JSS ACADEMY OF HIGHER EDUCATION AND RESEARCH MAURITIUS

A degree awarding institution registered with the Higher Education Commission, Mauritius

JSS Health & Education Newsletter

Volume II Issue II
May-August 2022

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About JSS Academy of Higher Education and Research, Mauritius (JSSAHERM)

The JSS Academy of Higher Education and Research, Mauritius (JSSAHERM) was established in 2018 with degree awarding powers is an approved and registered institution with the Higher Education Commission, Mauritius.

JSSAHERM is located on a sprawling eight- acre freehold campus at Bonne Terre, Vacoas, the only one of its kind in the country, including some 15, 000 sq. mts of built- up area with necessary academic, learning, and recreational infrastructure. The campus also comprises of hostels for boys and girls students, sports facilities such as Volleyball, Basketball, Football and in- door games. There are also residential units for staff and guests.

Building on its philosophy of quality education at affordable costs, JSSAHERM aims to present itself as the destination of choice for higher education and training in Mauritius and the Indian Ocean region.

JSSAHERM launched the Bachelor of Pharmacy (BPharm) programme in 2020. The Bachelor of Pharmacy programme of JSSAHERM has received Pre-certification from the Accreditation Council for Pharmacy Education (ACPE), USA, making JSSAHERM the first institution in African region to get ACPE pre-certification.

JSS Mahavidyapeetha (JSSMVP), Mysuru, India is the sponsoring society of JSSAHER, Mauritius. JSSMVP has established more than 330 educational institutions in India, Dubai, Mauritius, and USA, with a total student population over 50,000 and a staff strength over 12, 000.

The parent institution for the establishment of JSSAHERM, is the JSS Academy of Higher Education & Research, Mysuru (JSS AHER, Mysuru, India), formerly known as the JSS University. JSSAHER, Mysuru, India is ranked overall in the band of 351-400 globally and ranked 2nd in India by the Times Higher Education (THE) Rankings 2021. Among young universities, JSSAHER Mysore stands 70th in the world and 1st in India as per THE 2022 ranking.

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Inside this Issue

A soft copy of this Newsletter is available under section *'Publications'* on our website
https://jssaher.edu.mu/publication/

Prof (Dr.) Praveen Mohadeb

Chief Executive Officer and Vice-Chancellor

JSS Academy of Higher Education and Research, Mauritius

I am pleased to write this forward to the 5th publication (Volume II Issue II, 2022) of JSSAHERM – Health and Education Newsletter. Over the period, the Newsletter has covered significant aspects of the "Health" and "Education" sectors.

Since the first issue covering the period January to April 2021, this Newsletter has become an interesting must-read for students, academic staff, researchers, health specialists, and the public in general. This issue also contains informative articles related to the health care and pharmacy sector, the latest happenings in the world of science, scientific articles of students and staff of JSSAHERM, invited articles, and drug-related information.

We, at JSS Academy of Higher Education and Research, Mauritius, are evolving as a health higher education-based institution with the vision "To be a world-class center of excellence in the Indian Ocean to enhance the quality of life for the benefit of Society in diverse nations through education, training, research, and innovation"

We are continuously working towards achieving our vision and mission and providing a different, distinct, affordable quality learning experience to our learners. I am glad to share that we have signed MoU/Agreements with several Hospitals/Pharmacies/CROs etc. and our students are undergoing internships in those places. I am also happy to share that we have an eminent visiting professor who guides the faculty in academic, research & development. We are also continuously expanding the portfolio of our programs in health and life sciences.

Apart from conventional teaching and education, social and professional responsibilities are inculcated through outreach programs. I congratulate the students and staff of the Faculty of Health Sciences, School of Pharmacy for organizing various outreach programs for the benefit of students, the general public, and society and also for this issue of the Newsletter as well.

I wish readers a happy reading.

Prof (Dr.) Praveen Mohadeb
Chief Executive Officer and Vice-Chancellor

Patient Safety

Every day, you are proud to be a part of a healthcare system that has a good influence on patients. You are aware that your daily employment has a significant impact on the health of others. Hence, the discussion of patient safety efforts has piqued your attention. Isn't the entire purpose of medical care to enhance patient safety?

Yes, but it is not as straightforward as it may appear. The medical community is in a perpetual state of growth and development, allowing much space for improvement. As hospitals get larger and busier, patient protection procedures might occasionally fall through the cracks. Healthcare staff who are committed to serving their patients' needs and ensuring their safety at all times have placed patient safety in hospitals on their radar.

Diverse healthcare facilities and medical associations have implemented patient safety initiatives to improve hospital procedures and train personnel to operate as a team to prevent errors and protect patients. There is no miracle cure for patient safety problems, but there are a number of recognized elements that can help.

- Utilize surveillance technology
  During their shifts, healthcare professionals provide care for multiple patients, each with unique needs and prescriptions. Utilizing monitoring technology can assist nurses and doctors in ensuring that they are constantly following the correct protocol for the correct patient and are aware of each patient's demands.

  Technology, such as bed alarms to notify staff if a patient falls or barcode systems that verify patient medication, are behind-the-scenes measures many hospitals are already taking to improve patient safety. Monitoring systems like these make it simple to detect and prevent harm caused by human error in hospitals.

- Ensure that patients comprehend their treatment
  You may believe that the healthcare professional is only responsible for patient safety, but patient education is also crucial for reducing medical errors. This does not necessitate that patients have the same awareness of their situation as a medical professional, but a basic understanding of the treatment and the risks they confront can go a long way. Patients and their families are naturally concerned with their own health maintenance. By ensuring that they comprehend their treatment plan, medications, and medical procedures, you equip them to detect and prevent errors in their own care.

- Verify all medical procedures
  We've all heard terrible stories of patients who had their right knee replaced when their left knee was really slated for surgery. Incorporating regular verification techniques into hospital protocols prevents such errors. Verification also plays a role in other parts of healthcare, such as checking the dosage and timing of medicine administration.

- Use adequate handwashing techniques
  Simple actions can have a significant impact on the safety of patients. Handwashing is cited by the Centers for Disease Control and Prevention (CDC) as one of the greatest strategies to reduce the transmission of germs and diseases in hospitals.

  The Clean Hands Count campaign of the CDC suggests that healthcare providers regularly use alcohol-based hand sanitizer and have open discussions with patients about the importance of hand cleanliness. This enables consumers to take charge of their own health by asking healthcare practitioners whether they've cleansed their hands upon entering the room.

- Promote a team environment
  Every member of a hospital's staff contributes to ensuring patient safety. Your hospital's culture and attitude toward mistake prevention can be drastically altered by emphasizing teamwork and being candid with personnel about their role in patient safety.

  The daily behaviours of hospital employees can have a significant impact on patient safety. Now that you are aware of the elements that can help protect patients, you will want to learn more about how to deliver the highest quality care.

Dr Khayati Moudgil,
Chief Editor
JSSAHERM, Newsletter

NAM S&T CENTRE

NAM S&T CENTRE: AN INTER-GOVERNMENTAL ORGANIZATION FOR COLLECTIVE SELF-RELIANCE OF NON-ALIGNED & OTHER DEVELOPING COUNTRIES

Preamble

After a series of international consultations and the decisions taken in the 5th, 6th and 7th Conferences of the Heads of State or Government of the NAM Countries, respectively held in Colombo (1976), Havana (1979) and New Delhi (1983), and thereafter, the adoption of the Statute of the Centre by consensus by the Meeting of the Plenipotentiaries of the Non-Aligned Countries in New York in February 1985, the **Centre for Science and Technology of the Non-Aligned and Other Developing Countries (NAM S&T Centre)** was established in August 1989 in New Delhi, India as an ***Inter-governmental Organisation***. At present, 47 NAM countries from various regions such as Asia, Africa, the Middle East and Latin America - represented by their government departments, Ministries or agencies dealing with Science and Technology are the Members of the Centre. Currently, for the 15th Governing Council, Sri Lanka is the President of the Centre; and Egypt, Mauritius and Palestine hold the offices of the three Vice-Presidents.

Objectives and Functions

The objectives and functions of the Centre include the promotion of mutually beneficial collaboration among scientists, technologists and scientific organisations from the non-aligned and other developing countries; helping in the establishment of links between national and regional centres; acting as a clearing house of information on technological capabilities of individual countries with a view to promoting technological cooperation and transfer of technology amongst them; maintaining a registry of scientific and technological experts of high calibre for utilisation of their services by the Member Countries; stimulating and promoting joint R&D Projects and Training Programmes either on bilateral or multilateral basis in selected fields of special relevance; preparation of the state-of-the-art reports, etc. The Centre may also undertake appropriate cooperation with the United Nations and its specialized agencies as well as with other governmental and non-governmental organizations.

