# Institute of Cardiovascular Sciences Cardiac Anaesthesiology

This department of Cardiac Anaesthesiology started its journey in the year 2011as per G.O. No. H/MA(MES)/495/ME/MISC-15-2011dated 11th February2011. DM (Cardiac Anaesthesiology) has been introduced under West Bengal University of Health Sciences with intake of 2 Post Doctoral Trainees per year. This course is offered only in a very few institutions in India at present.

The Department started with the following staff:

• Professor and Head: Dr. Anupam Goswami

• Associate Professor: Dr. Chaitali Sen

Assistant Professor: Dr. Kakali Ghosh

• RMO cum Clinical Tutor: Vacant

Posts increased as per order number HF/O/MERT/64/ME/PG-31-13 dated 17th/01/2014 were:

Professor: One

Associate Professor: One
 Assistant Professor: One
 RMO cum Clinical Tutor: Two

## **FACULTY**

Dr. Anupam Goswami, Dip Card, MD	Professor & Head
Dr. Chaitali Sen (Dasgupta), MD (AIIMS). DNB. DM (AIIMS), MNAMS	Professor
Dr. Kakali Ghosh MD, DM (WBUHS), FIACTA	Assistant Professor
Dr. Sandeep Kumar Kar, MD	Assistant Professor
Dr. Asit Munsi, DA	Medical Officer

# Posts vacant

Associate Professor: TwoRMO cum Clinical Tutor: Three

# DM in Cardiac Anaesthesia

The Postgraduate Medical Education Committee considered the Assessment Report (June, 2014) and decided to recommend that DM (Cardiac Anaesthesiology) qualification granted by West Bengal University of Health Sciences, Kolkata in respect of students being trained at Institute of Postgraduate Medical Education & Research, Kolkata, West Bengal be RECOGNISED for 02 (Two) DM (CARDIAC ANAESTHESIOLOGY) seats and included in the 1st Schedule to the I.M.C. Act, 1956 as per declaration no, No.MCI-4 (3) /2014-Med./MEDICAL COUNCIL OF INDIA, POSTGRADUATE MEDICAL EDUCATION COMMITTEE (meeting held on 10/10/2014)

Till now four candidates have passed DM in Cardiac Anaesthesiology in MCI recognized seats. In August 2014,

- Dr. Kakali Ghosh (now working as Assistant Professor in this Department)
- Dr. Monalisa Datta

In August 2015,

- Dr. Jyoti Ranjan Parida
- Dr. Somnath Dey (now working in WBHS)

# **Current post-doctoral trainees (DM Cardiac Anaesthesiology)**

- Dr. Anusuya Banerjee, MD, Third year DM Post Doctoral Trainee
- Dr. Dipanwita Das, MD, Third year DM Post Doctoral Trainee
- Dr. Tanmoy Ganguly, MD, Second year DM Post Doctoral Trainee
- Dr. Soumi Das, MD, Second year DM Post Doctoral Trainee
- Dr. Harneet Singh Khurana MD, First year DM Post Doctoral Trainee
- Dr. Sushmit Kamat, DA, DNB, First year DM Post Doctoral Trainee

# Achievement of postdoctoral trainees:

- 1. Dr Kakali Ghosh passed the **FIACTA Examination** after her DM examination. She also successfully completed her 15 days Observership in Narayana Hudalaya Hospital, Bengaluru.
- 2. Dr Monalisa Datta was selected for **One month IACTA Travelling Grant Fellowship** within India and she successfully completed **Observership** in Narayana Hrudalaya Hospital, Bengaluru.
- 3. Dr Jyotiranjan Parida successfully completed his 15 days **Observership** in Narayana Hudalaya Hospital, Bengaluru.
- 4. Dr Somnath Dey successfully completed his 30 days Observership in PGI, Chandigarh.
- Dr Anusuya Banerjee and Dr Dipanwita Das successfully completed their 15 days Observership in AIIMS, New Delhi.
- 6. Dr Kakali Ghosh, Dr Monalisa Datta, Dr Jyotiranjan Parida, Dr Somnath Dey, Dr Anusuya Banerjee, Dr Dipanwita Das, Dr Tanmoy Ganguly and Dr Soumi Das successfully completed their 7 days hands on training and workshop on transesophageal echocardiography in Narayana Hudalaya Hospital, Bengaluru.

