

SAAP Bulletin

The newsletter of the South Asian Association of Physiologists

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8th Biennial Conference
South Asian Association of Physiologists (SAAP - 8)
&
35th Anniversary Academic Sessions of the Physiological Society of Sri Lanka

11th - 13th November 2022, Colombo, Sri Lanka

Registration fees:

Category	Early Bird Registration until 31 st October 2022	Late Registration	On-line participation
Local	LKR 6000.00	LKR 7500.00	LKR 2500.00
International	USD 200	USD 200	USD 50



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From Editor's Desk



This issue of the SAAP bulletin contains reports on many developments in basic sciences and physiology in the SAARC region, highlighting the importance of physiology as a core subject area in medicine. The article on the learning phases of a medical doctor describes a student's transition from a teacher-directed learner, through self-directed learner to a lifelong learner. The progress in physiology and medicine despite difficult times is encouraging as related in The story of the Department of Physiology of the new Faculty of Medicine, University of Moratuwa, Sri Lanka. The importance of academic freedom to the progress of a field is voiced in a letter to the editor.

The SAAP community's thirst for new knowledge and the interest in fostering student interactions seems to be growing. Many conferences are being organized locally and internationally, as shown in the report on the 3rd PROBE Conference 2022 - Physiology; Pandemics, Practices and Perspectives, by the university of Karachi. The 8th SAAP conference with the Annual academic Sessions of the Physiological Society of Sri Lanka in November 2022 is going to be a memorable event for the SAAP fraternity, with pre and post congress workshop. Other activities such as invited lectures, regional meetings and Fancy Bird Exhibition - POULTRY PHYSIOLOGY aptly demonstrate the varied means of disseminating knowledge and skills.

Physiological societies are also investing in the future by stimulating the students interests in Physiology. Quiz competitions organized for local and international students in Pakistan and Sri Lanka in this issue are apt evidence for the above.

Happy reading

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Progress in Physiology and Medicine in Sri Lanka:

The story of the Department of Physiology of the new Faculty of Medicine, University of Moratuwa



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**Specialist in Internal
Medicine**
**Head, Department of
Physiology**
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The Faculty of Medicine, University of Moratuwa is the latest addition to the medical faculties in Sri Lanka. The Faculty of Medicine commenced its academic program in May 2021 with a vision of being the most globally recognized center for excellence in professional health care education in South Asia.

At present, there are two batches of students, intake 2020 and intake 2021 following the basic sciences stream of the medical curriculum. The main driving force behind initiating a new medical faculty was to reach the target physician to patient ratio, which at present is largely underfilled.

Establishing the Medical Faculty at university of Moratuwa has taken medical education to a new dimension, recognizing and embracing the global trends in integrating technology in to undergraduate and postgraduate medical education. As such, in comparison to traditional undergraduates, the department of physiology is focused on fulfilling the mission of developing innovative and adaptive healthcare professionals committed to lifelong learning, who are well

conversant with the state-of-the art developments in healthcare and research.

Inception

The department of physiology was founded by professor Mahinda Kommalage. The establishment of the physiology department amidst the covid pandemic with a limited number of staff members was a challenging task requiring dedication and perseverance.

Staff

The academic staff consists of two permanent senior staff members along with two visiting professors and four demonstrators. In addition, there are two nonacademic staff members. The cadre positions for academic, technical and assistant staff members are still largely underfilled.

Curriculum outline

Physiology Curriculum consists of ten (10) modules running over a span of fifty-two 52 weeks. It is focused on an outcome based; student centered approach developed on module basis integrated with other domains of basic sciences stream as well as with other streams including clinical sciences and medical technology streams.

Medical Technology Stream (MTS) has been designed to incorporate technology into medical education. It focuses on empowering the students to be able to apply information technology and biotechnology in learning and professional development. Therefore, as the sole medical faculty delivering medical technology as a subject to undergraduate medical students in Sri Lanka, it

is noteworthy that the integration of the physiology curriculum along with the MTS stream has opened up novel teaching and research opportunities to the department.

Teaching-Learning Activities

Both traditional and innovative methods are utilized in curriculum delivery to encourage continuing lifelong learning, to improve reflective practice and independent learning. Along with traditional methods of learning such as lectures, tutorial and practical sessions, a considerable time is allocated for student-centered learning methods, like problem-based learning sessions (PBLs), and case-based learning (CBL).

The hallmark of delivery of teaching learning activities as previously stated is that there are intensely integrated with the rest of the disciplines and streams. Accordingly, where relevant, many of the lectures are conducted as combined sessions with anatomy and biochemistry department.



Students attending lectures

Practical sessions, especially of the neuroscience module are conducted as integrated activities with the clinical sciences department aiming to deliver a holistic approach to neurology examination and interpretation. Similarly, combined lecture and practical activities are scheduled with medical technology stream especially in relation to

electrocardiography (ECG), pulmonary functions (PFT) and electromyography (EMG), where students can benefit and develop interest for future progression from a technological perspective.



A physiology practical session

A blended learning, with both face-to-face and distant (online) learning components, is the targeted approach for delivering the curriculum. This process is assisted by the Center for Information Technology Services (CITeS) of the Moratuwa University. Moodle online platform is used as the learning management system. Under the current circumstances of the country, almost all the teaching learning activities are conducted online.