During the last thirty years, the NAM Centre has evolved as a multi-functional international scientific institution, meeting the needs of the developing countries for their capacity building and collective self-reliance through science and technology interventions.

Priority Areas

The priority areas of the Centre have been identified based on their direct relevance and benefits to the developing countries; with a special focus on addressing issues related to South-South S&T cooperation and sustainable development.

S&T Activities

The Centre has so far organised **135** scientific events, including **90** international workshops, conferences, and roundtables and **45** training programmes on various S&T topics with **7923** participants from **127** countries. These events were highly successful and were organised in partnership with scientific organisations and agencies in the respective host countries with appropriate sharing of organisational and fiscal responsibilities.

In order to promote South-South and also North-South cooperation in Science and Technology, the NAM S&T Centre has been implementing various Fellowship Programmes in different S&T areas of interest, aimed at capacity building of the young scientists and researchers in NAM and other developing countries, in partnership with academic/research institutions and Centres of Excellence (CoE) in Egypt, Germany, India, Nigeria, Pakistan and South Africa. Currently, such Fellowships are being offered on: Ocean Sciences, Natural Products Chemistry, Minerals Processing and Beneficiation, Vaccines, Indian System of Medicine, Medicinal Plants etc. The Centre is also negotiating with a few more institutions to start fellowship schemes in new subject areas.

The Centre has brought out 90 publications, including 76 technical books, 9 workshop proceedings, 4 status reports and directories in various priority areas and 1 Monograph. The last two Books/Monographs from the Centre on *"Lightning"* and *"Dryland Agriculture"* were published by the leading International Publisher, Springer Nature, Singapore. Four other books from the Centre will also be published by Springer in the near future. In addition, the Centre publishes a quarterly **'NAM S&T Newsletter'**, which reports the activities of the Centre and the progress on S&T areas in the developing world. The Centre's official website: www.namstct.org carries key organizational information and recent updates on its scientific activities. Through the website, the Centre also provides opportunity to its Member Countries/Industry-Network Members to showcase their achievements and success stories in Science, Technology, and Innovation.

The Centre has the mandate to implement multilateral collaborative projects having implications on transfer of technologies within the NAM countries on various subjects that are of significant scientific, technological, and economic relevance to these countries. The Centre has successfully completed three collaborative projects partially supported by the Group of 77 (G-77) under its **Perez-Guerrero Trust Fund (PGTF)** for South-South Cooperation - on *Low-cost Housing Technology (1998–2003), Bio-Control of Pests and Weeds for Successful Agricultural Development (2001–2003) and Rainwater Harvesting and Groundwater Recharge – HRD and Technology Transfer (2008–2011)* with participation of a number of Member Countries. A Project on *Good Asian Practices in Innovation and Development* under the Regional Technical Assistance (RETA) was also implemented in 2009 with partial support from **Asian Development Bank (ADB)** and with participation of eight Asian countries. The Centre is currently executing another collaborative project on "*Reducing Arsenic Exposure from Food and Water in Developing Countries – A Road Map for Technological Solutions for the Future*" under partial support from G77/PGTF. The project is essentially aimed at capacity building through HRD and technology transfer in the NAM and other developing countries - to cope with the serious consequences of

Arsenic contamination of ground water in developing countries and provide a roadmap for low-cost technological solutions for the removal of Arsenic from the groundwater.

International Partnerships

The Centre has established partnerships from time to time with various international and national level S&T organisations across the world to initiate new activities and extensively disseminate the information from various agencies in Member Countries to help the scientific communities of the developing countries.

In order to make use of the networks of various international scientific organizations and to foster promotion of human resource development, capacity building and scientific research, the Centre has entered into formal partnership arrangements and concluded *Memorandums of Understanding* (MoU) or Agreements for cooperation with several organisations. Some of these important organisations in which the NAM S&T Centre has signed an MoU are Indian Ocean Rim Association (IORA), Mauritius; Leibniz Centre for Tropical Marine Research (ZMT), Bremen, Germany; International Science, Technology and Innovation Centre for South-South Cooperation under the Auspices of UNESCO (ISTIC), Kuala Lumpur, Malaysia; and JSS Academy of Higher Education and Research (JSS AHER), Mysuru, India.

Prof. B. Suresh, Pro-Chancellor and Dr. Surinder Singh, Vice Chancellor, JSS Academy of Higher Education, Mysuru during Visit to NAM S&T Centre, New Delhi for Signing of the Memorandum of Understanding on 25 October 2021

NAM - S&T Industry Network

Also, in order to encourage participation in the activities of the Centre and also to promote public-private partnership in S&T, a *'NAM S&T – Industry Network'* has been set up by the Centre, which may be joined by the academic and research institutions, S&T agencies and industry in the NAM and other developing countries as its members by paying a small annual membership fee.

Endnote

In pursuance of its objectives and functions to promote South–South cooperation in Science and Technology and with a special focus on implementation of Sustainable Development Goals-2030, the NAM S&T Centre is striving with a dream to bring the non-aligned and other developing countries to the frontiers of science, technology and innovation through capacity building, knowledge sharing, exchange of information, networking and pooling of resources. The Centre is also pursuing its efforts in enhancing North-South Cooperation in STI in the developing world.

The NAM S&T Centre has been working as a facilitator in science-driven economic development in the countries of the South by encouraging their governments to nurture the S&T institutions and formulating policy guidelines for the integration of science and technology into national development plans; and with the successful execution of a large number of programmes in diverse areas of science and technology, the Centre has been able to achieve noteworthy successes in establishing an identity of its own in the developing world.

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Edema

Our body is mostly water. It's in our blood, muscles, organs, and even in our bones. we need it, but sometimes our body holds on to too much of it. This is water retention, and it causes puffiness and swelling. Water, or fluid, retention occurs when there is a problem with one or more of the body's mechanisms for maintaining fluid levels. The circulatory system, the kidneys, the lymphatic system, hormonal factors, and other bodily systems all help maintain healthy fluid levels. If a problem arises with one of these systems, however, fluid retention- otherwise known as edema - can occur. Edema can affect any area of the body. It happens for a variety of reasons.

Could it be our diet?

We all need sodium. It plays an important part in regulating blood pressure and fluid levels. But you only need a small amount. If you have too much in your system, your body holds in water. Table salt is one source of sodium, but we get more of it from processed food like lunch meat, crackers, chips, canned vegetables and soups, fast food, and even soft drinks.

Check the sodium levels of food and drinks before you buy them. You can help balance your sodium by eating potassium-rich foods like bananas and spinach and drinking plenty of water.

Could it be our lifestyle?

Do you have swollen legs and ankles? Gravity keeps blood lower in your body. That increases the pressure inside the blood vessels in your legs and feet and causes fluid to leak into those tissues. Sitting or standing too long can cause your tissue to hold water. If your job keeps you onyour feet, you may notice swollen legs and ankles at the end of the day. It's also common after along time on an airplane.

The key is to keep blood circulating. If you stand or sit all day, it's important to take time to move around.

Could it be hormones?

It's normal for a woman to feel puffy or bloated in the days leading up to their period. It usually goes away after a few days. Hormones taken for birth control or hormone replacement therapy can also cause you to hold water.

Could it be our medication?

Many medicines have water retention as a side effect. They include:

- High blood pressure medication
- Pain relievers known as NSAIDs, including ibuprofen
- Antidepressants
- Chemotherapy medication

Could it be a heart problem?

A weak heart doesn't do a good job of pumping. That can cause you to retain water and lead to
swelling in the legs and abdomen.

Other symptoms of heart failure include:

- Weakness
- Lightheadedness
- Rapid heart rate
- Tired feeling
- Shortness of breath

In extreme, heart failure can cause a dangerous buildup of fluid in the lungs called pulmonaryedema. Signs of this include:

- Shortness of breath
- Rapid, shallow breathing
- Coughing

This requires emergency treatment.

Could it be your veins?

Chronic venous insufficiency (CVI) is a common cause of edema. CVI is a condition that typically affects the valves in the leg veins but may occur in other locations.

If the valves inside your veins don't close the way they should, not all your blood gets pumped back to your heart. This causes swelling in your lower legs.

Other symptoms include:

- Aching legs
- Enlarged veins
- Change in skin color
- Skin rashes
- Skin ulcers

CVI can be painful and uncomfortable. It may also cause noticeable changes to the skin.

