UBIQUISCOPE

A LOOK INTO SCIENCE

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WHAT'S INSIDE

EDITORIAL NOTE

"If I have seen further, it is by standing on the shoulders of giants."

– Sir Isaac Newton.

It is only through deeper understanding and rigorous research that true innovation takes shape. In medicine, such innovation has allowed us to confront age-old diseases that once seemed inevitable, so common that they became household names. Modern solutions now offer the hope that these burdens will not only be treated but, one day, eradicated—ensuring that future generations may never have to worry about them.

This edition of Ubiquiscope celebrates that progress. Within these pages, we explore how research-driven discoveries have transformed patient care—from the promise of nanoparticles in managing sepsis, to mRNA vaccines that prevent community diseases, the revival of ancient remedies for weight management, and the strides in beta cell restoration therapies for diabetes. Each of these reflects how Modern Science tackles the familiar problems of yesterday with the innovative tools of today.
Healing, after all, is both timeless and ever-new.

CAMPUS INSIGHTS

INNOVATIVE MACROPHAGE- LIKE NANOPARTICLES: A NEW ERA OF SEPSIS MANAGEMENT?

> **"The macrophage is the soldier of the immune system. Teach it to fight wisely, and we conquer more than just disease—we conquer time."**
> **— Ralph Steinman, Nobel Laureate in Immunology**

Sepsis remains one of the leading causes of morbidity and mortality globally, with an estimated 11 million deaths annually. The dysregulation of the immune response, coupled with the presence of harmful agents such as endotoxins and proinflammatory cytokines, plays a critical role in the progression of sepsis. Traditional treatment modalities often fall short, leading to an urgent need for innovative therapeutic strategies. Recent advancements in nanotechnology have paved the way for the development of macrophage biomimetic nanoparticles that can concurrently absorb endotoxins and proinflammatory cytokines, presenting a novel approach to sepsis management.Endotoxins, specifically lipopolysaccharides (LPS) derived from the outer membrane of Gram-negative bacteria, are significant contributors to the inflammatory cascade seen in sepsis. Once released into the bloodstream, these endotoxins trigger an exaggerated immune response, releasing a plethora of proinflammatory cytokines such as TNF-α, IL-1β, and IL-6. This cytokine storm not only exacerbates inflammation but also results in tissue damage and organ dysfunction, hallmark characteristics of septic shock. Since higher level of endotoxins correlate to worsened clinical outcomes, effective endotoxin removal is a critical component of sepsis management.

In an effort to combat sepsis, researchers have engineered macrophage-like nanoparticles, designed to mimic the natural scavenging function of macrophages. These nanoparticles possess a unique surface chemistry that allows them to selectively bind and neutralize endotoxins and cytokines, effectively inhibiting their ability to potentiate the sepsis cascade. By serving as a decoy, they can sequester harmful agents from the circulation, thereby reducing their bioavailability and mitigating their detrimental effects.

The mechanism of action of these nanoparticles is astonishingly efficient. They are made by wrapping polymeric cores with cell membrane derived from macrophages, thereby possessing the same antigenic exterior as source cells. The surface of the nanoparticles is modified with specific receptors that recognize and bind to LPS molecules and proinflammatory cytokines. This binding initiates a cascade of events leading to the internalization of these harmful agents, transforming them into inert forms that are subsequently cleared from the body. In experimental models, these nanoparticles have demonstrated a capacity to significantly reduce plasma levels of cytokines and endotoxins, correlating with improved survival rates and better organ function.While the preclinical data sounds promising, it is imperative to establish their safety and efficacy in human trials. The potential applications are vast—these nanoparticles could be administered as adjunct therapy in patients with sepsis, particularly those presenting with high levels of endotoxins and inflammatory cytokines. Furthermore, their targeted delivery capabilities could allow for tailored treatments, minimizing the risk of systemic side effects often associated with conventional therapies.
Despite the encouraging results, several challenges remain. The translation of these nanoparticles from bench to bedside necessitates rigorous evaluation of their biocompatibility, pharmacokinetics, and potential immunogenicity. Researchers must also address the scalability of nanoparticle production to ensure a feasible clinical application.

The emergence of macrophage-like nanoparticles represents a significant breakthrough in sepsis management. Employing these nanoparticles as a biomimetic detoxification strategy shows promise for improving patient outcomes, potentially shifting the current paradigm of sepsis management. As we advance through rigorous testing and validation, the hope for a new era of sepsis treatment grows stronger, promising to save countless lives in the battle against this complex and lethal condition.

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mRNA Vaccines : Mechanisms, Milestones and the future of Preventive Medicine

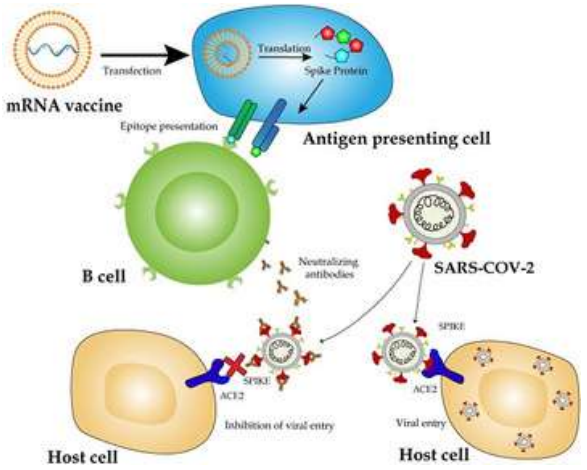
The COVID-19 pandemic brought global attention to mRNA vaccines, a technology that had been in development for decades but had never before been used on a large scale in humans.Unlike conventional vaccines that use attenuated or inactivated pathogens—or parts of them like proteins or polysaccharides—mRNA vaccines deliver a synthetic strand of messenger RNA that encodes a specific viral antigen, such as the spike protein of SARS-CoV-2. Once inside the host cells, this mRNA is translated by ribosomes to produce the target protein, which is then recognized by the immune system, leading to the generation of both humoral and cellular immune responses.

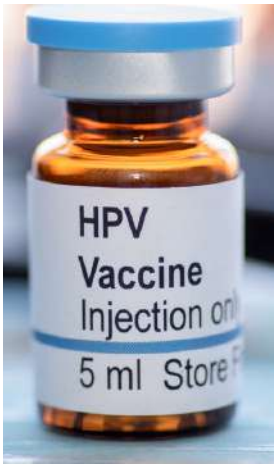
Although research on mRNA vaccines began in the early 1990s, progress was initially slow due to challenges such as the instability of mRNA and its rapid degradation by enzymes in the body. Additionally, unmodified mRNA could trigger strong innate immune reactions, making it unsuitable for clinical use. Key breakthroughs —including the use of lipid nanoparticles (LNPs) for delivery and the modification of nucleosides to reduce immunogenicity—helped overcome these barriers and made the platform clinically viable.

The real-world application of this technology during the pandemic was historic. The Pfizer-BioNTech and Moderna vaccines were the first mRNA-based vaccines approved for human use and demonstrated high efficacy in preventing symptomatic COVID-19, as well as significant reductions in severe disease and mortality. Notably, the ability to design and produce these vaccines rapidly—from genome sequencing to clinical trials within months—highlighted the platform's potential for rapid response in future outbreaks.

Beyond COVID-19, mRNA vaccine research is expanding into other areas, including prophylactic vaccines for viruses such as influenza, Zika, and CMV, as well as therapeutic vaccines in oncology, particularly for melanoma and certain solid tumors. The platform also holds promise in the development of personalized cancer vaccines, which can target tumor-specific neoantigens.In cancer treatment, mRNA vaccines can be personalized to target tumor-specific antigens, prompting the immune system to recognize and destroy cancer cells with greater precision. In autoimmune disorders, researchers are developing mRNA therapies that help reprogram the immune response, potentially reducing harmful inflammation without broadly suppressing immunity. For rare genetic conditions, mRNA can instruct cells to produce missing or faulty proteins, offering a non-permanent but highly adaptable alternative to gene therapy. This versatility positions mRNA as a powerful platform for developing targeted, personalized treatments with fewer side effects and faster turnaround than traditional therapies.

