# **CURRICULUM VITAE**

**D**R SANJAY MITTAL, M.B.B.S, M.D, DM

Medanta THE MEDICITY Sector-38, Gurgaon, Haryana-122001, India Ph: 0124-4141414

Mobile: +91-9910044477

E-MAIL: sanjay.mittal@medanta.org

san\_mit@hotmail.com

## PRESENT APPOINMENTS:

Senior Director Cardiology & Clinical Research at Medanta- THE MEDICITY (Dec 2009- till date)

Appointed as a Director in Medanta Duke Research Institute (2010-till date)

#### PAST APPOINMENTS:

• December 2009- Current:

Director Cardiology & Clinical Research

Medanta- The Medicity, Gurgaon-122001, Haryana

• 2007 - 2009:

Senior Consultant Cardiologist Incharge Non Invasive Cardiology

## Indraprastha Apollo Hospital, New-Delhi

• 2006-2007:

Principal Consultant cardiologist

Escorts Heart Institute & Research Centre, New-Delhi

• 2003 – 2006:

Senior Consultant Cardiologist & Incharge Non-invasive Cardiology Escorts Heart Institute & Research Centre, New-Delhi

• 1999-2003:

Consultant Cardiologist & Incharge Heart Failure Unit Escorts Heart Institute & Research Centre, New-Delhi

• 1996-1999:

Junior Consultant Cardiologist

Escorts Heart Institute & Research Centre, New-Delhi

1995-1996:

Attending Cardiologist

Escorts Heart Institute & Research Centre, New-Delhi

1994-1995:

Senior Resident in Cardiology

Escorts Heart Institute & Research Centre, New-Delhi

• 1992-1994:

Senior Resident in Cardiology

LARI Cardiology Institute K.G.M.C., Lucknow, UP (India).

• 1989-1991:

Resident Registrar

L.L.R.M. Medical College, Meerut - UP (India)

1988-1989:

Resident House Officer

L.L.R.M. Medical College, Meerut - UP (India)

1987-1988:

Resident Rotating internship

L.L.R.M. Medical College, Meerut - UP (India)

## **TEACHING EXPERIENCES:**

Resident

L.L.R.M Medical College, Meerut Undergraduate(M.B.B.S. student) Medicine

• Senior Resident

LARI card centre, K.G.M.C Lko Undergraduate (M.B.B.S. student)Cardiology

Consultant Cardiologist

Escorts Heart Institute And Research Centre Post-doctoral DNB candidatesCardiology

• Consultant Cardiologist

Escorts Heart Institute And Research CentreIMA Academy of Med. Accredition to Private Practitioner Cardiology

• Senior Consultant Cardiologist

Indraprastha Apollo Hospital Post-doctoral DNB candidates Cardiology

Senior Consultant Cardiologist

Medanta- The Medicity Post-doctoral DNB candidates Cardiology

## **EDUCATIONAL QUALIFICATION:**

**M.B.B.S.**, L.L.R.M Medical College, Meerut 1982-88

**M.D.(Med),** L.L.R.M. Medical College, Meerut 1989-91

D.M. LARI Cardiology Inst. of K.G.M.C, LUCKNOW 1992-94

Fellow in Internatinal Medical Sciences Academy

## **SPECIALISATION:**

- Multiplane Transesophageal Echocardiography.
- Stress Echocardiography
- Enhanced External Counterpulsation.

- Intraoperative TEE in Port Access Cardiac Surgery
- Vascular Doppler: Including
  - Abdominal vascular, Carotid and Peripheral Vascular Doppler
  - Internal Mammary artery Duplex scanning
- Heart failure

## **RESEARCH PROJECTS:**

- 1. Treatment of Functional Mitral Regurgitation without Atriotomy or CPB Clinical Evaluation (TRACE)
- 2. Trace-R (Treatment of Functional Mitral Regurgitation without Atriotomy or CPB Clinical Evaluation Registry) Myocor Study 020204, April 20, 2004.
- 3. Randomized Evaluation of a Surgical Treatment for Off-pump Repair of the Mitral Valve (RESTOR-MV)
- 4. CINCH 1 Trial: A Study for the Surgical Repair of Mitral Valve Regurgitation Using the Guided Delivery Systems, Inc. (GDS) Surgical Accucinch Implant and Delivery System Phase 1
- 5. Follow-Up Serial Infusions of Natrecor (nesiritide) for the Management of Patients with Heart Failure FUSION II
- 6. Performance Evaluation to Establish the Clinical Utility of NT ProBNP in Therapy Monitoring of Patients with Compensated Left Ventricular Dysfunction in Congestive Heart Failure Clinic.
- 7. A randomized trial to compare survival following bilateral versus single internal mammary (IMA) grafting in coronary revascularization (ART)
- 8. Comparison of hemodynamic and neurohormonal effects of EECP therapy with those of IABP.
- 9. Autologous Progenitor Cell Therapy for Congestive Heart Failure Patients Undergoing Treatment with Coronary Artery Bypass Grafting (CABG) Surgery: A Phase-I Study Using Bone Marrow Derived Progenitor Cells.
- 10. The effect of Eplerenone versus placebo on Cardiovascular Mortality and Heart Failure Hospitalization in subjects with NYHA Class II Chronic Systolic Heart Failure.
- 11. Bone Marrow Laser Revascularization (BMLR) Study to provide initial clinical safety and feasibility information on the combined therapy of transmyocardial revascularization (TMR) in combination with autologous bone marrow concentrate.
- 12. RECOVER: A phase III, randomized, double blind, parallel-group study of the efficacy and safety of oral dabigatran etexilate (150mg bid) compared to warfarin (INR 2.0-3.0) for 6 month treatment of acute symptom venous thromboembolism, following initial treatment (5-10 days) parenteral anticoagulant approved for this indication

- 13. RE-MEDY: A phase III, randomized, double blind, parallel-group, active controlled study to evaluate the efficacy and safety of oral dabigatran etexilate compared to warfarin (INR 2.0-3.0) for the secondary prevention of venous thromboembolism.
- 14. ASCEND-HF: Double-blind, Placebo-controlled multicenter acute study of clinical effectiveness of Nesiritide in subjects with decompensated heart failure (ASCEND-HF) (the study).
- 15. SIRS TRIAL: An INCLEN McMaster study about steroids in cardiac surgery trial (SIRS trial).
- 16. Harvest BME (MA-CT-09-016): "Feasibility Study of Autologous Concentrated Bone Marrow Nucleated Cell Therapy for Congestive Heart Failure Patients Undergoing Treatment with Coronary Artery Bypass Grafting (CABG) Surgery"
- 17. ANTHEM-HF: Autonomic Neural Regulation Therapy to Enhance Myocardial Function in Heart Failure (ANTHEM-HF) Study
- 18. BACE Study: Evaluation of safety and efficacy of the BACE™ [Basal Annuloplasty of the Cardia Externally] device in the treatment of Functional Mitral valve Regurgitation (FMR)"
- 19. MCDS study: MEDANTA CARDIOMETABOLIC DISEASE STUDY
- 20. Retrograde Study: Feasibility Study of Retrograde Delivery of Autologous Concentrated Bone Marrow Nucleated Cell Therapy for patients diagnosed with congestive Heart Failure (CHF).
- 21. PROMINENT PEMAFIBRATE TO REDUCE CARDIOVASCULAR OUTCOMES BY REDUCING TRIGLYCERIDES IN DIABETIC PATIENTS

## **ROLE IN RESEARCH PROJECTS:**

- 1. National Level Investigator:
  - SOLID TIMI 52
  - ECLIPSE
- 2. Regional Academic Group Coordinator:
  - IMPROVE IT
  - TECOS
- 3. Steering Committee Member:
  - ASEND- HF
- 4. Protocol Writer : ANTHEM HfpEF
  - 5. National Level Investigator

