Jai sri gurudev

ADICHUNCHANAGIRI INSTITUTE OF MEDICAL SCIENCES

PHYSIOVAARTHE

Imparting knowledge of life process …..

BI-ANNUAL NEWS LETTER FROM DEPARTMENT OF PHYSIOLOGY

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Dear readers,

I am very much pleased to bring out the Vol-7 (2) of our Newsletter 'Physiovaarthe' giving useful information on the subject & the department.

I am extremely delighted to inform that students of batch 2016-17 have created history by securing a pass percentage of 97% in Physiology taking the department at the top position among the preclinical subjects.

I also feel proud to share the information that, we got very good response from the delegates & students for the **State level CME cum WORKSHOP**: "*Chronic obstructive pulmonary disease – An update*" conducted on 15th November 2017 jointly with Department of General Medicine.

In memory of our great teacher, philosopher and guide, Dr. Rajagopal (Former Principal and HOD of Physiology, AIMS) the department celebrated his birthday with high respect by inviting all teaching and non-teaching faculty of the college on 14/09/2017.

I whole heartedly thank our beloved & dynamic Principal for his constant support and encouragement. I also thank all the staff for their great effort contributing to the success of the CME & also for the smooth running of departmental activities.

Dr K.N. Narasimhaswamy
Professor and Head

CME cum WORKSHOP CONDUCTED ON 15th November 2017
Summary of Scientific Sessions

Session 1: The speaker for the first session, Dr. Rajalakshmi R., Professor and Head, Department of Physiology, JSS medical college, Mysusru spoke on "**Revisiting Pulmonary function testing – the Physiological principles**".

Session 2: The speaker for this session **Dr Jayaraj B.S.**, Professor of Pulmonology, JSS medical college and hospital, Mysuru spoke on the topic "**Pathophysiology, diagnosis & management of COPD**".

Session 3: The speaker for this session **Dr B Ragavendrasamy.**, Assistant professor, Division of life sciences, SVYASA University, Bengaluru spoke on the topic "**Role of Yoga in COPD management**". This was followed by lunch.

Session 4: Workshop on **"PFT! – How is it performed? A live demonstration & hands-on experience on proper usage of inhalers"** by **Dr Avinash R.,** Assistant Professor, Department of TB and Chest Diseases, AIMS, BG Nagara**.**

Session 5: Following tea break at the BGS Auditorium within the AIMS campus, with the speaker for this session **Dr B Ragavendrasamy**, gave a **Live demonstration & hands-on training session on Yoga for COPD.** This session was attended by delegates, faculty members and students of AIMS, B G Nagara.

ACADEMIC SECTION
Activities of the department - Highlights

Valedictory function for students of batch 2016-17

The valedictory function, "Prathibha Puraskara 2017" was organized by all the Pre-clinical departments to the outgoing batch 2016-17 on 24th November 2017. All the toppers and meritorious students were awarded with certificates and mementos.

Crossword Answers
ACROSS – 1) Syncytium 3) Systolic 4) Semilunar 6) Arterioles 7) Sinus
DOWN – 2) Capillaries 3) Shock 5) Atrial

Toppers List (2016-17 batch)

1	Juhi Arora	82.5%
2	Ekshita	82.4%
2	Shirsha S	82.4%
3	Ayushi Singh	81.6 %

We are extremely happy to announce that 26 student secured distinction and 80 students secured first class in Physiology in the I MBBS exam.

ACADEMIC SECTION

Activities of department - HIGHLIGHT

Publications in 2017 (July – December)

1. Ravi G.N, Narasimhaswamy K.N, Anand K.S.S. Effect of Short Term "Deep Breathing" On MVV in Young Individuals of B.G. Nagara. Scholars Journal of Applied Medical Sciences, 2017; 5(7C): 2651-54.
2. Narasimhaswamy KN, Ravi GN, Anand KSS. Study of Relationship between Body Mass Index & Autonomic Functions in Normal & Obese Adults of B.G. Nagara. Scholars Journal of Applied Medical Sciences, 2017; 5(10F): 4194-96.
3. Gayatri Bora, G.K. Sudhir, K.N. Narasimhaswamy. Impact of exercise training on peak expiratory flow rate in relation to body mass index – An Indian perspective. Indian Journal of Clinical Anatomy and Physiology, January-March, 2017;4(1):34-39.
4. Malini M, Baljoshi V.S., Kammar K.F. A comparative study of impact of obesity on maximum voluntary ventilation in young adult women. National Journal of Physiology, Pharmacy and Pharmacology, 2017;7(2):174-77.
5. Malini M, Baljoshi V.S., Kammar K.F. A comparative study of impact of obesity on static lung volumes and capacities in young adult women. IJOP, 2017;5(1):105-09.

Ongoing projects:

1. Influence of mental stress on the cognitive ability among medical students – Dr. Sudhir G.K, Miss Eniya V.
2. Assessment of relation between sleep pattern, waist circumference and glycosylated hemoglobin in healthcare professionals in A.I.M.S., B.G.nagara – Dr. Sudhir G.K, Miss. Nagarathna K.
3. Evaluating the effectiveness of physiology lectures by introducing pre-test and post-test in a medical college. – Dr. Malini M.
4. Crossword puzzle as a tool to enhance learning among students in a medical school. – Dr. Malini M.