Despite these advances, several limitations remain. The requirement for ultra-cold storage complicates distribution, especially in low-resource settings. Public mistrust and vaccine hesitancy, often driven by misinformation, continue to challenge uptake. Additionally, long-term safety and efficacy data are still being collected, although current evidence remains reassuring.mRNA vaccines have marked a paradigm shift in vaccinology, offering speed, specificity, and scalability. For us as future clinicians, understanding this technology is essential—not only for
academic knowledge but also for its future applications in public health and clinical practice.





A Pharmacological Insight into Natural Weightloss Agents

In the quest for effective weight loss solutions, many individuals are turning to natural products that can complement traditional methods like diet and exercise. These natural alternatives often offer a safer, more holistic approach to weight management, free from the harsh chemicals or side effects associated with synthetic weight loss medications. From herbal teas to nutrient-rich superfoods, nature provides a wide array of products known for their ability to support metabolism, reduce appetite, and improve overall health.

CHAMOMILE TEA

Chamomile tea has been studied for its potential effects on weight loss and metabolic health. The mechanisms through which chamomile tea may aid in weight management involve several biological pathways.

1)Inhibition of Sugar Absorption:

Chamomile tea has been shown to inhibit the transport of glucose and fructose in the intestines by blocking glucose transporters GLUT2 and GLUT5. This action can help manage sugar absorption and metabolism, potentially reducing the risk of obesity and related metabolic disorders (Villa-Rodriguez et al., 2017).

2)Antioxidant and Anti-inflammatory Effects:

Chamomile contains phenolic compounds and essential oils that exhibit antioxidant and anti-inflammatory properties. These compounds can modulate signaling pathways involving AMP-activated protein kinase (AMPK), NF-κB, Nrf2, and PPARγ, which are associated with obesity prevention and metabolic health (Bayliak et al., 2021).

3)Lipid Profile Improvement:

Studies on chamomile tea have demonstrated its ability to lower serum cholesterol, triacylglycerides, VLDL, and LDL, while slightly increasing HDL levels. These effects are attributed to the presence of phytochemicals like tannins, saponins, and flavonoids, which inhibit cholesterol absorption and promote its excretion (Akinseye, 2016).

4)Protection Against Lipotoxicity and Oxidative Stress:

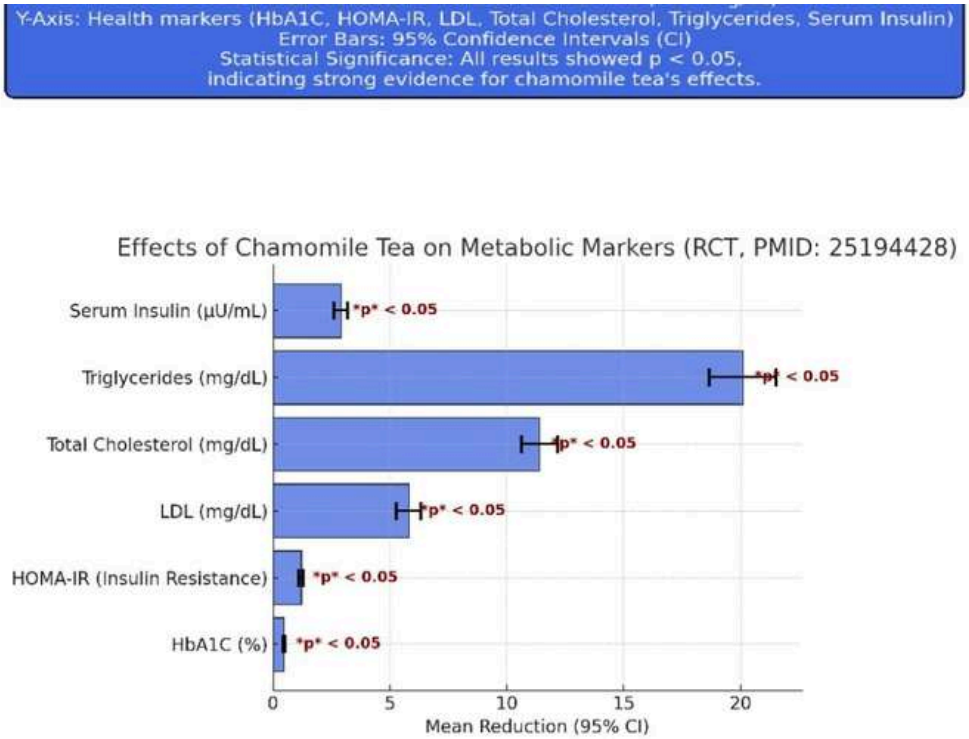
Chamomile tea has been found to protect against high-fat diet-induced lipotoxicity and oxidative stress, which are common in obesity. It helps in maintaining liver and kidney function and reducing oxidative damage (Jabri et al., 2017).

5)Glycemic Control:

Regular consumption of chamomile tea has been associated with improved glycemic indices and increased antioxidant status in individuals with type 2 diabetes, which can indirectly support weight management by improving metabolic health (Zemestani et al., 2016).

Chamomile tea is often explored for its potential benefits in weight management and metabolic health.However, its role in weight loss presents both challenges and opportunities for future research.

Chamomile tea contributes to weight loss and metabolic health through mechanisms such as inhibiting sugar absorption, improving lipid profiles, and providing antioxidant and anti-inflammatory benefits.These effects are supported by its ability to modulate key metabolic pathways and protect against oxidative stress and lipotoxicity. However,the inhibition of sugar transport by chamomile tea is acute, with no enhanced effects observed over long-term consumption, suggesting that its benefits may not be sustained without continuous intake.



This **Randomized controlled trial(RCT)** on 64 patients with type 2 diabetes examined the effect of **three cups of chamomile tea daily for eight weeks on glycemic control and lipid metabolism.**
Compared to the control group, chamomile tea consumption **significantly improved HbA1C,insulin resistance and cholesterol levels, suggesting potential benefit for blood sugar regulation and cardiovascular health.**

APPLE CIDAR VINEGAR

Apple cider vinegar (ACV) has gained attention for its natural weight loss benefits, primarily due to its effects on appetite control, metabolism and fat reduction. By promoting satiety, improving digestion, and regulating blood sugar levels, ACV supports gradual and sustainable weight loss.
One of its key benefits is reducing hunger cravings.ACV contains pectin, a fiber also found in apples, which helps create a feeling of fullness, leading to lower calorie intake.
When taken before meals, ACV helps regulate appetite, preventing overeating and reducing the likelihood of unhealthy snacking. Additionally, ACV aids in fat metabolism and digestion. It helps break down food more efficiently, preventing the excessive storage of fat. By reducing the amount of time that fats remain in the digestive tract, ACV lowers fat absorption, further contributing to weight loss. Another significant factor in weight management is blood sugar regulation. ACV stabilizes blood sugar levels, preventing insulin spikes that often lead to fat storage. This not only reduces cravings for high-calorie processed foods but also helps the body burn fat more efficiently.

MECHANISM OF ACTION:

The weight loss effects of ACV are primarily driven by acetic acid, the active compound that influences various metabolic processes. Acetic acid plays a role in appetite suppression by delaying gastric emptying, meaning food stays in the stomach longer. This leads to prolonged satiety and reduced hunger, making it easier to consume fewer calories throughout the day.ACV also enhances digestion and nutrient absorption, particularly for proteins. Efficient protein digestion is essential for muscle growth, insulin production, and fat metabolism, all of which contribute to a healthier weight. Additionally, acetic acid stimulates fat oxidation, promoting the breakdown of stored fat while simultaneously preventing new fat accumulation.
ACV also contributes to mental well-being by aiding in serotonin production. The amino acid tryptophan, found in ACV, is essential for serotonin synthesis, which improves mood and helps reduce stress-related eating habits. Emotional eating is a common cause of weight gain, and by promoting a sense of calm and satisfaction, Lastly, ACV helps regulate sodium-potassium balance, which plays a role in reducing water retention and bloating. This contributes to a leaner appearance and prevents unnecessary fluctuations in body weight. Additionally, ACV's ability to stimulate taste buds encourages a greater appreciation for whole, nutrient-dense foods like vegetables, whole grains, and legumes while decreasing cravings for unhealthy.

Ginseng Tea

Ginseng tea is a herbal fusion derived from the roots of Panax ginseng, with bioactive compounds. It serves as a functional beverage with potential benefits in cognition, metabolism, development. However, the effectiveness of the tea depends on many factors such as bioavailability of ginsenoids and metabolic differences in gut microbiota.

