

# What's Up? @St John's Hospital

Issue 40, March 1<sup>st</sup>, 2020



The Eternal Grove, Garden of Remembrance, was inaugurated on 29<sup>th</sup> January 2020. This sculpture was designed by Ms. Alina Anna Jacob, medical student, batch of 2017. The design draws inspiration from the symbol of infinity which denotes the eternal bond between the donor and recipient who has been helped by the donor and is eternally grateful.

#### EDITORIAL TEAM:

Alma Lakra, Archana S, Avinash. H. U, Bhavyank Contractor, Blessy Susan Biji, Deepak Kamath, Jenniefer Gabriela, Jyothi Idiculla, Kiranmala Keithellakpam, Manu. M. K. Varma, Monica Rita Hendricks, Nivedita Kamath, Rakesh Ramesh, Ruchi Kanhere, Sanjiv Lewin, Santu Ghosh, Saudamini Nesargi, Srilakshmi Adhyapak, Uma Maheshwari, Rev. Fr. Vimal Francis, Winston Padua

St John's National Academy of Health Sciences  
St John's Medical College Hospital, Bengaluru



# CONTENTS

<a href="#">Message From The Editorial Team .....</a>	02
<b>Updates This Month</b>	
<a href="#">Novel Corona Virus Infection (The Basics).....</a>	03
<a href="#">Corona Virus Awareness Session by SEC.....</a>	05
<a href="#">Sr. Dr. Mary Glowrey Oration by Dr. Sanjiv Lewin .....</a>	06
<a href="#">1<sup>st</sup> and 2<sup>nd</sup> Prizes in IAPSM NatCon.....</a>	06
<a href="#">Inauguration of 3<sup>rd</sup> Floor OT Complex .....</a>	07
<a href="#">Inauguration of Newly Renovated OPD.....</a>	07
<a href="#">Republic Day Celebration 2020.....</a>	08
<a href="#">31<sup>st</sup> Annual Sports Meet of SJCON.....</a>	08
<a href="#">Meraki 2020.....</a>	09
<a href="#">Cervical Cancer Awareness Day .....</a>	10
<a href="#">Magic Show for Pediatric Cancer Patients .....</a>	10
<a href="#">Oral Cavity Cancer Screening (Surgical Oncology).....</a>	11
<a href="#">World Cancer Day (Surgical Oncology Ward).....</a>	11
<a href="#">World Cancer Day (SJCON).....</a>	11
<a href="#">2<sup>nd</sup> Annual Research Day 2020.....</a>	12
<a href="#">Heroic Act by Major (Dr.) Ankit.....</a>	14
<a href="#">New Vice Deans.....</a>	15
<a href="#">Student Executive Committee 2020-21 Handover .....</a>	15
<a href="#">Convocation 2020.....</a>	16
<a href="#">Sr. Dr. Mary Glowrey Award to Sr. Dr. Beatrice.....</a>	17
<a href="#">Alumni Lunch to Interns (Batch 2015).....</a>	17
<a href="#">Pioneer's Award for Excellence in Teaching.....</a>	18
<a href="#">Friday Clinical Meeting .....</a>	19
<a href="#">Research Snippets (Checklist) .....</a>	20
<a href="#">Know Your Hospital (Family Welfare and Lactation) .....</a>	21
<a href="#">Ig Nobel.....</a>	24
<a href="#">Survivor's Corner .....</a>	25
<a href="#">St. John's Fountainhead (Article 1).....</a>	27
<a href="#">St. John's Fountainhead (Article 2).....</a>	28
<a href="#">The Quotable Osler .....</a>	29
<a href="#">Medicine Dis Month.....</a>	29
<a href="#">Reference 1 of Medicine Dis Week.....</a>	30
<a href="#">Reference 2 of Medicine Dis Week.....</a>	31
<a href="#">The Story Of Medicine.....</a>	32
<a href="#">L Johny .....</a>	18
<a href="#">Did You Know? .....</a>	32

\* We now present a fully interactive menu. It works best with Adobe reader application (on computers, mobile phones and tablets)



# MESSAGE FROM THE EDITORIAL TEAM

**Dear All!**

We are pleased to release the fortieth issue of “What’s Up? @ St John’s Hospital” magazine today.

We would rather call it an eventful month, there were significant accomplishments in national conferences, multiple celebrations of socio-cultural, sports & academic events, inaugurations of new hospital facilities, awareness programs and so on. We have made a sincere attempt to cover each and every event related to the Academy. There are many video links and other external links in the present issue, which makes it even more interesting.

4<sup>th</sup> February 2020 was observed as World Cancer day. There were public awareness programmes, patient awareness programs, cancer screening camps and magic shows for cancer patients, truly in line with the theme ‘I am and I will’.

The present issue highlights Department of Family Welfare, Fertility Study and Lactation Clinic in the section of ‘Know your hospital’. Also do not forget to read the story of a mother and her 1.9Kg newborn in the section ‘Survivors Corner’.

Please feel free to communicate with us to publish your achievements. Feedback on any section of the magazine is welcome. We are happy to evolve to meet the needs to our beloved readers. Happy Reading!!

**Editorial Team**

**CONTENTS** 

# UPDATES THIS MONTH

## Novel Corona Virus 2019 infection

### The Basics...

#### What is novel Corona virus?

Corona viruses are a family of viruses that cause illness ranging from the common cold to more severe diseases such as Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS) and the newly detected strain in China.



#### When was this new corona virus identified?

On January 7, 2020 Chinese authorities identified a novel corona virus that caused illness in humans. Currently named 2019-nCoV it is a new strain that had not been previously identified in humans.

#### From where did this virus emerge ?

Not yet clearly known. Experts are working to find the source. The early cases of this new infection were traced to the South China seafood wholesale market where live wild animals were sold including farm animals, civet cats, bats and snakes.

#### Can this virus spread from one person to another?

Yes, human to human transmission has been confirmed.

#### How deadly is it?

It's not yet clear how bad this new corona virus is. But, some experts say it may not be as deadly as SARS. Case fatality rate for SARS was 10% whereas till now 2019-nCoV has killed 618 out of 28,000 people leading to a death rate of 2.2%. (7th Feb 2020)

#### How does one get this virus?

It spreads from person to person through close contact, droplets expelled in the air by coughing or sneezing. It can spread through surfaces contaminated by people coughing or sneezing on them.

CONTENTS 

# Novel Corona Virus 2019 The Basics...

## What are the symptoms of flu?

Symptoms may appear in as few as 2 days or as long as 14 days after exposure. Fever, severe cough, difficulty in breathing, pneumonia, severe acute respiratory syndrome, impaired kidney and liver function leading to organ failure and death.

## Is this infection curable?

The treatment is mainly conservative with fluids and supplemental oxygen. Currently there is no evidence recommending specific anti-viral treatment for suspected or confirmed patients.

## How can this infection be prevented?

1. No vaccines are available to prevent this infection.
2. Wash your hands often with soap and water for at least 20 seconds. If soap and water are not available, use an alcohol-based hand sanitizer.
3. Cover your cough or sneeze with a tissue, then throw the tissue in the trash.
4. Clean and disinfect frequently touched objects and surfaces.
5. Avoid close contact with people who are sick.
6. Thoroughly cook meat and eggs.
7. Avoid unprotected contact with live wild or farm animals.
8. Health workers- strict infection control practices.



## What's the global situation?

- As on 7<sup>th</sup> Feb 2020, 25 countries have reported 2019-nCoV including India.
- According to the WHO this is a public health emergency of International concern.