These valves usually make sure that blood flows toward the heart. In CVI, the valves malfunction and allow blood to flow backward and pool in the lower legs and ankles.

Examples of some treatments include:

- Wearing compression stocking to reduce swelling and help heal skin ulcers
- Avoiding prolonged sitting or standing
- Keeping the legs raised to improve blood flow
- Walking or doing exercises that build the calf muscles
- Undergoing ablation, which uses heat or chemicals to destroy damaged vein

Could it be something else?

Water retention can also be caused by other serious conditions:

- **Deep vein thrombosis**: If you have swelling in just one foot or leg, it's possible you have a bloodclot. Other signs include pain, warmth, and redness. A clot can form while you're healing from surgery or during a long flight. This can be very dangerous, and you need to see your doctor rightaway.

- **Pregnancy:** During pregnancy, the body produces more blood and bodily fluids to support the developing fetus. Swelling is a common side effect of pregnancy. It can affect the ankles,feet, legs, face, and hands. Slight swelling is common and usually harmless. However, sudden swelling of the hands and face could signify a potentially life-threatening condition called preeclampsia.

  Women who experience mild swelling during pregnancy may get relief from home remedies such as:
  - Eating foods high in potassium
  - Reducing salt intake
  - Avoiding caffeine
  - Wearing comfortable shoes
  - Wearing support stockings
  - Avoiding standing for long periods
  - Elevating the feet when reading
  - Applying cold compresses
  - Wearing loose-fitting clothes
  - Limiting time outdoors during hot weather
  - Resting in a pool

- **Preeclampsia:** It's normal for women to have swelling in their feet and legs toward the end of apregnancy. But swelling in the hands and face could be a sign of a dangerous blood pressure problem called preeclampsia. Doctor's intervention is required if there is swelling along with headaches, blurred vision, or abdominal pain.

  Other possible causes include:
  - Cancers including kidney, liver, and ovarian cancer
  - Kidney disease
  - Cirrhosis of the liver
  - Protein loss from severe malnutrition
  - Lymphedema, a rare condition that can develop if lymph nodes are damaged or removed during cancer treatment

What can you do about it?

Call your doctor. In some cases, swelling calls for immediate medical help. If it's brought on byyour menstrual cycle or a salty meal, it'll go away on its own. If it's a symptom of another medical condition, treating it should help.

Your doctor may also suggest you:

- **Try a low-salt diet:** Don't get more than 2,300 milligrams of sodium a day.

- **Take medication:** Your doctor may prescribe a diuretic, or water pill. These help your body getrid of extra sodium and fluid through peeing.

- **Raise your feet:** Lie down with your feet above the level of your heart several times a day tomove fluid out of your feet and ankles.

- **Wear compression stockings:** Special stockings or socks gently squeeze your lower legs to helpkeep your blood circulating.

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Written by:

Mrs. Medha Gujadhur
Assistant Professor
JSSAHER, Mauritius

The Vaccines of COVID-19

COVID-19 continues to ravage the earth. Covid vaccinations are delivered to individuals in an effort to interrupt the COVID-19 transmission chain.

Vaccines aid in the development of immunity against a virus or other pathogen. A vaccine inserts into a person's body a less dangerous portion of the germ, or a substance engineered to resemble or behave like it. The immune system produces antibodies to combat the pathogen. In the future, if the individual is exposed to the same pathogen, their immune system will "recognize" it and "remember" how to combat it. This stops the individual from becoming ill from the germ.

The virus that causes COVID-19 features protein spikes on each viral particle. These spikes aid in virus attachment to cells and disease transmission. Some coronavirus vaccinations are designed to help the body "recognize" and combat coronaviruses that include spike proteins. The purpose of the coronavirus vaccination is to protect individuals by decreasing their risk of contracting COVID-19. In the event that a person contracts COVID-19, the vaccine prevents severe disease, hospitalization, and death.

There are three primary types of COVID-19 vaccines approved or authorized for use or undertaking large-scale (Phase 3) clinical trials in the United States.

- **mRNA vaccines** contain components of the virus responsible for COVID-19. This material instructs the cells in our body to produce a harmless protein that is specific to the virus. After our cells duplicate the protein, they destroy the vaccine's genetic material.

  Our systems understand that the protein should not be there and produce T-lymphocytes and B-lymphocytes that remember how to fight the virus that causes COVID-19 in the event of future infection. mRNA vaccines from Pfizer-BioNTech and Moderna are examples.

- **Vector vaccinations** contain a modified version of a virus other than the virus responsible for COVID-19. Within the modified virus's outer shell is material from the virus that causes COVID-19. This is known as a viral vector. Once the viral vector enters our cells, the genetic material instructs the cells to produce a protein that is specific to the COVID-19 virus. Using these instructions, the protein is replicated by our cells. This causes our bodies to produce T-lymphocytes and B-lymphocytes that remember how to combat the virus should we become sick in the future.

- **Protein subunit** vaccinations incorporate harmless fragments of the COVID-19 virus rather than the entire pathogen. Once vaccinated, our bodies identify that the protein should not be there and produce T-lymphocytes and antibodies that remember how to fight the virus that causes COVID-19 if we are ever infected again. Protein subunit vaccines are under development.

Typically, a vaccine undergoes preclinical research to guarantee its safety and efficacy. Prior to release, the three phases of clinical trials include regulatory approval, production, and distribution.

To be deemed safe and effective, a COVID-19 vaccination must pass a series of tests and meet specific criteria. The National Academy of Sciences, the National Institutes of Health, and the Food and Drug Administration (FDA) employ scientific research data to determine whether and when new treatments and vaccines can be made available to the general public. Importantly, COVID-19 cannot be acquired through vaccination. The vaccinations contain proteins or other biological molecules that stimulate the immune system, but do not contain the coronavirus.

According to CDC standards, you are fully immunized after it has been: • Two weeks after your second dose in a two-dose series, such as the Pfizer or Moderna vaccines; • Two weeks after your third dosage in a three-dose series, such as the Merck or Sanofi vaccines; • Two weeks following administration of a single dose of the Johnson & Johnson vaccine.

However, it is evident from clinical trial data that four weeks following the single-dose immunization there is further improvement, particularly in preventing severe COVID-19 or silent infection. For this reason, Johns Hopkins Medicine recommends four weeks following a single dosage of vaccine before a person is deemed fully immunized.
If you do not meet these standards, your vaccination status is incomplete.

Everyone 12 years and older should receive a booster dosage. A booster dose must be administered at least 5 months following the completion of the primary COVID-19 vaccine series. In most circumstances, Pfizer-BioNTech or Moderna (mRNA COVID-19 vaccines) are preferred. 12- to 17-year-old adolescents may only get a Pfizer-BioNTech COVID-19 vaccination booster.

The objective of covid vaccination is herd immunity. After a sufficient number of individuals in a population have been immunized, herd immunity will effectively prevent the virus from propagating. Not all individuals can be immunized. People with poor health or serious sensitivities to certain vaccine components may be unable to get vaccinations. However, they can still be protected if they reside near vaccinated individuals. When most of the population is immunized, it is difficult for the pathogen to spread because the majority of individuals they contact are immune.

Consequently, immunization protects not just you but also people in the community who are unable to receive the vaccine. By gaining herd immunity, we will hopefully be able to eradicate the disease and return to our regular lives. Therefore, if you can, get vaccinated.

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Written By:
Ms. Neelakshi Joyram, 2nd Year B Pharm Student, JSSAHERM

Discovery, Good & Bad side of Molnupiravir

Molnupiravir is an antiviral prodrug medication designed for the treatment of COVID-19 which first hit the market in November 2021 under an emergency proposal by the UK government. Discovered at Emory University through its non-profit spinoff 'Drug Innovation Ventures Emory' or DRIVE, its intended use was initially to treat influenza in infected patients. DRIVE was incorporated with Ridgeback Biotherapeutics which would later on partner with Merck&Co. Molnupiravir was slated for clinical trials against influenza before the pandemic outbreak, but in March 2020 Ridgeback Biotherapeutics was contacted to expedite the quest for a viable coronavirus treatment.

The development of small-molecule antiviral drugs during the coronavirus epidemic has not been simple. Let's just put it that way. Remdesivir has received a great deal of attention, and in the end, it appears to be moderately useful but not particularly game-changing; still, it is the best of the bunch. Several other compounds were discussed last year, but none of them left a particularly favourable impression. In general, there are not a great deal of effective antiviral medications, and the ones we do have are primarily focused on HIV and hepatitis C. These are gradually created exhaustively and meticulously against specific microorganism targets for these infections. There have been no very effective, broad-spectrum antiviral small compounds as of yet. However, molnupiravir is one of the best options for doing so. It is a prodrug of the nucleoside analog N4-hydroxycytidine (NHC), which has been studied for decades.