With regards to assessment of learning, Q and A sessions and formative assessments are held in each module to supplement the active learning process. Assessments are conducted online. Introducing online assessments for basic sciences is a new experience with possibilities for improvement and expansion.

Summative assessments include five continuous assessments (CA), followed by the first MBBS examination. As novel assessment strategies, in addition to Multiple-Choice Questions (MCQs), Structured Essay Questions (SEQ), Objectively Structured Practical Examination (OSPE),

Extended Matching Questions (EMQ) and Single Best Response (SBR) questions are incorporated to strengthen and improve the quality of evaluation. Immediately after each assessment, a discussion is held with the students explaining the model answers followed by a period for students to raised objections. Where objections are valid, the examiner board with come to a conclusion on accepting/rejecting the relevant objections.

Online student feedback sessions relating to module activities and individual lecturer assessments are performed during each module and curriculum is mapped, revised and updated through curriculum discussion meetings (CDC) at the completion of each batch of intake.

Research Activities

The ethics review (ERC) and research committees are in the process of being established with a specific focus on research activities evaluating the use of medical technology.

Infrastructural Development

A new faculty complex including a physiology laboratory departmental space, lecture halls and tutorial rooms are is in the process of development within University of Moratuwa premises, with a completion target in early 2024.

Challenges

Shortage of academic and nonacademic staff has been a major challenge faced over the past year. Continuing teaching learning activities amidst the ongoing adverse circumstances in the country has been successfully confronted to date as a result of commitment, dedication, unity and teamwork among staff and the students.

Future Goals

The department of physiology aims to establish specialized physiology laboratories aiming not

only to expand the research dimensions but also for service provision to the community. Establishing teaching and research activities in the fields of allied sciences and postgraduate activities is yet another goal to be fulfilled in future.

Expression of Gratitude

Along this strenuous pathway numerous institutions and individuals have rendered their invaluable support to us.

First and foremost, we like to thank the Vice Chancellor and all relevant authorities and the all the other faculties of University of Moratuwa including information technology, biomedical engineering, architectural and electrical engineering for helping us along the way.

It is with much gratitude that we appreciate the continued support rendered by professor Mahinda Kommalage and professor Piyusha Atapattu in continuing the teaching learning activities.

We also express our sincere gratitude to the Department of Physiology, Faculty of Medicine, University of Colombo for extending instantaneous support to complete the physiology practical sessions, and University of Kelaniya for assisiting in the purchase of equipment.

A special note of thanks is also expressed to the physiology departments of faculty of medicine, university of Ruhuna and Kotalawala defence academy for their kind gestures for support.



Staff members

Perspectives:

Learning Phases for a Medical Doctor



Dr Tehseen Iqbal

RYK Medical College,
Rahim Yar Khan

Basic education arouses a desire to carry on learning. The more education you have, the more education you want. UNESCO

Abstract

A doctor undergoes different learning phases with different learning styles and requirements. In fact, a doctor's life is a learning continuum. As pre-medical student, he is a teacher-dependent learner with a limited course content and prescribed textbooks. A teacher teaches the subject from the prescribed textbook. As a medical student, he is expected to acquire a large amount of knowledge through multiple resources and multiple recommended books. Student improves his listening skills, memorizing skills, writing skills, test taking skills and learns many psychomotor skills. During MBBS, teacher is acting as facilitator and student as self-learners. After MBBS and as postgraduate student, he remains a self-learner and his self-directed learning upgrades him to a lifelong learner. During his practice as a doctor, he learns through his experience and becomes an experiential learner throughout life. Lifelong learning is not an option in healthcare, it's required by healthcare workers to remain

relevant and continue providing safe, effective patient care.

Key words: Teacher-dependent learner, self-learner, lifelong learner, experiential learner

Introduction

A doctor undergoes diverse learning phases during his life in which there are different learning styles, resources, techniques and requirements. In fact, a doctor's life is a learning continuum.

Pre-medical Student:

FSc Pre-Medical is an intermediate program that comes after matriculation. FSc Pre-Medical means the pre or initial, inter-level studies, associated with the medical field. The word FSC stands for Faculty of Sciences which is a two-year course offered almost in all colleges. FSc (Pre-Medical) is the first step towards the medical field for those who aim to become a Doctor.¹ In pre-medical classes, there are prescribed course and prescribed textbooks for each subject. A teacher teaches the subject from the prescribed textbook. So, students learn from a textbook in each subject.

After FSc or A-level, a student has to pass an entry level test to get admission in to a medical college. After the successful completion of Inter (FSc Pre-Medical or A-level) the aspirants may go for various fields which include MBBS (Bachelor of Medicine and Bachelor of Surgery), BDS (Bachelor of Dental Surgery) and Emerging Biological Sciences.² In FSc Level, student is a **teacher-directed learner**.

Medical / Professional Student:

In a medical college, student is a professional student. He is expected to acquire a large amount of knowledge through lectures, recommended books, computer based materials (cd's, internet), research journals and senior students.

There are many important differences between the pre-medical and medical studies. One of the major differences is that there are no prescribed textbooks in medical college and the course or syllabus is in the form of topics. Topics can be learned from the recommended books. Students should know the most recent and comprehensive knowledge about these topics. So, teachers always recommend the latest editions of books. Usually more than one book is used to study one subject.

The second difference is that the knowledge gained even in first year of MBBS should be remembered throughout life. So, the students should learn memory techniques like making notes, mind maps, mnemonics etc.