# Novel Corona Virus 2019 The Basics...

## Are there any cases reported from India?

- Currently, 3 cases have been reported. Screening of all incoming air travelers in 21 airports across India and some of them are kept under observation.
- It is advised that general public keep themselves informed about 2019-nCoV and follow the recommended precautions.
- Travel advisory has been issued to avoid all non essential travel to China.
- For more information and updates please visit-  
<https://www.who.int/emergencies/diseases/novel-coronavirus-2019>
- For 24\*7 help call 011-23978046
- Health department Bangalore 080-22208541 and 22374658 and 104 Aarogya Sahayawani

## How do we diagnose in ER or emergency?

- Ask for recent travel/transit from/through China in the past 2 weeks.
- If positive and with respiratory symptoms presume the patient to have 2019-nCoV infection.
- Handover mask, isolate patient and transfer **to Rajiv Gandhi Institute of Chest Diseases** near NIMHANS.

<https://www.cdc.gov/coronavirus/2019-ncov/index.html>;  
<https://www.who.int/emergencies/diseases/novel-coronavirus-2019>;  
BBC News; Ministry of Health

## Corona Virus Awareness Session by Student Executive Committee

19<sup>th</sup> February 2020 – Integrated awareness class on corona virus was organised by the Student Executive Committee 2020-21 in Lecture hall 1. Facts and measures required were discussed in this program.



CONTENTS 

## Dr. Sanjiv Lewin delivered Sr. Dr. Mary Glowrey Oration 2020 in SDFI

23<sup>rd</sup> January 2020 – Dr. Sanjiv Lewin (Chief of Medical Services, Professor of Paediatrics) delivered Sr. Dr. Mary Glowrey Oration 2020 in 26<sup>th</sup> National conference of Sisters Doctors Forum of India (SDFI), Aluva. The title of oration was 'Chronic Care – The need of the hour.'



## Team from Department of Community Medicine won First and Second Prize in Annual National Conference of IAPSM

The Indian Association of Preventive and Social Medicine (IAPSM) confers awards at the annual conference for "innovative teaching/training" and "best practices" in Community Medicine, nationwide. This year, our team from St John's won the '**second prize**' for the ROP and CHAP programs in the former category for "community based undergraduate training", and the '**first prize**' for the Senior Citizen Health Service in the "Best Community Medicine Practice" section at the IAPSM conference in January 2020. Kudos to the Department of Community Health, Dr Farah, who made the presentation on teaching/training and Dr Arvind Kasthuri for the presentation on best Community Medicine practice. (Courtesy:Dr. Arvind Kasturi & PC: Dr. Deepti Shanbhag)



## Inauguration of 3<sup>rd</sup> Floor Operation Theatre complex

30<sup>th</sup> January 2020 – Newly renovated 3<sup>rd</sup> floor operation theatre complex with modern amenities, was inaugurated on 30<sup>th</sup> January 2020 by Mr. Ramalinga Reddy (Member of Legislative Assembly, BTM Layout constituency, Karnataka).



## Inauguration of Newly Renovated Out Patient Block

14<sup>th</sup> February 2020 – The newly renovated outpatient entrance was inaugurated and blessed by His Eminence Oswald Cardinal Gracias (President, Catholic Bishop's Conference of India). NABH Accreditation plaque was also unveiled. This was done during CBCI 34<sup>th</sup> Plenary Assembly.



PC: Mr. Peter Martin

CONTENTS

## Republic Day Celebration 2020

26<sup>th</sup> January 2020 – 70<sup>th</sup> Republic day was celebrated in front of St. John's Medical College Hospital. The chief guest was Mr. Kumar Ajit (IRS, Income Tax Commissioner). The program included Eucharistic Celebration in hospital chapel, followed by unfurling of National Flag by the chief guest and message by the chief guest. There was a beautiful cultural program by students of allied health sciences and college of nursing.



## 31st Annual Sports meet of St. John's College of Nursing

10<sup>th</sup> January 2020 - 31<sup>st</sup> Annual Sports meet of SJCON was held. The chief guest of the day was Rev. Fr. Pradeep Kumar Samad. A spectacular display of march-past by the four teams ( Lilly, Jasmine, Rose & Lotus) set the tone for the sports meet. The oath was administered by Sports captain Ms. Abhinisha M. The first year B.Sc. Nursing students displayed a mesmerizing drill. The races began filling the air with cheer and "Hurray's" for the young athletes. The day saw the students' enthusiasm & competitive spirit at various track & field. The teachers' events such as lemon & spoon, tug of war & pot breaking added fun to the meet.



# Meraki 2020

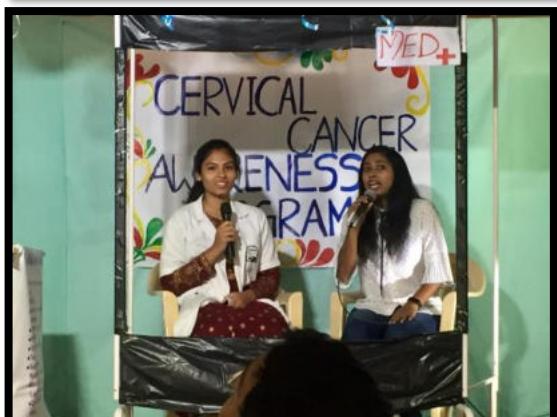
8<sup>th</sup> February 2020 – A cultural extravaganza, Meraki was organised in St. John's National Academy of Health Sciences to celebrate cultural diversity of India. Students across different courses and institutions of SJNAHS represented culture, art and traditions of different states in our country. The aim is to remind the students of their rich national heritage and to foster co-operation between the people of different culture and backgrounds. The event was truly a visual treat!



CONTENTS 

## Cervical Cancer Awareness Day 2020

29<sup>th</sup> January 2020 – Department of Gynaecologic Oncology in collaboration with St. John’s College of Nursing organised a public education and awareness program regarding carcinoma of uterine cervix on account of Cervical Cancer Awareness day. The chief guest for the occasion was Rev. Fr. Duming Dias (Associate Director College). The guest of honour was Dr. Nirmala S (Professor and Head, Department of Radiation Oncology). The occasion was graced by Rev. Fr. Jesudoss Rajamanickam (Associate Director Finance, SJNAHS), Mrs. Reena Menon (Principal, St. John’s College of Nursing), Dr. Premalatha (Professor and Head, Department of Gynaecologic Oncology) and the doctors of oncology department. The program included awareness talks by the chief guests followed by a skit from students of college of nursing.



## Magic Show for the Paediatric Hemato-oncology patients

1<sup>st</sup> February 2020 – Magician, Mr. Nagendra performed a magic show for the sake of paediatric hemato-oncology patients. This show was on account of World Cancer Day which is observed on 4<sup>th</sup> February. Children and the care-givers rejoiced the same.



## Oral Cavity Cancer Screening by Department of Surgical Oncology

2<sup>nd</sup> February 2020 – Team from the Department of Surgical Oncology and Cancer Registry lead by Dr. Rakesh Ramesh (Associate Professor, Surgical Oncology) conducted oral cancer screening and awareness program in a school called ‘Building Blocks’ run by an NGO in Ejipura. Over 146 parents of the children from this school who reside in slums were screened for oral cancers. The program was done in association with students of The International School, Delhi Public School and The Building Blocks, Bangalore.



## World Cancer Day Awareness Surgical Oncology Ward



4<sup>th</sup> February 2020 – Staff from the Department of Surgical Oncology, Nursing team of Surgical Oncology ward and day care ward in association with nursing students organised an awareness program for the patients and attenders of surgical oncology and day care ward.

