Our Campus
Beloved Readers,

It’s only apt for our Medical Centre to be honoured with Health Care Excellence Award as we strive to deliver quality healthcare, providing exceptional professional service consistently to meet and manage patient expectations thereby being the most trusted wellness provider to so many of the lives we touch.

The rapid revision courses organised by various departments in the campus help students revisit concepts difficult to understand and have a second chance to learn from an expert, filling in any gaps that might have been missed initially. They also provide a thorough and intensive re-examination of the syllabus allowing them to practise techniques known to benefit performance in the examinations.

Health Glance provides insights into possible ways of preventing dementia in the aged. Let us pursue a hobby or learn a new skill to keep us mentally active and stay young in mind as we age.

Let us stay connected…

Sheela Ravinder S.
Editor-in-Chief

Sri Ramachandra Medical Center was honored with the Healthcare Excellence Award 2018 for the category – Quality Beyond Accreditation in the 5th AHPI Global Conclave – 2018 with the theme, ‘Is Quality Healthcare Sustainable?’ - ‘Issues, Concerns & Solutions’ conducted by the Association of Healthcare Providers India Ltd. held in Cochin on 16th February 2018.

Dept. of Physiology organized a CME program on ‘Rhythmical Phenomena in the Dermal Perfusion proved Assessment Strategies and New Discoveries’ on 19th April 2005. The speaker was Dr. V. Blazek, Aachen University, Germany.
Dept. of Plastic Surgery in collaboration with the multidisciplinary team of Sri Ramachandra Cleft & Craniofacial Center observed the National Cleft Lip & Palate Awareness Day and celebrated the completion of 12,000 free surgeries on 24th Feb. Dr. J. Radhakrishnan, Health Secretary, Health & Family Welfare Department, Govt. of India, Ms. Mamta Carol, Vice-President & Regional Director, South Asia, Smile Train, India and Mr. M. Nassar, Actor & President, Nadigar Sangam, South Indian Artistes' Association were the special guests. Mr. M. Nassar was announced as a Regional Ambassador by Smile Train during the program.

Dept. of SLHS in collaboration with the National Institute for Empowerment of Persons with Multiple Disabilities, Chennai conducted a Seminar cum Workshop on Auditory Processing Disorder: Assessment and Management with the theme, ‘Community-based Awareness and Programs for Inclusion & Rehabilitation’ on 16th & 17th Feb. Around 180 students, faculty members and professionals from various speech and hearing colleges, institutions & hospitals attended.

Dept. of Public Health Dentistry organized the 4th National Rapid Review Program – PILOT 2018 from 1st to 3rd Feb. 42 delegates from South Indian states participated.

Dept. of Pharmacology conducted the Rapid Review Course II – ASPIRE 2018 from 30th Jan. to 4th Feb. The course comprised of workshops, panel discussions, model pedagogy and lectures. 70 PGs from various medical colleges across the nation attended.

A monograph titled Treatment Protocol of Common Medical Outpatient Conditions edited by Prof. Preetam Arthur, HOD and Dr. M. K. Sudhakar, Former HOD, Dept. of General Medicine, with chapters contributed by the faculty members of the Dept. of General Medicine was released under the auspices of the Indian College of Physicians, Academic Wing of Associations of Physicians of India at the inaugural function of 73rd Annual Conference of the Association of Physicians of India - APICON 2018 held at Bengaluru on 22nd Feb.

Dept. of Periodontology & Implantology conducted the 10th Rapid Review & Revision Course from 12th to 15th Feb. The program included 25 lectures by national speakers and two debates. 120 delegates from all over the country attended.

The 20th Annual Rapid Review Course (ARRC) in General Surgery was conducted from 22nd to 27th Jan. Lectures were delivered by 43 invited speakers including seven alumni from all over India. The ARRC Book was released by our Chancellor. 175 delegates across the country participated.

Dept. of OBGYN conducted OG QUEST – the 21st Annual Revision Course from 7th to 12th Jan. The course included obstetric drills, case discussions and lectures. Around 300 PGs from various states attended.
National Centre for Disease Informatics and Research (NCDIR), Indian Council of Medical Research (ICMR) in collaboration with SRMC & RI (DU) and National Institute for Research in Tuberculosis (NIRT) conducted a seminar for Dissemination of the ICMR National Ethical Guidelines for Biomedical and Health Research involving human participants 2017, National Guidelines for Biomedical Research involving Children and National Guidelines for Stem Cell Research on 7th Feb. Dr. Srikanth Prasad Tripathy, Director-in-Charge, NIRT, Dr. Roli Mathur, Scientist E & Head, ICMR Bioethics Unit, NCDIR, Bengaluru, Dr. Nandini K. Kumar, Former Deputy Director General Sr. Grade, ICMR, New Delhi and Dr. Geetha Jotwani, Scientist F, Division of BMS, ICMR, New Delhi were the guest speakers. The presentations were followed by a panel discussion. 1200 participants attended.

