From the Editor’s Desk

Beloved Readers,

Six years have flown by since the inception of Bridges!

Bridges is celebrating its sixth anniversary this month and on this joyous moment we thank our readers who made it possible and kept us going. We have been trying our best to protect the interest of our readers and ensure that the content published always merits your attention. We are open to your critical feedback and solicit your ideas for the areas in need of improvement.

Did you know divulges the Sri Ramachandra Centre for Women's Advancement which has been providing a platform for inspiration, motivation, empowerment, and fun to the women employees of SRU.

Tamil section reveals nature's bounty that can be easily missed. When we take the time to examine the beauty of the world around us, we are able to see parallels within our own lives. Let us get attuned with nature, look around and enjoy the awesome and incredible world we live in.

Let us stay connected…

Sheela Ravinder. S.
Editor-in-Chief

The following faculty members are being given additional responsibilities:

Prof. D. Prathiba – Dept. of Pathology as Associate Dean of Post-Graduate Studies (Basic Medical Sciences)

Prof. J. Damodaran – Head of the Dept. of General Medicine as Associate Dean of Post-Graduate Studies (Clinical Departments)

Memories

Dept. of Psychiatry observed the International Day against Drug Abuse & Illicit Trafficking with the theme, ‘A Message of Hope: Drug Use Disorders are Preventable and Treatable’ on 26th Jun. The various events included:

- Distribution of handouts
- Drug Prevention Pledge with the theme, “Think Health, Not Drugs” by more than 500 students, faculty and staff
- Awareness program for patients and caregivers at Psychiatry Ward, G-Block
- Skit by staff nurses
- De-addiction Camp on 27th Jun. at G-Block: 52 patients attended

The Alumni Committee of Faculty of Dental Sciences conducted an Alumni Meet – Mafia Rendezvous on 29th Jun. A Mafian directory was released followed by various entertainment events. A total of 305 alumni & families participated.

A workshop on Medical Education Technologies was organized from 2nd to 4th Jul. by the Medical Education Unit, a MCI recognized Nodal Center for Faculty Development Workshop. 27 delegates participated.

IQAC organized Grant Writing Workshop on 3rd Jul. 36 faculty members participated and prepared research proposals for submission to funding agencies.
CME on ‘Current Concepts of Hepato Renal Syndrome’ by Dr. V. Chandrasekaran, Chief Consultant Nephrologist, Global Hospital, Chennai

26.06.’14 Guest lecture on ‘Three Decades of Experience in Alcohol Treatment with Personal Note’ by Prof. R. Rajkumar, Dept. of Psychiatry, SRM University, Chennai

26.06.’14 Intra-collegiate round of National level IAP quiz in Pediatrics Winners
- Dr. Arun Shriram & Dr. Manipiya, I yr., MD Pediatrics
- Dr. Bagavathi & Dr. Aurosri, final yr., MBBS

25.06.’14 Ms. Pragnya Ravichandran & Ms. Karthika Ponni H., final yr. BPT won the 1st place in poster competition at continuous professional development program on ‘Recent Trends in Spasticity Diagnosis & Therapeutic Interventions’ held at Meenakshi University, Chennai

26.06.’14 & 23.06.’14 International paper presentation at the 2nd Annual Worldwide Nursing Conference, Singapore Winners
- Dr. S. J. Nalini, Reader - ‘Evaluating an Educative Supportive Nursing Intervention for Women in India with Abnormal Cervical Smears’
- Dr. S. Aruna, Reader - ‘Effectiveness of Cognitive Behavioral Nursing Strategies on Pre-Menstrual Syndrome among Adolescent Girls’
- Dr. B. Sreelekha, Reader - ‘Effectiveness of Osteoporosis Prevention Program on Dietary Calcium Intake and Bone Mineral Density among Female School Teachers’

19.06.’14 CME on ‘Pediatric Rheumatology’ by Dr. Sampath Prahalad, Marcus Prof. & Chief, Division of Pediatric Rheumatology, Emory University School of Medicine, Atlanta – USA, Prof. Sathish Kumar, Pediatrics, CMC, Vellore & Dr. R. Ravichandran, Assoc. Prof. & Head, Dept. of Rheumatology, Kilpauk Medical College, Chennai