Like many nucleoside analogs, it has both positive and negative characteristics:
Positively, these chemicals will interfere with viral RNA-dependent RNA polymerase, a crucial enzyme for the reproduction of any RNA virus. A mechanism typically referred to as an "error catastrophe." These enzymes are famously faulty to begin with, and viruses have evolved numerous strategies to keep this under control; nevertheless, keep in mind that a background mutation rate is actually a survival advantage, so long as it doesn't go out of hand. In many instances, nucleoside analogs function by pushing the RNA replication stage to generate so many mistakes that the end product cannot even produce a competent virus. This is the outcome of NHC with molnupiravir.
Let us examine the hazardous aspects. Several of these nucleosides are mutagenic because they can be taken up by numerous enzymes, including those that manage our own nucleic acids. Indeed, NHC was initially identified as a mutagenic agent in bacteria. They are cytotoxic via a variety of ways, and nucleoside drug candidates are notorious for failing in human trials due to toxicity in the liver, kidneys, and other organs. This was a feature of the 2012 scramble in the hepatitis C domain, as Bristol-Myers Squibb paid $2.5 billion for a nucleoside addition to its planned treatment cocktail, only to have it destroyed a few months later when it was discovered to have major problems in human testing. Molnupiravir itself has demonstrated potent antiviral efficacy against a comprehensive array of viruses in presymptomatic trials; it is a very intriguing contender, all the more so because it appears to have an unusually high barrier to resistance mechanisms.

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Written By:
Mr. Muhammad Shuaib Luckhoo, 2nd Year BPharm Student, JSSAHERM

Healing Medicinal Herbs, Spices and Plants Health Benefits and Medicinal Uses

Herbal medicines have been able to spread their horizons since ancient cultures. It involves the medicinal use to treat any disease and improve general health and well-being. A few common herbal medicines are shown below. However, herbs can interact with other pharmaceutical medications, and they should be taken with care and prudence. Most herbs have not been completely tested to see if they work properly or to see if they do interact with other herbs, supplements, medications, or foods. Products added to plant-based preparations may also result in interactions. It is essential to be aware that "natural" does not mean "safe". Hence, it is important to inform your health care providers of any herbs or food supplements you use.

Chamomile (Flower)

Thought by some to be a panacea, chamomile is widely used in the United States for anxiety and relaxation. It is used in Europe for wound healing as well as to reduce inflammation or swelling. Not a lot of research has looked at how it works for any condition. Chamomile is used as a tea or applied as a compress. It is considered safe by the Food and Drug Administration (FDA). Additionally, it can increase sleepiness due to medications or other herbs or supplements. Chamomile may also interfere with how the body uses certain medications, causing excessive levels of the medication in some people.

Chamomile for skin (topical) can be used to treat skin irritation in cancer radiotherapy treatments. Chamomile capsule can be used to control nausea during chemotherapy.

Feverfew (Leaf)

Feverfew has historically been used to treat fever. It is now widely used in preventing migraines and treating arthritis. Some studies have shown that some low-dose formulations can prevent migraine headaches. Side effects include mouth sores if leaves are chewed as well as digestive irritation. People who suddenly stop taking feverfew for migraine headaches may have back-to-back headaches. Feverfew must not be used with nonsteroidal anti-inflammatory drugs because these drugs can change how well feverfew works. This medication should not be used with warfarin or other anticoagulants.

Echinacea (Leaf, stalk, root)

Echinacea is commonly used to treat or prevent colds, influenza, and infections, and to heal sores. Many studies have examined how echinacea works to prevent or reduce the course of a cold, but none have been conclusive. Some studies show some advantages in using echinacea for upper airway infections.

Short-term use is recommended because further studies have also demonstrated that long-term use can affect the body's immune system. It is always recommended to check with your health care provider for all interactions with the drugs you are already taking. People with allergies to plants of the daisy family (ragweed, chrysanthemums, marigolds) may be more susceptible to an allergic reaction to echinacea.

Ginger (Root)

Ginger is most widely known as an herb to relieve nausea and motion sickness. Research indicates that ginger can relieve nausea associated with pregnancy and chemotherapy. Other areas of study in the use of ginger are in surgery and as an anti-cancerous agent. Its broad range of actions can be due in part to its potent anti-inflammatory and antioxidant effects.

Reported side effects may include bloating, gas, burning of the stomach and nausea for some people.

Ginseng (Root)

Ginseng is used as a tonic and aphrodisiac, including as a remedy. Research is ambiguous of how well it works, partly because of the difficulty in defining "vitality" and "quality of life.". The quality of the ginseng sold is highly variable. Side effects of Ginseng are hypertension and tachycardia. Though, it is said to be safe by the FDA. However, it should not be used with warfarin, heparin, non-steroidal anti-inflammatory drugs, estrogen, corticosteroid, or digoxin. Ginseng is not recommended for people with diabetes.

Garlic (Cloves, root)

Garlic has been used worldwide for cooking and for its numerous medicinal qualities. It has been shown that isolated compounds of garlic have antimicrobial, cardioprotective, anticancer and anti-inflammatory properties. These properties can play a role in believing that garlic contributes to lowering cholesterol and blood pressure. Regrettably, the evidence is contradictory. The FDA does not consider garlic to be unsafe. However, it may increase the risk of bleeding and should not be used with warfarin. For the same reason, it is not recommended to take large quantities prior to dental or surgical procedures.

Milk thistle (Fruit)

Milk thistle is an herbal remedy used to treat liver disease and high cholesterol, as well as to reduce cancer cell growth. Milk thistle is a plant from the Mediterranean area. It has been used for many different diseases in recent millennia, particularly liver problems. Studies have equally shown major improvements in liver function in people with liver diseases who take a milk thistle supplement, implying a reduction in liver inflammation and liver damage. Nonetheless, the findings of the study are not definite of the real benefits of milk thistle for liver disease.

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Written By:
Mr. Tatayah Vignesh Vanapalli, 2nd Year BPharm student, JSSAHERM

Insomnia

Sleep and rest are necessary for memory consolidation and brain fitness. To recharge the batteries, in brief. A good night's sleep puts us all to this point and even makes us more vigilant and aware, but we must not sleep. According to a research published in the international Sleep newspaper, if you want to maintain a healthy heart, you should sleep for seven hours, neither more nor less. However, it is not a simple task for many persons with insomnia, who spend the majority of the night waiting for sleep to set in. Do not panic! Mother Nature had them in mind...

It is recommended to consume lettuce in the evening for a good night's sleep due to its magnesium content and its calming and soothing impact. Some prepare it, for instance, as a broth. Mint leaves are equally beneficial. They should be consumed as an infusion (rather than by boiling) or in a salad. As for the infusion you will make with seven mint leaves, consume it in the evening after dinner. Milk and ground almonds that have been heated and ingested once or twice a day is a cure that is likely well-known by many elderly people. Thus, calcium, a relaxant, and magnesium, a stress reliever, both contribute. In this way, sleep will be favoured. "The milk and almond powder blend reduces anxiety, tension, and improves memory and sleep quality." "Consume frequently," suggests the specialist. Many additional foods, especially oats, are recommended for insomnia sufferers (or oatmeal). This cereal, which is used primarily for breakfast, is somewhat antidepressant and therefore excellent for anxious individuals. It would promote sleep and focus. Consider using basil leaf, which has calming effects, for sleeplessness caused by stress. The expert also recommends fresh seafood. It is beneficial to the brain since it nourishes its cells and the neurological system.

If there are foods that help combat insomnia, there are also some that should be avoided. We count the ginger that we won't consume in excess. It is one of the products that improves blood flow and, as a result, keeps you alert since it provides more energy. Due to their vitamin C level, the same holds true for grapes, kiwi, oranges, tangerines, and other citrus fruits, as well as tamarind. Is it necessary to state that coffee and tea should be avoided in the evening if you have a fragile sleep. Rich desserts should be avoided, even if they are accompanied by a food that is too spicy. In fact, going to bed immediately following a large meal can cause problems falling asleep. Alcohol is also a false buddy because it just induces sleepiness. As a result, it will cause more harm than good by reducing your ability to recuperate. Know the signals of sleep (yawning, nodding head, etc.) and go to bed so that your organization does not lose its bearings. Maintain as much consistency as possible with your bedtime. And most importantly, pleasant dreams...