## World Cancer Day by St. John's College of Nursing

5<sup>th</sup> February 2020 – Public awareness program was organised by St. John's College of Nursing in the OPD on account of World Cancer Day on the theme of '*I am and I will!*'. Dr. Ganesh (Senior Consultant and Head, Department of Medical Oncology) gave an awareness talk followed by a skit from students of nursing college. The program was graced by Rev. Fr. Pradeep Kumar Samad (ADH), Rev. Fr. Duming Dias (ADC) and Rev. Sr. Ria Emmanuel (CNS).



# 2nd Annual Research Day 2020

The second annual research day of St. John's National Academy of Health Sciences [SJNAHS] was held on 3<sup>rd</sup> and 4<sup>th</sup> February 2020. The theme for this year was "Today's Research, Tomorrow's Healthcare". Various events were held over 2 days and faculty and students from all the units of the academy participated with enthusiasm. The research day was inaugurated by chief guest and plenary speaker Padmashri (Dr) Abhay Bang, Director - SEARCH and Rev Fr. Paul Parathazham, Director - SJNAHS. On the first day, 2 workshops were conducted viz., 1) The "Basics of Health Research Methodology and Designing a Proposal" and 2) "Funding Opportunity and Grant writing for innovation research". These workshops were well attended by 26 and 30 delegates respectively. Dr. Denis Xavier was the course director and faculty from hospital, medical college, nursing college and research institute were the resource persons for the health research methodology workshop. Dr. Shrishendu Mukherjee, Mission Director, Grand Challenges India and faculty from BIRAC conducted the innovation workshop. The revamped "Undergraduate Mentoring Program in research" was inaugurated by Padmashri (Dr) Abhay Bang who interacted with first year MBBS students and inspired them to engage in research. An open day, wherein the faculty and students could visit the research laboratories in the academy was organized. The visit provided an opportunity to know more about the facilities available and the research work being carried out in these labs.



There was an overwhelming response to the “call for abstracts” with 106 abstract submissions from faculty and students across the academy, of which 23 were selected by two independent reviewers for oral presentations and the remaining for poster sessions. Two prizes in each of the category were awarded in oral and poster sessions. An e-abstract book was prepared and can be viewed here [[LINK](#)]

A key component of the Research day program was the key note addresses from eminent speakers such as Prof. Anura Kurpad, Prof. Vikram Mathew and Dr. Shirshendu. The audience listened to these lectures with rapt attention and actively participated by asking questions. The Plenary talk was delivered by Padmashri (Dr) Abhay Bang who took the audience through his journey of doing research in the community and his landmark achievements. The panel discussion was interactive and lively with panelists and the audience providing various view points and suggestions on facilitating clinician participation in research. All the talks and panel discussions can be viewed on the SJRI you tube channel {click on youtube icon below}.

During the Research day, 13 departments displayed their research work and information about the facilities available in various stalls that were put up on display.

The two day program concluded with prize distribution for the winners and acknowledging the work of the organizing committee members under the leadership of Dean and the Vice-Dean of SJRI.



CONTENTS

## Awards Won in 2<sup>nd</sup> Annual Research Day

**ORAL PRESENTATION:** In the postgraduate medical/Non-medical category, Ms. Navyashree AR (Senior Research Fellow, Molecular Medicine) and Dr. Deepa S (Postgraduate student, Community Medicine) won 1<sup>st</sup> and 2<sup>nd</sup> prize respectively. In Professor/Asso. Professor category, Dr. Jyothi Prabhu (Associate Professor, Molecular medicine) and Dr. Priya Pais (Associate Professor, Paediatric Nephrology) won 1<sup>st</sup> and 2<sup>nd</sup> Prize respectively. In Assistant Professor/Senior Resident category, Dr. Nivedita Kamath (Assistant Professor, Paediatric Nephrology) won 1<sup>st</sup> prize, whereas 2<sup>nd</sup> Prize was shared between Dr. Divya Swaminathan (CARE ADD) & Dr. Shubhashree Karat (Ophthalmology).

**POSTER PRESENTATION:** In Postgraduate medical/non-Medical category, Mr. Syed Fazil (Senior research fellow, Infectious disease) and Ms. Sahaya Merina (MSc MLT, Clinical biochemistry) won 1<sup>st</sup> and 2<sup>nd</sup> prize respectively. In Professor/Associate Professor category Dr. Savitha D (Associate Professor, Physiology) and Dr. Tinku Thomas (Professor, Biostatistics) won 1<sup>st</sup> and 2<sup>nd</sup> prize respectively. In Assistant Professor/Senior Resident category Dr. Dhinagaran (Assistant Professor, Medical Informatics) and Dr. Rehna K Rahman (Senior Resident, Nephrology) won 1<sup>st</sup> and 2<sup>nd</sup> prize respectively. Congratulations to all the winners.

## Heroic Act by Major Dr. Ankit (Batch 2007)

Heroic effort by Maj (Dr.) Ankit, Anaesthesiologist at Army Field Hospital to evacuate a soldier with splinter injury to head, from the front line even as active shelling from the enemy side was on. He assessed the injured soldier, intubated him and airlifted him to safety. All this amidst heavy cross border firing! True to the army tradition "leave no one behind". In the picture is Maj (Dr.) Ankit standing to left of patient with Dr. Parikshit and Dr. Manish (Neurosurgeons from AFMC). We are proud of you Maj (Dr.) Ankit. (Click on the Facebook icon/Picture for full story)



CONTENTS

## New Vice Deans of St. John's Medical College

31<sup>st</sup> January 2020 – Four new vice deans have been appointed. Dr. John Stephen (Vice Dean, Medical Postgraduates), Dr. Anuradha Ananthamurthy (Vice Dean, MBBS Undergraduates), Dr. Mary Diaz (Vice Dean, Allied Health Sciences) and Dr. Bobby Joseph (Vice Dean, Community outreach and Distance Education). Congratulations to all the new Vice Deans.



## Handover Ceremony 2020

12<sup>th</sup> February 2020 – The Students Executive Committee (SEC) consists of students mainly from 3<sup>rd</sup> year, who coordinate majority of events conducted by the students for that academic year. It is an elected body. The handover ceremony of student executive committee from 2019-20 to 2020-21 happened on 12<sup>th</sup> February 2020. The SEC has representatives both from medical college and allied health sciences. The newly elected president is Mr. Tijo Thomas. All the best to the newly elected members. (Courtesy: Mr. Reuben Roshy – Literary Secretary)



CONTENTS

# Convocation 2020

15<sup>th</sup> February 2020 – The Convocation ceremony 2020 was held in St. John's Auditorium. The chief guest was Dr. Shashi Tharoor (Member of Parliament, former union minister, Government of India) and the event was presided over by His Eminence Oswald Cardinal Gracias (President, Catholic Bishop's Conference of India).

Dr Shashi Tharoor emphasized the need to uphold the Hippocratic oath and to be sensitive to the needs of the impoverished and poor, who are in many a case living one catastrophic illness away from poverty. He appreciated St John's for its efforts to train students to address some of these above mentioned objectives, emphasized on the need for such institutions to train more quality medical professionals to help bridge the gap in the doctor population ratio. Dr. Tharoor also underscored the need for greater GDP allocation for healthcare. He congratulated parents and teachers who had helped the graduates and awardees achieve this milestone in their lives. (Click on youtube icon/picture of Dr. Tharoor to access full speech)

Cardinal Oswald Gracias, president, Catholic Bishops Conference of India (CBCI), in his presidential address congratulated St John's for its contributions and achievements. He wished the best for the institution to strive for continued excellence and also for their long journey of learning in life and in building a better India for tomorrow. He emphasised the fact that, this year, nearly 40 (of 58, 70%) of the outgoing MBBS graduates have opted to serve for two years in various underprivileged areas of the country.