17.06.’14 to 19.06.’14 International Paper Presentation in Asia Pacific Dental Congress (APDC) 2014, Dubai Winners
- Dr. Ram Sabarish, Lecturer – ‘Natural T Regulatory Cells in the Peripheral Blood of the Individuals with Healthy Gingiva and Chronic Periodontitis’

16.06.’14 to 04.07.’14 Prof. Sandhya Sundaram attended the summer course on ‘Cancer Registration and Epidemiology’ as an invited participant at the International Agency for Research on Cancer, (WHO), Lyon, France

16.06.’14 Guest lecture on ‘Career Prospects for Pharm D Students’ by Mr. Jacob Nicholas, Coordinator, ACNOVA Center for Academic Excellence, British Columbia, Canada

09.06.’14 CME on ‘Plastic Surgery Advances’ by Dr. Howard N. Langstein, Prof. & Chief, Division of Plastic Surgery, University of Rochester Strong Memorial Hospital, Rochester, New York, USA

05.06.’14 CME on ‘Hospital Disaster Preparedness’ by Dr. C. Sri Hari, Harvard Affiliated Fellow in Disaster Medicine/Emergency Management, USA

22.05.’14 to 25.05.’14 Dr. S. Roopa, Assoc. Prof. was one of the participants in a world record, ‘Ulag Saadhanai Kaviarangam’ - nonstop Tamil poetry rendering for 75 hrs, held at Chennai conducted by Thamizhaga Kavingar Kalai Ilakkiya Sangam

MoU

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<th>S.No.</th>
<th>Partner Institution/Industry</th>
<th>Date of Signing of MoU</th>
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<td>3.</td>
<td>The Himalaya Drug Company, Bangalore</td>
<td>03-07-2014</td>
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<td>5.</td>
<td>Board of Control of Cricket in India (BCCI), Mumbai</td>
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Sri Ramachandra Centre for Women’s Advancement (SRCWA) was established in 2007 to empower women employees in all spheres of life. The mission of SRCWA is to encourage and support women for professional and personal advancement. The members include the Managing Trustee and women employees from various constituent colleges of the university and the hospital.

- The center has conducted inspiring and educative workshops since its inception, on topics like:
  - Developing Managerial Skills of Women
  - Women in a Changing World: Challenges and Opportunities
  - Finance and Auditing: All a Woman must Know
  - Women’s Role in Science and Technology
  - Women and Leadership
  - Capacity Building for Women

- Interactive sessions with eminent personalities on the theme, ‘Inspiring Change’

- The healthcare activities included:
  - Health check-up for women employees above 40 years of age
  - Gynecology screening camp at BANYAN, a NGO, Kovalam
  - Manasvini – a screening program for women school teachers
  - Breast cancer screening
  - Awareness program on ‘Exercise in Women's Health and Well Being’

- Slogan, poster and poetry competitions are conducted every year as part of International Women’s Day celebrations

Contact details: Extn.113, 3rd Floor, Sri Ramachandra Medical College Block.

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### Bits ‘n’ Bytes

**Cloud Storage**

With more and more people owning multiple computing devices – laptops, tablets and smart phones, the idea of someone’s data being locked away in a desktop PC seems antiquated. Cloud storage has freed us from these restraints, ensuring that the files we need are available where and when we want them. Today one can sign up to a bewildering array of free services that offer to automatically upload smartphone photos to the cloud, sync the documents across multiple devices, and enable us to work collaboratively on the web. Sharing large files with friends is now easier than ever, as we no longer have to hope that the data we send will not bounce back due to limits imposed by email servers. Instead we just need to send a link to files stored within a cloud service to which friends or colleagues have access immediately. Choosing which service to use will depend on several factors - preferred OS, space needed and the levels of security.

**Dropbox**

Dropbox is one of the only online storage solutions for Linux and Blackberry, alongside the usual Windows, Mac OS X, Android and iOS standards. The basic, free account comes with a rather small - in comparison to rival services - 2GB of storage. Folders and files can also be shared with friends either by sending them links (these work for non-Dropbox users) which allow them to view the data, or by sharing the file.

**Google Drive**

Google Drive is at the heart of the various online services that Google currently offers. Free space is generous with 15GB available when the Google account is setup or link to an existing one. The interface across the apps is smart and simple to navigate, with a basic file tree showing where the data are kept.