Prominent study

## ASSISTANT EDITOR (VICE PRESIDENT)

Journal of Indian Academy of Echocardiography

#### MEMBERSHIPS OF SCIENTIFIC ORGANISATIONS

1. American society of Echocardiography

- 2. Indian Academy of Echocardiography (Vice President)
- 3. Cardiological Society of India
- 4. Heart Failure Society of America
- 5. Vascular Society of India
- 6. Association of Physicians of India.
- 7. Cardiological Society of India (Delhi branch) (L-2146)
- 8. New Delhi IMA
- 9. Indian Association of Occupational Health
- 10. International Medical Science Academy
- 11. Member of Pneumococcal Advisory Board of MSD Pharmaceuticals Pvt. Ltd.
- 12. STEMCELL Foundation, New Delhi
- 13. Vice president :Indian Academy of Echocardiography
- 14. Fellow in International Medical Sciences Academy
- 15. Heart Failure Association (Secretray)
- 16. Member of Institute Review Board / Ethic committee of Medanta The Medicity

# INTERNATIONAL WORK EXPERIENCE-(2D ECHO AND VASCULAR DOPPLER)

#### Worked at:

- Non Invasive and Haemodynamic laboratory New England Medical Centre, Boston, U.S.A, 1996. Training in advanced echo techniques
- 2. Echocardiography Laboratory, **Cleveland Clinic**, Cleveland, Ohio-USD 1996: Training in advanced Echo techniques
- 3. Participated workshop on Innovation in Cardiac Surgery Buffalo New York, Nov. 1996.
- 4. Underwent training in Enhanced External Counterpulsation organised by Vasomedical Inc. in New York 1996
- 5. Dept of Cardiology at Hospital Angelina Caron, Campina Grande do sul (Brasil) April 1997 Training on Cardiac evaluation of patients for Batista Procedure

- 6. Set up a Stress Echo Lab at JBFH in Sept 1997 Dhaka, Bangladesh
- 7. Heart failure and Chest Pain Centre At Columbia Presbyterian Hospital, NewYork, USA Oct 1997: management of heart failure
- 8. Worked with Dr Antonio Calafiore at the department of cardiology and cardiac surgery Cheiti, Italy: Feb 1999
- 9. Worked at Heart failure and Cardiac Transplant centre Columbia Presbyterian Hospital, New York, USA June 1999.
- 10. Attended Annual American society of Echocardiography meeting as Faculty at Seattle, USA, May 2001.
- 11. Worked at Columbia Presbyterian Hospital in Heart Failure Centre to get experience on Myostents.(October 2001)
- 12. Worked at New Hampshire in USA with pericardia on Myostents.(October 2001)
- 13. Visited Heart Failure centre at Cleveland clinic USA (August 001)
- 14. Underwent training at Myocor in Minneapolis on the project of Coapsys device, (May 2002)
- 15. ACTS Mitral valve repair in beating Heart Role of Coapsys device.
- 16. Worked at Frankfurt Airport Sheraton Hotel on Frankfurt Summit (September 2004).

## **INVITED GUEST LECTURES**

May 1996	Annual meeting API UP Chapter Meerut	"Unstable Angina"
Dec1996.	New frontiers in Cardiology conference by API, (UP Chapter) Meerut.	"Congestive Cardiac Failure. What's New ?.
Mar 1997.	Third Joint Echocardiography Today and Tomorrow Symposium New Delhi	"Echocardiography in Clinical Decision Making"
May 1997	Seminar on Dyslipidemia Faridabad	Dyslipidemia : When should we treat ?
May 1997	Echo Symposium Amritsar	Evaluation of LV Functions by Echocardiography
June 1997	Gangaram hospital	Sequential External Counterpulsation
Sept 1997	Bangladesh Medical College, Dhaka	Stress Echocardiography
Nov 1997	Symposium on Coronary Artery Disease (Bhilwara)	Coronary Risk Factors in Indians
Nov 1997	IMA Academy of Medical specialties	Echocardiography : Echo-anatomical

	(course on Cardiology)	correlations
Dec 1997	IMA Academy of Medical specialties (course on Cardiology)	Evaluation of Valvular heart disease by Echo
Dec 1997	IMA Academy of Medical specialties (course on Cardiology)	Diagnosis of Myocardial infarction
Jan 1998	IMA Academy of Medical specialties (course on Cardiology)	Hypertension: Diagnosis and evaluation
Jan 1998	IMA Academy of Medical specialties (course on Cardiology)	Pharmacological management of heart failure
Aug1998.	IMA AMS	Non pharmacological management of hypertension
Oct 1998	Cardiology and cardiac Surgery in the next millenium (New Delhi)	Evaluation of Regurgitant lesions by Echo
Oct 1998	Cardiology and cardiac Surgery in the next millenium (New Delhi)	Role of Internal Mammary artery duplex scan in patients undergoing Mini CABG
Oct 1998	Cardiology and cardiac Surgery in the next millenium (New Delhi)	Role of duplex scanning in abdominal vascular diseases
Feb 1999	IV Echocardiography Today and Tomorrow Symposium (Udaipur)	Non invasive evaluation of internal mammary artery
Feb 1999	5th Annual Conference of Indian Academy of Echo (19-21 Feb.)	
1999	2nd Annual Conference of Nuclear Cardiological Society of India (Apollo Hospitals)	Myocardial viability assessment- Low dose Dobutamine ECHO
1999	51st Annual Conference of Cardiological Society of India (New Delhi)	Echocardiographic Techniques – Can they replace Nuclear Techniques
2000	DMA	CAD at the Dawn of new millennium – The challenge of heart failure
2000	Heart Failure Summit II (Amritsar)	CAD at the Dawn of the millennium – The challenge of heart failure
May 2000	A Perspective at LeMeridian : to Senior CGHS Physicians	HOPE study and ACE Inhibitors
June 2000	Bhart Vikas Parishad, Meerut	Heart Diseases How and Why?
July 2000	Echo Summit 2000, IAE/CSI, Delhi (Oberoi Hotel)	Chaired Symposium Session on Clinical perspectives and Echocardiography
Aug. 2000	First National Symposium (India	Myocardial Contrast studies and

	Habitat Centre, Delhi)	Minimally Invasive Coronary Surgery – What to expect?
Aug. 2000	IMA-Early Detection of CAD-The role of newer technologies (EHIRC, New Delhi)	Primary prevention and statins. Are all statins equal?
Aug. 2000	Screening of Coronary Arteries by Newer Technologies & its clinical implications (CME, EHIRC)	Role of lipid lowering agent in primary and secondary prevention of Coronary Artery Disease
Oct. 2000	IInd Comprehensive Course on Echocardiography (Suder Lal Jain Hospital, Delhi)	Echo Evaluation of Coronary Artery Disease
Dec. 2000		Echo Techniques in Myocardial Viability Assessment
Dec. 2000	IIIrd CME meet of Meerut Medicos Delhi Chapter (Hotel Kanishka, New Delhi)	Emerging risk factors for heart diseases and life style management
Jan 2001	APICON 2001 (Ashoka Hotel, New Delhi)	Surgical techniques in the failing heart
Feb. 2001	Indian Association of Occupational Health 51st National Conference (India Habitat Centre, New Delhi)	Symposium - Heart Failure Clinic - A New Concept
Feb. 2001	International Summit on Coronary Artery Disease in the New Millennium (CME, Mumbai)	Internal Mammary Artery Flow studies by Doppler Echocardiography
Feb. 2001	4th Asian Cardiac Nursing Conference (India Habitat Centre, New Delhi)	Cardiac Imaging
Feb. 2001	7th Annual Conference of Indian Academy of Echocardiography (Science City, Calcutta)	Transesophageal Echo-cardiography
April 2001	3rd Comprehensive Course on Echocardiography (Sunder Lal Jain Hospital, Delhi)	on of CAD (a live demonstration)
June 2002	45th DMA Annual Conference at Ashoka Hotel Delhi	Enhanced External Counterpulsation a new therapy for Angina.
June 2002	45th DMA Annual Conference at Ashoka Hotel Delhi	Heart Failure understanding and management.
July 2002	Symbosis of Sun Pharmaceutical at Agra	Lercanidipine a new Antihypertensive
July 2002	Symbosis of Sun Pharmaceutical at	Value of Life ARBs revisited