PC: Mr. Peter Martin



CONTENTS



16

## **Sr. Dr. Mary Glowrey Award to Dr. Sr. Beatrice (Batch 1964)**

15<sup>th</sup> February 2020 – During the occasion of convocation 2020, Dr. Sr. Beatrice from batch of 1964 was awarded Sr. Dr. Mary Glowrey award, the highest award of the St John's Medical College Alumni Association for service in rural and underprivileged areas of the country, for her dedicated and selfless service in various parts of the country. Sr. Dr. Beatrice joined SJMC in 1964, completed her internship and house-manship in CMC Vellore, before going on to do her MS in General Surgery at the Benaras Hindu University. She obtained specialised surgical skills in Switzerland and Australia. For the greater part of her life she was surgeon and medical superintendent at the Holy Cross Hospital, Ambikapur, Chhattisgarh.



Over the years she has worked as a physician, obstetrician, paediatrician and a surgeon in an area where specialised services were initially few and far between. Sr. Beatrice always had a special place in her heart for poor and unserved people. She has done close to 70,000 surgical procedures over many years. The level of commitment and dedication has made her a life-promoting and life saving agent in Surguja and neighbouring districts of Chhattisgarh state. People who have experienced healing call her 'Devi' and 'Mother Teresa' of Surguja.

Sr. Dr. Beatrice is an inspiration to many others in the field of healthcare, and many other sister doctors have followed the path she explored first and now work as rural surgeons across the country.

## **Alumni Lunch for Interns (Batch 2015)**

13<sup>th</sup> February 2020 – St. John's Alumni association organised lunch for the interns from batch 2015 on the last day of interns orientation program. The occasion is to formally welcome interns to alumni association.

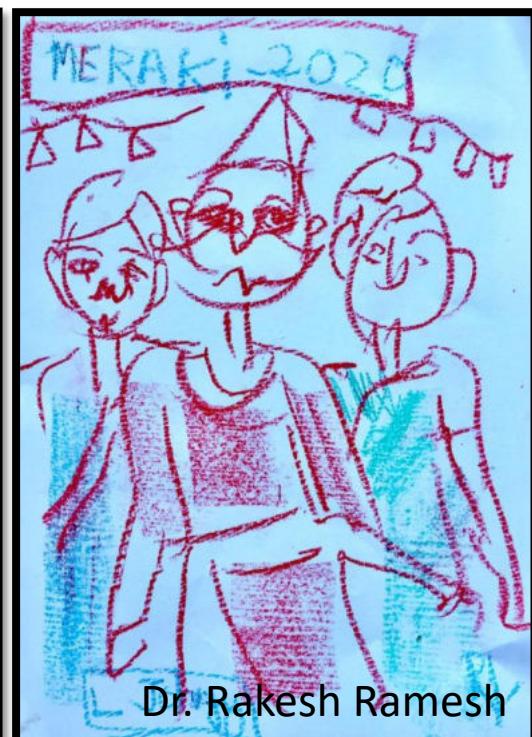
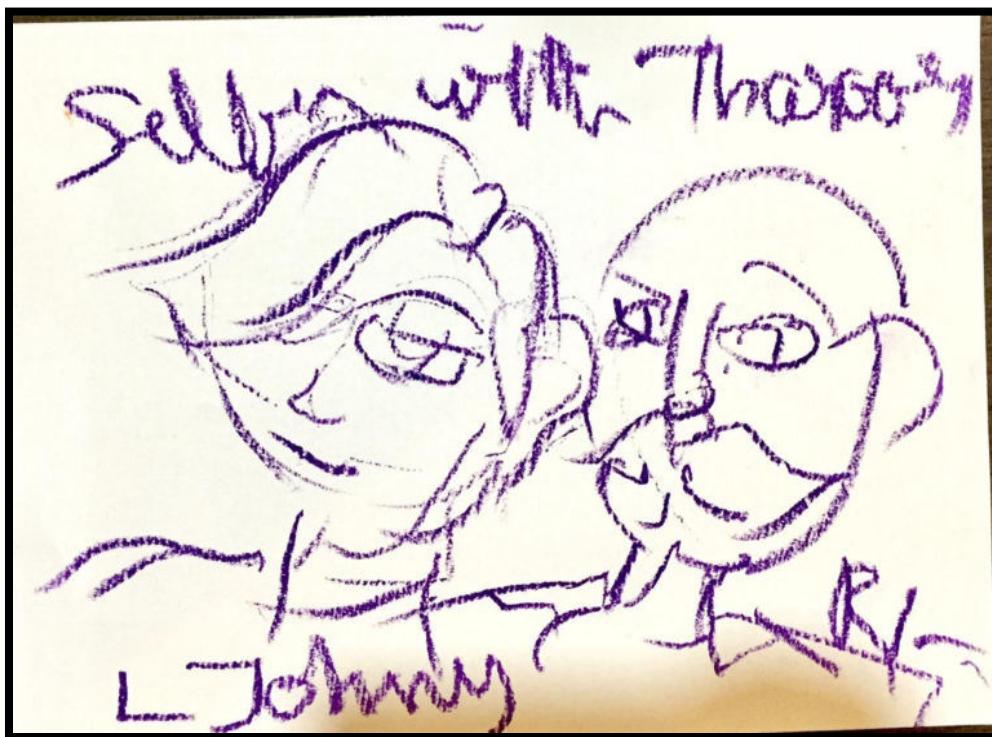


## Pioneer's award for excellence in teaching for year 2019

4<sup>th</sup> February 2020 – The Pioneer's Award for excellence in teaching for the year 2019 has been awarded to Dr. Nachiket Shankar (Professor, Department of Anatomy). The award is given based on the feedback from the students. Dr. Nachiket was presented with the award on the graduation day. Dr. Chaitanya. H.B (General Medicine), Dr. Govindaraj Sridhar (General Surgery), Dr. Yogitha Ravindranath (Anatomy) and Dr. Mario Vaz (Physiology) were ranked 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup> and 5<sup>th</sup> respectively. We congratulate all the teachers.



## L Johny



# FRIDAY CLINICAL MEETING

24<sup>th</sup> January 2020

## “Staying with a Young knee while Ageing – Is it Possible?!!!”

**Moderator:** Dr. Rajkumar S Amaravathi, Professor & Head of Unit 3,  
Dept. of Orthopaedics, SJMCH

The title was enough to create huge interest in everyone. Dr. Amaravathi not only spoke about the surgical repair of knee injuries but also answered all the questions arising from common curiosities. The learning points were:

- Meniscal injuries are common in both young and old age; ageing, high BMI (body mass index), osteoarthritis of knee and contractures are factors harmful for cartilage of knee.
- The old practice of removal of one leaf of meniscal cartilage is no longer practised as it only leads to osteoarthritis.
- SJMCH does cartilage repair in collaboration with laboratory in Mumbai that grows cartilage in lab that are implanted in patients.
- 45 mins of brisk walk (not just 30 mins as body warms up only after 30 mins) eg jogging; being busy with household chores like cooking, walking around inside the house is not a substitute for 45 mins of dedicated brisk walk!
- Both playing and dancing should be age appropriate if we want to keep our knees healthy. In simple words, we should avoid putting our body any force that is beyond the natural strength of age to handle; dancing is healthy but we should avoid steps that involve landing on our knees forcefully putting whole weight on our knees so “No Zumba” for forties (it is only for the young).
- Climbing up and down the stairs is good but if we have osteomalacia of knees we should only climb few steps and then take the stairs.
- Vitamin D level proven healthy for musculoskeletal system is above 12 ng/ml.