#### ACADEMIC ACTIVITIES

# The post doctoral students participate in:

- 1. Regular classes, examinations for assessment and hands-on training for DM (Cardiac Anaesthesiology) and MD (Anaesthesiology) students.
- 2. CME programs organized by INDIAN SOCIETY OF ANAESTHESIOLOGISTS, and INDIAN SOCIETY OF CARDIOTHORACIC ANASESTHESIOLOGY, both in National and State level.
- 3. Various conferences at State, Zonal, National, and International level.
- 4. Paper presentations at various conferences.
- 5. They are encouraged for one moth FELLOWSHIP in any Premier Institute in INDIA.
- They are encouraged to participate in seven days Hands on Training and Workshop in NARAYANA HRUDALAYA, BENGALURU under guidance of Eminent National and International Faculties of Cardiac Anaesthesiology in First Year.
- 7. They are posted in Cardiology Department of IPGMER to have Hands on Training in Transthoracic Echocardiography for two months (One month in First year and one month in Third Year).
- 8. They are encouraged for publication of Research Articles, Case Reports, Review Articles in Different Journal of National and International repute.

# The teachers participate in:

- 1.Teaching in regular classes, examinations for assessment and hands-on training for DM (Cardiac Anaesthesiology) and MD (Anaesthesiology) students.
- 2. CME programs organized by INDIAN SOCIETY OF ANAESTHESIOLOGISTS, and INDIAN SOCIETY OF CARDIOTHORACIC ANASESTHESIOLOGY, both in National and State level.
- 3. Various conferences at State, Zonal, National, and International level.
- 4. Paper presentations at various conferences as presentor or as Judge.
- 5. Delivery of lectures and orations and panel discussions in conferences at the State, Zonal, and National and International level.
- 6. Delivery of lectures at post graduate assembly attended by PG students from various medical colleges.
- 7. Post Graduate Trainees in Anaesthesiology are sent to this Dept. Not only from Department of Anaesthesiology, IPGMER but also from other institutions like VIMS, Sambhunath Pandit Hospital, Burdwan Medical College, Bankura Medical College, North Bengal Medical College, Kisangaunge Medical College, ESI Hospital, Sealdah, KPC Medical College, Command Hospital and Tripura Medical College for hands-on training in Cardiac Anaesthesiology.
- 8. CTVAC for EGPGs (Cardiothoracic and Vascular Anaesthesiology Classes for Post Graduate Students) for MD Anaesthesiology students are being held for last four year by this Department.
- 9. The teachers also teach the PERFUSIONIST students according their schedule.

## Prof. Anupam Goswami

- Guide or co guide of 6 (six) DM (Cardiac Anesthesiology) students and 4 (four) MD (Anaesthesiology) students.
- ACTA WB Annual conference held in May 2015
- Invited Speaker in ISACON 2014 held in DEC 2014 at Madurai on "Perioperative Arrhythmias.
- Invited speaker NEZACON 2014 held in Agartala Tripura OCT 2014 on Non cardiac surgery in cardiac patients.
- Immediate Past President West Bengal Association of Cardiothoracic and Vascular Anaesthesiologists.
- Course Coordinator of CTVAC 2014
- Examiner MD (Anaesthesiology) in Datta Megha Institute of Medical Sciences Wardha (Maharastra)
- Examiner MD (Anesthesiology), MGM Medical College Kisangani
- Chairperson at ISAZAC 2015
- Chairperson at International conference on imaging in critical care organised by ISCCM (Indian Society of Critical Care Medicine).
- Examiner of DM Cardiac Anaesthesiology Examination in WBUHS