	Agra	
August 2002	IMA, Agra	Primary & Secondary prevention of CAD
1ST OCT 2002	Sunder Lal Jain	Echo in cad
5th Oct 2002	Interesting cases	Hotel Taj Palace
1st Dec 2002	CSI	Systemic Approach to border tracking
5th October	CSI, Hotel Taj Palace, Delhi	New frontiers in echocardiography
8th Nov 2002	Patholophysiology and management of end stage Heart disease	Lucknow
1-6 Dec 2002	CSI, Kochi , Kerala	Color kinesis: systematic approach to broader tracking.
8-10th Nov2002	Hotel Samrat, New Delhi 2002	" Heart Failure in Elderly"
January 11, 2003	Indian Habitat Centre, New Delhi	"Role of nikorandil, trimetazeden & L.carnitine in heart failure"
Feb, 2003	Indian Academy of Echo , Hyderabad	Trans Thoracic visualization of Coronary Arteries Graft
March. 2003	West Delhi	External counter pulsation
March, 2003	Beta Blockers in Heart Failure	
April, 2003	Sunder Lal Jain Hospital	Echo in CAD
April, 2003	Morinda (Punjab)	CAD in India
July	Le Meridian Windsor Palace	Material in Heart Pellers
2003	New Delhi	Metoprolol in Heart Failure
August 2003	Sunder Lal Jain Hospital	Transis of TEE: Echo and Academical correlation
February 2004	Hotel Swosti Plaza Bhubhaneswar	3D Echo-anatomic correlation

March 2004	Sunder Lal Jain Hospital	"Echo Evaluation of CAD"
May 2004	Punjab Heart Foundation	"M. Mode and 2D Echocardiography" "RWMA and role of echo in cad"
		"Echo in dilated cardiomyopathy"
February 2005	10th Annual Conference of Indian Academy of Echocardiography, Udaipur(Raj.)	Segmental Wall Motion Analysis
February 2005	10th Annual Conference of Indian Academy of Echocardiography, Udaipur(Raj.)	RV infarction: Echo diagnosis and assessment of RV function: Prognostic implications.
June 04, 2005	Engineers India Limited, Bhikaji Cama Place, Delhi	Lifestyle Management for Heart Diseases.
June 04, 2005	Cipla Doctors Meet at Dehradun	The New Chapters in Management of Dislipidium.
July 24, 2005	South Delhi IMA	Past Present Future of Echocardiography
July 16, 2005	Heart Failure Summit at India Habitat Centre	Management of Heart Failure 2005, End Stage Heart Disease role of Heart Failure
Aug 14, 2005	AST-2005 at Sunder Lal Jain Hospital	Introduction to TEE, Echo-anatomic correlations, normal variants & artifacts
Aug 27, 2005	Echo Update 2005 at Vellore	Applications of 3D Echo in Valvular heart disease, Conducted a workshop on live 3D Echo & Tissue Doppler Imaging
Nov 30, 2005	Cardiological Society of India at Mumbai	Acute Myocardial Infarction – Early detection & predictors of outcome – Conventional methods & their limitations
Dec 1, 2005	Cardiological Society of India at Mumbai	Should PISA be discarded
April 2006	Heart Check-up camp at Indore	Awareness talk on Heart diseases in Indians
October 18, 2006	Indian Council of Medical Research, New Delhi	Cardiovascular Diseases and Heart Failure
Dec. 7-10, 2006	Cardiological Society of India, New Delhi	Carotid Intimal Thickness

Oct 12-15, 2006	Chest Summit, New Delhi	Echocardiography in ICU
April 15- 16, 2006	Delhi Diabetic Forum, New Delhi	
Oct. 3, 2006	XIV Comprehensive Course of Echocardiography, Sunder Lal Jain Hospital, Delhi	Echo Evaluation of CAD
March 10- 11 2007	South Asia Heart Failure Summit, New Delhi	Selecting Patients for CRT
21 May 2007	EECP Meeting, Chennai	External counter pulsation
28th July 2007	CME meeting, Noida	ACS- What are we likely to miss?
4th October 2007	AHA meeting, USA	AHA abstract Presentation
16-19 Sep 2007	11th Annual Scientific meeting Heart Failure society of American	
26-28th October 2007	Asian Society of Cardio Thoracic of Anesthesia	Updation on heart failure management
4th -7th Nov 2007	AHA meeting, USA	AHA abstract presentation
5th December 2007	CSI Conference, Hyderabad	High flow Vs High Gradient
02nd Jan 2008	Board Room meeting, Indraprastha Apollo Hospital, Delhi	Risk factor for CHD in south Asians
05th Jan 2008	Hotel Jaypee Siddhartha, Delhi	ED leads to ED
08th Feb 2008	Exiomm 2008 Scientific Symposium on "Post MI Survival"	North Zone Allapey, Kerala
10th Feb 2008	International conference of Echocardiography, Scientific Committee, Delhi	Heart Failure 2008, What is current role of Echo?

23rd Feb 2008	India Habitat Centre, Delhi	Recent advances in CHF – Diagnostic modalities
December 2008	CSI Conference, Kochi	
November 2010	Medanta THE MEDICITY, Gurgaon	Stem cell Lecture: topic
November 2010	Medanta THE MEDICITY, Gurgaon	Concept of shock centre Viability, feasibility & Need
November 2010	SCGS-2010, AIIMS Hospital, Delhi	Application of stem cell in Cardiology
01/29/12	National Heart valve submit	Bacterial endocarditis prophylasis- current overview
02/11/12	CME, Hyderabad	
02/17/12	ISEKON, Jaipur	Heart failure with preserved LV Systolic Function
04/14/12	CMI, Delhi	Cardiometabolic risk
1 June -4 June 2012	Exiomm 2012	Exiom 2012 Scientific symposium
06/26/12	Anthem HF. Thailand	Anthem HF
30/06/20 12	Annual academic session of the cylon college of physician, Sri lanka	VAD
13/6/201 2	JROP, Delhi	Echo cases
05/10/12	AICT 2012, Gurgaon	Echo evaluation for mitral clip invtervention for selection of patients
11/02/12	DIA, Hyderabad	
11/25/12	4th International Echo Course & Workshop- 2012	Echocardiographic evaluation of ischemic heart disease: Tips & Tricks for young echocardiographers

18/06/20 13	CME, Rohtak	Management of HTN in changing scenario
18/06/20 13	Presentation on DCMP, Medanta	DCMP
3/8/2013	Academic session, EHIRC	
11/08/13	Heart Failure Summit, Delhi	Role of Echo and nuclear cardiology in HF
16/08/20 13	AST, Delhi	Transesophageal echocardiography
12/08/13	CME, Medanta	Recent advances in stem cell research in cardiology
19/08/20 13	Tecos meeting, Bangalore	Tecos
22/8/201 3	Conference, Bangalore	Managment of Diffuse disease : role of EECP
21/9/201	II C Summit, Gurgaon	Chair person : Anti platelet Live 3D technology
05/09/13	Echo India, Bangalore	LV apex: What abnormality are seen and how to image pitfalls, tips and tricks to evaluate mitral and aortic regurgitation
10/01/13	Echo evaluation of CAD, Delhi	TAVI/Paravalvular leak : 3D echo has major role to play in procedure success
06/10/13	CME, Bangalore	Serios events (SAE) reporting in clinical trials
13/10/13	Heartware asia user meeting, Singapore	LVAD device
15/12/20 13	5th International Echo Course & Workshop - 2013 , Bhopal	Echocardiographic evaluation of ischemic heart disease
27/2/201	2 <sup>nd</sup> world summit Echocardiography, gurgaon	Acute mitral regurgitation after balloon mitral valvuloplasty : should i call