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<tr>
<th>Date</th>
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<tbody>
<tr>
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Dept. of Cardiology conducted the 1st Dr. S. Thanikachalam Endowment Oration in Cardiac Sciences on Tricuspid Valve & Coronary Artery Disease by Dr. George Cherian, Head of Cardiology, Narayana Institute of Cardiac Sciences, Bengaluru on 25th Jan. 200 delegates across the country attended.

Dept. of Neurosurgery conducted the Shri. N. P. V. Ramasamy Udayar Oration in Neurosciences on 'Awake Craniotomy and Intraoperative Neuromonitoring’ by Prof. Michael Sabel, Dept. of Neurosurgery, Heinrich-Heine-University Düsseldorf, Germany on 23rd Jan. 40 delegates participated.

Dept. of ENT, Head & Neck Surgery in association with Depts. of Anatomy, Forensic Medicine & Anesthesiology conducted the 2nd All India Sri Ramachandra CME in ENT (ASCENT 2018) from 2nd to 6th Feb. The resource persons included faculty members of SRMC & RI (DU) and an international faculty. Cadaveric & live surgical workshops were also organized. 48 delegates from all over the world participated.

Dept. of Anesthesiology & Pain Medicine conducted the 19th Ramachandra Anesthesia Continuing Education - RACE 2018 from 16th to 18th Feb. The 11th Professor Vijayalakshmi Kamat Memorial Oration on 'Anesthesiology – The path forward' was delivered by Dr. Rajiv Juneja, Director, Cardiac Anesthesia & Critical Care, Medanta - The Medicity Hospital, Gurgaon. 850 delegates from all over the country participated.

Dept. of Radiology & Imaging Sciences organized the 15th Annual Ramachandra Advanced Radiology Education - RARE 2018 from 7th to 11th Feb. Eminent radiologists from various institutions across the country were the resource persons. 330 delegates attended. A preconference workshop was held on 7th Feb. which was attended by 160 delegates. The following medals were awarded:

- Dr. Liya Mary, Pushpagiri Medical College, Kerala - Gold Medal for the best student in RARE 2018
- Prof. V. Vidhyanathan Certificate for the best performing PG student (2017-2018) to Dr. Biji Babu, II yr., PG, SRMC & RI (DU)
Mr. R. Akash, 1 yr., B. Sc. Sports and Exercise Sciences won the first place in Strength Lifting & Incline Bench Press Championship 2017-2018 conducted by VIT, Chennai on 6th Feb. under the following categories -

- Sub-Junior Category - Gold Medal
- Junior Category - Gold Medal
- Senior Category - Silver Medal

Dept. of Physical Education conducted the 3rd Inter Paramedical Tournament from 12th to 17th Feb. Our team won the Overall Championship.

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<tr>
<th>Team</th>
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<td>Men</td>
<td>Cricket</td>
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<td>Football</td>
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<td>Table Tennis</td>
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<td>100 m, 200 m, Long Jump, 4x100 m Relay</td>
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<td>Women</td>
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<td>Volleyball</td>
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<td></td>
<td>100 m, 200 m, 800 m, Shot put, Discus &amp; 4x100 m Relay</td>
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Global News

New drugs could help prevent hearing loss

Researchers from St. Jude Children's Research Hospital have discovered that inhibiting an enzyme called cyclin-dependent kinase 2 (CDK2) protects mice and rats from noise - or/and drug-induced hearing loss. The study, published in March 2018 in the Journal of Experimental Medicine, suggests that CDK2 inhibitors prevent the death of inner hair cells, which has the potential to save the hearing of millions of people around the world.

According to the World Health Organization, 360 million people worldwide, including 32 million children, suffer from hearing loss caused by congenital defects or other factors. These factors include infectious disease, use of certain medicines, or exposure to excessive noise. Yet, there are currently no FDA-approved drugs to prevent or treat hearing loss.

A team of researchers led by Dr. Jian Zuo screened over 4,000 drugs for their ability to protect cochlear cells from the chemotherapy agent Cisplatin. Cisplatin is used to treat a variety of cancers but causes irreversible hearing loss in up to 70% of patients.

Zuo and colleagues identified multiple compounds that protected cochlear cells from Cisplatin, several of which are already approved to treat other conditions. Three of the ten most effective compounds were inhibitors of the enzyme, CDK2. One of these CDK2 inhibitors, Kenpaullone, was more effective than four other compounds that are currently in clinical trials for treating hearing loss.

