking as opposed to 25% of the control group, there's a 35% difference. There are a number of statistical tests that generate a p-value using the results obtained.





• If p < 0.05:

There's less than 5% probability that a large difference of 35% arose purely by chance if nicotine patches truly had no effect.

- → We reject the null hypothesis.
- → Suggests patches likely help with smoking cessation.

• If $p \ge 0.05$:

The observed difference could reasonably be due to chance.

- → We do not reject the null hypothesis.
- \rightarrow It doesn't prove patches don't work only that our study didn't provide strong enough evidence.
- \rightarrow A non-significant p-value may occur because the treatment has no effect but also because the sample size is small or due to high variability in data or high dropout rate. This means that the effect exists but the study couldn't detect it.

The p value denotes statistical significance not clinical importance. The latter depends on effect size and patient outcomes, and it is important to remember that 0.05 is an arbitrary threshold, 0.049 and 0.051 are almost the same in reality.

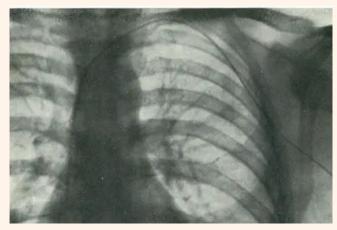
Together, Fisher's ideas link the design of a study to its inference. Randomisation ensures comparability, p-values help interpret the outcome, forming the statistical backbone of research.

- Khushii D J

THE HISTORY OF CARDIAC CATHETERIZATION

Cardiac catheterization is the insertion of a catheter into a chamber or vessel of the heart. This is done both for diagnostic and interventional purposes. What known today as a simple minimally invasive diagnostic procedure, was a milestone in medical history brought about by a 25 year old man's courage and trust in his medical knowledge.





Background

Werner Forssmann was born in Berlin on 29 August 1904. Upon graduating from Askanisches Gymnasium, he went on to study medicine in the University of Berlin.

The Invention

In 1929, Forssmann was working as a young intern at the Auguste-Victoria Hospital in Eberswalde. As a tired and curious intern he spent most of his night shifts wondering about the available diagnostics to monitor the heart which were not enough at that time to make a comprehensive diagnosis.

Forssmann began thinking about how to obtain greater access to the organ. So he went to work, and spent his days and nights tirelessly reading various textbooks and journals of physiology and cardiology. His 'eureka' moment seemed to have appeared one such day where he hypothesised introducing a urethral catheter to study the heart.

Opposition

Like every great innovation made, Forssmann was also met with opposition. The hospital's director, a distinguished physician by the name of Schneider, rejected his proposal, claiming it was too unsafe to perform on a live patient.

The Experiment

Young Forsmann didn't let this stop him. He worked in silence, plotting every small detail, working out the steps and making plans therein. On one fine day which forsmann later described in his autobiography as "I no longer remember the date on which it all took place. All I know is that it was a beautiful, sunny day in early summer".

He persuaded the operating-room nurse in charge of the sterile supplies, Gerda Ditzen, to assist him. She agreed, but only on the promise that he would do it on her rather than on himself. However, Forssmann tricked her by restraining her to the operating table and pretending to locally anaesthetise and cut her arm whilst actually doing it on himself.

He introduced a well-oiled ureteral catheter through his left antecubital vein. Once the tube was inserted into his arm, he ran to the X-ray room and used the fluoroscopic screen to check the position of the catheter, pushing it further and further until it reached the right chamber of the heart. He later asked for X-rays to be taken in order to serve as documentary evidence.

Outcome

The X-ray images were published, along with a description of his self-experiment, in the journal Klinische Wochenschrift in November 1929.

Like many great inventions it was not met with the great response it warrante. It wasn't until after the 1950s, when Dickinson Richards and André Cournand revived the idea of Cardiac catheterization that it was put to use widely in various clinical settings.

In 1956, Forssmann received the Nobel Prize in Medicine for the first cardiac catheter examination.