MECHANISM OF ACTION :

Ginseng and its bioactive compounds, ginsenosides, exert anti-obesity effects through multiple physiological pathways. The primary mechanism involves activation of AMP-activated protein kinase (AMPK), a central regulator of energy metabolism, which promotes catabolic processes while inhibiting anabolic pathways. The detailed mechanism is as follows:

1)Regulation of Appetite and Energy Intake

Ginseng modulates the hypothalamic pathways responsible for appetite control.

It reduces hypothalamic inflammation, thereby improving leptin sensitivity and reducing food intake.It also suppresses neuropeptide Y (NPY), a hunger-stimulating hormone, while enhancing cholecystokinin (CCK), which promotes satiety.

2) Inhibition of Lipid Digestion and Absorption

Ginsenosides, particularly protopanaxadiol (PPD)-type, inhibit pancreatic lipase, reducing the breakdown and absorption of dietary fats.Ginsenoside Rg1 is known to decrease sodium-dependent glucose transporter 1 (SGLT1) expression, limiting glucose absorption in the intestines.

3) Activation of AMPK in the Liver

AMPK activation leads to:Inhibition of fatty acid synthesis by downregulating fatty acid synthase (FAS).Reduction in cholesterol synthesis via suppression of HMG-CoA reductase (HMGCR)Inhibition of gluconeogenesis, reducing glucose-6-phosphatase (G6Pase) and phosphoenolpyruvate carboxykinase (PEPCK) expression.Enhanced fatty acid oxidation through activation of peroxisome proliferator-activated receptor-alpha (PPAR-α).

4) Reduction of Adipose Tissue Mass

Ginsenosides regulate PPAR-γ, a key transcription factor in adipogenesis:Some ginsenosides inhibit PPAR-γ, suppressing adipocyte differentiation and lipid accumulation.In diabetic conditions, ginseng upregulates PPAR-γ, improving insulin sensitivity.Stimulates lipolysis and reduces triglyceride storage in adipocytes.

Increases secretion of adiponectin, which promotes fatty acid oxidation.

5)Enhancement of Skeletal Muscle Energy Utilization

AMPK activation in muscle promotes:Increased glucose uptake via GL UT4 translocation.Enhanced mitochondrial biogenesis through PGC-1α (peroxisome proliferator-activated receptor gamma coactivator 1-alpha).Increased fatty acid oxidation, reducing lipid accumulation in muscle.

6)Modulation of Gut Microbiota

Ginseng's effects on obesity vary among individuals due to differences in gut microbiota composition.

Gut bacteria metabolize ginsenosides into more bioavailable forms, influencing their effectiveness.

Ginseng combats obesity through a multi-targeted approach .However, variations in gut microbiota and bioavailability limit its efficacy in human trials, necessitating further research.

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BEYOND THE FLOW: DECODING THE MYSTERIES OF FLUIDS

From Aristotle's philosophical ideas to Newton's mathematical advancements, understanding fluids as complex,law-governed substances has shaped modern science and technology, especially in fields like engineering,medicine, and natural sciences. Early contributions laid the groundwork for modern fluid mechanics.

Fluids are essential to human health and form the backbone of modern medical practice. From circulating oxygen-rich blood to delivering medications intravenously, fluids support nearly every physiological and clinical function. Body fluids such as blood, lymph, interstitial fluid,and cerebrospinal fluid are crucial for maintaining homeostasis, aiding in recovery, and managing disease.

Whether through simple hydration or advanced therapeutic interventions, the medical use of fluids plays a critical role in sustaining life. As our understanding of fluid dynamics advances, healthcare professionals can leverage this knowledge to improve patient outcomes—reinforcing the idea that fluids truly are the "lifeblood" of modern healthcare.Hydration is essential for maintaining bodily functions, from temperature regulation to joint lubrication and cellular activity. In medical settings, ensuring proper hydration is a key aspect of patient care, especially in cases of dehydration due to illness or surgery.Intravenous (IV) fluids play a critical role when oral intake isn't possible, offering precise control over fluid delivery. Commonly used in hospitals, IV therapy is vital for treating conditions such as severe dehydration, shock, and electrolyte imbalances. Both crystalloids and colloids serve as essential forms of IV fluids to support recovery and restore physiological balance.

Intravenous (IV) fluids serve a critical role beyond hydration, supporting a wide range of therapeutic functions in modern healthcare. They are commonly used to deliver medications directly into the bloodstream, enabling rapid and controlled absorption.IV fluids are essential in blood transfusions, particularly in cases of trauma or surgery, where they help restore blood volume and oxygen-carrying capacity by administering red cells, platelets, or plasma. In cancer treatment, IV hydration helps mitigate the harsh side effects of chemotherapy and protects against dehydration and organ damage.Additionally, IV fluids are employed in pain management, where analgesics or anesthetics like morphine or lidocaine are infused to provide fast and effective relief. These diverse uses underscore the importance of IV therapy in improving patient outcomes across various medical settings.

Fluid management plays a vital role in maintaining internal physiological balance, particularly in critical and acute care settings. In contemporary medicine, it extends beyond basic hydration to encompass the precise regulation of fluids and electrolytes for optimal patient outcomes.With significant advancements in medical technology and understanding, fluid management has become increasingly sophisticated. Innovations such as smart IV pumps, goal-directed therapy, and point-of-care testing have enabled personalized treatment strategies tailored to individual patient needs. These developments reflect a shift from generalized approaches to highly targeted fluid therapies, improving care for a wide range of medical conditions.

Cutting-edge research in fluid dynamics is offering new insights into human physiology, medical treatments, and healthcare technology. Understanding fluid behavior in the body and in medical applications is key to improving patient care and developing innovative treatments. This research drives breakthroughs in areas such as cardiovascular health and organ transplants. As technologies and methods advance, fluid dynamics is expected to lead to more effective therapies, improved outcomes, and transformative healthcare solutions.

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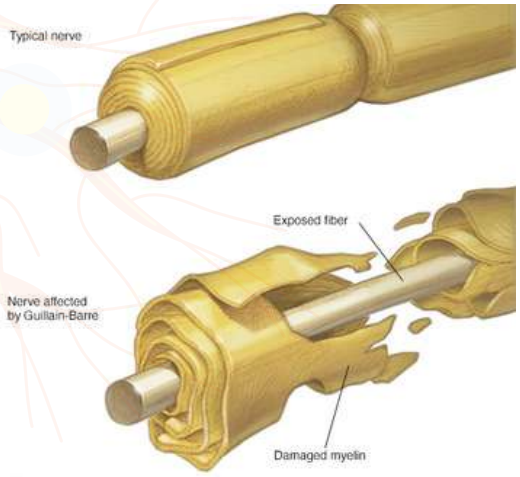
THE EVOLUTION OF GUILLIAN-BARRÉ SYNDROME: FROM LANDRY'S PARALYSIS TO MODERN CONTROVERSIES

Guillain-Barré Syndrome (GBS) is a rare but serious autoimmune disorder in which the body's immune system attacks the peripheral nervous system, leadingè to muscle weakness, paralysis, and sometimes even death.It has an intriguing history, from its discovery in war torn Europe to its modern links with viral infections, including COVID-19 vaccines. Descriptions of clinical cases that closely resemble the condition we now know as GBS were made at least as early as 1859, when Jean Baptiste Octave Landry reported on "acute ascending paralysis". Landry's description was based on ten cases, five of his own and five from the medical literature. In one case, Landry gave a long description of a patient who eventually died of asphyxia. Landry's superior, a Dr Glauber who had admitted the patient, had diagnosed hysteria but Landry predicted the patient's demise at an early stage. Landry's reports described it as subacute ascending peripheral sensory and motor dysfunction.The term "Landry's ascending paralysis" was first used in 1876. In Landry's reports core clinical features of the condition were described, but its aetiology and pathogenesis remained obscure to mid-nineteenth and early twentieth century neurologists. It was not until 1916 that Guillain, Barré and Strohl published the paper that would define the disease and the next 100 years of research.