Injecting Kenpaullone into the middle ear protected both mice and rats from Cisplatin-induced hearing loss. Moreover, Kenpaullone also protected the hearing of mice to noise as loud as 100 dB. "Given that 100-dB noise is in the range of noise insults commonly experienced by people, Kenpaullone could have significant clinical application in treating noise-induced hearing loss," says Zuo.

In the case of Cisplatin-induced hearing loss, Kenpaullone appears to protect hair cells by preventing CDK2 from stimulating the production of toxic reactive oxygen species from the cells' mitochondria.

"The robust protection conferred by one-time local delivery of Kenpaullone suggests that CDK2 inhibitors may transform the clinical prevention and treatment of Cisplatin- and noise-induced hearing loss in patients," Zuo says. "Modifications of the treatment regimens, additional optimization of the delivery methods via the use of hydrogels, and structural modifications of the compounds via medicinal chemistry could ensure even better results with CDK2 inhibitors in treating hearing loss in humans."

Source: Tal Teitz, Jie Fang, Jian Zuo et al. CDK2 inhibitors as candidate therapeutics for cisplatin- and noise-induced hearing loss. The Journal of Experimental Medicine, 2018; jem.20172246.
Way back in 1907, Francis Darwin, the son of Charles Darwin theorized that plant leaves have organs made up of lens-like cells and light-sensitive cells, organs now called ocelli. Ocelli, sometimes called simple eyes are present in all sorts of animals: some arthropods have them, as do sea creatures like jellyfish and sea stars. But plants? A recent research revealed a startling truth.

Darwin's theory was all but forgotten until recently, when a new wave of plant neurobiology started gaining steam. In a November 2016 issue of Trends in Plant Science, scientists Stefano Manusco and František Baluška laid out the case for plants having something akin to an eye. Earlier in 2016, researchers discovered that an ancient species of Cyanobacteria actually act like tiny lenses in what is "probably the world's smallest and oldest example of a camera eye." It's reasonable to assume that if an organism that primitive has that ability, further evolved organisms such as plants probably do too.

According to the Scientific American, "some plants, such as the cabbage, mustard and arabidopsis, make proteins that are involved in the development and functioning of eyespots similar to the ultrabasic eyes found in some single-celled organisms such as green algae." And then there's the mind-bending fact that the climbing vine Boquila trifoliolata can change its leaves to look like those of the plant it is climbing. It is still not known how the climber achieves this complex task of mimicry without vision.

Recent scientific research has proven that plants are way more complex than they are given credit for. Plants communicate through air and through their root structures, and even show a plant version of cognition. Manusco and Baluška revealed in a 2007 paper, "...in order to adapt, all organisms continuously generate hypotheses about their environment via well formulated ‘questions’ which are solved by an increasing set of possible ‘answers’ in order to adapt." Baluška added that there is a lot more going on in those leaves and roots than previously thought.

Source: František Baluška, Stefano Mancuso; Plant neurobiology as a paradigm shift not only in the plant sciences, Plant signaling & behavior 2 (4), 205-207, 2007.

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**Believe it or Not**

**Plants may have a sense of sight**

Dementia is an age-associated illness with a devastating impact on patients and their families. It is a serious loss of general cognitive ability including memory loss, difficulties with thinking or problem-solving, and difficulties with language. These symptoms are normally progressive. The patients with dementia have many associated physical illnesses, behavioural problems and functional impairments affecting activities of daily living.

In India, the prevalence of dementia cases, predominantly that of Alzheimer's Disease (AD), is estimated to be around 4.1 million. Only 10% of these get diagnosed showing clearly that the gravity of the problem is much higher. It might be observed that a person with Alzheimer's Dementia:

- repeatedly asks the same questions
- becomes lost or disoriented in familiar places
- is unable to follow directions
- is disoriented as to the date or time of day
- has difficulty with routine tasks
- neglects personal safety, hygiene and nutrition
- frequently loses or misplaces things
- does not recognise and is confused about familiar people
- has difficulty remembering the names of new friends
- frequently forgets conversations, appointments or events
- has difficulty following the flow of a conversation

The family members and even clinicians fail to recognise early symptoms as it is believed that cognitive impairment is normal in ageing. The affected person is brought in late stages of dementia with the symptoms of restlessness, wandering and aggressiveness. The family members undergo more stress and burnout as taking care of dementia patients requires lot of time and effort.