Today, cardiac catheterization is a common practice and can be used not only to diagnose a multitude of cardiological diseases but also to treat them directly and we owe this to Werner Forssmann's daring self-experiment. He has demonstrated that a little bit of curiosity, a bucket full of courage and a whole

NIVETHA V

VERSECRAF







LA LITTERATIE



La Litteratie marks a new milestone with its inaugural intracollege literary fest — DopaMania, a curated arena built to unify minds drawn to literature, art, fiction, fandom, and scientific curiosity. The fest brings a high-impact mix of a Model United Nations, an immersive Crime Scene Investigation challenge, and Blind Book Dates, all engineered to spark creativity, drive collaboration, and establish a dynamic cultural ecosystem on campus.

"The Home" Maker

"Was it choice? No, not quite— More a whisper in the night. Was I happy? Ask her then, The girl I was, not who I am. Fights like storms, and love like rain, Was it worth the worldly pain? I waited for him But the lights grew dim

For him, I stayed, through joy, ache, For vows I'd never dare to break. He worshipped work, and I—his name, Two altars burning, with one small flame.

Then came voices, tiny and red, Crying loud where the angels tread. They took his gaze, they stole his smile, Yet I adored them all the while. They grew so fast, their laughter wild, Between us widened a mile. School bells, shops, and fleeting days, My name was lost in their hungry maze.

by Rohan D

"For them, I rose, for them, I prayed, Through broken sleep, through dreams decayed. Their cries became my daily song, Their silence now feels twice as long.

Now the house stands still, the rooms breathe chill, They've gone to chase their world anew, And I am left here with sky and dew.

He sits beside, the same old man, A little frail, yet still my plan. The race is done—was there a win? Perhaps the peace lies within. I lost and loved, I broke, I tried, And somewhere in that loss, I lied— That love was less than what I gave, But he's one my heart could save

For him, for them, for all I've been, Through the years and might-have-beens, You ask me now—am I happy still? You'll know my truth when all is still.

HEY AMIGO

Hey Mind, never think you've won But never lost too.

Hey Soul, be wild and free But be stained no more.

Hey Heart, like a dolphin you can dive But not into depths and tricks

Hey Love, they think you are heaven But all you do is test their might.

Hey Sadness, I'll say it's fine But go now and come back then.

Reading now, the words don't rhyme,

The same after the hundredth time.

It's easy if you can understand that

The poem's written by the mad man

But if you look closely, my friend, That towards the end,

All the words rhyme to ten,

That's the magic of a crazy pen.

Andrew joel

The Basic Life Support Camp:



The Basic Life Support (BLS) Camp was successfully conducted from October 13 to 17, 2025, by the Institute of Anesthesiology and Critical Care, in association with the Medical Relief Wing of MMC, as part of the CPR Awareness Program organized at the college. The initiative aimed to equip undergraduate MBBS students with essential emergency response skills that can make a critical difference in saving lives.

During the week-long training, participants were introduced to the core components of BLS, including first response techniques, site safety assessment, and cardio-pulmonary resuscitation (CPR). Through a combination of interactive demonstrations and hands-on sessions, students gained practical experience in performing CPR and managing emergency scenarios efficiently.



Blood Donation Camp Marks Doctor's Day at MMC



Chennai, July 1, 2025 — Madras Medical College observed Doctor's Day with a meaningful act of service as the Medical Relief Wing of MMC, in collaboration with the Department of Transfusion Medicine, organized a blood donation camp on campus.

The event saw enthusiastic participation from students, faculty, and staff, with a total of 74 donors contributing to the blood bank. The camp aimed to raise awareness about the importance of voluntary blood donation and to encourage more members of the medical community to take part in life-saving initiatives.

Faculty members from the Department of Transfusion Medicine supervised the procedures, ensuring smooth flow and adherence to safety protocols. Volunteers from the Medical Relief Wing assisted in registration, counselling, and post-donation care.

The event concluded with refreshments and certificates of appreciation for all participants, marking a successful and impactful celebration of the day dedicated to medical professionals.

@mmc_blood_donors_club

MMC Observes World Environment Day with Activities on "Ending Plastic Pollution"







Madras Medical College celebrated World Environment Day on 5th June 2025 with a series of engaging activities organized by the Eco Club of MMC. This year's global theme, "Ending Plastic Pollution," set the tone for the event, emphasizing the urgent need to reduce plastic waste and adopt sustainable alternatives.