#### **Publications**

- Anusua Banerjee, Sandeep Kumar Kar, Chaitali Sen Dasgupta, Anupam Goswami: Renal Cell Carcinoma Extending through Inferior Vena Cava into Right Atrium Removed with Cardiopulmonary Bypass Support. Archives of Medicine 08/2015; VOL 7(VOLUME 3:2):1-
- Sandeep Kumar Kar, Manasij Mitra, Tanmoy Ganguly, Chaitali Sen Dasgupta, Manabendra Sarkar, Anupam Goswami: Hereditary Hemorrhagic Telangiectasia: Presening with Epistaxis. Archives of Medicine Volume 7 May 2015 page no 22 - 26
- Sandeep Kumar Kar, Tanmoy Ganguly, Chaitali Sen Dasgupta, Anupam Goswami, Chiranjibbhattacharya: Comparison of
  Postoperative Analgesia in Thoracotomy versus paravertebral block Patients by Thoracic Epidural versus Paravertebral Block
  with Ropivacaine and Clonidine. Journal of Universal Surgery Volume 3 Page 1-4 June 2015
- Sandeep Kumar Kar, Tanmoy Ganguly, Chaitali Sen Dasgupta, Anupam Goswami: Comparison of Low Venilaion, No Venilaion and Coninuous Posiive Pressure Venilaion as Pulmonary Protection Strategy During Cardiopulmonary Bypass. Archives of Medicine 04/2015; Volume 7(1:2).
- Tanmoy Ganguly, Sandeep Kumar Kar, Chaitali Sen Dasgupta, Anupam Goswami: Surgical Management of Congenital Cystic Adenomatoid Malformation in a 2 Month Old Patient: A Case Report. Archives of Medicine 04/2015; Volume 7(No 1): 1-4.
- Sandeep Kumar Kar, Tanmoy Ganguly, Santa Saha Roy, Anupam Goswami: Effect of Indian Classical Music (Raga Therapy) on Fentanyl, Vecuronium, Propofol Requirements and Cortisol levels in Cardiopulmonary Bypass. Journal of Anesthesia & Critical Care: Open Access Volume 2 Issue 2 2015Published: March 25, 2015
- Sandeep Kumar Kar, Tanmoy Ganguly, Chaitali Sen Dasgupta, Anupam Goswami: Cardiovascular and Airway Considerations in Mediastinal Mass During Thoracic Surgery. Experimental and clinical cardiology 12/2014; Volume 5(issue 12):1-8. DOI:10.4172/2155-9880.1000354
- Tanmoy Ganguly, Sandeep Kumar Kar, Chaitali Sen Dasgupta, Anupam Goswami, Ansuman Mandal: Penetrating Arrow Wound of the Chest -A Case Report. Journal of Case Reports and Studies Volume 2 | Issue 2
- Sandeep Kumar Kar, Chaitali Sen Dasgupta, Anupam Goswami: Amiodarone In Rheumatic Valve Disease Undergoing Valve replacement. 1ST 01/2015; Lambert Academic Publishing.

# Dr. Chaitali Sen (Dasgupta)

- Promoted to Professor on 09.12.2014
- Served as Scientific Secretary of Indian Society of Anaesthesiologists West Bengal Branch
- Served as Scientific Secretary of Association of Cardio Thoracic Anaesthesiologists, West Bengal
- Guide or co guide of 6 (six) DM (Cardiac Anesthesiology) students and 4 (four) MD (Anaesthesiology) students
- Chairperson, Scientific Committee of 36th Annual Conference of Indian Society of Anaesthesiologists of West Bengal and 25th Eastern Zonal Conference of Indian Society of Anaesthesiologists in November 2015
- Course Coordinator of CTVAC, December 2014.
- Guest lecturer in WB ACTA Annual conference held in Kolkata, May, 2015 Delivered Lecture on "Aortic Aneurysm"
- Judge of Research papers in International Conference of Regional Anaesthesia (Kolkata, August, 2015)
- Guest lecturer in 36th Annual Conference of Indian Society of Anaesthesiologists of West Bengal and 25th Eastern Zonal Conference of Indian Society of Anaesthesiologists (Delivered lecture on CPR Guidelines 2015)
- Guest lecturer in CTVAC 2014
- Active participation in classes for DM Post Doctoral Trainees and MD Anaesthesiology students.
- Examiner for DM Cardiac Anaesthesiology WBUHS in 2015