CONTENTS



# RESEARCH SNIPPETS

## CHECKLIST

A checklist is an instrument that enables the observer to note whether a particular trait is present or absent . Its most commonly employed in performance evaluation and behaviour associated with intervention.

It's a prepared list of expected items of performance or attributes, which are checked by a researcher for their presence or absence.

### CHARACTERISTICS:

- Observes one subject at a time
- A clear specification of the behaviour expected
- Observer should be trained how to observe , what to observe and how to document the observation

**Example:** Checklist to observe a procedure



SI . No.	Behavior	Yes	No	Remarks
1	Explains procedure			
2	Collects and arranges equipment			
3	Prepares patient			
4	Washes hands			
5	Maintains asepsis			

\* All steps are listed , down to the very last as per the expected protocol or standard

## Department of FAMILY WELFARE, FERTILITY STUDY & LACTATION CLINIC

WELFARE

The Catholic Bishop's conference of India for Medical Education decided to have a "Family Welfare Centre" in St. John's Medical College Hospital in 1983. The department was inaugurated on 16<sup>th</sup> August 1983 under the able leadership of Dr. Sr. Lillian who was the head of the department. The department was later headed by Dr. Sr. Agostina Putti Thomas & then taken over by Dr. Annamma Thomas who is continuing to serve as the head the department.

It was initially started with an aim to provide information regarding the Billings ovulation method to promote, achieving a healthy pregnancy and aided in avoiding unwanted pregnancy (Natural Family Planning). Later the service was extended to provide life value education, responsible parenting and family value education. It also initiated teen star program to school & college going students both in the rural & urban areas, where value education was imparted to the children.

Annual Training program, a 3 days certification course is conducted for teenage students and rural health workers to teach them about the Billing Ovulation Method for fertility to promote planned pregnancy. Classes are conducted as awareness of respect for life & prolife services for both medical and nursing student as part of their curriculum. Awareness program & value education for teen star program, responsible parenthood, are some of the training programs conducted in both rural & urban slums by the department. We also render our service to the prison inmates in counselling and value education. We have also helped St. Martha's hospital (Bangalore) & Jubilee Mission hospital (Thrissur, Kerala) to set up their family welfare center.

In 1994 the department took the responsibility of lactation clinic, under the guidance and co-ordination of Paediatrics department. St. John's Hospital is now designated as a "Baby Friendly Hospital" and is a member of the Breastfeeding Promotion Network of India (BPNI).

WELFARE



# Know Your Hospital!

Family 

## Department of FAMILY WELFARE, FERTILITY STUDY & LACTATION CLINIC

WELFARE

### OBJECTIVES:

- Education
- Service
- Training

### STAFFS AND MEMBERS:

SI No	STAFF	Designation
1	Dr. Annamma Thomas	HOD of Family Welfare
2	Mrs. Amudha Mary	Jr. NFP Trainer
3	Mrs. Appoline	Jr. NFP Trainer

### ACTIVITIES:

- Beginning of the life- protection of unborn: Welfare of family life education in Reproduction “Values from Womb to Tomb”.
- Importance of breastfeeding: Re-lactation, breast engorgement, feeding twins, parent craft (pregnancy) management of sore nipple/ cracked nipples, mother craft and Complimentary food
- Nutrition: Diet for ANC & PNC
- Youth “teen star” programme: Value Education
- Responsible parenthood
- Natural fertility control (Billings ovulation method): Avoiding and achieving pregnancy
- Counselling and guidance
- Providing lactation counselling to babies referred by other hospitals too.

Above programmes are conducted in schools, colleges, training centres.



# Know Your Hospital!

## Department of FAMILY WELFARE, FERTILITY STUDY & LACTATION CLINIC

The department sees 10 to 15 outpatients and 30 to 40 inpatients every day.



The TEAM (left to right): Mrs. Amudha Mary J (Jn.NFP Trainer), Dr. Annamma Thomas (HOD), Mrs. Appoline (Jn.NFP Trainer)

Do You Want to Access all the previous issues of the Magazine? [CLICK HERE](#)  
→

**What's Up?  
@St John's Hospital**



# IG NOBEL



## 1996 – BIODIVERSITY

### Chonosuke Okamura

Chonosuke Okamura of the Okamura Fossil Laboratory in Nagoya, Japan, for discovering the fossils of dinosaurs, horses, dragons, princesses, and more than 1000 other extinct “mini-species,” each of which is less than 1/100 of an inch in length.

Okamura did no less than discover the Silurian Period beginnings of all vertebrate life, including humans, 425 million years ago. Nearly everything he found was a new subspecies, whether the species was extant or extinct. Some examples are *Canis familiaris minilorientalis* (common dog), *Homo sapiens minilorientales* (humans), and *Brontosaurus exculus minilorientalus* (a dinosaur).

Using slabs of polished limestone from Mount Nagaiwa in Iwate Prefecture, Okamura scrutinized the surfaces with a microscope. There he saw tiny shapes, which most geologists have thought to be mineral grains and the fossils of tiny foraminifera and coral fragments. But Okamura discerned that the figures resemble millimeter-sized remains of many modern animals, including human beings.



	1	2	3	4	5	6	7	8
DESF	1	2	3	4	5	6	7	8
DESH	1	2	3	4	5	6	7	8
DESI *	1	2	3	4	5	6	7	8
- b	1	2	3	4	5	6	7	8
DE138	1	2	3	4	5	6	7	8
DE149 *	1	2	3	4	5	6	7	8
- b	1	2	3	4	5	6	7	8
- c	1	2	3	4	5	6	7	8
- d	1	2	3	4	5	6	7	8
DE146 *	1	2	3	4	5	6	7	8
- b	1	2	3	4	5	6	7	8
- d	1	2	3	4	5	6	7	8
- e	1	2	3	4	5	6	7	8
DE147 *	1	2	3	4	5	6	7	8
- b	1	2	3	4	5	6	7	8
- d	1	2	3	4	5	6	7	8
DE148 *	1	2	3	4	5	6	7	8



Okamura Taxonomy,  
Miniperson holding mini  
baby. Head of miniman!.





# SURVIVOR's CORNER

A pregnant lady, close to term, presented to the emergency room with complaints of tachypnoea. This was her third pregnancy and she was referred to St. Johns with a diagnosis of peripartum cardiomyopathy. She was admitted to the Emergency Intensive care unit (EICU) for further management. On admission she was given oxygen and a work up initiated.

A few hours later she became acutely hypoxic and bradycardic requiring immediate intubation and CPR.

It was decided to deliver the baby and she was rushed to the OT. In the OT however, she delivered vaginally and a baby boy weighing 1.9 kg was born.

The baby required resuscitation, had minimal respiratory distress and was put on CPAP (Continuous Positive Airway Pressure) in the neonatal ICU. He had no features of asphyxia and was removed from respiratory support in 1 day.<sup>2</sup>

The mother was shifted back to EICU where she required ventilation for the next 2 days. Her ejection fraction was less than 40% but was slowly improving. Other than unilateral deep vein thrombosis, the lady had an uneventful post partum course.

Both mother and baby were discharged after a week! Excellent team work from all involved!