Guillain and Barré were medical students together at the Saltpetriere in Paris at the turn of the century and specialised in neurology. During the First World War, they were both serving as doctors in the French Army. They noted the cases of two soldiers who had become partially paralyzed. They observed that these soldiers became weak, lost their reflexes, and had difficulty walking. Unlike typical war injuries, these soldiers had no wounds or direct nerve damage.Instead, their own immune systems appeared to be attacking their nervous systems.Guillain and Barré discovered that these soldiers had abnormally high protein levels in their spinal fluid without an increase in white blood cells—a key diagnostic marker of GBS today.This was a crucial discovery as two common infections of the time, syphilis and tuberculosis, would have shown such an increase.Guillain personally was not convinced that the condition that he and his partners had described was the same as Landry's. Landry had noted how the condition could cause respiratory failure but Guillain saw no such evidence and believed the illness he had described was not particularly serious.

After World War One, doctors were faced with three similar conditions with slightly different definitions: Landry's ascending paralysis, acute febrile (or perhaps infectious) neuropathy and the radiculoneuritis described by Guillain. In 1927, Dragonescu and Claudian first used the term Guillain-Barré syndrome (GBS), but Strohl was excluded from credit. Initially, Guillain rejected the idea that these conditions were the same, emphasizing cerebrospinal protein levels as a key diagnostic factor. In 1949, Haymaker and Kernohan proposed merging GBS with Landry's paralysis, which Guillain strongly opposed. By 1953, he acknowledged severe cases but maintained that an unidentified infection, not an allergy, was the cause.



In 1956, C. Miller Fisher described three patients with ophthalmoplegia, ataxia, and areflexia, identifying it as a variant of Guillain-Barré syndrome (GBS), now called Miller Fisher syndrome (MFS). His observations helped establish a broader immunopathological spectrum linking MFS, Bickerstaff brainstem encephalitis, and GBS. In 1958, J.H. Austin identified a chronic form of GBS, now known as CIDP.

Tingling sensation in the extremities

Paralysis of fascial muscles

Rapid muscular weakness and pain

Imbalace and clumsiness

Difficulty in speaking and swallowing

Meanwhile, early contributors like Strohl and Landry remain largely unrecognized.Several well-known people have battled GBS, increasing awareness of the disease.Joseph Heller, author of Catch-22, described his struggle with GBS in his memoir.Actor Andy Griffith also suffered from it but recovered.The Zika virus outbreak (2015-2016) sparked further research when many infected individuals later developed GBS, showing the strong connection between viral infections and the disease.researchers also found that some vaccines could, in rare cases, trigger GBS, leading to medical controversy.In 1976, the U.S. government launched a mass vaccination campaign against swine flu, but it was halted after reports linked the vaccine to Guillain-Barré syndrome (GBS). Later studies found the risk increase was minimal—about 1 extra case per 100,000 people—while the flu itself posed a greater GBS risk. This event fueled vaccine skepticism.During the COVID-19 pandemic, reports of GBS cases after COVID-19 vaccination surfaced, reigniting the controversy.

In 2021, the Johnson & Johnson (Janssen) COVID-19 vaccine was found to have a small but notable increase in GBS cases.The U.S. FDA added a warning but did not withdraw the vaccine, as the benefits outweighed the risks.However, studies also confirmed that getting COVID-19 itself posed a greater risk of developing GBS than the vaccine.Scientists believe vaccines can, in very rare cases, trigger an autoimmune response, similar to an actual infection.This might happen due to molecular mimicry, where the immune system mistakenly attacks nerves.
However, the overall risk remains extremely low compared to the millions of lives saved by vaccination.Guillain-Barré Syndrome remains one of medicine's great mysteries, highlighting the delicate balance of our immune system—and the importance of continuous research in both disease and vaccine safety.Even after more than a century, Guillain-Barré Syndrome still poses unanswered questions.Though rare,GBS remains a serious condition that highlights the fragility of the immune system—and the power of medical research in saving lives.

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Emerging Strategies in Pancreatic β-Cell Restoration for Diabetes Therapy

Diabetes mellitus, particularly type 1 and advanced type 2, is characterized by the progressive loss or dysfunction of insulin-producing β-cells in the pancreas. Despite significant advancements in insulin therapy and glucose monitoring, a definitive cure remains elusive. Recent developments in regenerative medicine, however, are now offering promising strategies aimed at restoring or replacing lost β-cell mass—moving us closer to long-term remission or even a potential cure.

This review explores two main approaches: β-cell regeneration and replacement. Regeneration focuses on stimulating the body's own ability to replenish β-cells through mechanisms like self-replication, neogenesis from pancreatic progenitor cells, and transdifferentiation—where other islet cells such as α-cells (glucagon-secreting) or δ-cells (somatostatin-secreting) are reprogrammed into insulin-secreting β-cells. Although these processes occur naturally at low levels in adults, researchers are now exploring ways to amplify them using small molecules, growth factors, and immunomodulatory drugs.

The second approach, replacement, involves the transplantation of functional insulin-producing cells. This includes cadaveric islet transplantation (such as the Edmonton protocol), autologous islet transplants following pancreatectomy, and the generation of β-like cells from stem cells or reprogrammed adult somatic cells like hepatocytes and pancreatic exocrine cells. Advances in 3D bioprinting, encapsulation technology, and artificial pancreas devices are also accelerating progress in this field by improving cell viability and immune protection.
Animal models have been instrumental in simulating β-cell injury and helping us understand regenerative pathways. Clinical trials continue to assess safety, efficacy, and long-term insulin independence in humans. While challenges like immune rejection, scalability, and cost remain, the rapid pace of innovation signals a transformative shift in diabetes treatment.For future physicians and researchers, the field of β-cell regeneration and replacement opens exciting doors. It not only challenges our understanding of cell plasticity and tissue repair but also represents a beacon of hope for millions battling diabetes worldwide.

CASE CHRONICLES

A 42-year-old right-handed female school teacher presents to the ENT outpatient department with complaints of progressive hearing loss in her right ear over the past 2 years. Initially, she noticed difficulty while conversing on the phone with her right ear, which she attributed to “ear wax.” Over time, her family also noticed that she often turned her head to the left side during conversations.
Along with hearing loss, she reports intermittent tinnitus in the right ear, described as a continuous, non-pulsatile “buzzing” sound, more prominent at night. She denies any history of vertigo but complains of a vague sense of imbalance while walking, a in the dark or on uneven surfaces. She has never experienced sudden falls.
In the past 3 months, she has also developed occasional numbness and tingling over the right cheek, difficulty chewing on the right side, and mild drooping of the right corner of her mouth when tired. Her colleagues report that her speech sometimes sounds “slurred.” She denies difficulty swallowing, hoarseness, diplopia, limb weakness, or seizures.
There is no past history of ear discharge, recurrent ear infections, trauma, tuberculosis, diabetes, or hypertension. She is not on any chronic medications. No family history of neurocutaneous syndromes (e.g., NF2) or similar complaints is reported.

General Examination:
Patient is well nourished, oriented, and cooperative.
Vitals: Pulse 82/min, BP 126/82 mmHg, RR 16/min, afebrile.
No cervical lymphadenopathy or thyroid swelling. No café-au-lait spots or cutaneous stigmata of neurofibromatosis.

Otological Examination:
External ear & canal: Normal bilaterally.
Tympanic membrane: Normal bilaterally.
Tuning fork tests:
Rinne test: Negative (BC > AC) on the right side, positive (AC > BC) on the left.
Weber: Lateralized to the left ear.
Absolute bone conduction (ABC): Reduced on right side.
Pure Tone Audiometry: Right ear shows sensorineural hearing loss, more pronounced at higher frequencies. Left ear normal.

Neurological Examination:
Cranial nerves:
CN V: Decreased pinprick and touch sensation in V1–V3 distribution on the right. Absent corneal reflex on right.
CN VII: Mild LMN type facial weakness (House-Brackmann grade II) with slight asymmetry on smiling.
CN VIII: Sensorineural hearing loss confirmed, imbalance noted.
CN IX, X, XI: Intact. No palatal asymmetry or hoarseness.
CN XII: Normal tongue movements.
Cerebellar signs:
Mild right-sided dysmetria on finger–nose test
Slight gait ataxia, swaying to the right
Motor & sensory exam of limbs: Normal

Systemic Examination:
Cardiovascular, respiratory, and abdominal exams: Normal

Investigations:
CBC, RFT, LFT: Within normal limits.
Audiometry: Pure tone average = 45 dB (sensorineural loss). Speech discrimination score = 50%.
ABR (Auditory Brainstem Response): Delayed wave III and absent wave V on the right side.
MRI Brain with contrast: Well-defined, homogenously enhancing mass in the right cerebellopontine angle (CPA), extending into the internal auditory canal, measuring 3.5 × 3.2 × 2.8 cm, causing brainstem compression without hydrocephalus.