		the surgical team?
23/08/20 13	LAI Heart Failure Summit 2013, Delhi	Role of echo and nuclear cardiology in HF
06/09/13	18 <sup>th</sup> Annual National conference of IAE, Bangalore	LV apex : what abnormalities are seen and how to image
06/29/14		ANSWER GUIDELINES- ARE THEY RELEVANT TO INDIAN POPULATION."
06-September 2014	Marriot Hotel ( Airport Road) , Delhi	
14 September 2014	Bhopal	СМЕ
07-08 Novemeber 2014	HRPP conference at Tata Memorial Hospita Mumbai	Research Ethics & Human Research Protection Programs in Clinical Research in collaboration with the Association for Accreditation of Human Research Protection Programs (AAHRPP)
18 febuary 2015	Chanakya Puri , delhi	USAIC Meeting
01/31/15	CME, Delhi	РАН
02/12/15	ISCRT, Delhi	Stem cell therapy
20-Febuary 2015	Gurukul, Leisure Valley Convention Centre Sector – 29, Gurgaon	Apicon 2015- Recent MI, Low EF presents with signs and symptoms of CHF
21 February 2015	JW Marriot	3rd Complex arrhythmia
03/14/15	India Habitat Centre	Pul -Embolism: Case based discussion on managmt as per recent guidelines
21 <sup>st</sup> – 22 <sup>nd</sup> March 2015	The Lalit, Barakhamba Avenue, Connaught Place, New Delhi	Guest faculty for 29thAnnual Conference of Cardiological Society of India Delhi Branch
02 <sup>nd</sup> ,3 <sup>rd</sup> & 5 <sup>th</sup> April 2015	National Intervention Council (NIC) mid term meet from 2nd – 5th April, 2015, Hotel Taj Palace, New Delhi, India.	Assessing cardiac hemodynamic in critically ill patient by echocardiography
18 <sup>th</sup> to 19 <sup>th</sup> April 2015	"Crowne Plaza, Today" in Gurgoan.	Medanta Echo n Cardiology: Today and Tomorrow 2015

13 <sup>th</sup> to 16 <sup>th</sup> August 2015	New Delhi	Advanced Skills Training in Echo Applications & Technology
08/22/15	lic Summit -2015, Delhi	Percutaneous mitral valve replacement : Solving the challenges
22 <sup>nd</sup> -23 <sup>rd</sup> August 2015	Ashok, New Delhi on Saturday-Sunday 22nd -23rd August, 2015.	2nd International Summit on Lipids at Hotel.  "Current status of stem cell & Gene therapy in Heart failure"  "Expert Consensus regarding Recommendations on Treatment of Dyslipidemia in Indian Patients"
5 <sup>th</sup> -6 <sup>th</sup> September 2015	Delhi – JW Marriott	Conference "Best Practices in Cardiology 2015" Rythm to Revival
12 September 2015	Mumbai	CME- USV
20 <sup>th</sup> September 2015	hyderabad	
27 September 2015	Meerut	CME
04 October 2015		Scientific Program for the 4th Comprehensive Perioperative TEE Workshop - Oct 3-4, 2015.
25 October 2015	"IACCCON 2015 DELHI"	6th National Clinical Cardiology Update - IACCCON 2015" - Saturday, October 24th to Sunday, 25th October 2015
26 December 2015	Lecture	Ranolazine
28 january 2016	APICON-2016 at Hyderabad	Echo Workshop during APICON-2016 at Hyderabad on 28th Jan. 2016
04 th February 2017	Heart Failure Association at Chennai	
11 <sup>th</sup> & 12 November 2017	Lead India 2017 at Hyderabad	Arni Evolution, Panel Discussion
12 <sup>th</sup> December 2017	Heart Failure Management -A Practical Apprroach	Heart Failure Management- Hotel Shangrila Delhi
30 <sup>th</sup> November 2017	CSI, Kolkata	CSI, Kolkata

		Echo Delhi 2018, India Habitat Centre, New Delhi
27 <sup>th</sup> -28 <sup>th</sup> January 2018	6 <sup>th</sup> Annual Echo Delhi	Valvular Heart Disease: What is wrong with this valve?  Interrpret doppler hemodynamics, Let us read doppler for fun "Pulmonary and Hpatic veins"
January 2018	CME, Delhi	Rolse of Tolvaptan in the Managment of hyponateremia
12 <sup>th</sup> December 2017	Heart Failure Management -A Practical Apprroach	Heart Failure Management- Hotel Shangrila Delhi
24 <sup>th</sup> & 25 <sup>th</sup> Feb 2018	4 <sup>th</sup> Annual Congress on Heart Failure, JW marriott Mumbai	
14 <sup>th</sup> April 2017	CME at Jaipur	Vyamada
15 <sup>th</sup> April 2017	Echo and Cardiology, Leelas, Gurgaon	
02/13/16	Echo India, India Habitat Centre Delhi	Mitral Regurgitation: pre-op TTE/ TEE or intra- op Sanjay Mittal TEE for severity?
08/07/16	A Symposium On viral infection in critical care, Country Inn, Gurgaon	Viral myocarditis
08/14/16	Device Symposium, Leela Ambience Gurgaon	
23/12/2017	IAE Acedemic Meeting, Medanta The Medicity Gurgaon	LV Strain
09/11/17	Role of Empagliflozin in Heart Failure, Borhringer Ingelheim, Medanta The Medicity gurgaon	

5-8 oct 2017	World congress of cardioecho and echo india 2017, Jaipur	

09/11/17	Role of Empagliflozin in Heart Failure, Borhringer Ingelheim, Medanta The Medicity gurgaon	
31/08/17	A new Paradigm in Management of CHF providing clinical meaning full benefits, Mumbai	Recent advances in HF managements
07/05/17	Echocon 2017	The right patient for Arni; How to shift the patient from current therapy to Arni
12/12/17	CME, Delhi	Heart Failure
09/11/17	Role of Empagliflozin in Heart Failure, Borhringer Ingelheim, Medanta The Medicity gurgaon	
22/02/18	AMI Apicon, Bengaluru	Role of Echocardiography in subset of patients with classical history of chest pain suggestive of AMI but with normal ECG and serum marker as may happen in patient presenting very early after onset of chest pain
14 & 15/04/2018	Medanta and Echo cardiology, Leela's Gurgaon	
24 & 25/04/2018	CME, Pullman, Aerocity Delhi	

#### **CONFERENCES**

# (ABSTRACTED IN NATIONAL JOURNALS)

# A Cardiological Society of India (CSI), Lucknow, 1995

- A Acoustic quantification for assessment of LV ejection fraction and its correlation with radionuclide ventriculography.
- A Sequential External Counterpulsation a new adjunctive therapy in CAD with LV dysfunction.

# American college of Cardiology 1996

▲ Three dimensional Echocardiography is useful in the detailed assessment of valvular, subvalvular and annular morphology in rheumatic mitral valve disease – clinical experience in 130 cases.

A Cardiological Society of India (CSI), Bangalore, 1996

Page

- Utility of Sequential External Counterpulsation in stabilization of patients with LV systolic dysfunction.
- Potentials and Limitations of Dynamic three-dimensional echocardiographic evaluation of prosthetic mitral valve.
- A Incremental value of volume-rendered Three dimensional echocardiography in organic tricuspid valve disease.

Reduction ventriculoplasty in patients with dilated cardiomyopathy : Our initial experience.

Rotational approach for transthoracic real - time Three dimensional echocardiography: Initial EHIRC experience.

A Does volume - Rendered three - dimensional echocardiography provide more comprehensive delineation of Endocarditis - associated lesions: Initial clinical experience.

## American college of Cardiology 1997

Intra and post operative Doppler assessment of left internal mammary artery flow and graft patency in patients undergoing Minimally invasive coronary artery bypass surgery.

Alterations in left ventricular geometry in patients with rheumatic mitral stenosis: a quantitative analysis of regional and global shape

A Varying morphology of mitral valve commisures, commisural fusion and orifice in Mitral stenosis, Mitral regurgitation and combined lesion in rheumatic valve disease: A three dimensional echocardiographic study.

#### American society of Echocardiography 1997

A Characteristics of Mitral leaflet thickening in different patterns of rheumatic valve disease: Difference between Mitral stenosis and mitral regurgitation – evaluation by three dimensional imaging.