Can dementia be prevented or at least delayed? There are no clear answers yet. The Alzheimer's Association continues to carry out intense research to explore possible stimulation in reducing the risks and slowing down the process of development of Alzheimer's Dementia. Consistent exercise, brain-healthy diet, challenging the mind with social connections & intellectual activities, regular and restful sleep, stress minimization, meditation and avoidance of smoking contribute to good mental health.

Note: To cater the needs of the Elderly, a Geriatric Care Clinic (GCC) is functioning at Sri Ramachandra Medical Centre since May 2016. 'Memory Screening' is carried out to detect Early Cognitive Deficits in the elderly.

*Courtesy: Dept. of Psychiatry*
Participants in this dialogue:
Jaak Panksepp (JP), Roald Hoffmann (RH) & Hugh Thomson (HT)

HT: I was telling you how it must be rare for any man-made structure to prompt an overwhelming response of the sublime in the viewer's mind. In fact, I had experienced it the other way also.
JP: Like you were saying about St. Peter’s?
HT: Well, 'the other way round' I mean. Let me explain, I was actually reminded of a man-made structure while viewing one of Nature’s gargantuan formations. Have you heard of Changabang, the 'shining mountain'?
RH: No, is it in the same location as Nanda Devi?
HT: Yes. See the map, Changabang lies within the Sanctuary. I wanted to see the 'shining mountain' but it had been completely invisible. The deep gorges would give no natural line of vision to it at any point on our journey. But one of our older porters was sure we could get a view of Changabang from across the Rhamani glacier.
RH: Is that the point you have shown in the map, close to the spot marked Deodi?

HT: Yes, from up the gorge of Rhamani glacier we had a clear view of Changabang – such a perfect peak; like 'a shark's tooth of granite thrusting into the skies.' You've heard of Chris Bonington? He took part in nineteen expeditions to the Himalayas. Well, Bonington has written about Changabang and how he was reminded of the Chrysler Building in New York.
JP: May be today we will be reminded of Burj Khalifa in Dubai … a shark's tooth thrusting into the sky … in the middle of the desert!
HT: You know what the Scottish mountaineer 'Bill' Murray wrote? “As fragile as an icicle; a product of earth and sky rare and fantastic, and of liveliness unparalleled so that unaware one’s pulse leapt and the heart gave thanks that this mountain should be as it is.”
RH: Hm … pulse leaping and heart giving, I'm sure you'll have something to say on that Jaak?

Garhwal Himalaya

Reach Out

Public Awareness Committee, Faculty of Dental Sciences launched a project, ‘Vizhithiru – An Anti-Tobacco Awareness Campaign’ for school children at the Government Higher Secondary School, Padiyanallur on 14th Feb. The events included:
- Skit by the interns
- Pledge taking
- Dental screening camp
- Video projection
1050 students benefited.

Inauguration of NSS volunteers-assisted construction of 55 sanitary toilets under Swachh Bharat Abhiyan in the NSS adopted village, Annambedu was held on 13th Feb. with financial support from SRMC & RI (DU). Mr. G. Balasubramanian, Block Development Officer, Poonamalle was the chief guest. 120 NSS volunteers attended.

Dept. of Psychiatry organized a Mental Health Camp at MDM Nagar, Tiruvallur in coordination with the Integrated Rural Community Development Society (IRCDS), an NGO working for the development of the poor and marginalized section of the society and also for the upliftment/development of nearby communities on 14th Feb. Two consultants along with a clinical psychologist, social workers & psychiatric nurses rendered their services. 56 cases were diagnosed and started on treatment.
Alumni Chapter of Faculty of Pharmacy organized a Continuing Pharmacy Education program on 17th Feb. Mr. Singaravelan Ramakrishnan (Alumnus 1994-’95 Batch), General Manager, Regulatory Affairs, Apotex, Bengaluru delivered a lecture on 'Drug Regulatory Affairs – an Overview and Career Opportunities'. 100 students benefited.

Dr. Karthic Babu Natarajan (Alumnus, MBBS 1996-’97), Consultant Pain Physician at Synapse Pain & Spine Clinic, Chennai was conferred as a Fellow of Indian Academy of Pain Medicine at ISSPCON 2018 in New Delhi.


Dr. J. Ramkumar, Senior Consultant, Dept. of Cardio Thoracic Surgery

Ms. V. Sujatha Reader, Faculty of Nursing

The 84th Bridges Monthly Book Review was held on 22.02.’18

Book : Outliers
Author : Malcolm Gladwell
Reviewed by: Prof. K. Vignesh, Dept. of Orthodontics, Faculty of Dental Sciences

Forthcoming Bridges Monthly Book Review
Reviewer : Prof. H. Thamizhchelvan, Dept. of Oral Pathology, Faculty of Dental Sciences