Questions:
What is the most likely diagnosis in this patient?
Explain the origin and pathology of this lesion.
Enumerate the differential diagnoses of a CPA mass.
Discuss the management options for this patient, including indications for observation, radiotherapy, and surgery.
What are the possible complications if left untreated?
How will you counsel this patient regarding hearing preservation strategies?

INTERVIEW SECTION

Sanjeev G Kulkarni sir
Student Welfare co-ordinator
Incharge, Directorate of International Relations
PIMS- DU
Professor, Department of Microbiology, Dr. BVP RMC

Q1.What inspired you to take up the role of Director of International Relations?

This responsibility was entrusted to me by the management of PIMS DU, after the then Incharge resigned and left. However, since I had returned from Sweden in 2005 after completing my Fellowship in Clinical Microbiology at Linkoping University, Sweden, I thought that based on my experience, I can positively contribute. I also seek my inspiration through the constant support, guidance and encouragement that I receive from Hon'ble Chancellor Dr Rajendra E Vikhe Patil from time to time.

Q2.How long have you been working in international relations within medical education?

I have been handling this responsibility for last 20 years and as a faculty for last 30 years at this institute.

Q3.As the director of International Relations, what does a typical day look like for you?

The most important part of my job profile is to promptly reply to the mails of the collaborators, which at times has to been done all through the day and at late hours in night, often when we are working on the important projects. Communication is the most important aspect of developing the international relations.

Q4.What are some of the key international partnerships currently active at the university?

Since inception, PIMS DU has developed international partnerships with 38 different universities and organizations, situated world over. Some of the current important international partnerships include ongoing research project on oral cancer with The Hebrew University of Jerusalem, Israel, strengthening the activities at Smt Sindhutai E Vikhe Patil Spinal Injury Rehabilitation Center in partnership with Karolinska Institute & Spinalis Foundation, Sweden and Establishing Neonatal Neuro Critical Care, active exchange programmes, receiving international students, documentation, developing new partnerships and strengthening the existing collaborative activities.

Q5.How do you identify and initiate new collaborations with foreign medical institutions? What factors do you consider ?

The process of internationalization of higher education at our campus was initiated in 1999, before the establishment of PIMS DU through the visionary efforts of our Founder Father Padmabhushan Dr Balasaheb Vikhe Patil and currently being undertaken under the leadership of our Hon'ble Chancellor Sir.
The new partners are identified based on the mutual interest of PIMS DU and foreign universities to initiate the academic and research collaborations in the areas of medicine, dentistry and allied health sciences including the world rankings of foreign higher education institutes.

When building partnerships with international universities, we review review their ranking, accreditation, affiliations and programs. The key step is to identify mutual academic and research interests. We further, assess each university's strengths, prepare an action plan for student and staff exchanges while expanding collaboration opportunities.

Q6.How do international relations benefit the college and its students?

The internationalization of higher education at PIMS-DU has greatly benefited faculty and students through advanced training and collaborative programs.
Faculty and students gain pedagogic and clinical skills via Erasmus and Swedish Government scholarships, with opportunities for doctoral, postgraduate, undergraduate, and certificate courses under the Erasmus Mundus scholarship programmes.
International expertise offers guidance to improve the health care delivery system, while visiting students and faculty engage with community-based medical education and rural public health initiatives.
These collaborations have led to the establishment of advanced healthcare facilities, including a pediatric cardiac surgery unit, an intensive neonatology unit at Pravara Rural Hospital, and 12 primary health centers including two in a tribal area modeled on Swedish healthcare with a focus on maternal and child health.
Other key developments include the establishment of Smt. Sindhutai Eknathrao Vikhe Patil Spinal Injury Rehab Center in partnership with Spinalis Foundation and Karolinska Institute and a digital pathology lab for international oncopathology consultations, and enhanced cancer research, treatment, and diagnostic facilities.

Q7.How does the university facilitate student exchange programs in medicine?

PIMS DU facilitates the student exchange programmes through the Linnaeus Palme Scholarship Programme and under Erasmus Mundus European Scholarship Programmes.

Q8.What are the key learning outcomes you expect from these international exchange programs?

Salient Features of International Collaborations:-
Academic:
PIMS-DU has partnered with European Union programs such as Erasmus Mundus, Erasmus+ and EUPHARATES, enabling students and faculty to pursue higher education in European universities.
Enhancement of Professional understanding and widening of the conceptual knowledge along with skill up-gradation by conducting conferences, Workshops, Seminars with the help of International Faculty.

Research:
Collaborative, interdisciplinary research is conducted across public health, medicine, dentistry, physiotherapy, nursing, biotechnology, and Ayurveda, with a focus on rural and tribal health.

Healthcare:
International collaborations have strengthened healthcare delivery through the establishment of specialized facilities, along with the previously mentioned collaborations, here are some more:
* A Digital Pathology Lab for international consultations in oncopathology.
* Cancer research, treatment, and diagnostic facilities with international partners.
* Innovative health programs such as body awareness training, arthritis care, Zumba and aerobic classes, and health promotion activities have also been introduced.
* Pravara Rural Hospital receives free devices from "Resources Beyond Borders" Swedish Organization established by visiting faculty of PIMS.

Q9.How do you ensure the safety and academic quality of international student placements?

As a policy decision laid down by our Founder Father Padmabhushan Late Dr Balasaheb Vikhe Patil, PIMS DU establishes a collaboration with countries that are recognized safe to travel by the various international agencies and are guided by the policies of Government of India.

Q10.What are some of the biggest challenges you face in international collaboration?

Some challenges include differences in curriculum between India and abroad, as many universities overseas follow credit-based assessment while India is still transitioning. In addition, certain statutory norms in India restrict students from undertaking exchange as part of their curriculum. Despite these, we continue working to overcome them.

Q11.How do you overcome issues like visa restrictions, language barriers, or curriculum mismatch?

We have not faced major visa restrictions, as our Directorate ensures all documents are properly supported. Language is not a barrier since most medicine and allied health programs worldwide are offered in English. To manage curriculum mismatch, both the host and home university sign a “Learning Agreement.” This ensures students undertake the desired academic activities during the exchange program.

Q12.How has the COVID-19 pandemic affected international medical programs, and what long-term changes has it brought?

During COVID, we stayed connected with partners through online guest lectures, workshops, and patient assistance. We even developed new partnerships and renewed older ones virtually. After the pandemic, major challenges have been seeking funding from global agencies, unequal distribution of resources, and access to healthcare. Strained diplomatic relationships also affect collaborations. COVID taught us the importance of adaptability in sustaining global programs.

Q14.What inspired you to pursue a career in Microbiology?

At the time I chose my career, Microbiology was an upcoming branch and a natural choice for me. My undergraduate and postgraduate teachers greatly inspired me to pursue diagnostic microbiology. Their guidance encouraged me to grow in this field. Over time, it has been a fulfilling journey of learning and teaching.

Q15.What advice would you give to medical students interested in international opportunities?

My advice to medical students is to first complete their post-graduation in India, after which , they can go abroad for fellowships, advanced training, and research opportunities. I strongly encourage them to return and practice in India, where doctors are globally respected for their clinical and surgical skills. This way, they can gain international exposure while serving their own country.

The Canvas

AGNIGARBH- Born of Fire
I bow to Hanuman,the one who holds fire within,of great speed,immense valor and boundless strength.
~ Siddhi Jadhav
MBBS(2024)

Med Poets Society

The Med-Bird's Flight

A little bird with wings so wide,
Dreams of soaring, full of pride.
Through books and nights so long and deep,
It flutters on, forsaking sleep.

With stethoscope like feathers bright,
It learns to heal, to set things right.
Perched on notes, it chirps in vain,
"Patho, Pharma—oh, my brain!"

Through storms of stress, through skies of doubt,
It flies ahead, never turns about.
And though its wings may tire and bend,
The healing sky waits at the end.