The Third very important difference is that students have to master many manual skills and skills to use medical equipment. Fourth difference is that students should remember that all knowledge of all medical subjects is going to be applied to a single human body – the patient, to solve his problem. That means student should not only be able to integrate concepts within a subject but should also integrate concepts studied in various subjects.

Remember that MBBS is one course of five-year duration.³ In first two years of medical college, students learn to integrate basic sciences (Physics, Chemistry) with basic medical sciences (Medical Physiology, Medical Biochemistry etc.). In the meantime, students learn to integrate basic

medical sciences with the Clinical sciences (Medicine, Surgery etc.). Medical teachers facilitate the students in this horizontal and vertical integration.

During MBBS course, student has become a **Self-Learner** or **Self-directed Learner**. Efforts are made during MBBS program that the graduates should be able to exhibit the habits of a lifelong learner.

Lifelong Learner:

The term lifelong learning was initially featured in 1973 in the report of a UNESCO body, the International Commission on the Development of Education, linking-up lifelong learning with the idea of the learning society.⁴

Lifelong learning of human beings lasts literally 'from cradle to the grave.' Interestingly, the Holy Prophet Muhammad ﷺ commanded his followers to "Seek knowledge (learn) from cradle to the grave"⁵ more than fourteen hundred years ago. There is an increased need for newly qualified doctors to commit to lifelong learning to keep up to date with developments in medical practice. Some employers, stakeholders and academics also suggested that lifelong learning was of specific value.⁶ So, a doctor has to learn throughout life to remain updated.

Healthcare is an ever-changing field of practice with advances in medicine, expanded evidence sources, new treatment options, and changing governmental regulations and models of care. Lifelong learning is not an option in healthcare, it is required by healthcare workers to remain relevant and continue providing safe, effective patient care.⁷

News and Events

3rd Inter Medical College Physiology Quiz University College of Medicine & Dentistry University of Lahore

The Third Inter Medical College Physiology Quiz was organised by the Department of Physiology of University College of Medicine & Dentistry (UCMD), University of Lahore (UOL), in affiliation with the global quiz master Professor Cheng Hwee Ming from the University of Malaya, Malaysia, on Saturday and Sunday, the 12th and 13th of March 2022, respectively.

Due to the ongoing travelling restrictions and social distancing being practiced because of Covid-19 Pandemic the quiz was held online, and was an international event. One hundred and twenty (120) teams, consisting of 3 undergraduate medical students each, from eleven (11) countries, namely Malaysia, Indonesia, Nepal, India, Bangladesh, Pakistan, Sri Lanka, China, Iraq, Laos and Malawi participated. The quiz was endorsed by Pakistan Physiological Society (PPS), South Asian Association of Physiologists (SAAP), International Union of Physiological Sciences (IUPS) and Federation of Asian and Oceanian Physiological Societies (FAOPS) along with International Foundation of Medical Students Association (IFMSA).

Mock quiz was run on Socrative for national and international participants on the 10th & 11th of March respectively by host department. Simultaneously the participating teams joined a zoom session through which the host department addressed their queries. Professor Cheng also joined the zoom session on 10th to make sure the participants were familiarized with the rules of quiz.

First and second rounds were held on Saturday, the 12th of March 2022. These were facilitated by the host department on Socrative with contribution from two Pakistani Professors of Physiology Prof. Dr. Ahmed Badar & Prof. Dr. Humayun Ikram for round 1 and one Pakistani Professor of Physiology Prof. Dr. Shahid Hasan for round 2. Both these rounds were team effort.



Dr. Samina and Dr. Maimoona at Round 1 of IMCPO22

The first round consisted of fifty MCQs and the response time was 30 seconds. The participating teams were divided into three groups for further facilitation and quick processing of results. The smooth running of this round was ensured by the group leaders Dr. Saman Saeed, Dr. Chaman Nasrullah and Dr. Sara Mukhtar with the assistance of Dr. Zobia Hafiz, Dr. Marzia Naqvi, Dr. Misbah Ahsan, Dr. Moiz Nauman and Dr. Ahmad Farooq Butt. Meanwhile Dr. Maimoona Nasreen and Dr. Qurrat-ul-ain along with the

Organizing Secretary, HOD of host department Prof. Dr. Samina Malik did the trouble shooting and answered the ongoing queries of the participants. Dr. Qasim Mehmood our external evaluator was responsible for the final compilation and declaration of the result.

A total of top 32 teams out of 120, qualified for the second round of the quiz. The results were conveyed to all team members via email and also in WhatsApp groups. The second round consisted of 20 Short Answer questions with 30 seconds response time and this was facilitated by Dr. Chaman Nasrullah, Dr. Saman Saeed and Dr. Qurrat-ul-ain Leghari. responded to the queries in WhatsApp group along with Dr. Maimoona and Prof. Dr. Samina Malik. Dr. Qasim Mehmood was once again responsible for compilation and declaration of the result.

6 teams out of 32 qualified for the third & final round of the quiz. This third round was conducted by Prof. Cheng Hwee Ming from Malaysia on zoom in collaboration with 3 impartial judges including Prof. Ahmad Badar from Saudia Arabia, Prof. Mehr un Nisa and Prof. Munazza Asad from Pakistan. This round was streamed live on the Facebook page of UCMD, UOL.