The celebration featured a variety of competitions aimed at spreading awareness while encouraging creativity among students. The essay writing competition invited participants to reflect on the environmental and health hazards posed by plastic pollution and to discuss practical solutions for a plastic-free future. The popular connexions event tested students' ability to interpret visual cues related to environmental challenges, offering a fun yet educational twist to the theme

Adding color and artistic flair to the day, the rangoli competition showcased eco-themed designs, many created with natural and biodegradable materials. The photography competition captured powerful images highlighting both the beauty of nature and the threats it faces due to plastic pollution.

Winners were felicitated eco-friendly mementos, underscoring the message of sustainability.

The event served as an inspiring reminder of the collective responsibility to protect the environment. By focusing on plastic pollution—one of the most pressing ecological issues of our time—MMC reaffirmed its commitment to fostering environmental consciousness within the campus community.

Winners of the events held on environment day:

Essay Writing- Tamil-Winner:

Pruthiviraj

'24 batch

Poem writing – English-winner:	Memes-Winner:	Connexions:
Anuridha Suri	Pruthiviraj	Winners
'24 batch	'24 batch	Akshata
Poem writing – Tamil-winner: Pruthiviraj '24 batch Essay writing – English-winner: Srivarshan B '23 batch	Photography-Winner: Hiranmahi Gandhi '22 batch	Vigasini Bhadrika '24 batch
	Selfie contest- Winner Kiran raj '23 batch Rangoli winners: Nanthini M	Runners: Siddarth Thriuvengadam Vimal kumar
		'22 batch

Nandhini M V

Bhadrika V

'24 batch

Undergraduate Research Achievements

1. Ertapenem-induced Encephalopathy in a Patient With Systemic Lupus Erythematosus and Preserved

Renal Function: A Diagnostic Challenge

Published in: Cureus

Date of Publication: September 2025

Contributed by: Elangovan Raman (Batch of 2018)

2. Awareness of Heart Attack Symptoms and Risk Factors Among the Elderly in Rural Chennai: A Cross-

Sectional Study

Published in: Cureus Inc

Date of Publication: June 2025

Contributed by: Sahasyaa Adalarasan (Batch of 2023), Kanika Balasubramani (Batch of 2023), Nithyashree

Sathiyamurthy (Batch of 2023), Vedasree Karthikeyan (Batch of 2023)

3. A Randomized Controlled Trial on the Therapeutic Effect of Aloe Vera Extract on Diabetic Foot Ulcers

Published in: Cureus inc

Date of Publication: July 2025

Contributed by: Sandhiya.T (Batch of 2023), Sahasyaa Adalarasan (Batch of 2023), Samyuktha

Umashankar (Batch of 2019)

4. Knowledge of Prescribed Medications and its Predictors amongst Patients Living with Type-2 Diabetes

Mellitus and Hypertension in Rural Tamil Nadu, India

Published in: Preventive Medicine: Research & Reviews

Date of Publication: August 2025

Contributed by: Gokulesh Devannagoundanur Gurumurthy (Batch of 2019)

5. Comparison of sequential intravesical gemcitabine and docetaxel versus bacillus Calmette-Guérin in the

treatment of non-muscle invasive bladder cancer: A meta-analysis

Published in: Journal of Clinical Oncology

Date of Publication: May 2025

Contributed by: Vishal Rajkumar (Batch of 2022)

6. ECG-AI in anthracycline cardiotoxicity: Promise, prudence, and practicality

Published in: The American Journal of Medicine

Date of Publication: July 2025

Contributed by: Niveditha Suresh Babu (Batch of 2021)

MMC History SNAPSHOTS

17.12.2025

@mmc.campus.chronicles

Tuesday

THE ALUMINI CHRONICLES

Contagious to Courageous: The Story Behind India's First HIV Discovery



When HIV seemed like a far-off threat, Dr. Nirmala Sellappan — guided by her mentor, Dr. Suniti Solomon at MMC — stepped into the unknown. Her work uncovered evidence that would ignite India's fight against HIV.

In the early 1980s, AIDS was still a mystery. Reports from the West described a deadly new virus, yet with no official cases in India, denial and stigma fostered a dangerous sense of safety.

Nirmala entered HIV research not with certainty, but with courage placed in her by Dr. Solomon. To reach those most at risk, she visited crowded STD clinics and a Vigilance Home where sex workers and abandoned women were confined away from society's view. Over months, she collected nearly 80 blood samples — often with her husband driving her to save the cost of bus fare. With no PPE available and no proper storage facilities, she kept the samples in her own home refrigerator, side by side with everyday food.