~Ajinkya Bidwe
MBBS 2022

हँसते हुए रस्ते पर शिकवा ना कर,
दिल के जसबातो को छुपाया ना कर,
और हर चीज़ मुक्कमल करके भी क्या होगा?
कुछ पाया कुछ खोया पर ये हँसी के पल गवाया ना कर|

~Shlok Bangad MBBS 2024

International Days

World AIDS Day
1st December

World Cancer Day
4th February

World TB Day
24th March

World Leprosy Day
30 January

World Mental Health Day
10th October

World Malaria Day
25th April

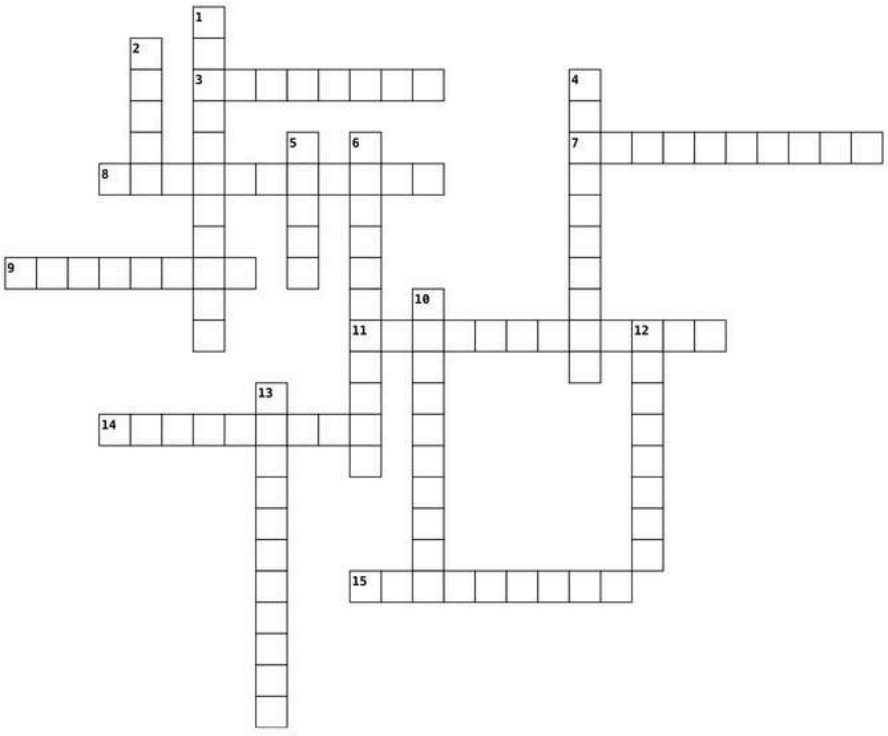
Campus Tales

College life truly is one of the best times to explore who you really are, figure out your strengths, and enjoy your life to the fullest.For me, every moment of college has been something to cherish — from the crazy fests filled with music, laughter, and endless energy, to those spontaneous day-outs with friends that turned into unforgettable memories. Bunking classes just for a chai session or a movie felt like such a rebellion, but honestly, those little things made it all the more fun. Of course, I can't forget the exams — the last-minute group studies, panic-fueled all-nighters, and the joy of passing subjects we barely studied for! College gave me the freedom to make mistakes, learn from them, and still laugh through it all. It's the time where you get to discover your potential without pressure, enjoy life to the fullest, and build friendships that last a lifetime. Honestly, if I could go back and relive it all, I would in a heartbeat.

Looking back, the memories that stand out are the late-night balcony sessions with friends. We would talk for hours, oblivious to the passage of time, only to be jolted by the realization that it was 4 a.m. and we had an 8 a.m. class. We'd make promises to wake each other up, a pact that, in all honesty, was rarely kept.
I even continued this tradition, passing on the "non-ideal senior" legacy to my juniors, a role I embraced with humor. Despite those late nights, college instilled in me a unique skill: the ability to wake up at 7:40 a.m. and still make it to my 8 a.m. duty on time for my internship. It's a testament to the life lessons that college teaches so well.
I am immensely grateful for the bonds I forged here. The relationships with my batchmates, the incredible seniors who always had my back, and my lovely bacchas are what I will cherish the most. These connections are the true legacy of my college experience, and I hope they last a lifetime.

- **Dr. Esha Mittal (batch 2019)**

CRISS-CROSS



Accross

3.A graphical representation of occurrence of cases over time
7. The total number of existing cases in a population at a given time
8. A variable that distorts the apparent effect of an exposure on outcome
9. Transmission of disease from animals to humans
11. Study of distribution and determinants of health-related states
14. Rate that measures new cases in a given population over time
15. The number of deaths in a population

Down

1. The ability of a test to correctly identify those without disease
2. Measure of association between exposure and outcome
4. Group of individuals being studied
5. Person who first develops a disease in a population
6. Absence of disease
10. A factor that increases the likelihood of disease
12. Sudden increase in the number of cases above what is normally expected
13. The ability of a test to correctly identify those with disease

Answers to previous edition;

1. PrEP
2.Gynaecologist
3. Obstetrician
4. ART
5. Immunity
6. Perinatal
7. Antenatal
8. Contraception
9. Pap Smear

CAMPUS INSIGHTS

PADMANJALI 2.0

Guest Lecture on Advaced Neonatal Neuro-monitoring conducted by the Department of Peadiatrics

Volunteers for Peadiatric Conference

NSS WORKSHOP

NSS Workshop was organised from 10th to 15th February,2025 . Various activities like Seminar on Nutrition and Hand Hygiene for school students , rallies, nutrition exhibition and lectures were organised. The volunteers collected door-to-door information via family survey and Epi Collect app to identify various health problems and needs of villagers and to formulate future plans and programmes.

Cleaniness drive conducted on Day 1 of NSS Camp.The volunteers cleaned the premises where the camp was organised and the surrounding areas.

NSS volunteers painted the walls of the assigned locality to spread social awareness among civilians. Some of issues they highlighted include- Save water, hand hygiene, women education and empowerment.

General Health Checkup for the villagers was conducted. The volunteers went door-to- door to promote health education and ensure active participation. A multi-diagnostic approach was followed where resirents from Surgery, opthalmology, medicine, orthopedics and ENT department also showed enthusiastic participation.

A Research Methodology Workshop was conducted for postgraduate students by the Directorate of Research, under the guidance of Dr. Rahul Kunkulol, Dr. Mandar Baviskar, and Dr. Anup Kharde.

Ameya – The Official Dance Club of PIMS opened its doors to enthusiasts—both experienced and novice dancers—through a dance workshop on 25th February 2025. Since then, the club has gained tremendous popularity with its frequent workshops covering diverse styles, ranging from hip-hop and Bollywood to classical dance forms. In addition to workshops, Ameya regularly performs at college events and showcases their creativity by producing and posting choreography videos.

Video Shoot-hip hop

The Core team members

The Official Dance Club of PIMS

Anushka Nagtilak and **Shreya Jagdale** won silver medal in women's doubles badminton

Swar Kulkarni of MBBS 21 stood first in badminton mens singles.

Ayush Gadge, Swar Kulkarni, Amey Bhalme,Hardik Runwal won bronze medal in Table tennis.

Men's doubles badminton 2nd position was bagged by **Aditiya Singh** and **Kaushik Bagad**

Silhouettes'25
AFMC, PUNE

Kaushik Bagad bagged 1st position in men's singles.

Pravara Badminton team representing at AFMC west zone Inter University Badminton tournament

Shreya Jagdale of MBBS 23 won gold medal in women's singles badminton at Bharatiya Vidyapeeth Pune.

A thought provoking play was conducted by RMC batch 2022 to educate kids about young onset diabetes mellitus and its management

Paediatrics Department's initiative to educate about diabetes among kids

In May 2025, Diksheeta Mathur, a student of the MBBS 2021 batch, participated in an international student exchange program organized by the International Federation of Medical Students' Associations (IFMSA) under the Standing Committee on Professional Exchange (SCOPE). She completed a clinical rotation in the Department of Pediatrics at Ospedale Sant'Orsola in Bologna, Italy, affiliated with the University of Bologna.

During this rotation, she observed and actively participated in the activities at the hospital. The exchange provided her with valuable exposure to European healthcare practices, enhanced her clinical skills, and broadened her understanding of healthcare in an international context.

Maitreyi

THE HUMANITIES CLUB

Maitreyi – The Humanities Club brought a splash of color and creativity to campus with Color Wars, a unique swap-painting event where participants traded their masterpieces every five minutes! Laughter, friendly chaos, and bursts of color filled the room — and the lucky winners walked away with sweet waffle coupons.