Prof. Julie Chan, President International Union of Physiological Sciences was the distinguished chief guest and inspired students and faculty through her motivational talk. The Principal of UCM Prof. Dr. Mahwish Arooj announced 1000 USD cash prize to be divided amongst the top 3 team and welcomed the participants. Our external evaluator Dr. Qasim Mehmood also addressed and encouraged the students.



The organizers with participants at IMCPQ 2022 joining online

The 3rd round was individual effort round. The participants of each finalist team were labelled as A, B & C. Each group (A-C) was asked 3 questions by Prof. Cheng simultaneously to which they were supposed to write the answer and then display that answer on camera when the response time of 30 sec was up. These questions and timer were also displayed for the ease of the participants and other attendees. The answers were then graded by Prof. Cheng and any ambiguity in grading of answers was dealt with, with the help of judges.

The scoreboard showing marks obtained by the participants was displayed after each group by Dr. Qurrat-ul-ain Leghari and Dr. Nooria Naeem.

The team from Faculty of Medicine, University of Colombo, Sri Lanka (members: M B Gunasekara, G A H G Gunasinghe and W M P C Weesekara) stood 1st. The first runner up team was also from the Faculty of Medicine, University of Colombo, Sri Lanka (members: R M Nethmini Nirasha Rathnayake, Rosalie Maleena Ratnayake and R P G Mithun Diyumantha Samaranayake). There was a tie for the position of second runner up between 2 teams; both from Nepalese Army Institute of Health Sciences- College of Medicine (members

Team 1: Manu Devkota, Sudhan Sunar & Arun Gaire) (Team 2: UN Acharya, Sunil Khadka & Sakar Pant). Top 3 positions were announced by Prof. Dr. Samina Malik and the distinguished judges.

This event was made possible by the joint efforts of Prof. and HOD Physiology Dr. Samina Malik (Organizing Secretary) and her hard working department including Dr. Maimoona (IMCPQ Coordinator), Dr. Sara, Dr. Saman, Dr. Chaman, Dr. Zobiah, Dr. Qurrat-ul-ain, Dr. Nooria, Dr. Moiz, Dr. Ahmad, Dr. Misbah, Dr. Marzia, Mr. Maratab Ali, Mr. Khalid Qaisar, Mr. M. Naveed and Mr. Zulfiqar. Dr. Tayyaba Azhar (ADME) provided technical support. Miss Sana Abrar took care of event management. Mr. Majid Malik, Miss Aiza Suhail, Miss Wardah Siddiqui, provided their services as graphic designers. While Mr. Yasir Shabbir took care of the website and scoreboard. Mr. Sohail and IT department UOL also contributed by ensuring the availability of fast internet and computer lab for smooth conduction of the online academic event. Mr. Ali Imran & Mr. Muhammad Hassan provided the media support.



Team IMCPQ 2022 after conduction of Round 1 and 2

3rd PROBE Conference 2022 - Physiology; Pandemics, Practices and Perspectives

The Department of Physiology, University of Karachi conducted its 3 day biennial conference entitled as 3rd PROBE Conference 2022, themed as Physiology; Pandemics, Practices and Perspectives during 21st – 23rd February 2022. PROBE is an abbreviation of Physiology Resonates & Ozonizes Biological Existence, it is a biennial meet up of eminent physiologists and scientists across the world. It was preceded by two Pre-Conference Workshops entitled as; Bioethics & animal handling and Manuscript writing & citation management on 18th February 2022.

The scientific event was inaugurated on 21st February by Chief guest Prof. Dr. Khalid M. Iraqi, honourable Vice Chancellor, University of Karachi and graced by distinguished guests including Dr. Kusal K. Das, president South Asian Association of Physiologists, Prof. Dr. Rumina Hasan (Keynote Speaker) Member Pakistan Medical Commission, Prof. Dr. Nasira Khatoon, Dean Faculty of Sciences, UoK. Dr. Das, appreciated the efforts behind PROBE and encouraged collaboration of scientists from different parts of the world. Dr. Hasan highlighted that interdisciplinary research actions and global synergistic approaches are required to improve population health during pandemics. She said there's an array of multidisciplinary scientists from Physiologists to Economists who play important role in providing solutions to the societal problems. She encouraged young students to be focused, determined and a team player. She also said that being a responsible human being we must contribute and be a beginning or the end of celebration.

Prof. Dr. Khalid Iraqi, VC, UoK said that science is the body of knowledge that's needed to build better, healthy and prosperous society. He urged youngsters to believe in science rather than fiction and advised to use all transdisciplinary paths of knowledge to achieve objectives. He further added that pandemics distanced us socially so we must connect by other means. He advised to indulge in collective efforts rather than individual leadership.



Day 2 – The conference was honoured by the insightful talk of Prof. Dr. Ahsana Dar Farooq, Adjunct Professor, Faculty of Eastern Medicine, Hamdard University. Dr. Ahsana Dar emphasized on therapeutic benefits of alternative medicine. She talked about how useful or dangerous self-medication can be without any prior knowledge. Dr. Farooq further encouraged youngsters to research before applying anything via YouTube channels. Later, the talk by Dr. H. R. Ahmed, Professor, Department of Biological & Biomedical Sciences, Aga Khan University enlightened young scientists. He said that science has its own patterns and it has no war and no walls. Scientists are same everywhere in the world and they follow same patterns. Scientific matter is always definable, measurable and falsifiable he added.