A Dynamic Behavior of the mitral annulus in rheumatic valve disease – insights from three dimensional echocardiography

#### A Cardiological Society of India (CSI), Calcutta, Nov 1997

Assessment of LIMA graft flow by transthoracic echocardiography in patients undergoing Minithoracotomy bypass Surgery : An angiographic validation.

A Benefits of three weeks therapy with SECP in patients with coronary artery disease and LV dysfunction

Long term benefits of Sequential external counterpulsation in patients with coronary artery disease and LV dysfunction.

#### A Cardiological Society of India (CSI), Mumbai, Nov 1998

Role of Abdominal duplex scan in patients after cardiac surgery

A Role of intraoperative duplex study of LIMA flow in patients undergoing Mini CABG

Page

## American society of Echocardiography

- A Intraoperative duplex study of LIMA flow in patients undergoing Mini CABG
- A Paper presentation at Heart Failure summit six at celeveland clinic.
- A Paper presentation at Heart Failure Summit Cleveland clinic 2001 on Hyperuricemia treatable cause of refarcatory Heart Failure.
- Moderated Session on Contrast and cardiography . This was in Annual ASE meet May 2001 at Seatle USA.

♣ 56<sup>th</sup> Annual Conference of Cardiological Society of India, Bangalore, 2-5<sup>th</sup> December 2004.

- ▲ 3-D Echocardiography: An Initial Experience. Kasliwal R.R., Chouhan N., Gupta P., Manocha S., Tandon S., Shrivastava S., Mittal S., Trehan N.
- Assessment of Cardiac Dyssynchrony In Patients of End Stage Heart Failure using ECG v/s ECHO criteria. Chouhan N., Gupta P., Manohar G., Shinde M., Manocha S., Goyal G., Tandon S., Mittal S., Kasliwal R.R.

▲ 51<sup>st</sup> Annual Conference of the Indian Association of Cardiovascular-Thoracic Surgeons, Kochi, Kerala, 17-20<sup>th</sup> February 2005.

- Mitral Valve Annuloplasty with Coapsys: Viable option for functional mitral Valve Regurgitation patients undergoing Off Pump CABG. Mishra Y., Mittal S., Jaguri P., Trehan N.
- A Post Operative Outcome of Ventricular reshaping by Septal exclusion in Patient with severe Left Ventricular reshaping by Septal exclusion in Patient with severe Left Ventricular Dysfunction. Kohli V., Goel M., Wasir H., Mittal S., Karlekar A., Mehta Y., Trehan N.

A First Global Conference on Cardiovascular Clinical Trials & Pharmacotherapy.

Treatment of functional MR without Atriotomy Clinical Evaluation :

Trace.

American Heart Association, Scientific Sessions 2005

Lardiological Society of India Meeting, Bombay, Dec 2005

Efficacy of Enhanced External Counterpulsation in Patients with and without Diabetes Mellitus.

Effect of Enhanced External Counterpulsation on Endothelial Dysfunction in Patients with and without Diabetes Mellitus

▲ 11<sup>th</sup> Asia Pacific Congress of Doppler Echocardiography, New Delhi, 26<sup>th</sup> - 27<sup>th</sup> Nov 2005

Use of Intraoperative Echocardiography Makes Beating Heart Mitral Valve Repairs Using Coapsys Annuloplasty System Feasible in Humans.

Page

## A Decision Making in Clinical Cardiology, February 2006

Asymptomatic Valve Disease Hypertension

- A 7th Asian Cardiac Nursing Conference, New Delhi, 20th 22nd February 2007
- A Stem Cell Therapy for Cardiovascular Disease
- ▲ South Asia Heart Failure Summit, New Delhi March 10-11 2007 Selecting Patients for CRT
  - ▲ EECP Meeting at Chennai on 21 May 20047
  - AHA meeting at USA
  - ▲ 11<sup>th</sup> Annual Scientific meeting Heart Failure Society of American 16-19<sup>th</sup> Sep 2007
- Asian Society of Cardio Thoracic of Anesthesia 26-28<sup>th</sup> October 2007 Updation on Heart Failure Management
  - AHA Meeting, USA 4th -7 Nov 2007

**Abstract Presentation** 

△ Cardiology society of Indi, Hyderabad - 5th Dec 2007

High flow vs High gradient

Exxiom 2008 Scientific Symposium, Kerala - 8th Feb 2008

Post MI survival

International Conference of Echocardiography, Scientific committee, Delhi- 23<sup>rd</sup> Feb 2008

Heart failure 2008, What is current role of echo?

A India Habitat Centre, Delhi - 23rd feb 2008

Recent advances in CHF- Diagnosis modalities

- Cardiology society of India, Kochi December 2008
- ▲ SCGS 2010, AIIMS Delhi on November 2018

Application stem cell in cardiology

▲ National Heart valve summit – 01/29/2012

Bacteria endocarditis prophylasis- current overview

▲ ISEKON, Jaipur – 02/17/2012

Heart failure with preserved LV systolic function

Annual Academic Session of cylon college of physicians, sri lanka – 30/06/2012

VAD

AICT 2012, Gurgaon

Echo evaluation for mital clip intervention for selection of patients

- ▲ DIA, Hyderabad
- 4th international echo course and workshop 2012- 11/2/2012
- Echocardiographic evaluation of ischemic heart disease : Tips and Tricks for young

echocardiographers

- ▲ Heart Failure summit, Delhi 11/08/2013
- A Role of echo and nuclear cardiology in HF
- ▲ II C summit gurgaon -21/09/2013

Anti platelet, live 3D technology

▲ Echo India, Bangalore – 5/09/2013

LV apex: What abnormality are seen and how to image pitfalls, tips and tricks to evaluate mitral and aoric regurgitation

▲ Heartware asia user meeting, singapore – 13/10/2013

LVAD device

\*IABS 2016", the 5th Annual Meeting of the Indian Academy of Biomedical Sciences from February 26-28, 2016 at India Habitat Centre, New Delhi.

#### Entitled - Role of Stem Cell Therapy in Heart Failure

A ISCT International Society for cellular therapy Sep 2016, Singapore

## Advances in cariopulmonary cell therapies in Asia Pacific

 $^{\, L}$   $\,$  69th Annual conference of CSI at Kolkata Nov 2017 Cardiodiabetic Update: A Textbook of cardiology

## (ABSTRACTED IN NATIONAL JOURNALS)

- 4th World Congress on Heart Failure. Jarusalem, Israel May 26 29, 1996
- Immediate hemodynamic effect of Sequential External Counter Pulsation in patients with CAD and LV Dysfunction.
- Benefits of 3 Weeks therapy with SECP in patients with CAD and LV Dysfunction.
- a) VII Annual Scientific Meeting of International Society of Minimally Invasive Cardiac Surgery, London, 23-26<sup>th</sup> June 2004.
  - CABG as a Treatment of Severe Ischemic Functional Mitral Valve Regurgitation. Trehan N., Mishra Y., Mittal S.
  - Geometric Changes of the Annulus in Functional Mitral Valve Regurgitation Following Off-Pump Repair Utilizing the Coapsys Device. Trehan N., Mishra y., Mittal S.
  - Differences in Mitral Valve Geometry in Patients with Post Infarction Functional Mitral Regurgitation are related to Infarct Territory. Trehan N., Mishra Y., Mittal S.
- 54th Annual Scientific Session of American College of Cardiology,
   Orlando, USA, 6-9th March 2005.
  - Coapsys Mitral Valve Repair Improves 1 Year Outcomes in Patients with Ischemic Mitral Regurgitation Undergoing Off-Pump CABG. Trehan N., Mishra Y., Mittal S.
- c) 5<sup>th</sup> Biennial International Conference of Pakistan Society of Cardiovascular and Thoracic Surgeons & 1<sup>st</sup> Heart Summit of Emergent Countries, Lahore, Pakistan, 27-29<sup>th</sup> March 2005.
  - Effect of Ventricular reshaping by Septal Exclusion in Patient with severe Left Ventricular Dysfunction. Kohli V., Goel M., Wasir H., Mittal S., Karlekar A., Mehta Y., Trehan N.
- d) American society of Echocardiography, Baltimore, 3<sup>rd</sup> 7<sup>th</sup> June 2006

• Use of Intraoperative Echocardiography Makes Beating Heart Mitral Valve Repairs using Coapsys Annuloplasty System Feasible in Humans

#### e) EECP Conference, China, 2006

• Enhanced External Counterpulsation Normalize Exercise Capacity And Angina Function In Patients With Chronic Angina

## f) American College of Cardiology, San Francisco, 10th – 12th August 2006

• Improved Effort Tolerance In Angina Patients With Enhanced External Counterpulsation Therapy Is Predominantly Due To Its Peripheral Training Effects.