If you have stories of Survivors from your department, Please mail to  
Dr. Saudamini ([saudamini\\_nesargi@yahoo.com](mailto:saudamini_nesargi@yahoo.com)) or  
Dr. Nivedita ([nkamath25@yahoo.com](mailto:nkamath25@yahoo.com))

# New Section!!

## “ST. JOHN’S FOUNTAINHEAD”

We will publish Abstracts of your published research.....

Based on criteria laid down by the Editorial Board.....

Email your Full Articles at the earliest to  
Dr. Santu Ghosh

**santu.g@stjohns.in**

**CONTENTS**



## Cardiovascular risk factor reduction by community health workers in rural India: A cluster randomized trial.

Joshi R<sup>1</sup>, Agrawal T<sup>2</sup>, Fathima F<sup>2</sup>, Usha T<sup>2</sup>, Thomas T<sup>2</sup>, Mesquite D<sup>2</sup>, Kalantri S<sup>3</sup>, Chidambaram N<sup>4</sup>, Raj T<sup>2</sup>, Singamani A<sup>5</sup>, Hegde S<sup>6</sup>, Xavier D<sup>2</sup>, Devereaux PJ<sup>7</sup>, Pais P<sup>2</sup>, Gupta R<sup>8</sup>, Yusuf S<sup>7</sup>.

<sup>1</sup> Department of Medicine, All India Institute of Medical Sciences, Bhopal, India. Electronic address:

rajnish.genmed@aiimsbhopal.edu.in.<sup>2</sup> Departments of Pharmacology, Community Medicine, and Division of Clinical Research and Training, St John's Medical College and Research Institute, Bangalore, India. <sup>3</sup> Department of Medicine, Mahatma Gandhi Institute of Medical Sciences, Sevagram, India. <sup>4</sup> Department of Medicine, Rajamuthiah Medical College, Annamalainagar, India. <sup>5</sup> Department of Clinical Research, Narayana Health Bangalore, India. <sup>6</sup> SRM Medical College and Research Center, Tamil Nadu, India. <sup>7</sup> Population Health Research Institute, McMaster University, Hamilton, Ontario, Canada. <sup>8</sup> Department of Preventive Cardiology and Internal Medicine, Eternal Heart Care Centre and Research Institute, Jaipur, India.

### Abstract

#### BACKGROUND:

There is a need to identify and test low-cost approaches for cardiovascular disease (CVD) risk reduction that can enable health systems to achieve such a strategy.

#### OBJECTIVE:

Community health workers (CHWs) are an integral part of health-care delivery system in lower income countries. Our aim was to assess impact of CHW based interventions in reducing CVD risk factors in rural households in India.

#### METHODS:

We performed an open-label cluster-randomized trial in 28 villages in 3 states of India with the household as a unit of randomization. Households with individuals at intermediate to high CVD risk were randomized to intervention and control groups. In the intervention group, trained CHWs delivered risk-reduction advice and monitored risk factors during 6 household visits over 12 months. Households in the non-intervention group received usual care. Primary outcomes were a reduction in systolic BP (SBP) and adherence to prescribed BP lowering drugs.

#### RESULTS:

We randomized 2312 households (3261 participants at intermediate or high risk) to intervention (1172 households) and control (1140 households). At baseline prevalence of tobacco use (48.5%) and hypertension (34.7%) were high. At 12 months, there was significant decline in SBP (mmHg) from baseline in both groups- controls  $130.3 \pm 21$  to  $128.3 \pm 15$ ; intervention  $130.3 \pm 21$  to  $127.6 \pm 15$  ( $P < .01$  for before and after comparison) but there was no difference between the 2 groups at 12 months ( $P = .18$ ). Adherence to antihypertensive drugs was greater in intervention vs control households (74.9% vs 61.4%,  $P = .001$ ).

#### CONCLUSION:

A 12-month CHW-led intervention at household level improved adherence to prescribed drugs, but did not impact SBP. To be more impactful, a more comprehensive solution that addresses escalation and access to useful therapies is needed.

Am Heart J. 2019 Oct;216:9-19. doi: 10.1016/j.ahj.2019.06.007. Epub 2019 Jun 19.



## Influence of disease duration and socioeconomic factors on the prevalence of infection and hospitalization in rheumatoid arthritis: KRAC study.

Chandrashekara S<sup>1</sup>, Shobha V<sup>2</sup>, Dharmanand BG<sup>3</sup>, Jois R<sup>4</sup>, Kumar S<sup>5</sup>, Mahendranath KM<sup>6</sup>, Haridas V<sup>7</sup>, Prasad S<sup>8</sup>, Singh Y<sup>9</sup>, Daware MA<sup>10</sup>, Swamy A<sup>11</sup>, Subramanian R<sup>12</sup>, Somashekar SA<sup>13</sup>, Shanthappa AM<sup>14</sup>, Anupama KR<sup>1</sup>.

<sup>1</sup>ChanRe Rheumatology and Immunology Centre, Bangalore, India. <sup>2</sup>St. John's Medical College Hospital, Bangalore, India. <sup>3</sup>Sakra Hospital, Bangalore, India. <sup>4</sup>Kanva Diagnostics Centre, Bangalore, India. <sup>5</sup>Columbia Asia Hospital, Bangalore, India. <sup>6</sup>Samarpan Health Centre, Bangalore, India. <sup>7</sup>Arthritis Super Specialty Centre, Hubli, India. <sup>8</sup>Vikram hospital Pvt Ltd, Mysore, India. <sup>9</sup>Manipal Hospital, Bangalore, India. <sup>10</sup>Narayana Health City, Bangalore, India. <sup>11</sup>Anurag Clinic, Bangalore, India. <sup>12</sup>Rheumatology Clinic, Bangalore, India. <sup>13</sup>Bangalore Rheumatology Centre, Bangalore, India. <sup>14</sup>Arushi Rheumatology Centre, Tumkur, India.

### Abstract

#### AIM:

The use of healthcare resources by rheumatoid arthritis (RA) patients can be related to the presence of disease, comorbid conditions, use of steroids, and the combined use of immunosuppressants. This study evaluated the risk factors associated with infection and hospitalization in RA.

#### METHODS:

This multicenter, cross-sectional study enrolled 3247 RA subjects fulfilling the 2010 American College of Rheumatology/European League Against Rheumatism criteria to examine the prevalence of hospitalization and episodes of documentable non-tubercular infections as a part of the "Karnataka rheumatoid arthritis comorbidity" study (KRAC). The study included 2081 subjects and 1166 were excluded due to incomplete data. Demographic, clinical and treatment variables were collected, and the events related to infections and hospitalization were extracted from the medical records. Comparative analysis and multivariate logistic regression were performed.

#### RESULTS:

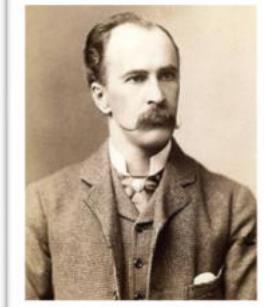
Around 22% of the subjects had hospitalizations and 2.9% had infections. Infections were pertaining to dental (1.3%), urinary tract (1.6%) and candidiasis (0.2%). Skin and soft tissue-related infections were found in 1.8% and 0.3% of patients, respectively. Increased need of hospitalization in RA patients was associated with advanced age ( $\geq 60$  years), lower education, family income, and longer duration of RA. Presence of comorbidity, usage of three or more disease-modifying anti-rheumatic drugs (DMARDs) and family income influenced the likelihood of infection. Dental infections were less likely in working subjects and more likely in patients with increased disease duration, higher family income, comorbidities and those between the age group 40-59 years. Urinary tract infection was associated with DMARD usage.