The third plenary speaker Dr. Noman Rashid talked about the concept of Hybrid Immunity (Infection + Vaccination), which is more protective against SARS-CoV-2 variants compared to only vaccinated or either only infected. He presented the data which suggested that natural immune protection that develops after

infection is more promising and defensive against the pandemic variants than two doses and a booster of COVID vaccine.

Day 3 – The third day was enlightened by the talk of Dr. Aqeel Ahmed COO, Tabba Kidney Institute who highlighted the issue of medical errors. He stated that it is one of the negligible yet least discussed issues of health care sector. Dr. Ahmed discussed variety of medical errors along with the ways in which they can be identified, minimized and counteract. He further emphasized attention of young students, researchers and faculty towards medical education, ethics, policies and public health. Later Dr. Amber Yasmeen from Department of Oncology McGill University, gave an exclusive talk on gynaecological cancer and research options for an early investigation and effective therapeutic approach.

The concluding ceremony was honoured by Prof. Dr. Umar Ali Khan President Pakistan Physiological Society. Dr. Umar congratulated the participants and organizing members for a



productive and successful scientific event and encouraged more programs like this to nurture the aspiring scientists and researchers across Pakistan. Dr. Hasib Anwer Chairman GC University Faisalabad congratulated the chairperson, faculty members and the students of the oldest Physiology department of Pakistan for arranging and organizing such influential and productive conference with limited resources. He added that facilities, funds and resources are important but dedication is above all.

In the end, Prof Dr. Nasira Khatoon, Dean Faculty of Sciences UoK appreciate the organizers for working genuinely and tirelessly. She presented souvenirs to role paly video competition winners and best poster presenters. She also presented certificates to all the volunteers. Dr. Taseer Ahmed Khan, chairman department of Physiology said that this biennial conference has beautifully portrayed the success and collaborative fortune of biological scientists and researchers nationwide. He mentioned this conference is attended by more

than 300 students and 50 distinguished guests. He further added that the conference included 01 keynote lecture, 04 plenary talks, 10 scientific sessions with 11 invited lectures, 47 oral presentations, 22 research poster presentations and 9 role play videos. He thanked all the participants who joined the conference in-person from Faisalabad, Nawabshah, Bahawalpur, KPK, Baluchistan and virtually from Lahore, Italy, India and Canada as well. The conference encouraged students by awarding them souvenirs in different categories including Best Role Play Video, Best Poster Presentation Undergraduate, Best Poster Presentation Postgraduate and M.H. Qazi Award for young researcher. Also each of the 10 scientific sessions announced one best oral presentation and awarded the presenter with souvenir. The conference was ended by a vote of thanks by conference secretary Dr. Ghazala Yasmeen.

Dr. Taseer Ahmed Khan



7th Inter Medical Faculty Physiology Quiz For Professor Carlo Fonseka Challenge Trophy

The Physiological Society of Sri Lanka (PSSL) conducted the 7th Inter-Medical Faculty Physiology Quiz for Professor Carlo Fonseka Challenge Trophy on 30th July 2022, at the Faculty of Medicine, University of Kelaniya. It was the first time the PSSL conducted the inter-medical faculty physiology quiz as a virtual event.

Prof Deepthi de Silva as the chairperson of the quiz committee did a wonderful job in organizing the quiz, with the able assistance of the committee and its secretary Dr Padmini Dahanayake, and the IT team and the staff of Faculty of Medicine Kelaniya.



IT team conducting the online quiz

There was much enthusiasm for participation, as the quiz had been interrupted for 2 years due to covid restrictions, and 11 of the 13 state medical faculties of Sri Lanka participated. The quiz was conducted over 3 rounds, with questions becoming progressively difficult and ending in an exciting rapid fire round, finishing with an intensely competitive tie-break for the winners.



Quiz teams being briefed by Prof Deepthi de Silva

The Faculty of Medicine, University of Colombo emerged the winners after a tough battle with the University of Ruhuna. The University of Sri Jayewardenepura became the 2nd Runners up.



The jubilant winners: Manul Gunasekara, Pumudu Weerasekara, Osanda Randula, Geshan Gunawardana and Geeth Gunasinghe of the AL 2017 batch

Stress and Time Management Workshop

A 3 hour-workshop was facilitated from the platform of “Students’ Well-being Committee”, University College of Medicine and Dentistry, The University of Lahore, Lahore, Pakistan by Prof. Dr. Samina Malik (Chair) and Psychologist Nabgha Batool (Member) on Saturday, 25th June, 2022. It was attended by 16 highly interested undergraduate students from first 4 medical academic years. Firstly, burning issues/problems were invited on anonymous sheets by participants which were dealt with one by one after converting them into the following 5 themes:

1. Anxiety Management: How to overcome anxiety?

Anxiety is diagnosed by presence of physical manifestations in presence of future anticipation. One should feel powerful being Ashraf-ul-muqhlloqat. On the other hand, Depression is past-related. However, Stress is a normal state with few symptoms of both depression and anxiety (not always bad). Positive stress is helpful on the basis of no pain no gain theory (*Khuda tujhay kisi toofan say ashna ker day .. k teray behr ki mojoon*



mein iztaraab nahin). The biggest tragedy is that we mostly dwell in past or future instead of being mindful of the present and working on it in the light of past experiences and alignment with future goals. One should live in 3Ps: Present, Positive and Powerful. One should have self-esteem as well as esteem for others. Mindfulness meditation and tapping technique along with deep breathing can relieve it (discussed ahead).