# **Publications**

- Anusuya banerjee, Sandeep Kumar Kar, Chaitali Sen Dasgupta, Anupam Goswami: Renal Cell Carcinoma Extending through Inferior Vena Cava into Right Atrium Removed with Cardiopulmonary Bypass Support. Archives of Medicine 08/2015; VOL 7: 1-4.
- Sandeep Kumar Kar, Manasij Mitra, Tanmoy Ganguly, Chaitali Sen Dasgupta, Manabendra Sarkar, Anupam Goswami: Hereditary Hemorrhagic Telangiectasia: Presening with Epistaxis. Archives of Medicine Volume 7 May 2015 page no 22 26
- Sandeep Kumar Kar, Tanmoy Ganguly, Chaitali Sen Dasgupta, Anupam Goswami, Chiranjib Bhattacharya: Comparison of Postoperative Analgesia in Thoracotomy versus paravertebral block Patients by Thoracic Epidural versus Para vertebral Block with Ropivacaine and Clonidine Journal of Universal Surgery Volume 3 Page 1-4 June 2015
- Sandeep Kumar Kar, Tanmoy Ganguly, Chaitali Sen Dasgupta, Anupam Goswami: Comparison of Low Ventilation, No Ventilation and Continuous Positive Pressure Ventilation as Pulmonary Protection Strategy During Cardiopulmonary Bypass. Archives of Medicine 04/2015; Volume 7(1:2).
- Tanmoy Ganguly, Sandeep Kumar Kar, Chaitali Sen Dasgupta, Anupam Goswami: Surgical Management of Congenital Cystic Adenomatoid Malformation in a 2 Month Old Patient: A Case Report. Archives of Medicine 04/2015; Volume 7(No 1):Page 1-4.
- Sandeep Kumar Kar: Tanmoy Ganguly, Chaitali Sen Dasgupta, Anupam Goswami Cardiovascular and Airway Considerations in Mediastinal Mass During Thoracic Surgery. Experimental and Clinical Cardiology 12/2014; Volume 5(issue 12):1-8. DOI:10.4172/2155-9880.1000354
- Tanmoy Ganguly, Sandeep Kumar Kar, Chaitali Sen Dasgupta, Anupam Goswami, AnsumanMandal: Penetrating Arrow Wound of the Chest -A Case Report...Journal of Case Reports and StudiesVolume 2 | Issue 2
- Sandeep Kumar Kar, Chaitali Sen DasGupta, Anupam Goswami: Amiodarone In Rheumatic Valve Disease Undergoing Valve replacement. 1ST 01/2015; LAMBERT ACADEMIC PUBLISHING., ISBN: 978-3-659-66863-0
- Kakali Ghosh, Chaitali SenDasgupta&SubhenduMahapatra, Our experience of intraoperative autologous blood donationin
  patients undergoing elective valve surgery, Indian J ThoracCardiovascSurg Received: 12 August 2014 /Revised: 7 October
  2014 /Accepted: 5 January 2015

## Dr. Kakali Ghosh

- Attended IACTA 2015 Conference at JAIPUR
- Participated as Faculty in Panel discussion in ISAZAC 2015 at Kolkata
- Co Guide of two Postgraduate Trainees in MD Anesthesia

# **Publications**

- Kakali Ghosh, Chaitali SenDasgupta & Subhendu Mahapatra, Our experience of intraoperative autologous blood donation in patients undergoing elective valve surgery, Indian J Thorac Cardiovasc Surg Received: 12 August 2014 /Revised: 7 October 2014 /Accepted: 5 January 2015
- Case Report in Medical Glory (Journal of West Bengal Medical Council) Persistent Left Superior Venacava draining into superior aspect of left atrium in a case of OstiumSecundum Atrial Septal Defect. Page78-80