Since Chennai lacked ELISA testing at the time, Dr. Solomon arranged for the samples to be processed at CMC Vellore, 200 km away. One February night in 1986, Nirmala and her husband boarded an overnight train with the samples packed into an icebox. At CMC, under virologist Dr. Jacob John, Dr. P. George Babu and Dr. Eric Simoes helped run the tests. A sudden power cut brought the lab to a halt — but when the machines resumed, six samples turned yellow. HIV positive. Silence filled the room. Before they left, the team was sworn to secrecy. Back at MMC, Nirmala quietly delivered the news that would change the nation's medical history.

The findings were escalated to the government. Many questioned the validity of the tests; some directed anger toward Dr. Solomon, labeling her an outsider bringing "bad news." Yet public health experts cautioned that this was only "the tip of the iceberg," and rapid screening and prevention efforts began as HIV cases spread across.

Their pioneering work laid the foundation for India's HIV response — shaping policies, expanding diagnosis and treatment, and saving millions of lives in the decades that followed.

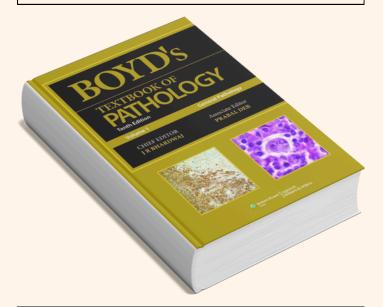
Their courage still serves as a reminder that in every emerging threat, science, compassion, and early action remain our strongest.

By.M.V.Harshavardhan

Medical Trivia Questions

- 1. EndeavorRX, developed by Akili Interactive, is FDA-approved to improve attention in children with ADHD aged 8–17. What is special about this therapeutic intervention?
- $2.\ A$ 1924 American comic strip heroine was drawn with large, blank, pupil-less eyes. What characteristic feature in a disease is named after her?
- 3. A 2015 JAMA paper studied the association of X consumption with physician visits. It concluded the long-standing belief was unsupported, though a small fraction took fewer visits. Identify X.
- 4. In post-WWII Soviet Union, banned Western music was smuggled using discarded medical materials and homemade equipment. What were these records called?
- 5. In 1905, Dr. Kelly and Dr. Hurdon described diseases of a human structure, noting an anatomical feature later named after an Indian. What is this structure?

SEND YOUR ANSWER TO - CAMPUSCHRONICLE@MMC.AC.IN



BOYD'S TEXTBOOK OF PATHOLOGY

~ A review by Rohan D

Boyd's Textbook of Pathology frames inflammation with a level of narrative precision that feels almost anatomical in its immersion. The chapter on leukocyte kinetics (Inflammation) is especially striking—you'd feel as if you're riding along with Leucocyte during its journey in inflammation from margination to diapedesis to chemotactic navigation and finally phagocytosis.

The descriptions are clinically anchored, mechanistically sound, and delivered in language that distills complexity into operational clarity. New facts are integrated seamlessly with pathophysiologic logic, reinforcing clinical correlations without diluting scientific rigor.

Example: Current studies have described neural circuits that modulate the innate immune response, in an effort to control cytokine production. One of the better understood neural circuits is that of the inflammatory reflex, in which action potentials transmitted through the vagus nerve reach the spleen to mediate the secretion of neurotransmitter acetylcholine that interacts with alpha7 nicotinic acetylcholine receptors (CHRNA7) that are expressed on the cytokine-producing cells, in an inhibitory manner. This is termed the cholinergic anti-inflammatory pathway.

It's a high-value, medically focused resource—an under-recognized asset in our own library that quietly outperforms on conceptual clarity and learner engagement.

Upcoming events



https://docs.google.com/forms/d/e/1FAIpQLSdes_rpV9zrSAoj_kvof 6ZAe6OJypxEw5Y6vFcRIMd9pSBr3g/viewform?usp=dialog

Upcoming events



Upcoming events



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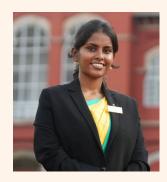
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THE CAMPUS CHRONICLES

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