# g) Heart Failure Society of America, Seattle, 10th - 13th September 2006

• Improvement In Left Ventricular Systolic And Diastolic Functions With Enhanced

External Counterpulsation In Patients With Heart Failure Is Sustained At One- Year.

- h) Heart Failure Summit at Paris on 28th April 2017
- I)  $4^{th}$  Annual Conference of the society for heart failure and transplant, Cochin -3/09/2016

# J) NEDSCON 2016, Guwahati, ASSAM " Cardiac Disease in Diabetes – Where are we in 2016), Raddison Blu, ASSAM – 6/11/2016

#### **AWARDS**

- Prof G P Elhence award 1990: Best Graduate attending the CME at the annual conference of UP chapter of API
- Excellence award 1996: from the Non Invasive and Haemodynamic laboratory New England Medical Centre, Boston.
- IMA Scroll of Honour award 1998: for Meritorious services rendered for academic activities during 1997-1998 in OCT 1998.
- CME Excellence award August 1998 : from IMA Academy of medical specialities, New Delhi
- Appreciation award Oct 1998: for service to humanity from Aggarwal samaj
- Best Echocardiography workshop 1997-1998: from South Delhi IMA

## WORKSHOPS AND PANEL DISCUSSIONS

## Transthoracic Echocardiography:

- Participated in a panel discussion on Coronary risk factors in Indians at annual CSI Delhi branch meet 1996.
- Started a Stress Echo Laboratory at Japan Bangladesh Friendship Hospital, Dhaka,
   Bangladesh Sept 1997

- Organized and participated in a workshop on Transthoracic Echocardiography for South Delhi IMA (Feb 1998) which was awarded as the best workshop for the year 1997-1998
- Participated (in the session on interesting Echoes) as a member of National Faculty in Echocardiography Today and Tomorrow meeting held in New Delhi (1998)
- Participated in Echocardiography workshop at Escorts Heart Institute on 4<sup>th</sup> March, 2006.
- Medanta Continuous Research Education and Training Exercises (CREATE)
   Program 2010

#### Transesophageal Echocardiography:

- New Delhi 1998: 4th Annual Conference of Indian Academy of Echocardiography a Le Meridien
- New Delhi June 1998: Live Echo and TEE transmission and Case discussion with cardiologists at Annual American Society of Echocardiography meet in at LA USA
- New Delhi Oct 1998: Cardiology and cardiac Surgery in the next millenium (New Delhi)
- Live Echo and TEE transmission and Case discussion with cardiologists at American Heart Association Nov 1998
- Calcutta Feb. 2001: Conducted Live Hemodynamic Workshop at the 7<sup>th</sup> Annual Conference of Indian academy of Echocardiography
- Chaired a session on Congenital anomalies of coronary arteries at 7<sup>th</sup> Annual Conference of Indian academy of Echocardiography, Calcutta Feb. 2001
- Live workshop on Stress Echocardiography and intra-operative TEE at 7<sup>th</sup> Annual Conference of Indian academy of Echocardiography, Calcutta Feb. 2001
- Participated in educative program of Kaun Banega Echo Millionaire.

#### Clinical Research:

- Participated in a panelist on "what are the hurdles and how to overcome these to usher in achehe din for the patient?" At annual ISCR Conference, Gurgaon 13, 14 February 2015.
- 19th October 2016, MIER Intenational Bioethics Day celebration workshop at Medanta The Medicity
- 9th April 2016 Science Communication workshop at Medanta The Medicity
- 11<sup>th</sup> Feb 2017 MIER hands on workshop Bio statistics (MS Excel) at Medanta The Medicity
- 19th May 2017 Research Touching lives at Medanta The Medicity

- 23rd March 2018 ICH- GCP workshop at Medanta The Medicity
- 7th April 2018 2nd annual MIER hands on bio statistics workshop: Clinical bio statistics (Basic SPSS) at Medanta The Medicity

Course faculty for the "Update in Cardiology Session" For South Delhi. <u>I.M.A.</u> New Delhi June 1998

Course faculty for the First EHIRC echocardiography today and tomorrow course 'Echocardiography in clinical decision making' For I.M.A. New Delhi August - September 1998

#### Lifestyle Management Workshops:

- Engineers India Ltd. on 30th May, 2005 at Bhikaji Cama Place
- Castrol (IHC) on 4th July, 2005
- Airports Authority of India on 16th December 2005 at Safdarjung
- At Rajiv Gandhi Bhawan on 22<sup>nd</sup> December, 2005
- Genpact on 26th December, 2005 at Gurgaon

## **COMMUNITY OUTREACH PROGRAM**

#### Team Leader for the Free Heart Camps

• New Delhi 1995 : Sadhu Vasvani Mission

• New Delhi 1996 : Air Force Wives Welfare Association.

• New Delhi 1996 : Free Heart Camp. Sadhu Vasvani

Mission

New Delhi 1997 : Free Heart Camp (Sarita Vihar)

• Faridabad 1997 : Free Heart Camp (9.3.97)

• Amritsar May 1997 : Amritsar Heart Center

• New Delhi June1997 : Free Heart Camp (N.T.P.C., Badarpur)

Rajasthan Nov 1997 : Bhilwara

New Delhi Nov 1997 : FHC at Sadhuvaswani Mission

• New Delhi Dec 1997 : TISCO, Connought place

New Delhi Feb 1997 : Doon School
 Rajasthan, Feb1999 : Ganga Nagar

U.P., Oct 1999 : Meerut

New Delhi, Feb 2000 : Daryaganj

• New Delhi, April 2000 : Saket, Rotary International

Amritsar, May 2000 : Amritsar Heart Centre

• Hapur, Aug. 2000 : Rotary Club

Narora, Sep. 2000 : Narora Atomic Power Station

New Delhi, Oct. 2000 : Narang Medical Centre

New Delhi, Nov. 2000 : Constitution Club, Rafi Marg

• Jalander July. 2001 : Heart Check-up camp

• Panchkula Feb 2004 : Free Heart Check Up held on 27th – 28th Feb

at Bhandra complex

• Morinda May 2004 : Free Heart check up held on 28 may at

Morinda.

• Madhopur Camp 2004 : Free Heart check up held on 18-19 sept. at

Madhopur

• Indore, April 2005 : Heart check up camp and Awareness talk on

Heart diseases in Indians.

• Indore, Dec. 2005 : Heart check up camp

• Meerut, Dec. 2005 : Heart check up camp

• Bhopal, March 2006 : Free Heart check up camp (8th March)

• Indore, March 2006 : Free Heart check up camp (9th March)

• Indore, June 2006 : Free Heart check up camp (28th June)

• Bhopal, June 2006 : Free Heart check up camp (29th June)

• Indore, August 2006 : Free Heart check up camp (27th Aug,

Yashwant Club)

• Jaipur, January 2007 : Free Heart check up camp (23<sup>rd</sup> January)

• Meerut, February 2007 : Free Heart check up camp (28th February)

• Indore, April 2007 : Free Heart check up camp (19<sup>th</sup> April)

• Indore, June 2007 : Heart check up camp

• Gurgaon, July 2007 : Heart check up camp

• Noida, 13th & 14 October 2008 : Free Heart Check up Camp (13

& 14 October)

• Gurgaon 9th December 2008 : Free OPD at Gurgaon

• Indore 28th February 2009 : Free OPD at Indore

## RESEARCH WORK AND PUBLISHED PAPERS:

- 1. Kasliwal RR, Omar AK, Mittal S, Kanojia A, Prakash O, Bhatia ML, Trehan N. Multiplane Transesophageal Echocardiography Widening Horizons from a Small Window. Indian Heart J 1994;46:188.
- 2. Kasliwal RR, Bhaskaran A, Omar AK, Gill R, Mittal S, Bhatia ML, Trehan N. Multiplane Transesophageal Echocardiography Our Initial Experience. Indian Heart J 1994;46:188-138.