#### CONCLUSION:

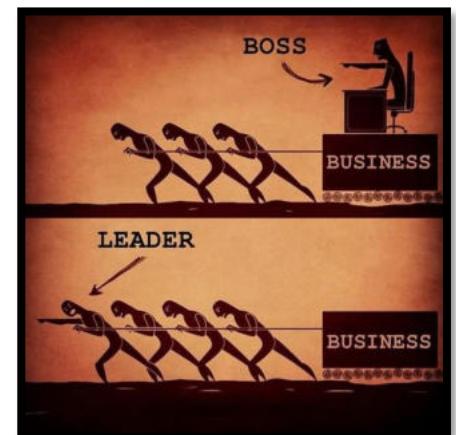
Patient-specific risk factors should be considered to improve treatment strategies and to reduce the risk of infection and hospitalization in RA patients.

Int J Rheum Dis. 2019 Jul;22(7):1216-1225. doi: 10.1111/1756-185X.13562. Epub 2019 Apr 11.





SIR WILLIAM OSLER



© English Language Learners Stack Exchange

REF: The Quotable OSLER: Edited by Mark E Silverman, T. Jock Murray, Charles. S Bryan



## MEDICINE DIS MONTH

*A Bird's Eye View.....*

### Screen time in the evening and impact on sleep.

Avoiding use of light-emitting screens before bedtime is often advised to improve sleep, but clinical evidence to support this practice is limited. In a study of more than 300 Swiss students between the ages of 12 and 19 years, screen time during the evening was associated with shorter sleep duration and later hour of dim-light melatonin onset, while off-screen activity was not. In a subset of over 180 participants who agreed to avoid screen time after 9 PM, sleep duration increased by 17 minutes and daytime vigilance improved. These findings support limitation of screen time before bedtime as an important intervention to improve sleep hygiene in adolescents.

- Perrault AA et al, Sleep. 2019 Jun 8. [Uptodate](#).

### Estrogen and Progesterone Receptor testing in breast cancer.

The American Society of Clinical Oncology (ASCO)/College of American Pathologists (CAP) has again established the threshold for a positive result for hormone receptor expression in breast cancer as at least 1 percent of cancer cells staining for estrogen receptor (ER) or progesterone receptor (PR). A new category, "ER Low Positive," for cancers with 1 to 10 percent of cells staining for ER, reflecting the limited data supporting efficacy of endocrine therapy has been introduced. Practically, this means that all patients with breast cancers that have ER or PR expression of at least 1 percent should be offered endocrine therapy. However, if patients with breast cancer ER expression of 1 to 10 percent do not tolerate treatment for whatever reason, it may be reasonable to discontinue therapy.

- Allison KH et al, J Clin Oncol. 2020. [Uptodate](#)



## ORIGINAL ARTICLE

# Reducing the use of screen electronic devices in the evening is associated with improved sleep and daytime vigilance in adolescents

Aurore A. Perrault<sup>1,2,\*</sup>, Laurence Bayer<sup>3</sup>, Mathias Peuvrier<sup>1,2</sup>, Alia Afyouni<sup>1,2</sup>, Paolo Ghisletta<sup>4,5</sup>, Celine Brockmann<sup>6</sup>, Mona Spiridon<sup>6</sup>, Sophie Hulo Vesely<sup>6</sup>, Dagmar M. Haller<sup>7,\*</sup>, Swann Pichon<sup>1,2,4,\*</sup>, Stephen Perrig<sup>3</sup>, Sophie Schwartz<sup>1,2,†</sup> and Virginie Sterpenich<sup>1,2,\*†</sup>

<sup>1</sup>Department of Neuroscience, University of Geneva, Switzerland, <sup>2</sup>Swiss Center for Affective Science, Geneva, Switzerland, <sup>3</sup>Center for Sleep Medicine, Geneva University Hospital, Switzerland, <sup>4</sup>Faculty of Psychology, University of Geneva, Switzerland, <sup>5</sup>Swiss Distance Learning University, Switzerland; Swiss National Center of Competence in Research LIVES-overcoming vulnerability: life course perspectives, Universities of Lausanne and Geneva, Switzerland, <sup>6</sup>Bioscope, University of Geneva, Switzerland and <sup>7</sup>Primary care unit, Faculty of Medicine, University of Geneva, Switzerland; Unité Santé Jeunes, Geneva University Hospitals, Switzerland Work Performed: Department of Neuroscience, University of Geneva, Campus Biotech, Chemin des Mines, 9, 1202 Geneva, Switzerland

\*Corresponding authors. Aurore Perrault, Campus Biotech, Chemin des Mines, 9, 1202 Geneva, Switzerland. Email: [Aurore.Perrault@unige.ch](mailto:Aurore.Perrault@unige.ch); Virginie Sterpenich. Email: [Virginie.Sterpenich@unige.ch](mailto:Virginie.Sterpenich@unige.ch).

†These authors contributed equally to the work.

## Abstract

The use of screen electronic devices in the evening negatively affects sleep. Yet, sleep is known to be essential for brain maturation and a key factor for good academic performance, and thus is particularly critical during childhood and adolescence. Although previous studies reported associations between screen time and sleep impairment, their causal relationship in adolescents remains unclear. Using actigraphy and daily questionnaires in a large sample of students (12 to 19 years old), we assessed screen time in the evening and sleep habits over 1 month. This included a 2 week baseline phase, followed by a 40 min sleep education workshop and a 2 week interventional phase, in which participants were asked to stop using screen devices after 9 pm during school nights. During the interventional phase, we found that the reduction of screen time after 9 pm correlated with earlier sleep onset time and increased total sleep duration. The latter led to improved daytime vigilance. These findings provide evidence that restricting screen use in the evening represents a valid and promising approach for improving sleep duration in adolescents, with potential implications for daytime functioning and health.

## Statement of Significance

With the emergence of smartphones and other connected devices, adolescents spend a lot of time on screen electronic devices, especially during the evening. We report that screen time after 9 pm negatively correlates with sleep onset time, sleep duration as well as mood, body weight, and academic performance. Such observable correlations urge for educational strategies to address the chronic lack of sleep observed in today's adolescent populations. Here we also show that limiting screen use after 9 pm improves sleep duration and daytime vigilance in most adolescents. This simple recommendation pertaining to sleep hygiene can be implemented by every household, yielding direct positive effects on sleep, and presumed benefits for health and daytime functioning.

**Key words:** pediatrics—adolescents; actigraphy; pediatrics—behavior; public health; screen electronic devices; vigilance; melatonin

Submitted: 16 April, 2018; Revised: 19 April, 2019

© Sleep Research Society 2019. Published by Oxford University Press [on behalf of the Sleep Research Society].