**Microsoft OneDrive**

Much of the functionality in OneDrive (previously SkyDrive) is similar to Dropbox, with apps available to Windows, Mac, Android, iOS, and Windows Phone users. Folders and files can be created on the web, including Office and OneNote formats.

**Box**

Sometimes mistaken for the similarly named Dropbox, Box offers solid personal storage options, however, with a generous 10GB space for any new account but there is a limitation to 250MB for a single file. The web portal gives user the ability to create new documents in Microsoft Office, Google Docs, or web-based formats, which can be edited in Box via a free, downloadable plug-in.
Stanislav Grof, the renowned psychiatrist and transpersonal psychologist has been involved for over five decades in studying non-ordinary states of consciousness which he calls ‘holotropic states.’ Grof started his career as a Freudian psychoanalyst in Prague, Czechoslovakia. Soon he migrated to the United States and went on to become the Chief of Psychiatric Research at the Maryland Psychiatric Research Center and in 1978 founded the International Transpersonal Association of which he became the Founder President.

Transpersonal, literally means ‘beyond the personal’ or ‘transcending the personal.’ Transpersonal Psychology includes studies on non-ordinary/alterned/higher states of consciousness, spirituality, transcendent states and cosmic unity or unitive experiences. Grof was interested in holotropic states that occur in the spiritual practices of yogis, Buddhists, Taoists and Sufis. He developed contact with practitioners of various spiritual disciplines like Vipassana, Siddha Yoga, Tantra, Vajrayana Buddhism, Zen and Christian Benedictine order. Another area that received his attention was the emerging discipline of thanatology that deals with Near-Death Experiences and the psychological and spiritual aspects of death and dying. One of the paradigm challenges that emerged from his studies led him to conduct clinical research with psychedelic drugs.

In his work with drugs like LSD and psilocybin, Grof observed that the subject transcended the ‘narrow and conceptual framework of mainstream psychiatry’ which he felt was restricted to experiences in postnatal biography and Freudian individual unconscious. Instead, he witnessed deep and authentic age regression in his patients which took them to memories of biological birth and of pre-natal existence. These were further confirmed by his personal experiences in psychedelic sessions. In these sessions which lasted three years, he was able to confront the paradigm challenges to conventional psychiatry and record as yet uncharted experiential domains and create a vastly expanded cartography of the psyche to accommodate the new data.

An important perinatal experience Grof was able to record was related to the primal union with the mother that suggested the state of intrauterine life during which the child and the mother form a symbiotic unity. When there are no disturbing external stimuli, the fetus experiences conditions close to the ideal - what could be described as a ‘free-floating experience’ ensuring protection, security and continuous satisfaction of all needs. The essential features of this state have been described as ‘transcendence of subject-object dichotomy, an exceptionally strong positive affect (peace, tranquility, serenity and bliss), feelings of sacredness, transcendence of time and space, and richness of insights of cosmic relevance.’ Grof referred to such experience of cosmic unity as ‘Amniotic Universe.’

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Believe it or Not
Bromine - the new entrant

27 chemical elements are considered to be essential for human life. Recently researchers have established for the first time that bromine, among the 92 naturally occurring chemical elements in the universe, is the 28th element essential for tissue development in all animals, from primitive sea creatures to humans. “Without bromine, there are no animals” said Billy Hudson, the paper’s senior author and Elliott V. Newman, Professor of Medicine. The researchers, led by co-first authors Scott McCall, Christopher Cummings and Gautam (Jay) Bhave, showed that fruit flies died when bromine was removed from their diet but survived when bromine was restored.

This finding has important implications for human disease. “Multiple patient groups have been shown to be bromine deficient,” said McCall, a Ph.D student. Bromine supplementation has been shown to improve the health of patients on dialysis or Total Parenteral Nutrition (TPN). Hudson said the foundation for the discovery about bromine goes back 30 years when he was at the University of Kansas Medical School. Curiosity about two rare kidney diseases led, in the mid-1980s, to the discovery of two previously unknown proteins that twist around each other to form the triple-helical collagen IV molecule, like cables supporting a bridge. Disease results when these cables are defective or damaged. In 2009, colleagues led by Roberto Vanacore, Assistant Professor of Medicine, reported in Science magazine the discovery of a novel sulfilimine bond between a sulfur atom and a nitrogen atom that acts like a ‘fastener’ to connect the collagen IV molecules forming scaffolds for cells. A defective bond may trigger the rare auto-immune disease, Goodpasture syndrome. That discovery led to a simple question: how is the bond formed?