2. Relationship Management: How to balance relationships/ How to handle family issues/How to handle negative people and their behavior?

One should understand that colleagues cannot be friends always (*Dost hota nahin her haath milanay wala*). One should be careful in selection of friends and give them the margin that may not have equal capacity to love and care about. Therefore, one should act but not react. A person is his own best friend and worst enemy. One must understand a fine balance between insiders and outsiders to protect themselves from being hurt. Our relationships should be for Allah to expect the reciprocation from Him only (*Ho lakh ghairon ka ghair koe, na samujhna usko ghair hurgiz, jo upna saya bhi ho to usko tasawwar upna na keyjiay ga!*). We should call attention to the mistakes of our dear ones indirectly by making them feel that it is coming from someone else (*Khuster aan baashid k sirray dilbaran, gufta-ayad der hadeesay deegaran!*). One must give quality time to family followed by friends by being mindful in those moments, as it will not compromise study/work routine. Hate the sin, not the sinner. Understand that it’s the principle of Nature, that first we are attracted to a person, then we start getting affected due to expectation from man, then we get hurt and connected back to Nature if we are able to manage our connection

with Nature. Keeping good expectation (gumaan) from Nature always materializes positively and vice versa. Meditation on abundance by Tapping Technique can attract any blessing abundantly (*Ay juba a dil ger main chahon, her cheese muqabil aa ja ay .. munzil k liyay do gaam chuloon.. or saamnay munzil aa ja ay!*). Our focus should be on why they do, what they do, instead of what they do, so that we can give them margin and understand the negative behavior. We should be thankful to Nature if people are jealous of our achievements as it is a sign of success.

3. Concentration & Confidence Management:

How to improve concentration or focus/How to avoid distraction/How to withdraw/ How to remain motivated and confident?

One should follow one-leg pose of yoga with a target in sight to condition the mind before opening a text-book/appearing in viva/important interview for focus and confidence. Metacognitive Awareness of Reading Strategies Inventory (MARSII) questionnaire helps in diagnosing our strengths and weaknesses while reading. Withdrawal/leaning pose of yoga/Nishpandabhava can be adopted with focus on a constant sound to avoid getting immersed in inner thoughts or distracting noises. Mindfulness meditation (10 minutes guided available on youtube) can improve focus on present. Use all senses while attending a lecture and draw a concept-map after listening attentively and processing the information in mind. Also use power of imagination and metaphors to imagine a role-play of events that are being discussed to add fun to the serious and dull facts. Participate in classroom discussion to develop long term memory and critical thinking. Motivation is not possible without passion coming from inside as it is self-regulated (*ger nahin dil mein shoq a*

warufta.. teray kis qaam ye jabeen saee..kya kisi nain kabhi shurur k baghair, sirf phoonkon say aag bhurqae!). The fact that you are still alive, means that have not immersed yourself in/ given yourself up, to your passion (*pertuwway khur say hay..shabnum ko funa ki taleem..mein bhi hoon aik anayat kin azar honay tuk!*).

4. Assertiveness Management:

How to be assertive?

Being assertive means to be able to express yourself freely and confidently while staying respectful and appropriate without feeling guilty or ashamed. It allows you to focus on your goals with high self-esteem. You can use the power of imagination during leaning pose and imagine yourself meeting your goal with eyes closed and fixed at horizon while focusing attention on a constant sound like that of a fan/tube-light/clock etc. Writing and reading the goals in order of preference or drawing a picture or pasting the cut-outs on your wish-board and focusing on them for some time will facilitate you in achieving them as anything your mind can conceive, it can achieve. We should learn to communicate our needs, discover our boundaries, acknowledge that we can only control our own behavior, avoid being aggressive and learn how to receive compliments as well as criticism. It helps in stress management by staying positive.

5. Time Management:

How to manage daily activities/ How to discipline managing schedule? How to prioritize/ organize? / How to avoid procrastination?

Time management is the most important stress management. Time Matrix is a two-by-two table to categorize and prioritize things to do into “urgent & important” to be dealt with in 2-3 days, “important but not urgent” to be planned in 2 weeks, “urgent but not important” to be delegated or done in 1 week and “not urgent, not important” to be dropped or parked for 1 month. If one-month planning is not done at the start of the month, then everything is likely to stress us by falling into important and urgent quadrant. Finally, some common stress reducing tips were advised including: Exercise, muscle relaxation, deep breathing, eating well, slowing down, taking a break, giving time to a hobby, talking about your problems, guided meditation, managing social media time, connection with others, connection with Nature, attitude of gratitude, force a laugh or smile, erect posture, muting phone notifications, giving someone a hug, and playing a recitation (Surah Rehman Audio-Therapy) or a song that makes you happy.



Reported by Prof. Samina Malik (Mind Sciences expert, HOD Physiology, UCMD, VP SAAP)



Guyton Physiology Quest Organized by 1st year Medical Students Under Supervision of Physiology Department, FMH College of Medicine & Dentistry, Lahore, Pakistan

The Arthur C. Guyton Physiology Quest '22: Lahore Chapter, held on Saturday, 18th June was attended by 20 medical colleges out of the total 21 in the Educational city of Lahore, Pakistan. The event was supervised by the Physiology department under the patronage of head of Physiology Prof. Dr. Saba Khalid. The idea and planning was conceived and exhibited by Muhammad Bin Muddassir, a First Year MBBS student, President and the Event Head.