- 3. Kasliwal RR, Prakash O, Kanojia A, Mittal S, Omar AK, Trehan N. Value of Multiplane Transesophageal Echocardiography in Assessment of Atrial Septal Defects in Adults. Indian Heart J 1994;46:226.
- 4. Kasliwal RR, Prakash O, Kanojia A, Mittal S, Omar AK, Trehan N. Multiplane Transesophageal Echocardiography in Congenital Heart Disease in Adults. Indian Heart J 1994; 46:227.
- 5. Kasliwal RR, Mittal S, Kanojia A, Omar AK, Gill RS, Singh RP, Prakash O, Trehan N. A Study of Spontaneous Echo Contrast in Patients of Rheumatic Mitral Stenosis in Sinus Shythm. Indian Heart J 1994; 46:229(abst).
- 6. Kasliwal RR, Mittal S, Kanojia A, Singh RP, Prakash O, Bhatia M L, Trehan N. A study of Spontaneous Echo Contrast in Patients with Rheumatic Mitral Stenosis and Normal Sinus Rhythm An Indian Perspective. British Heart J 1995; 74:296-299.
- 7. Kasliwal RR, Omar AK, Mittal S, Kanojia A, Trehan N. Multiplante Transesophageal Echocardiography "The EHIRC Experience". Indian Journal of Medical Ultrasound 1995;3:87-93.
- 8. Kasliwal RR, Mittal S, Kanojia A, Gill RS, Prakash O, Trehan N. A Study of Spontaneous Echo Contrast In Mitral Stenosis By Transesophageal Echocardiography. Indian Journal of Medical Ultrasound 1995;3:94-102.Kasliwal RR, Shrivastava S, Dhalwani R, Omar AK, Kanojia A, Mittal S, Trehan N. Value of Multiplane Transesophageal Echocardiography in patients of Hypertrophic Cardiomyopathy. Ultrasound International 1995; 1:208-211.
- 9. Kanojia A, Kasliwal RR, Srivastava S, Mittal S, Chandra N, Trehan N. Real Time Three Dimensional Echocardiography For Evaluation Of Atrial Septal Defect Enhanced Comprehension Of Dynamic Morphology. Indian Heart J 1995;47:575 (abst).
- 10. Kanojia A, Kasliwal RR, Mittal S, Omar AK, Bhatia ML, Trehan N. Dynamic Three Dimensional Echocardiography In Patients With Valvular Disease Using Mixed Shading Technique Early EHIRC Experiene. Indian Heart J 1995;47:579 (abst).
- 11. Mittal S, Kasliwal RR, Kanojia A, Tandon S, Bhatia ML, Trehan N. Immediate Hemodynamic Effects Of Sequential External Counterpulsation (SECP) In Patients With Coronary Artery Disease And LV Dysfunction. Indian Heart J 1995;47:579 (abst).
- 12. Kasliwal RR, Mittal S, Agarwal S, Kanojia A, Omar AK, Rohatgi R, Bhatia ML, Trehan N. Our Experience With Digital Stress Echocardiography. Indian Heart J 1995;47:592 (abst).
- 13. Mittal S, Kaslkiwal RR, Kanojia A, Omar AK, Bhatia ML, Trehan N. Effect Of Sequential External Counter Pulsation On Renal Function In Patients With LV Dysfunction. Indian Heart J 1995;47:597(abst).
- 14. Omar AK, Kasliwal RR, Srivastava S, Mittal S, Kanojia, Bhatia ML, Trehan N. Multiplane Transesophageal Echocardiographic Assessment Of Hypertrophic Cardiomyopathy(With 3D Reconstruction). Indian heart J 1995; 47:609 (abst).

- Kasliwal RR, Shrivastava S, Kanojia A, Mittal S, Trehan N. TEE In Hypertrophic Cardiomyopathy. Ultrasound International March 1996.
- 15. Kasliwal RR, Mittal S, Kanojia A, Bhatia ML, Kronzon I, Trehan N. Sequential External Counterpulsation: An Adjunctive Therapy For Patients With Chronic Coronary Artery Disease And Left Ventricular Dysfunction. Indian Heart J March-April 1996;150-156.
- 16. Kanojia A, Kasliwal RR, Mittal S, Omar AK, Shrivastava S, Bhatia ML, Trehan N. Utility Of Sequential External Counter Pulsation In Stabilization Of Patients With LV Systolic Dysfunction. Indian Heart J,1996;48:5 (abst).
- 17. Kanojia A, Omar AK, Kasliwal RR, Mittal S, Bhatia ML, Trehan N. Potentials And Limitations Of Dynamic Three Dimensional Echocardiographic Evaluation Of Prosthetic Mitral Valve. Indian Heart J,1996;48;5(abst)
- 18. Kanojia A, Kasliwal RR, Mittal S, Srivastava S, Bhatia ML, Trehan N. Incremental Value Rendered Three Dimensional Echocardiography In Organic Tricuspid Valve Disease. Indian Heart J 1996;48:5(abst).
- 19. Kanojia A, Kasliwal RR, Omar AK, Mittal S, Bhatia ML, Trehan N. Does Volume Rendered Three Dimensional Echocardiography Provide More Comprehensive Delineation Of Endocarditis Associated Lesions: Initial Clinical Experience. Indian heart J 1996; 48:5 (abst).
- 20. Trehan N, Kohli VM, mehta Y, Mittal S, Kasliwal RR. Reduction Ventriculoplasty In Patients With Dilated Cardiomyopathy: Our Initial Experience. Indian Heart J 1996;48;5 (abst)
- 21. Bedi HS, Sharma VK, Kasliwal RR, Mittal S, Trehan N. Foreign Body In The Heart Images In Cardiovascular Medicine. Texas Heart Inst. Journal 1997;24:2,140-141.
- 22. Misra YK, Mehta Y, Juneja R, Kasliwal RR, Mittal S., Trehan N. Mammary Coronary Artery Anastomosis Without Cardiopulmonary Bypass Through A Mini-Thoractomy. Ann Thorac Surgery 1997; 63:5,114-118.
- 23. Kasliwal RR, Bhardwaj M, Shrivastava S, Omar AK, Mittal S, Kanojia A, Trehan N. A Comparative Study Of Extracranial Internal Carotid Artery Using Duplex Scanning And Colour Doppler Imaging With Angiography. Ultrasound International 1997;3:72-78.
- 24. Kanojia A, Kasliwal RR, Omar AK, Mittal S, Bhatia ML, Trehan N. Potentials And Limitations Of Transesophageal Rotational Approach For Three Dimensional Echocardiographic Evaluation Of Atrial Septal Defects In Adult Initial Clinical Experience: Indian Coll Cardiol 1997.
- 25. Kanojia A, Kasliwal RR, Bapna R, Mittal S, Pasricha V, Bhatia ML, Trehan N. Three Dimensional Echocardiographic Evaluation Of Mitral Commisural Morphology In Rheumatic Mitral Valve Disease A Surgical Validation Study. Indian Coll Cardiol, 1997.
- 26. Kanojia A, Kasliwal RR, Bapna R, Srivastava S, Mittal S, Omar AK, Bhatia ML, Trehan N. Three Dimensional Echocardiographic Evaluation Of Aortic Valve Morphology And Measurement Of Valve Area: Comparison With Surgical Findings. Indian Coll Cardiol 1997.
- 27. Mittal S, Shrivastava S; Echocardiography In Ischemic Heart Disease: Journal Of Internal Medicine 1997;8:3.