# Dr. Sandeep Kumar Kar

- Co Guide of two Postgraduate Trainees in MD Anaesthesia
- Participated as Faculty in ISAZAC 2015, Kolkata in Panel Discussion
- Editor of insights of blood pressure
- Editor of journal of neurosurgery Imed pub indexed in scopus
- Editor of interventional Cardiology
- Editor in Chief Journal of Heart Care: Lawrence Press U.S.A.
- Editorial Board of International Archives of Medicine indexed in scopus
- Editor Translational Biomedicine indexed in scopus
- Associate Editor Journal of Anesthesia & Critical Care

#### **Publications**

- Sandeep Kumar Kar, Tanmoy Ganguly, ShantaDutta: Incidental Diagnosis of a Giant Pericardial Cyst and Surgical Management: a Rare Case Report. International Archives of Medicine 08/2015; 8(198):1-7
- Anusuya banerjee, Sandeep Kumar Kar, Chaitali Sen Dasgupta, Anupam Goswami: Renal Cell Carcinoma Extending through Inferior Vena Cava into Right Atrium Removed with Cardiopulmonary Bypass Support. Archives of Medicine 08/2015; VOL 7(VOLUME 3:2):1-4.
- Sandeep Kumar Kar, Tanmoyganguly, JishnuNayek: Robotic Cardiac Surgery: A systemic Review, La PrensaMedica Argentina. PrensaMédica Argentina 06/2015; 101(issue 6):1-5.
- 4.Sandeep Kumar Kar: Laparoscopic Bilateral Adrenalectomy in a Patient of Cushing Disease due to Pituitary Microadenoma: a Challenge for the Anaesthesiologist. Prensa Médica Argentina 05/2015; Volume 101(issue 6):1-4.
- Sandeep Kumar Kar, Tanmoy Ganguly, Chaitali Sen Dasgupta, Chiranjib Bhattacharya, ManasijMitra: Thoracic Gunshot Wound: A Report of 3 Cases and Review of Management.. PrensaMédica Argentina 05/2015; Volume 101(issue 6):1-5.
- RajatChoudhuri, Sandeep Kumar Kar, SamarendranathSamui, NairitaMayur: Perioperative Management of a Child having Ovarian Dysgerminoma with Para Neoplastic Syndrome: Case Report of Stormy Events. PrensaMédica Argentina 05/2015; 101(issue 6):1-3.