Written By:
Mr. Yaseen Abdool, 2nd Year BPharm Student, JSSAHERM

FDA Approved Drugs

S.N	Drug	Indication	Date of Approval
1	Ztalmy (ganaxolone) oral suspension	Treatment of seizures in cyclin-dependent kinase-like 5 deficiency disorder	18/03/2022
2	Opdualag (nivolumab and relatlimab-rmbw) injection	Treatment for unresectable or metastatic melanoma	18/03/2022
3	Pluvicto (lutetium (177Lu) vipivotide tetraxetan) Solution	Treatment for prostate-specific membrane antigen-positive metastatic castration-resistant prostate cancer following other therapies	23/03/2022
4	Vivjoa (oteseconazole) capsules	To reduce the incidence of recurrent vulvovaginal candidiasis (RVVC) in females with a history of RVVC who are not of reproductive potential	26/04/2022
5	Camzyos (mavacamten) capsules	Treatment for certain classes of obstructive hypertrophic cardiomyopathy	28/04/2022
6	Voquezna (vonoprazan, amoxicillin, and clarithromycin) Tablets	Treatment for Helicobacter infection	03/05/2022
7	Mounjaro (tirzepatide) Solution	To improve blood sugar control in diabetes, in addition to diet and exercise	13/05/2022
8	Vtama (tapinarof) Cream	Treatment for plaque psoriasis	23/05/2022
9	Amvuttra (vutrisiran) injection	Treatment for polyneuropathy of hereditary transthyretin-mediated amyloidosis	13/06/2022

Events Corner

Event 1: World Health Day 2022

In honor of the commemoration of World Health Day celebrated annually on the 7th of April, JSS Academy of Higher Education and Research Mauritius held a series of events revolving around the theme "Our Planet, Our Health"

The overall goals of these events were to:

1. Sensitise students and the public about the crucial aspects and importance of good health
2. Help students in better interacting with people as part of their curriculum
3. Provide Health Screening Services

All activities related to World Health Day were intertwined on three separate days:

Day 1: Thursday 7th of April 2022 (Inaugural Function Program)

The Inaugural Function Program was a launching event organised in an effort to:

- Orient students about Good Health
- Release the Annual Newsletter
- Opening the Pharmacy Practice Lab

Celebrations kick-started as Chief Guest for the occasion, The Honourable Dr Ismael Rawoo-Member of National Parliament and Parliamentary Private Secretary, cut through the traditional ribbon ceremony signifying the official opening of the Pharmacy Practice lab wherein students will now be able to re-enact scenarios as it happens in a typical real-life pharmacy. With the help of demos, computers, and mock drugs, pharmacists-to-be will learn to manage stock, angry customers, staff, and much more. Prior to the opening ceremony, the Lab was prepped up with pamphlets and wall information stickers by students for the occasion.

Next in line for the event was the speech address held by designated speakers which was attended by students, staff, and special guests in the university's conference room. The first and second speaker who took to the stage were Dr Ashish Wadhwani and CEO of JSSAHER Mauritius, Dr Praveen Mohadeb- who both made profound welcoming statements and unique, concise elaborations on why we should celebrate the World Health Day and how it impacts us.

Then it was the turn of the Chief Guest to address the attendees. In his speech, The Honourable Member of Parliament, thanked the University for inviting him as Chief Guest and for giving him the opportunity to intervene on such an important day. He also stressed heavily on why we should become a health-conscious nation, and what the government is striving to achieve in terms of health-related matters. He further acknowledged the importance of the presence of a pharmacy school in Mauritius such as JSSAHERM, which tallies with the government's vision of making the country a pharmaceutical hub. He also paid tribute to his colleague The Minister of Health, the Honourable Dr Kailesh Jagutpal.

The next segment came with the Release of The Annual Newsletter which was the first issue for 2022. The Chief Guest was presented with a copy of the newsletter in the presence of the Chief Editor, Dr Khayati Moudgil and Chief Student Editors, Mr Abdallah Sultan and Ms Salvi Wahidna. After pictures were taken, attendees were each given a newsletter copy together with refreshments.

Day 1 celebrations were closed off in the last segment deemed “Mindful Fitness” which consisted of a thrilling Zumba and Taiichi session guided by the talented Mrs Marjorie Drack, fervent Zumba instructor. Students and staff alike were encouraged to participate in this session and most of them were up to the challenge.

Media coverage throughout Day 1 was assured by the Mauritius Broadcasting Corporation (MBC) and a significant portion of the celebrations were featured in a segment of the evening news.

Day 2: Friday the 8th of April 2022 (Webinar)

Riding on the momentum of the previous day activities, Day 2 main event was the hosting of a webinar held by one of India's leading dieticians- Dr Shilpa Joshi. A respected and accredited dietician, Dr Joshi has made healthy promotion a lifelong vocation. It is also important to emphasise on the extensive research she led in the field of Diabetes and hence it comes with no surprise that the theme of this webinar was: “Mindful Eating: A Satisfying Strategy in Healthy Living and Diabetes Management – Eat Right Not Less.”

The webinar was held on the Zoom© platform at 6:00 pm (Mauritian Time) and the first speaker to address the digital audience was Dr Ashish Wadhwani, Professor & Head Faculty of Health

Sciences JSSAHER Mauritius, where he gave a short typical welcoming speech to captivate listeners. Dr Wadhwani was the convenor for the event. Upon finishing his speech, Dr A. Wadhwani invited Dr Praveen Mohadeb, the CEO of JSSAHER Mauritius, to say a few words to the attendees and the latter, in his opening remarks, welcomed the guests and thanked them for attending this special webinar.

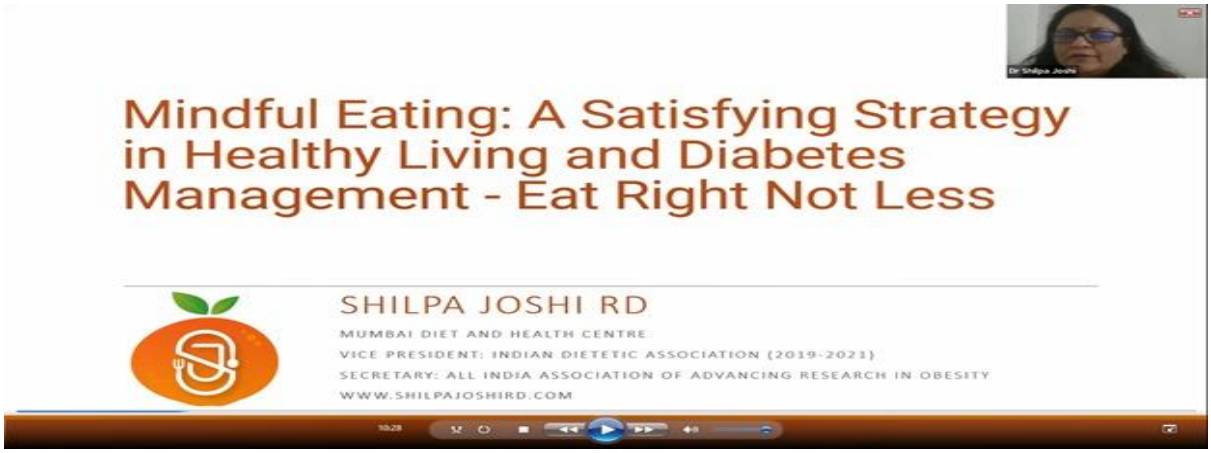
Next, the event's foremost speaker, Dr Shilpa Joshi, initiated the main discussion of the day and in her speech, she laid out some of her primary objectives which were:

1. The crucial aspect of Heathy Eating
2. The basic eating guidelines for Diabetes
3. How we can improve our quality of life

These points were elaborated with great profoundness, much to the appraisal of the actively listening audience which at peak enumerated at 236 participants.

This same audience was then given the opportunity to ask some questions to Dr Joshi in a Q&A segment held at the end of her speech. The Q&A was monitored by second year student, Ms. Umaira Oodally, under the coordination of Assistant Professor, Dr Khayati Moudgil. This section of the event proved to be very interactive and engaging.

The webinar was closed off after the Q&A session at 7:00 pm (Mauritian Time).



Day 3: Saturday 9th of April 2022 (Free Health Camp)

To wrap up the celebrations of World Health Day 2022, JSSAHER Mauritius organised a Free Health Camp on Day 3 in association with Sihha Medical Centre, Port Louis. The health camp was held at the Valentina Mall, Phoenix, with the aim of educating the general public about common health issues and how to maintain good health altogether.