This was the first time in the history that First Year MBBS, organized an event by Physically visiting all medical colleges of Lahore. The core cabinet also included Abeeha Masood Alam as Vice President and Deputy Event Head, Namood-E-Saher as Executive Director and Director Internal Affairs, Hassaan Ahmad as Director External Affairs and Noor-Ul-Ain Saleem as General Field Manager. The event allowed the students from different medical colleges to showcase their capabilities in the field of Physiology and to be ready for their future endeavors. Prof. Dr. Hamid Javed Qureshi (Principal, Akhtar Saeed Medical and Dental College) & Prof. Dr. Tayyab Abbas (Acting Principal, FMH CM&D) honored the opening ceremony with their presence, as the Chief Guests. Fatima Jinnah Medical University (public sector) participants received the Best Delegation award,

by winning two of three categories, and took home the Best Delegation Card and a cash prize.

The first category was Category De Station, in which the delegates had to pass through ten stations, with unique and different tasks in each station. Five minutes were given to each station. At the last station, the delegates had to draft their awareness poster on a disease, chosen from a pool of diseases. Next, they were given half an hour to make their awareness poster. Umer Farooq from University College of Medicine and Dentistry, University of Lahore won the competition, and Aima Raza Bukhari from Shalamar Medical and Dental College, Lahore was the runner up.

The second category was On-Site in which the delegates were given a patient's clinical scenario. The delegates were given a research time of one hour to prepare a presentation on that case covering the symptoms, history, examination, diagnosis, pathophysiology and treatment. Salika Malik and Seemab Mehmood from Fatima Jinnah Medical University, Lahore won the competition, and Sheharyar Tariq and Insha Nawaz from Lahore Medical and Dental College, Lahore were the runner ups.

The third category was Mind Boggler (Three in One), in which there were two rounds. In the first and preliminary round, all the twenty teams attempted a Multiple-Choice Questionnaire comprising thirty questions. In the second round, there were three segments. In the first, buzzer segment, a question was displayed on the screen, and the team first ringing the buzzer got to answer. In the second, three pictures were shown to each team, and were to be identified. In the third, the rapid-fire segment, each team was given 45 seconds to answer as many questions, as they can. Sozaan Saher Saleem, Iqra Idrees and Fatima Amir from Fatima Jinnah Medical University won the category and Qurat-Ul-Ain Fowad, Ramia Mahnoor and Syeda Shehr Bano from Lahore Medical and Dental College, Lahore were the runner ups.

The host team from FMH College of Medicine and Dentistry, Lahore participated in the quest, but did not compete for the prize. The jury comprised of internal, as well as external judges.

In the closing ceremony. Prof. Dr. Shireen Khawar (Dean Postgraduate Sciences, Amna Inayat Medical College, Lahore and Ex-Pro Vice Chancellor, Fatima Jinnah Medical University, Lahore) was the chief guest. Prof. Dr. Samina Malik, Head of Physiology Department, University College of Medicine and Dentistry (UCMD), University of Lahore, and Vice President, South Asian Association of Physiologists was the honorable guest who dedicated her poem to the academic sons and daughters who participated, on behalf of the devoted faculty. Students from UCMD were accompanied by Dr. Chaman Nasrullah. The winning teams and the runners-up were awarded their shields and certificates, and the management team members were awarded shields.

In the end, the delegates were entertained by a thrilling performance by Qawal Adnan Haidri, a renowned artist of Pakistan.

Prof. Dr. Saba Khalid, the event patron, and HOD Physiology



Brief reports from the Department of Physiology, University of Karachi

Fancy Bird Exhibition - Poultry Physiology

On 14th February, 2022 the students at department of Physiology, University of Karachi organized a fancy bird exhibition for general public awareness. Different varieties of poultry birds were gathered where vaccine producing organizations also participated in the event. The event also highlighted the entrepreneurship opportunities for the youngsters interested in poultry business.

Radiological Anatomy – Invited Lecture

On 30th June, 2022 an Invited lecture was organized by Department of Physiology, University of Karachi. Dr. M. Zuhair Yousuf and Dr. Amin Shah from Department of Biological & Biomedical Sciences, Aga Khan University Hospital were invited as guest speakers. Different Radiological Techniques including MRI, CT, PET were explained to Post graduate research students in detail. The lecture gave a thorough insight to advancement of imaging techniques.

Dr. Taseer Ahmed Khan

Letters to the Editor



Prof HR Ahmad
Physiologist
Aga Khan University
Karachi , Pakistan

Dear Editor,

The reference, of this letter to the editor, stems from “Universities and Academic Freedom”: Riaz Ahmed Sheikh in Proceedings of History Conference at University of Karachi 2014. History of academic freedom is an off shoot of freedom of thought and speech. Universities maintained their autonomy during the medieval period. However, their liberty came under threat with the hardening of church doctrine in 13th century. The loop of church and university was loosened by protestant reformation. The age of enlightenment and reformation enabled the academic freedom. The idea of constitutio habita concept protected research legally. Academic freedom was born out of religious and political conflicts. Scientific work of Galileo, Kepler, Copernicus, and Newton further promoted further academic freedom. Several new universities emerged e.g., Leiden 1575 and Heidelberg 1652. These universities emphasized on the concepts of libertas philosophandi. Francis Bacon advanced research-based learning without any prejudice and influence in 1605. The concept of scientific research bodies was promoted like Royal Society in England in 1660, the Academy of Sciences in Germany in 1700 and American Philosophical Society 1743.