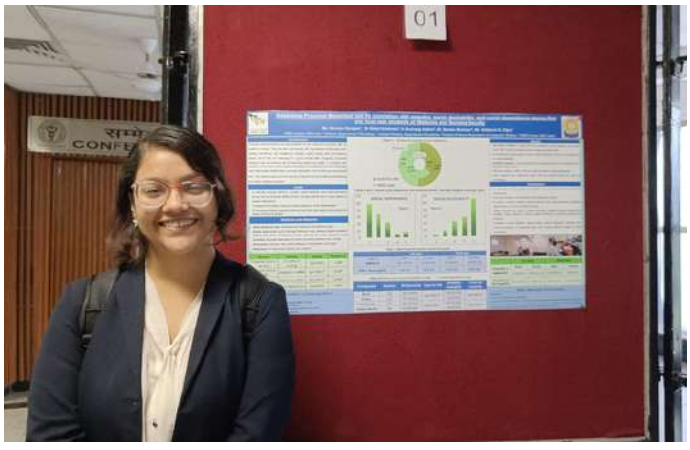
The excitement didn't stop there! Maitreyi also hosted a university-wide screening of the ICC World Champions Trophy semi-final and final matches. The hall echoed with cheers, claps, and chants as India stormed to victory — a night of pure joy, energy, and unforgettable memories!

MEHFIL-E-ALFAAZ

On 12th July, Maitrayi – The Humanities Club hosted Mehfil-e-Alfaaz, an enchanting evening drenched in poetry, shayari, and soulful expression. The event brought together students from various batches who took the stage to recite verses that spoke of love, life, nostalgia, and dreams.

Each performance was a window into the performer's heart — some evoked laughter, others left the audience spellbound in silence. The ambience, adorned with soft lights and an air of literary warmth, transformed the evening into a celebration of words and emotions.

Mehfil-e-Alfaaz truly stood as a testament to the club's spirit — nurturing creativity, connection, and the timeless beauty of expression through art and language.



Soumya Gangwar (MBBS Batch 2021) was shortlisted among candidates from across the country to the top 20 finalists for her Original Research Poster at INSIGHT 2024, held at AIIMS, New Delhi. She secured the Second Position in the poster presentation and also received a Special Mention in the Open Mic event.

Shivam Waghmare (MBBS Batch 2022) recived Silver medal/2nd prize for Research Proposal presentation at AIIMS BHOPAL held on 22nd September 2024.

The topic for his research was -Association of Pedometric Data with Wellbeing in Medical Students .

IGNITIA

National level intercollegiate tournament was held in our college. RMC football team won the tournament.

Action-packed matches held during Ignitia '25

Winning teams of Ignitia in high spirits

Priyanshu Kumar Jha and Vanshika Agarwal of MBBS 2021 presented a case at CONFLUENCE'24 held at Seth GS Medical college and KEM hospital. They stood second overall for their presentation.

ABHIRANGA

The Drama Club

Abhiranga- The Drama Club held their inaugral meet and greet event, introducing the team and its scope to all interested attendees.

Abhiranga Drama Club focuses on presenting the legacy of Indian theatre and cinema along with all its aspects viz. acting, writing and filming in a way that will be both classy and popular. It serves as the hallmark of the dramatic art with another important function apart from entertainment- holding a mirror to society.

A modern adaptation of the classic Marathi play by Prof. Vasant Kanetkar, 'Raigadala Jevha Jaag Yete', directed by Tanmay Sardesai, edited by Vishwajeet Dharmadhikari, Sharavani Hekde, Tanmay Sardesai.

REIGNING CHAMPIONS

UNITED WARRIORS

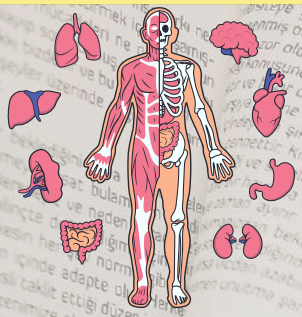
PPBL'25

RUNNER UP GOLDEN EAGLES

Rising Star: Sangram

MVP Tournament: Krish Dabas, MBBS 2021

MVP of the Final match: Dr. Akhil Guntupalli



Synergia

The Academic Club

Anatomy Quiz was organised by the academic club in association with the Department of Anatomy. Prelim Round witnessed enthusiastic participation and the event was well organized.

Winners - **Sarvesh Wani,Soham Sankhe,Asees Atar,Shreyas Upasani.**

Runners up- **Gaurav Chalwade,Nishita Bhrama,Shivom Pandey and Jay Dudhani**

Laproscopic Workshop organised by Obstetrics and Gynecology Department witnessed enthusiastic participation.

Laproscopic Workshop participants with organizers.

A brief introduction was given by the residents about the advantages and disadvantages of laproscopy and how the procedure has taken over obstetrics. Later, a laproscope was used to demonstrate how procedures like fibroid removal, management of ectopic pregnancies is done. Overall, the workshop was informative and useful.

Laproscopic Workshop (Session 2) was an enriching academic experience that provided hands-on exposure to minimally invasive surgical techniques. Students and delegates actively participated in various training sessions, gaining familiarity with specialized laparoscopic instruments and their proper handling. Faculty experts demonstrated the use of the laparoscopic simulator, allowing participants to practice basic skills such as hand–eye coordination, precision, and depth perception in a controlled environment.

FLAGSHIP UG-PG RESEARCH CONFERENCE OF PIMS-
FOR STUDENTS OF HEALTH SCIENCES.

INVENTUM'25

STUDENTS OF RMC MADE THEIR INSTITUTE PROUD BY EARNING NUMEROUS LAURELS. GLIMPSES ARE SHOWN HERE.

Ms. Manaswi Sharma, MBBS 2024, was awarded for best Technical work for Symposium.

Ms. Soumya Gangwar was acclaimed as the Best Speaker for Symposium. She also participated in the Debate compeition, and stood first.

Symposium team Adopt a Grandparent were the first runner up for Symposium. The team members were: Ms. Sakshi Parate, Ms. Soumya Gangwar, MBBS 2021; Ms. Aarya Ghuge, Ms. Tanishi Bahety, Mr. Swayam Rane, Mr. Jay Patil, Mr. Anjisth Tandon, Mr. Varad Khedkar, MBBS 2023; Ms. Shambhavi Lugade and Ms. Shreeza Singha, MBBS 2024.

Ms Shreya ghogare, ms. Hridaya Jain, and Ms. Kirtishree gude of MBBS 2022 stood second in the Pre/ Paraclinical quiz.

Ms Anuja Umbarkar, Ms. Jui Vaidya, and Mr. Shivam Waghmare of MBBS 2022 stood first in the Pre/ Paraclinical quiz.

Mr. Adnan Narvel of MBBS 2021 stood third in the paper presentation event.

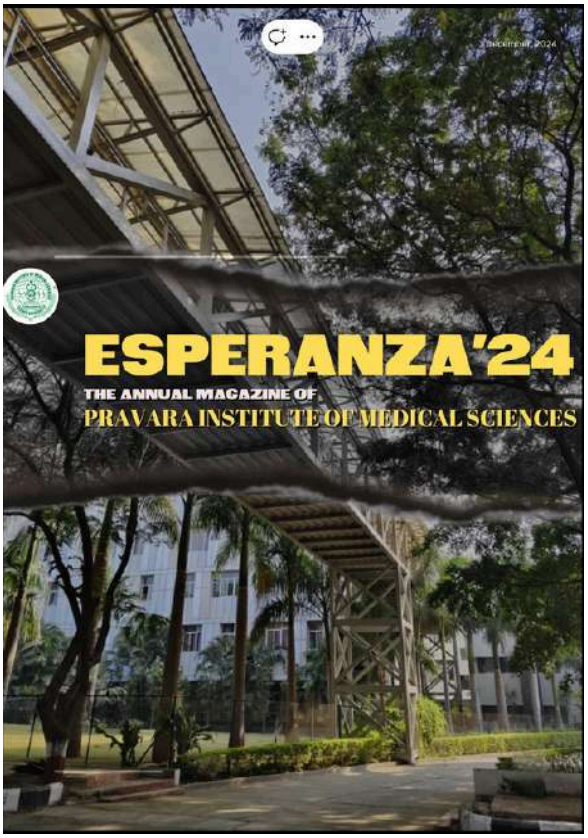
Mr. Shreyas Acharya, MBBS 2021,and Mr. Shivam Waghmare MBBS 2022, stood third for Paper presentation.