On the dot of 9:00 am, the event, comprising of a free, extensive health check-up, was under way in full swing. Representatives from Sihha Medical Centre as well as students and staff of JSSAHERM were present to conduct the health tests for the mass of two hundred people at the Valentina Mall.

The health tests which were carried out include:

- Blood Sugar Test
- Bone Density
- Eye Check Up
- Blood Pressure Monitoring
- BMI
- Body Fat

In an attempt to spread awareness about Diabetes, a highly prevalent condition among the population and one of the leading causes of death in Mauritius, pamphlets were distributed to each examinee. The booklets contained information about the causes of diabetes and included a meal planner with the intention of guiding diabetic patients on how to follow an appropriate diet.

Examinees were additionally provided with a brief explanation of their test results as well as counselling on how to maintain them within the recommended range. Some of the counselling points included going for a healthy, balanced diet, incorporating physical activities in their daily life and all in all, maintaining an active lifestyle.

A glimpse of the event;

Event 2: CPD Event of Dental Council of Mauritius

The Dental Council of Mauritius was the host for the CPD (Continuing Professional Development) event held at Holiday Inn Hotel, Plaine Magnien on Sunday 8th of May 2022.

Mrs. Manisha Parsad, Assistant Professor at JSSAHER Mauritius, was invited as one of the few guest speakers and she delivered an hour-long enthralling lecture to educate the audience, mainly comprising of the numerous dentists and orthodontists practicing in Mauritius, about the drugs used in dentistry.

The Chairman of the Dental Council of Mauritius, Dr. Sailesh Bissumbhur, later presented her with a shield and a bouquet of flowers in gratitude for her time and remarkable speech.

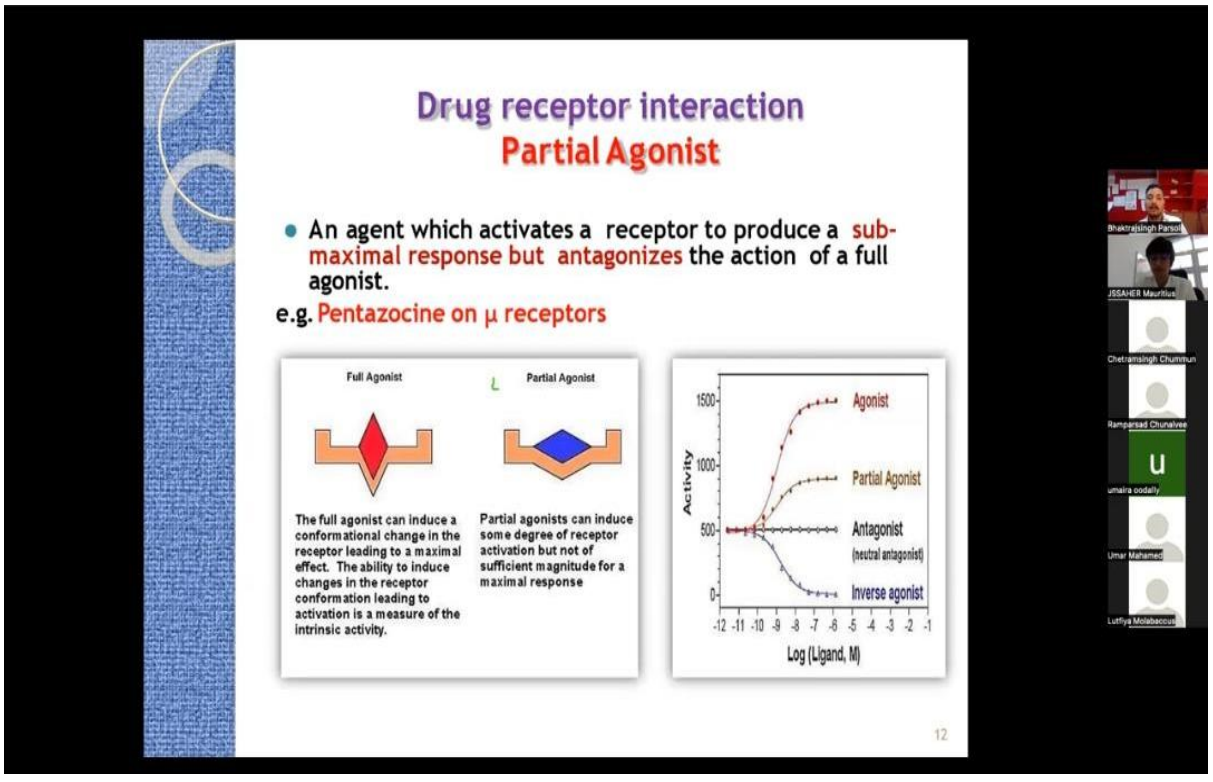
Event 3: Virtual Guest Lecture on "Pharmacodynamics"

On the 20th of May 2022, JSSAHERM had the privilege of hosting a special guest lecture led by Dr Bhaktraj Singh Chauhan, an upcoming clinical pharmacologist and assistant professor in the field of Pharmacy.

The lecture was held online at 09 30 MUT via Google Meet and comprised only of 2nd year/4th semester B Pharm students as part of their ongoing curriculum in the Pharmacology Module. The lecture was held in an effort to enter more deeply the relatively new subject and provide a better understanding for the students.

During the lecture, Dr Bhaktraj Singh Chauhan touched upon several important aspects of Pharmacodynamics including:

- Its Definition
- Its Core Principles
- Mechanism Of Drug action
- Role of Receptors
- Pharmacodynamic calculations



Event 4: Guest Lecture on "ECG and its Interpretation – Clinical Perspective"

On the 24th of May 2022, JSSAHER Mauritius warmly welcomed Dr D.B. Wadhwani, the Chief Guest and main speaker for this extracurricular event. The primary motive of this activity was to provide an insight to the first and second year BPharm students of the academy on some of the basic principles of interpreting an Electrocardiogram (ECG) in a clinical perspective.

Shortly after the arrival of the guest speaker at 10.30 AM, the opening of the event was marked by a short, introductory speech from the CEO of JSSAHER Mauritius, Dr Praveen Mohadeb followed by second year BPharm student, Ms. Umaira Oodally. The latter acquainted the audience with the feats of Dr D.B. Wadhwani, Specialist in Yoga and Naturopathy as well as Lifestyle diseases. It was also pointed out that he is an avid author and editor of various books and is the holder of an MD in Internal Medicine.

It was then the turn of Dr. D.B. Wadhwani to take to the floor. Being a practitioner for more than 40 years, it came as no surprise that he was well versed about the ins and outs of ECG and hence delivered a highly informative and captivating lecture. Some of the points covered in the session were:

- Reasons of studying ECG
- History of ECG
- Electrodes and Leads used in ECG
- Electrical activity of the heart
- Clinical interpretation of ECG
- Case studies

Subsequently, Dr. D.B. Wadhwani concluded his elaborate speech by responding to the questions posed by the audience in the brief Q&A session. Before the event drew to a close at 12.00 PM, Mrs. Manisha Parsad, lecturer at JSSAHERM, presented her deep gratitude to the Chief Guest. Soon afterward, Ms. Zeenaat Bhatoo, first year BPharm student, did not withhold from thanking Dr. D.B. Wadhwani and expressing her appreciation for the session on behalf of the audience. Finally, her closing remarks of how this lecture would help the aspiring pharmacists in their future endeavors brought the event to an end.

Event 5: Blood Donation & Free Health Check Up

The grand success of the Health Camp held in commemoration of the World Health Day was the catalyst for JSSAHER Mauritius to set up yet again another free health checkup for the public along with a blood donation camp this time.

This event, made conceivable due to the collaboration of JSSAHER Mauritius with UR Medic Centre, Flacq and the Blood Donors Association, was held at Flacq Coeur de Ville, Central Flacq on the 29th of May 2022 and the fact that Mother's Day is celebrated on this date provided even more reason for the health camp to be held. It was scheduled from 10:00 AM to 02:00 PM.

The free health checkup comprised of the following:

- Blood Sugar Test
- Blood Pressure Monitoring
- Hemoglobin Test
- Bone Density
- BMI
- Body Fat
- Counselling by Experts

The health tests were conducted by the staff of UR Medic Centre and the students of JSSAHERM and was followed by the blood donation of healthy volunteers. Test results were then provided to those who underwent the health tests along with the significance of the results.

All in all, the event went on without a hitch, thereby achieving the objective of serving humankind.