This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs licence (<http://creativecommons.org/licenses/by-nc-nd/4.0/>), which permits noncommercial reproduction and distribution of the work, in any medium, provided the original work is not altered or transformed in any way, and that the work is properly cited. For commercial re-use, please contact [journals.permissions@oup.com](mailto:journals.permissions@oup.com)

## CONTENTS



# Estrogen and Progesterone Receptor Testing in Breast Cancer: ASCO/CAP Guideline Update

Kimberly H. Allison, MD<sup>1</sup>; M. Elizabeth H. Hammond, MD<sup>2</sup>; Mitchell Dowsett, PhD<sup>3</sup>; Shannon E. McKernin<sup>4</sup>; Lisa A. Carey, MD<sup>5</sup>; Patrick L. Fitzgibbons, MD<sup>6</sup>; Daniel F. Hayes, MD<sup>7</sup>; Sunil R. Lakhani, MD<sup>8,9</sup>; Mariana Chavez-MacGregor, MSc<sup>10</sup>; Jane Perlmutter, PhD<sup>11</sup>; Charles M. Perou, PhD<sup>5</sup>; Meredith M. Regan, ScD<sup>12</sup>; David L. Rimm, MD, PhD<sup>13</sup>; W. Fraser Symmans, MD<sup>10</sup>; Eminia E. Torlakovic, MD, PhD<sup>14,15</sup>; Leticia Varella, MD<sup>16</sup>; Giuseppe Viale, MD<sup>17,18</sup>; Tracey F. Weisberg, MD<sup>19</sup>; Lisa M. McShane, PhD<sup>20</sup>; and Antonio C. Wolff, MD<sup>21</sup>

ASCO special articles

abstract

ASSOCIATED CONTENT  
Appendix[Data Supplement](#)

Author affiliations and support information (if applicable) appear at the end of this article.

Accepted on September 3, 2019 and published at [jco.org](https://jco.org) on January 13, 2020; DOI <https://doi.org/10.1200/JCO.19.02309>.

Clinical Practice Guidelines Committee approval: July 10, 2019

Reprint Requests: 2318 Mill Road, Suite 800, Alexandria, VA 22314; guidelines@asco.org.

**PURPOSE** To update key recommendations of the American Society of Clinical Oncology/College of American Pathologists estrogen (ER) and progesterone receptor (PgR) testing in breast cancer guideline.

**METHODS** A multidisciplinary international Expert Panel was convened to update the clinical practice guideline recommendations informed by a systematic review of the medical literature.

**RECOMMENDATIONS** The Expert Panel continues to recommend ER testing of invasive breast cancers by validated immunohistochemistry as the standard for predicting which patients may benefit from endocrine therapy, and no other assays are recommended for this purpose. Breast cancer samples with 1% to 100% of tumor nuclei positive should be interpreted as ER positive. However, the Expert Panel acknowledges that there are limited data on endocrine therapy benefit for cancers with 1% to 10% of cells staining ER positive. Samples with these results should be reported using a new reporting category, ER Low Positive, with a recommended comment. A sample is considered ER negative if < 1% or 0% of tumor cell nuclei are immunoreactive. Additional strategies recommended to promote optimal performance, interpretation, and reporting of cases with an initial low to no ER staining result include establishing a laboratory-specific standard operating procedure describing additional steps used by the laboratory to confirm/adjudicate results. The status of controls should be reported for cases with 0% to 10% staining. Similar principles apply to PgR testing, which is used primarily for prognostic purposes in the setting of an ER-positive cancer. Testing of ductal carcinoma in situ (DCIS) for ER is recommended to determine potential benefit of endocrine therapies to reduce risk of future breast cancer, while testing DCIS for PgR is considered optional. Additional information can be found at [www.asco.org/breast-cancer-guidelines](http://www.asco.org/breast-cancer-guidelines).

*J Clin Oncol* 38. © 2020 by American Society of Clinical Oncology

## INTRODUCTION

First released in 2010, the American Society of Clinical Oncology (ASCO)/College of American Pathologists (CAP) estrogen receptor (ER) and progesterone receptor (PgR) testing guideline is aimed at improving the analytic performance and diagnostic accuracy of ER and PgR testing and their clinical utility as biomarkers for the management of women with primary breast cancer.<sup>1,2</sup> The guideline focuses entirely on immunohistochemical testing, as this reflects the near exclusive use of this approach in contemporary practice. The Expert Panel (Appendix Table A1, online only) reconvened to consider evidence for changes in laboratory and clinical practice or the emergence of new data that might require an update in this guideline. The importance of the accurate assessment (protocols and readout) and interpretation of

ER and PgR expression is emphasized by more than 1,000,000 women per year worldwide diagnosed with primary breast cancer and tested for these receptors. Studies using contemporary populations note increases in the proportion of breast cancers that are ER positive, with overall rates of between 79% and 84% of breast cancers (with higher ER-positive rates occurring in postmenopausal subpopulations).<sup>3-9</sup> While ER-positive rates are influenced by population-dependent variables (eg, age, race, screening, birth rate, and so on), increased analytic sensitivity of assay protocols due to adherence to previously published guidelines, newer detection methods, more sensitive primary antibodies, and protocol design changes after feedback provided by external quality assessment may also have contributed to this increase.

## Discovery of Colloids



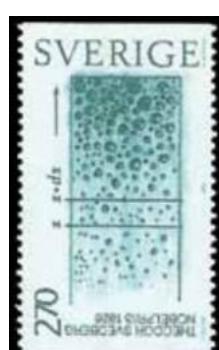
Richard Adolf Zsigmondy



Richard Zsigmondy received his Nobel Prize in 1926



Theodor ("The") Svedberg



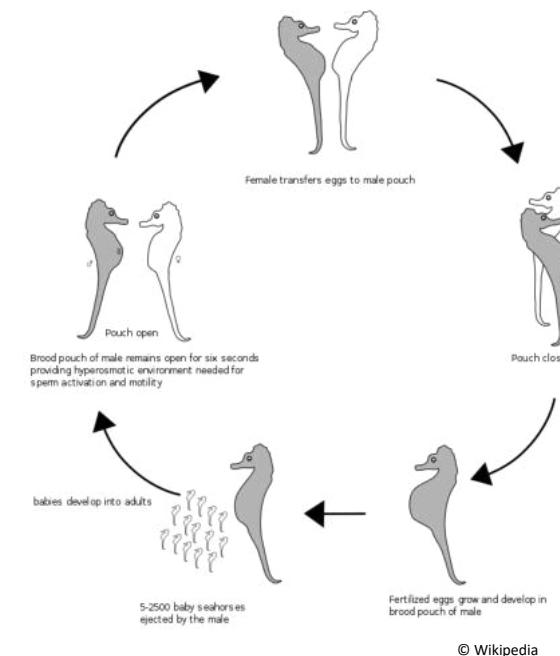
Sweden 1983 stamp depicting colloids

Richard Zsigmondy (April 1, 1865 – Sept 23, 1929): Austrian chemist, while employed in a glassworks (1897), directed his attention to colloidal gold present in ruby glass, and he discovered a water suspension of gold. He theorised that much could be learned about the colloidal state of matter from studying the manner in which the particles scatter light. To facilitate such study, he and Heinrich Siedentopf developed the ultramicroscope (1903)

Theodor H. E. Svedberg (Aug 30, 1884 - Feb 25, 1971): Swedish chemist, to better study the particles, Svedberg used centrifugal force to mimic the effects of gravity on them. His first ultracentrifuge, completed in 1924, was capable of generating a centrifugal force up to 5000 times the force of gravity. Svedberg found that the size and weight of the particles determined their rate of settling out, or sedimentation, and he used this fact to measure their size. With an ultracentrifuge, Svedberg went on to determine precisely the molecular weights of highly complex proteins such as haemoglobin.

## Did You Know?

Unlike all the other animals, male Sea Horse gets pregnant. The male seahorse is equipped with a pouch on the ventral, or front-facing, side of the tail. When mating, the female seahorse deposits up to 1,500 eggs in the male's pouch. The male carries the eggs for 9 to 45 days until the seahorses emerge fully developed, but very small.



**DISCLAIMER: For Private Circulation and Academic Non-Commercial Purpose only**

**DO YOU HAVE ANY INTERESTING CONTENT TO BE PUBLISHED?**

*Write to Dr. Avinash. H. U: avinash.hu@stjohns.in*