Presentations in conferences:

1. Dr.Malini. M., Assistant Professor have presented Research paper titled "A comparative study of Impact of obesity on Dynamic Lung Function test in young adult women" at First National Conference of Association of Telangana Physiologists conducted by Department of Physiology at SVS Medical college, Mahabubnagar on 30th -31st August, 2017.
2. Dr.Malini. M., Assistant Professor have presented Poster titled "Forced Expiratory Flow during 25-75% of Expiration in middle aged Obese and Non- Obese Females-A comparative study" at First National Conference of Association of Telangana Physiologists conducted by Department of Physiology at SVS Medical college, Mahabubnagar on 30th -31st August, 2017.

ACADEMIC SECTION

Activities of department - HIGHLIGHTS

We bid farewell, with a heavy heart to our most beloved colleague Dr Gayatri Bora, Associate Professor. She was a wonderful teacher and colleague.

We are delighted to welcome the two new staff Dr Ashwathy V T, Assistant Professor and Dr Jyothi S, Assistant Professor.

Dr K N Narasimha Swamy, Professor and HOD of Physiology chaired the scientific session in state level Biochemistry CME along with Dr M Shivakumar, Professor and HOD of Surgery.

Dr Sudhir G K, Professor and co-convener MEU, AIMS, delivered talks in 3 sessions of RBCMET workshop for medical teachers held from 13th to 15th December 2017.

SCIENTIFIC SECTION

Research confirms fat is the 6th modality of taste sensation

Fat is considered as the 6th taste sensation after sweet, salt, sour, bitter and umami according to a study from Purdue University.

Fatty acids cleaved off triglyceride molecule in the food stimulate the sensation of fat called OLEOGUSTUS (Latin OLEO = oily).

Shorter chain fatty acids induce a sensation similar to sour. However medium and longer chain non-esterified fatty acids (NEFA) specifically induce a unique sensation different from all other modalities.

Dr.Sudhir G K
Professor

Have you heard of Botzinger complex?

It is a group of neurons located in the ventrolateral part of medulla. The area close by is pre- botzinger complex which is more important where respiratory rhythm is generated. So who was Botzinger? A scientist who discovered it or patient in whom it was discovered?? Nooo!!!

This area was named botzinger by Prof Jack L Feldman of UCLA in 1978 while discussing about this structure at a scientific session in Hirschhorn, Germany after a white wine, served during the session "Botzinger Spatherbst"

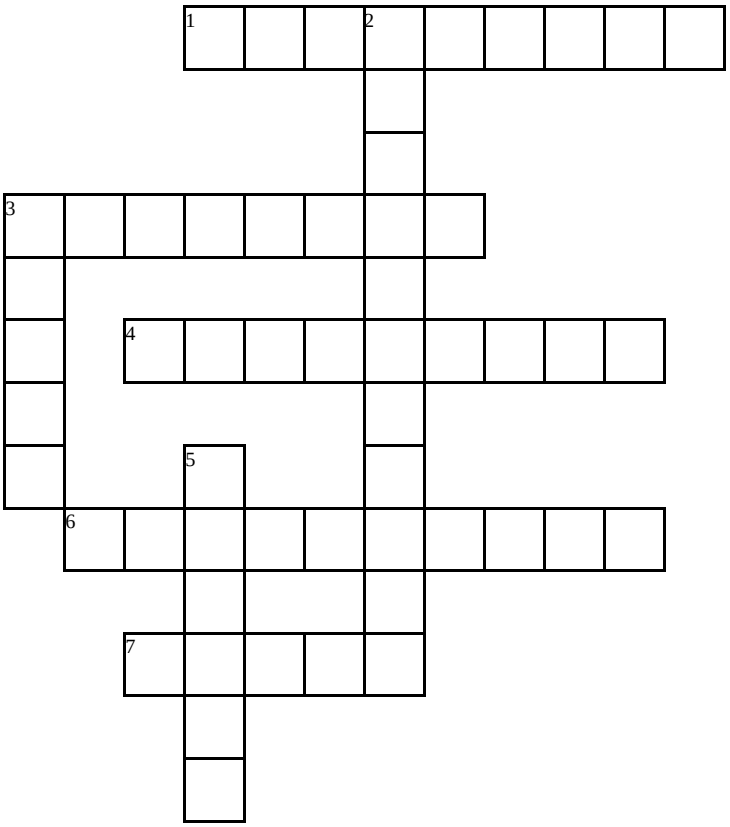
Dr Jyothi S
Assistant Professor

Nobel Prize in Physiology or Medicine 2017

The Nobel Prize was awarded jointly to Jeffrey C. Hall, Michael Rosbash and Michael W. Young "for their discoveries of molecular mechanisms controlling the circadian rhythm".

SCIENTIFIC SECTION

Cardiovascular Physiology



Across

1. cardiac muscle work as a functional ----

3. end--- volume is the volume of blood in the ventricles just after systole

4. second heart is produced due to closure of ---- valves

6. ----are called resistance vessels

7. ---- rhythm is a term used to describe the normal beating of the heart as measured by ECG

Down

2. ----are called exchange vessels

3. the condition of circulatory failure is termed as ----

5. a wave in the JVP is due to ---- contraction

Dr Malini M
Assistant Professor