In 2012, Bhave and team found that the enzyme peroxidasin, conserved across the animal kingdom, may play a role in the disease. An overactive enzyme may lead to excessive deposition of collagen IV and thickening of the basement membrane, which can impair kidney function. The scientists further demonstrated the unique and essential role for ionic bromide as a ‘co-factor,’ enabling peroxidasin to form the sulfilimine bond. Future studies might reveal more proteins with ionic bromide as a co-factor.

Global News
Sheep vs. Goats

Scientists have cracked the genetic code of sheep to reveal how they became a distinct species from goats around four million years ago. The study is the first to reveal the genetic differences that make sheep different from other animals.

The research identifies the genes that give sheep their fleece and uncovers features of their digestive system, which makes them so well-suited to a diet of low quality grass and other plants. It also builds the most complete picture yet of sheep’s complex biology. Further studies using this resource could reveal new insights to diseases that affect sheep. Researchers from the University of Edinburgh’s Roslin Institute, which receives strategic funding from the Biotechnology and Biological Sciences Research Council (BBSRC), were part of a global team that has decoded the genome sequence, the entire genetic make-up of domestic sheep for the first time.

The International Sheep Genomics Consortium compared the sheep’s genes with those of other animals including humans, cattle, goats and pigs. The analysis identifies several genes that are associated with wool production. It also reveals genes that underpin the evolution of the rumen - a specialized chamber of the stomach that breaks down plant material to make it ready for digestion.

The BBSRC-funded Genomics facility provided a substantial body of sequence data, including information on which genes are expressed in a spectrum of 40 different tissues. Prof. Alan Archibald, Head of Genetics and Genomics, Roslin Institute said, ”Sheep were one of the first animals to be domesticated for farming and are still an important part of the global agricultural economy. Understanding more about their genetic make-up will help us to breed healthier and more productive flocks.” The findings could aid the development of DNA testing to speed-up selective breeding programs, helping farmers to improve their stocks.


Happiness is...
....... to acknowledge

Acknowledging the good in our lives is the foundation for all abundance. Whether at work, with friends or families most of us don't give and receive enough acknowledgements in our daily lives. Instead of focusing on what's not working well, we need to acknowledge them for all the good they do. People love to be acknowledged because it’s all about them and who they are. Though we know it important, when work piles up and the schedule gets packed, acknowledging the successes of others falls off the to-do list. Being acknowledged helps people perceive their greatness and inspires them to do even more.

Let us practice consciously to acknowledge people each day at work or at home. It only takes seconds, yet its impact is timeless. We need to remember to express our appreciation when the opportunity arises. Acknowledgement is a wonderful thing. Effective acknowledging creates a feeling of being understood. By acknowledging others often, we build a bond of trust and love and foster healthy relationships.

“There is as much greatness of mind in acknowledging a good turn, as in doing it.”

- Lucius Annaeus Seneca

Home Hints
To remove grease off clothes

- Sprinkle a small amount of baby powder/white chalk powder/cornstarch over the fresh grease stains. The fine powder will fill in the crevices between the fibers and absorb the grease. If the stain persists, repeat the process immediately, while the cloth is still wet - if it dries, the stain will set. Leave the powder on for 10-15 minutes, and brush it off before tossing it in the washing machine for a cold wash.

- Pour shampoo/dish detergent directly on to the stain, and use a cloth to vigorously rub it in. Let it set for 10-15 minutes, and then wash.

- Soak your clothing in cool water and then pour aloe vera gel on to the stain. Rub the gel into the stained spot for a few minutes and then wash the clothes with cold water.

- Spray on some hair spray. Allow it to soak for 30 minutes, and then put it in the washing machine for a regular wash.
The 41st Bridges Monthly Book Review was held on 04.07.’14

Book : The Shiva Trilogy
Author : Amish Tripathi
Reviewed by : Ms. Aravinda Hari Ram, 3rd yr., MBBS

Forthcoming Bridges Monthly Book Review
Aug, 2014 – And the Mountains Echoed by Khaled Hosseini
To be reviewed by Ms. Mahima Viswanathan, 2nd yr., MBBS.