The university of Berlin in 1811 enhanced the academic freedom in the modern age with two principles of freedom to teach and freedom to learn. These ideas became the model of the academic freedom in universities throughout the world. University of Berlin nurtured notable academics like Einstein, Marx Planck, Hegel, Friedrich Engels, and Karl Marx. The principle of academic freedom was further enhanced by American Association of

University Professors in 1915. In US “1940 Statement of Principles on Academic Freedom and Tenure” was jointly produced by AAUP and AAC.

However, after WWII, another phase of restrictions on academic freedom started by the bipolar world’s division. Of note is the fact that despite end of the bipolar world, there is still repression against academic freedom in various countries. In US, denial of freedom in the name of patriotism came into being in 2001. Likewise, patriotism engulfed academic freedom in countries under oligarchy. Thus, states issued a letter on Adherence to Ideology to the Vice Chancellors of Universities to limit the academic freedom of teaching and learning. This is the reason Charles Darwin, Karl Marx, Sigmund Freud, and Bertrand Russel and the fields history of philosophy, literature, arts, and anthropology are not the part of curriculum to be enlightened through discussion and debate.

What changed Europe? The list includes: 1. Enlightenment of mindset by work of people’s philosophers and thinkers; 2. Scientific discovery in research on the microworld; 3. Renaissance; 4. Industrial civilisation switching wealth generation from the mode of wealth collection; 5. Democracy through evolution in steps and struggle by separating the state from the church in 17th century. The renaissance freed the mankind from the chains of slavery and serfdom turning them to citizens with human rights of health and education for all infants and children of the global family.

Collegial regards, HR Ahmad

This letter to editor is dedicated to the fond memory of Abdullah Khattak, a medical student of Class of 2024 and a superb artist of humanity from Aga Khan University, whose recent sudden demise in road accident has made us all lonely.

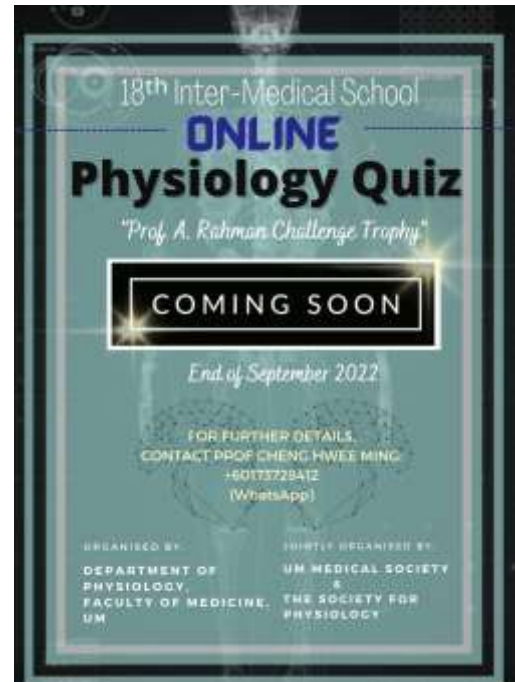
HR Ahmad is a Professor of Physiology at Aga Khan University Karachi Pakistan and can be reached at hrahmad.alrazi@aku.edu

Compiled by Professor Piyusha Atapattu
Editor-in Chief, SAAP Bulletin



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Upcoming Events



Regional Meeting of the Physiological Society of Sri Lanka 2022

at the

Faculty of Medicine, University of Peradeniya

On Saturday 27th August 2022

9.30 – 10.30 am	Registration / Breakfast / Tea
10.30 – 10.35 am	Welcome address by Head, Department of Physiology, University of Peradeniya Prof. Tharaka Dassanayake
10.35 – 10.40 am	Address by the Chief Guest Dean, Faculty of Medicine, University of Peradeniya Prof. Vasanthi Pinto
10.45 – 11.30 am	A.C.E. Koch memorial Lecture Heart Rate Variability: Can it be a Marker of Disease? Prof. Indu Nanayakkara , Professor in Physiology, Faculty of Medicine, University of Peradeniya
11.40 – 12.10 noon	Invited lecture: Diabetes Therapeutics and Cardiovascular Outcomes. Dr. Charles Anthony Pillai , Consultant Endocrinologist, National Hospital of Kandy
12.10 – 12.40 pm	Aldous Huxley and Music by Valentine Bismayake Presented by Prof. Vajira Weerasinghe , Professor of Physiology, Faculty of Medicine, University of Peradeniya
12.40 – 1.10 pm	Ongoing research at the Department <ul style="list-style-type: none"> Prevention of Childhood obesity through optimizing maternal BMI, gestational weight gain (GWG) and postnatal weight gain Dr. Vasana Kiridana, Consultant Pediatrician and Senior Lecturer in Paediatrics, Faculty of Medicine, Peradeniya
1.10 – 1.40 pm	<ul style="list-style-type: none"> Visual Electrophysiological Assessments of Ophthalmic Diseases. Dr. Padmini Dhanayake, Senior Lecturer in Physiology, Faculty of Medicine, Peradeniya
1.40 pm onwards	Lunch and fellowship
Evening Programme Starting at 6.30 pm onwards	Singong and Dinner at Galbungalawa, University of Peradeniya