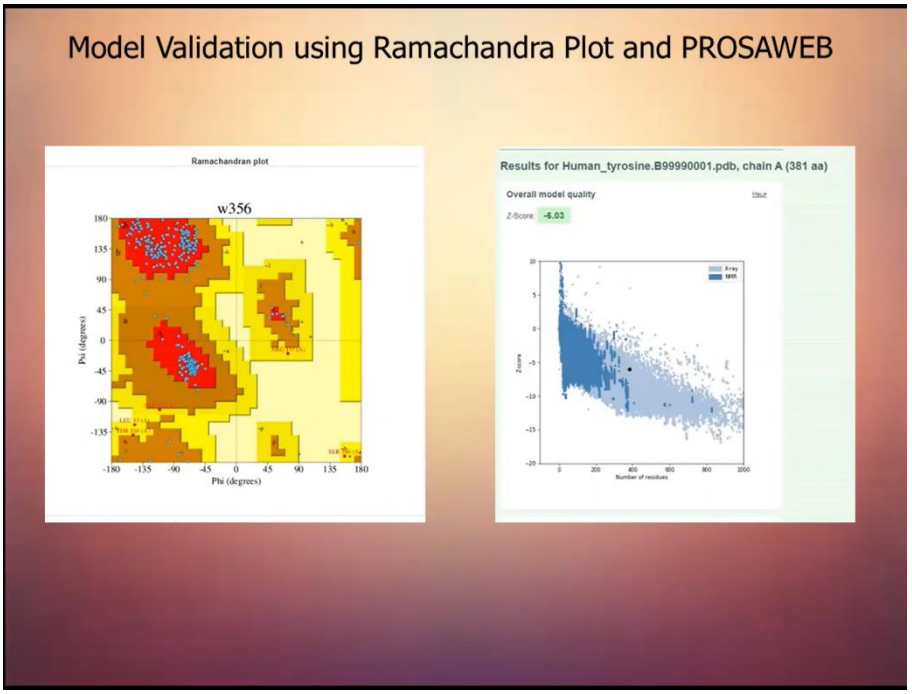
Event 6: Virtual Guest Lecture on "Bioinformatics"

JSSAHERM was the organizer for this virtual lecture with the aim of familiarizing the 1st Year BPharm students of the academy on some of the aspects of Bioinformatics.

The half-hour-long lecture was conducted by Ms. Maria Sweda A. S., a Process Executive in Data at Cognizant Digital Business Ops. The speaker first enlightened the students on the vast topic with a brief introduction and consecutively dived into the core of the subject by covering the following points:

- Objectives of Bioinformatics
- Bioinformatics Database
- Impact of Bioinformatics on Vaccine Design & Development
- Application of Bioinformatics Database

The engrossing session came to an end with Ms. Maria Sweda A. S. expressing her gratitude for being presented with the opportunity of taking up this lecture.



Event 7: Commonwealth of Learning- Skills for Work Scholarship

The Higher Education Commission (HEC) in collaboration with the Ministry of Education, Tertiary Education, Science and Technology partnered with the Commonwealth of Learning (COL) by offering scholarships under the 'Skills for Work Program' available for staff and students. The latter were encouraged to register online at https://skillsforwork.hec.mu**.**

The HEC, in association with the Commonwealth of Learning (COL), offers about 1,000 scholarships annually under the 'Skills for Work Scholarship', over the next 3 years in a bid to accentuate skills required for proper employment and entrepreneurship and lead the way for skilling, reskilling, upskilling, and lifelong learning.

Through their online platform partner Coursera, the COL assist students and staff during their course learning process by providing the best available resource material. Coursera is a leading professional development program that boasts about 6000 different and varying courses which is not only free but has also unlimited access.

Students who were enrolled in this Programme and their selected courses include:

Ms. Zeenaat Bhatoo - participated in a Health Care course and the Korean Language.

Ms. Harsha Santchurn - studied the Physiology of Appetite

Mr. Haiman Nubheebucus - followed a course on cheminformatics and medicinal chemistry.

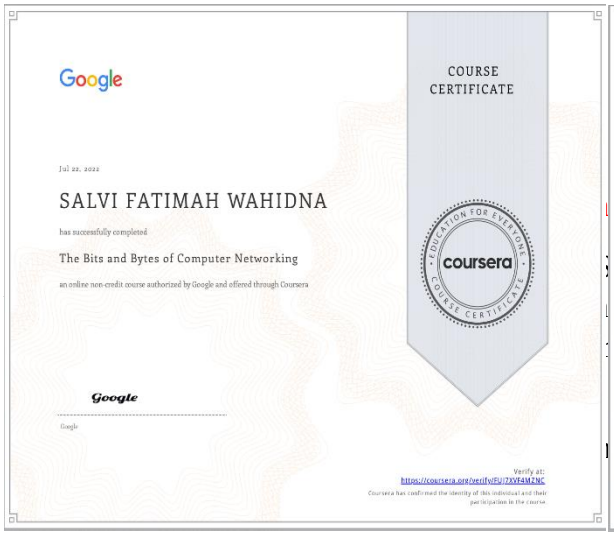
Ms. Vanshita Bhoojhowon - was involved in the topic of 'Why do smart executive fail' and 'Diabetes'

Ms. Salvi Wahidna - enrolled in a course that teaches IT support

Ms. Angeli Tan Wee - gained knowledge about Business Creation

Participating students and staff agreed that they benefited immensely from these courses and the skills they learned would certainly be useful in their future endeavors.

Certificates of Participation were also given to course attendees.



Event 8: Visit of Dr. Saksena at JSSAHER, Mauritius

Renowned Cardiac Surgeon Professor (Dr) Devendra Saksena, Head Department of Thoracic and Cardiovascular Surgery, Bombay Hospital visited JSSAHER Mauritius on 17th August 2022 where he met up with Dr. Praveen Mohadeb, CEO of JSSAHERM. He also acquainted himself with the Heads of Faculties, Dr. Ashish Wadhwani and Dr. Jaishree V. along with Assistant Professor, Dr. Khayati Moudgil. The interaction proved to be delightful for both Dr. Saksena and the team at JSSAHERM.

Dr. Saksena also found the campus facilities he was familiarized with during his visit to be quite sound.

It is to be noted that in recognition of his efforts for the people of Mauritius, Dr. Saksena has been awarded with the Highest Civilian Award conferred by the Govt. Of Mauritius- The title of The Commander of the Order of Star and Key of the Indian Ocean.

Event 9: Celebrations of 76th Independence Day of India

The 76th Independence Day of India was celebrated on 15th August 2022 between 9.30-10.00 a.m. on the premises of JSSAHERM. The Indian flag was hoisted in the presence of the Registrar and staff members. The members of the Indian community also attended the celebrations on this special day.

Event 10: Students Learning Experience –

Internship at C-Care Wellkin Hospital and Transphorm Pharmacy

1. **Ms. Zina Elaheebucus**

My six-week internship at C-Care Wellkin Hospital was more than a simple internship; it was an opportunity for me to prove myself as a reliable coworker and a motivated student. Over the duration of my internship, I worked in the in-patient pharmacy, from where currently admitted patients get their medications. I also had the incredible opportunity to participate in rounds in the oncology ward, ICU, NICU, CT ICU and private wards, whereby we would review the patients' treatment charts. As I found my bearings, I was able to assist my coworkers effectively. One of the many things I learned was to sharpen my analytical skills. Also, I was assigned to give my input on the protocols for antibiotics administration and on the intravenous infusion preparations, which I gladly did accomplish. Lastly, I would say that working in a hospital setting is definitely challenging but frames you professionally as you go along.

2. **Ms. Misbah Dhuny**

I spent half of my fourth-semester break as an intern at Transphorm Pharmacy, Floreal, and I must admit that during such a short period of time, I leaned many things which I know will help me in my future professional life. In fact, I had the chance to witness the opening of a pharmacy. I truly admire the pharmacist, Mrs. Kaajal Nathoo, from whom I learned so many things like managing a pharmacy, counseling patients, filling prescriptions, inventory control, and many more. I was given presentations to do on the spot and in addition to learning new drugs, this activity truly helped me know how to explain scientific terms to the general public. Moreover, I learned how to communicate and listen to the patients as well as have empathy for them. I can certainly say that this internship has truly shaped me into becoming a good pharmacist for the future.

Volunteer First Aider for St. John Ambulance

Introduction

St John is a working Order of Chivalry and a charity NGO delivering first aid, healthcare, and support services around the world for over 140 years and operates under her Majesty, the Queen Elizabeth II.