- Sandeep Kumar Kar, ManasijMitra, Tanmay Ganguly, Chaitali SenDasGupta, ManabendraSarkar, Anupam Goswami: Hereditary Hemorrhagic Telangiectasia: Presening with Epistaxis. Archives of Medicine Volume 7 May 2015 page no 22 26.
- Sandeep Kumar Kar, Tanmoy Ganguly, Chaitali Sendasgupta, Anupam Goswami, Chiranjib Bhattacharya: Comparison of Postoperative Analgesia in Thoracotomy versus paravertebral block Patients by Thoracic Epidural versus Paravertebral Block with Ropivacaine and Clonidine. Journal of Universal Surgery Volume 3 Page 1-4 June 2015.
- Sandeep Kumar Kar, Tanmoy Ganguly: Postoperative Pneumoscrotum in a Cardiac Surgery Patient: A Case Report. PrensaMédica Argentina 05/2015; Volume 101(issue 6):1-5.
- Sandeep Kumar Kar, Tanmoy Ganguly, Chaitali Sen Dasgupta, Anupam Goswami: Surgical Management of Congenital Cysic Adenomatoid Malformaion in a 2 Month Old Paient: A Case Report. Archives of Medicine 04/2015; Volume 7(1:5):1-4.
- Sandeep Kumar Kar, Tanmoy Ganguly, Chaitali Sen Dasgupta, Anupam Goswami: Comparison of Low Ventilation, No Ventilation and Continuous Positive Pressure Ventilation as Pulmonary Protection Strategy During Cardiopulmonary Bypass. Archives of Medicine 04/2015; Volume 7(1:2).
- Sandeep Kumar Kar, Chaitali Sen Dasgupta, Anupam Goswami: Amiodarone In Rheumatic Valve Disease Undergoing Valve replacement. 1ST 01/2015; Lambert Academic Publishing.
- Tanmoy Ganguly, Sandeep Kumar Kar, Chaitali Sen Dasgupta, Anupam Goswami: Surgical Management of Congenital Cystic Adenomatoid Malformation in a 2 Month Old Patient: A Case Report. Archives of Medicine 04/2015; Volume 7(No 1):Page 1-4
- Sandeep Kumar Kar, Tanmoy Ganguly, Santa Saha Roy, Anupam Goswami: Effect of Indian Classical Music (Raga Therapy) on Fentanyl, Vecuronium, Propofol Requirements and Cortisol levels in Cardiopulmonary Bypass. Journal of Anesthesia& Critical Care: Open AccessVolume 2 Issue 2 2015Published: March 25, 2015
- Tanmay Ganguly, Sandeep Kumar Kar, Chaitali Sen Dasgupta, Anupam Goswami, Ansuman Mandal: Penetrating Arrow Wound of the Chest -A Case Report. Journal of Case Reports Volume 2 | Issue 2
- Sandeep Kumar Kar, Tanmoy Ganguly, Chaitali SenDasgupta, Harneet Singh Khurana: Cardiovascular Consideration of Bilateral Carotid Body Tumour: a Rare Case Report. International Archives of Medicine 09/2015; Vol. 8(227):1-6.
- Sandeep Kumar Kar, Tanmoy Ganguly, Chaitali Sen Dasgupta: Epidural & Paravertebral Block in Thoracotomy As Multimodal Analgesia. 1st edited by Christina Sevenco, 10/2015; Lambert Academic Publishing., ISBN: 978-3-659-79337-0
- Bhuban Majhi, Sandeep Kumar Kar: Cardiology Of Systemic Sclerosis With Pulmonry Hypertension.. 1st edited by Christina Sevenco, 09/2015; Lambert Academic Publishing., ISBN: 978-3-659-78783-6
- International Journal of Pharmacology, Phytochemistry and Ethnomedicine Vol. 1 (2015) pp 23- Inhalation of Pin A Rare Case Report., Sandeep Kumar Kar1, Deepanwita Das2, Chaitali Sen3, Riju Bhattacharya4, Asit Munsi, 26Online: 2015-12-02 (2015)
- Perioperative Pediatric Anxiety: Nightmare for the Anaesthesiologist: Review Article: Sandeep Kumar Kar, tanmoy Ganguly, Chaitali Sen Dasgupta, Anupam Goswami. Translational Biomedicine Volume 12(No 3):Page65-72
- HIV: Constraints and concerns For the intensivists: Review Article: Sandeep Kumar Kar, Bipasa Chakraborty, Sudipto Ghosh, Manas Sarkar, Raja Roy Translational Biomedicine. Volume 5(No 4): Page 31-34. Atypical associations of Japanese Encephalitis: A case Report: Rajat Choudhuri, Sandeep Kumar Kar, Dhiman Adhikari Translational Biomedicine Volume 12(No 4): Page 11-44.

# SERVICE INFORMATION

Number of procedures done by this department in different operating rooms

Taniber of procedures acres by the department in an error operating rooms		
Number of cases Cardiac	511	
Number of cases Non-cardiac	406	
Number of Cath lab cases	73	
Number of Sishu Sathi Cardiac Cases	120	

Apart from routine Anaesthesia works in CTVS OT, the Department

- Runs PAC Clinic 3 days in a week.
- Monday & Wednesday: 2PM to 4PM, Friday: 12 Noon to 4 PM
- Administers Anaesthesia to Sishu Sathi Patients for Cath Lab procedures regularly
- Administers Anaesthesia to adult patients for Catheterisation Lab procedures as & when required.
- Takes care of patients in CTVS Recovery.
- Actively helps the Department of CTVS and undertakes anaesthetic procedures in complex congenital cardiac surgery done under Sishu Sathi Scheme.