Mr. Shreyas Ramakrishna and Ria Chordiya of MBBS 2023 sto third in the poster presentat event.

Research Methodology Workshop was organized by the Directorate of Research for postgraduate students, aimed at enhancing their understanding of research design, data analysis, and scientific writing

ESPERANZA'24

Click on the link to open your own copy of the Annual University Magazine of Pravara Institute of Medical Sciences



Want more highlights for Ganpati festival and Padmanjali?
insights on various cells, student clubs?
Artworks and poetry showcased by students and faculty of all institutes?
Want to read about the research Maestros of different colleges, or the journey of a student through various medical conferences?

Pravara Institute of Medical Sciences
https://www.pravara.com
PDF
ESPARANZA 24

The Editorial Board of Esperanza'24

In May 2025, Mr. Shreyas Acharya, a student of the MBBS Batch of 2021, undertook a prestigious Surgical Elective at King's College London, one of the world's leading centers for medical education and research. His elective posting was at Guy's and St Thomas' NHS Foundation Trust, widely regarded as the UK's premier training hospital, where he completed a rotation in Plastic and Reconstructive Surgery.

During his elective, Mr. Acharya gained extensive clinical exposure, actively participating in over 40 surgical procedures—including 20 scrubbed-assisted surgeries and 20 detailed procedures which were he scrubbed-observed.

His dedication, clinical acumen, and professionalism earned him high commendation from his mentors. Upon evaluation, he was awarded a Grade 'A+', reflecting his exemplary performance and commitment to excellence in surgical practice

Winners of season 3 La Pravara Annual Football Tournament **team Notorious Nutmeg**

La Pravara Football Tournament

La Pravara, the annual intercollegiate football tournament took place in the month of Acopeted head-on pril 2025. Four teams - Venom FC, Notorious Nutmeg, Bluelock and Norad II competed head-on against each other. The teams battled it out in them regular seasons, showcasing their strengths and stratergies. The final playdown took place between Norad ll and Notorious Nutmegs.The stage was set for a dramatic showdown,The finals lived upto the hype and kept everyone on the edge of their seats till the very end. **Asbah Sheikh** was declared the most valuable player of the tournament with a whopping hat-trick of goals.

Series Reveiw : Hospital Playlist Season 1

사랑해요

Hospital Playlist, written by Lee Woo-jung and directed by Shin Won-ho, is a slice-of-life medical K-drama that follows the friendship of five doctors in their 40s who met in medical school. Through their daily lives, the show offers a heartwarming yet realistic portrayal of working in a hospital—doctor-patient interactions, sleepless nights on duty, and the challenges and fulfillment of saving lives.

Unlike typical medical series packed with high-stakes emergencies and hospital politics, this drama takes a refreshing approach. The medical cases feel real yet never overly dramatized with no forced antagonists or exaggerated conflicts, making the series both engaging and comforting. The series showcases the brilliance of physicians yet, it does not glorify them as infallible heroes.
As Dr. Ahn Jeong-won wisely says:
"Do you know why doctors can only give vague answers such as 'We can't be sure yet,' and 'We need to observe a bit more'? Doctors must take responsibility for their words. So we must be careful with what we say. There's only one thing we, doctors, can tell our patients with certainty: 'We will do our best.' That's the only thing."

Along with a nostalgic OST that tugs at your heartstrings, Hospital Playlist will make you laugh, cry, and feel deeply connected through its heartfelt storytelling, well-developed characters, and perfect balance of humor and emotion.

Brain On Fire : My Month of Madness (by Susannah Cahalan)

"Brain on Fire: My Month of Madness" by Susannah Cahalan is a thought provoking memoir that recounts the author's harrowing experience with a rare autoimmune disorder. At 21, Cahalan, a young journalist, began experiencing strange and terrifying symptoms, including seizures, hallucinations, and paranoia. Her behavior became increasingly erratic, causing concern among her loved ones.Cahalan's doctors were bewildered by her symptoms, leading to misdiagnosis of schizophrenia, bipolar disorder, and alcohol withdrawal. However, her parents were not satisfied with these diagnoses and sought a second opinion. A team of specialists, led by Dr. Najjar, took on Cahalan's case, determined to unravel the mystery of her illness.

After a series of tests, Cahalan was diagnosed with anti-NMDA receptor encephalitis, a rare autoimmune disorder in which the immune system attacks the brain. This diagnosis marked aturning point in Cahalan's journey, and she began a long and difficult process of recovery.
Throughout the book, Cahalan's writing is compelling and insightful, making her story both engaging and accessible. She extends her gratitude to the medical professionals involved in her recovery, particularly Dr. Najjar, whose dedication and expertise were instrumental in saving her life.

Cahalan's narrative highlights the importance of accurate diagnosis and the dangers of misdiagnosis. Her story emphasizes the need for medical professionals to consider rare and unusual conditions, providing supportive treatment to those affected.The book also underscores the significance of mental health and early diagnosis in rare neurological conditions. Cahalan's experience demonstrates how early intervention was crucial to her recovery. By incorporating case studies and notes from doctors, Cahalan provides a comprehensive understanding of her disease, making the book an invaluable resource for patients facing similar struggles.

Ultimately, "Brain on Fire" is a testament to Cahalan's courage, patience, and resilience. Her determination to uncover the truth behind her condition makes her story both emotional and deeply relatable.

The book is a remarkable blend of memoir and autobiography, capturing every incident of Cahalan's turbulent period.It is a riveting and memorable narrative that chronicles a woman's fight to reclaim her identity and sanity. This insightful memoir is a must-read for anyoneinterested in mental health and medical mysteries, offering a profound understanding of the human spirit's capacity for resilience.

THE DIAGONISTIC DILEMMA

Informant: Father (Reliable, Fair)
Veena, a 7- year old female, hindu by religion, is a child of 1st birth order born of Grade 3 consanguineous marriage was brought to the opd by her father on Aug 29, 2025.
The child's father reported c/o fever, cough and coryza since 2days.
She was apparently alright 2days back when she developed a low grade- intermittent type of fever, acute in onset a/w an acute- intermittent type of cough and coryza. It was not a/w burning micturition, loose stools, vomitting, headache, blurring of vision, yellowish discoloration of eyes. Cough not a/w expectoration, post- tussive vomiting.
There was 1episode of vomiting present, non- projectile type, containing undigested food and blood.
She had previous multiple history of hospital visits i/v/o LRTI and was taken to a local GP who advised a 2D- echo to be done, result s/o 'Large Os- ASD (20X21)mm mild RV systolic dysfunction mild MR, mild TR, echogenetic AML shunt PML moderate PAH. Patient was started on inj. Lasix and total fluid input and urine output was monitored. The patient was shifted for Paediatric- ICU for hourly monitoring and since was having moderate PAH, a blood c/s was done, result positive for Burkhodelia cepacia infection and cons. Patient was thus started on inj. Ceftazidime for 11days.

There is no significant family history of any congenital heart disorder(s) or no known exposure of mother to toxins during pregnancy.

On systemic examination, she had a pericordial bulge, trachea midline, apex beat at 5th ICS with thrill+ at mitral area. S1 S2 heard, with S2 loud and Grade 3 systolic murmur+. Increased jvp and parasternal heave present.

R/s: BLAE with no added sounds
P/A: soft, non- tender, no organomegaly
Cns: tone- power- reflexes normal, activity present.

INVESTIGATIONS:
1. To prove the diagnosis
• X ray chest
• Ecg
• 2d echo and Color doppler
• Transesophageal Echocardiography (TEE)
• Cardiac Catheterization (if surgery is contemplated)

2. To rule out complications
• Cbc: for respiratory tract infections
• Esr: increases in IE and decreases in ccf
• Blood culture: for suspected IE

DIFFERENTIAL DIAGNOSIS:
1.Patent Foramen Ovale
2.Endocardial Cushion Defects
3.Pulmonary Stenosis
4.Partial Anomalous Pulmonary Venous Return
5.Other Valvular Lesions like Aortic Stenosis, Mitral Regurgitation, etc.