Personal Notes

As a member of the organization since 2015, I have served hundreds of hours on duty serving the community by providing first aid to the injured or people suddenly taken ill for public and private events including religious festivals such as Maha Shivaratree and Ganesh Chaturti.

Among the casualties that I have treated are cases of fracture, dislocation, head trauma, seizures, alcoholic fits, and hypo/hyperglycemia to name some.

I have also had the pleasure to represent the organization in 2020 as team leader of the delegation that attended the 2020 edition of the St. John International Cadet Camp in Cape Town, South Africa.

As part of the organization's objectives, basic first aid training courses are taught to students and the working population with the aim that anyone could save a life.

Written By:
Mr. Vasish Madoo, 2nd Year BPharm student, JSSAHERM

Memorandums of Understanding/Agreements

During the calendar year of 2022, JSSAHERM signed a number of Memorandums of Understanding (MOUs)/Agreements with organisations and corporations concerned with academic fulfilment in a bid to strive for the best academic approach for its students. The MOUs signed were:

1. JSSAHER Mauritius and Transphorm Pharma

- JSSAHER Mauritius and Transphorm Pharma signed a MOU on 17 May 2022.
- These two entities hope to create new opportunities for upcoming students in the field of pharmacy
- They also hope that they will be able to assist students to pave their way in the job world.

2. JSSAHER Mauritius and Lovelife Pharmacy

- JSSAHER Mauritius and Lovelife Pharmacy agreed on a MOU on 27 April 2022.

- Lovelife Pharmacy is a conglomeration of a number of pharmacies spread over the island providing useful learning experiences during eventual curriculum placements.

3. JSSAHER Mauritius and Centre International de Development Pharmaceutique (CIDP)

- JSSAHER Mauritius and CIDP signed a MOU on 26 May 2022.
- CIDP is an International Contract Research Organization (CRO) which operates high performance R&D for the medical, pharmaceutical, nutraceutical and cosmetic industries.
- Through the MOU, both institutions hope to provide unexplored and ambitious pathways for students in their future endeavors.

4. JSSAHER Mauritius and Soho Pharma

- An MOA with Soho Pharma, Mauritius was ratified on 23 May 2022.
- The MOA serves to provide opportunities for the students of the academy to study about various concepts in a pharmacy.

JSSAHERM Faculty Publications and Conferences Attended (May-August 2022)

- **Faculty publications:**

1. Greeshma Sai Sree Nayudu, Arjun Nambiar, Khayati Moudgil, Sjogren's syndrome and reproductive outcomes (Perspective), Asian Journal of Reproduction 2022; 11(3):105-106

2. V. Jaishree, Faraz Ul Haq, Antimicrobial evaluation and molecular docking studies of Swertiamarin and Quercetin targeting dihydropteroate synthase enzyme, Advances in traditional Medicine, May 2022

3. Vedpal Singh, Selvaraj Jubie, Srikanth Jupudi, Ashish Wadhwani, Sangai P. Dhanabal, Rohit Singh, Manish Pal Singh, Targeting Lipoxygenase Enzyme by Flavonoids from Tadehagi triquetrum: a Combined In Silico and In Vitro Approach, Revista Brasileria de Farmacognosia, June 2022, 32(3):1-7

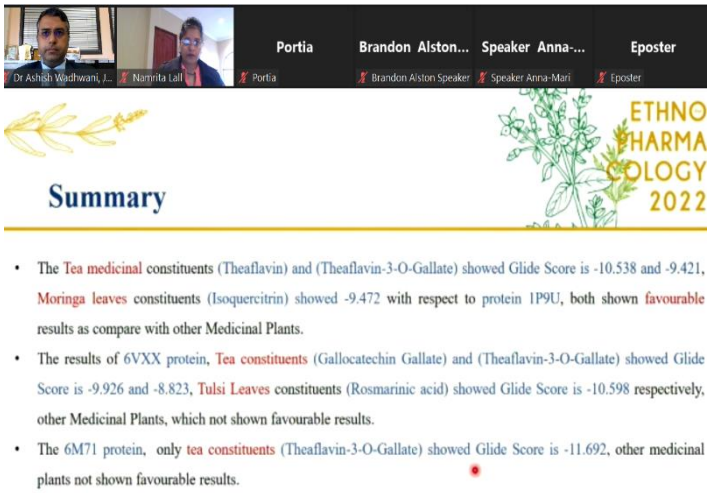
- **Conferences attended:**

- ***21st International Congress of International Society for Ethnopharmacology***

Professor and Head of Faculty of Health Sciences at JSSAHER Mauritius, Dr Ashish Wadhwani delivered a special lecture revolving around the theme: 'Antiviral potential of components of tea and other medicinal plants from Mauritius for the treatment of COVID-19'.

The event was held in connection with the 21st International Congress of the International Society for Ethnopharmacology which lasted between the 28th and 31st of May 2022 at the China Medical University in Taichung, Taiwan.

During the lecture, Dr. Wadhwani strongly emphasized on the importance of searching for disease treatment through maximizing isolation from natural sources. Dr. Wadhwani laid out promising outcomes from reports and research, which favor the presence of Active Pharmaceutical Ingredients present in herbal component which can potentially be used as lead compounds for drug treatment research.



Visiting Professors of JSSAHERM

Name		Field of expertise
Prof Dr Manas Mandal Professor of Pharmaceutical Sciences and Full Bridge Research Fellow Roseman University of Health Sciences, College of Pharmacy, 11 Sunset Way, Henderson, NV - 89014, USA		Pharmaceutical Sciences & Clinical Practice
Prof. Dr Namrita Lall Professor, University of Pretoria Room 3-39, Plant Sciences Complex University of Pretoria, Private Bag X20 Hatifield 0028, South Africa		Plant Science, Pharmacology & Toxicology

Congratulations Dr. Manas Mandal, Visiting Faculty of JSSAHER, Mauritius for "Receiving Fulbright Specialist Award"

FULBRIGHT

FOR IMMEDIATE RELEASE Contact: ECA Press Office

Date: 7/5/2022 Telephone: 202-632-6445

Manas Mandal Receives Fulbright Specialist Award to India at BITS Pilani, K K Birla Goa Campus

The U.S. Department of State and the Fulbright Foreign Scholarship Board are pleased to announce that Manas Mandal of Roseman University of Health Sciences has received a Fulbright Specialist Program award. Dr. Mandal will complete a project at BITS Pilani, K K Birla Goa Campus in India that aims to exchange knowledge and establish partnerships benefiting participants, institutions, and communities both in the U.S. and overseas through a variety of educational and training activities within the field of biology education.

Dr. Mandal is one of over 400 U.S. citizens who share expertise with host institutions abroad through the Fulbright Specialist Program each year. Recipients of Fulbright Specialist awards are selected on the basis of academic and professional achievement, demonstrated leadership in their field, and their potential to foster long-term cooperation between institutions in the U.S. and abroad.

The Fulbright Program is the flagship international educational exchange program sponsored by the U.S. government and is designed to build lasting connections between the people of the United States and the people of other countries. The Fulbright Program is funded through an annual appropriation made by the U.S. Congress to the U.S. Department of State. Participating governments and host institutions, corporations, and foundations around the world also provide direct and indirect support to the Program, which operates in over 160 countries worldwide.

Since its establishment in 1946, the Fulbright Program has given more than 400,000 students, scholars, teachers, artists, and scientists the opportunity to study, teach and conduct research, exchange ideas, and contribute to finding solutions to shared international concerns.

Fulbrighters address critical global issues in all disciplines, while building relationships, knowledge, and leadership in support of the long-term interests of the United States. Fulbright alumni have achieved distinction in many fields, including 60 who have been awarded the Nobel Prize, 88 who have received Pulitzer Prizes, and 39 who have served as a head of state or government.

For further information about the Fulbright Program or the U.S. Department of State, please visit http://eca.state.gov/fulbright or contact the Bureau of Educational and Cultural Affairs Press Office by telephone 202-632-6452 or e-mail ECA-Press@state.gov.

United States Department of State
Bureau of Educational and Cultural Affairs
Washington, DC
http://eca.state.gov/fulbright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To:

The Chief Editor

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Prepared and Circulated by:

School of Pharmacy

Faculty of Health Sciences

JSS Academy of Higher Education and Research, Mauritius

Droopnath Ramphul Avenue, Bonne Terre,

Vacoas-73304, Mauritius

Phone: +230 4016415

Website: http://www.jssaher.edu.mu

Email: info@jssaher.edu.mu