- 28. Mittal S, Kasliwal RR, Shrivastava S, Kanojia A, Mishra Y, Trehan N. Assessment Of LIMA Graft Flow By Transthoracic Echocardiography In Patients Undergoing Minithoracotomy Bypass Surgery: Asn Angiographic Validation. Indian Heart J 1997;49:6 (abst).
- 29. Kasliwal RR, Mittal S, Omar AK, Shrivastava S, Kanojia A, Bhatia ML, Trehan N. Benefits Of 3 Weeks Therapy With SECP In Patients With Coronary Artery Diseaseand LV Dysfunction. Indian Heart J 1997;49:6 (abst).
- 30. Mittal S, Kasliwal RR, Omar AK, Shrivastava S, Kanojia A, Bhatia ML, Trehan N. Long Term Benefits Of Sequential External Counterpulsation In Patients With Coronary Artery Disease And LV Dysfunction. Indian Heart J1997;49:6 (abst).
- 31. Kasliwal RR, Pasricha V, Kanojia A, Mittal S, Shrivastava S, Tandon S: Syndrome 'X' Revisited, Current Medical Trends 1998;2:415-423.
- 32. Mishra Y, Mehta Y, Mittal S, Mairal M, Karlekar A, Seth A, Kler TS, Trehan N. Mammary Coronary Artery Anastomosis Without Cardiopulmonary Bypass Through Minithoracotomy: One Year Clinical Experience. European Journal of Cardiothoracic Surgery 1998;14:531-537.
- 33. Trehan N, Kasliwal RR, Shrivastava S, Mittal S. Role Of Abdominal Duplex Scan In Patients After Cardiac Surgery. Indian Heart J 1998;50:6 (abst).
- 34. Kasliwal RR, Mittal S, Shrivastava S, Saxena A, Malhotra R, Mishra Y, Trehan N. Role Of Intraoperative Duplex Study Of LIMA Flow In Patients Undergoing Mini CABG. Indian Heart J 1998;50:6 (abst).
- 35. Kasliwal RR, Sodhi HS, Sharma RK, Paliwal VS, Mittal S, Shrivastava S, Pasricha V, Trehan N. Cardiac Diagnosis At Doorstep: Mobile Echocardiography A New Concept. Indian Heart J 1998;50:6 (abst).
- 36. Omar AK, Kumar V, Chandra N, Kapila D, Mittal S, Bhatia ML, Trehan N. Acute Myocardial Infarction In Young Patients Risk Factors, Clinical And Coronary Angiographic Profile. Indian Heart j 1998;50:6 (abst).
- 37. Shrivastava S, Saxena A, Mittal S, Kanojia A, Omar AK, Kasliwal RR. Safety Of Transesophageal Echocardiography In Awake Patients: A Study Of 4237 Consecutive Patients. Indian Heart J 1998;50:6 (abst).
- 38. Kasliwal RR, Pasricha V, Kanojia A, Mittal S, Shrivastava S, Tandon S. Syndrome 'X' Revisited. Current Medical Trends 1998;2:415-23.
- 39. Shrivastava S, Kasliwal RR, Kumar V, Bhardwaj M, Mittal S, Kanojia A, Omar AK, Trehan N. Should Carotid be Scanned Prior to Coronary Artery Bypass Graft Surgery. Journal of Indian Academy of Echocardiography 1999;Vol 4, No. 3.
- 40. Sharma BD, Mittal S, Shrivastava S, Kasliwal RR. Echocardiography in Diagnosis and Follow-up of Patients With Discrete Subvalvular Aortic Stenosis; Journal of Indian Academy of Echocardiography 1999; Vol. 4 No. 3.
- 41. Wasir H, Mehta Y, Mishra YK, Shrivastava S, Mittal S, Trehan N. Transesophageal Echocardiography in Hypotensive Post-Coronary Bypass Patients. Asian Cardiovasc Thorac Ann 2003;11:139-42.
- 42. Mittal S. Valvular Heart Disease: Mitral Regurgitation. Echocardiography Update (Indian College of Cardiology) 2002; Vol-I.
- 43. Mittal S, Bansal M, Kasliwal RR. Myocardial Viability Issues in CAD: Role of Echo. Echocardiography Update (Indian College of Cardiology) 2004; Vol-2.

- 44. Harpreet W, Mittal S, Mishra Y, Mehta Y, Yrehan N. Site-Specific Detection of Bleeder Using Transesophageal Echocardiography. Asian Cardiovascular & Thoracic Annals 2005;Vol 13,No 4.
- 45. Kohli V, Wasir H, Mittal S, Karlekar A, Mehta Y, Trehan N; Post-operative outcome of ventricular reshaping by septal exclusion in patients with severe left ventricular dysfunction; Indian Heart Journal 2005, 57: 44-48.
- 46. Mishra Y, Mittal S. Geometric Changes of the Annulus in Functional Mitral Valve Regurgitation following Off-Pump Repair Utilizing the Coapsys Device. ISMICS, June 2004.
- 47. Mishra Y, Mittal S. Differences in Mitral Valve Geometry in Patients with Post Infarction Functional Mitral Regurgitation are related to Infarct Territory. ISMICS, June 2004.
- 48. Mittal S, Uxa A, Sabir M, Shrivastava S, Kasliwal RR. Anti Anginal Effect of Enhanced External Counterpulsation Persists After Six Months in Patients with Angina. Indian Heart Journal Sept-Oct 2002; Vol 54, No. 5.
- 49. Kohli V, Wasir H, Mittal S, Karlekar A, Mehta Y, Trehan N. Mitral Valve Repair for Ischemic Mitral Regurgitation in Dilated Cardiomyopathy. Asian Cardiovascular & Thoracic Annals 2005; Vol 13, No. 3.
- 50. Kasliwal RR, Sidhu P, Bansal M, Mittal S. Efficacy of Enhanced External Counterpulsation in Patients with and without Diabetes Mellitus. Indian Heart J 2005;57:555.
- 51. Kasliwal RR, Bansal M, Sidhu P, Mittal S. Effect of Enhanced External Counterpulsation on Endothelial Dysfunction in Patients with and without Diabetes Mellitus. Indian Heart J 2005;57:556.
- 52. Mishra Y, Mittal S, Jaguri P, Trehan N. Coapsys Mitral Annuloplasty for Chronic Functional Ischemic Mitral Regurgitation: 1-Year Results. Ann Thorac Surg 2006; 81:42-6.
- 53. Mittal S, Soni P, Chauhan NS, Kasliwal RR. Normal Doppler and Color Flow Imaging. Echocardiography Update (Indian College of Cardiology) 2007; Vol-5.

# TRAINING PROGRAM (FOR PRIVATE PRACTITIONER)

FOLLOWING COURSES HELD AT EHIRC UNDER THE AEGIS OF THE IMA ACADEMY OF MEDICAL SPECIALITIES

- THE 1ST EHIRC AND IMA COURSE (8 WEEKS)
- CARDIOLOGY TODAY AND TOMORROW
- THE 2<sup>ND</sup> EHIRC AND IMA COURSE (8 WEEKS)
- CARDIOLOGY TODAY AND TOMORROW
- THE 3<sup>RD</sup> EHIRC AND IMA CO
- URSE (4 WEEKS)
- ECHOCARDIOGRAPHY IN CLINICAL DECISION MAKING
- XIth COMPREHENSIVE COURSE ON ECHOCARDIOGRAPHY at Sunder Lal Jain Hospital.

#### ORGANISER FOR THE FOLLOWING SCIENTIFIC MEETINGS

## ECHOCARDIOGRAPHY TODAY AND TOMORROW - 1995

- 1. ECHOCARDIOGRAPHY TODAY AND TOMORROW 1997
- 2<sup>nd</sup> International Symposium on Cardiovascular Surgery and Cardiology in the 2000.
- 3. CO-organizer for the Delhi Medical Association annual meeting held at Ashoka hotel New Delhi, June 2002.
- Chairman of Organizing Committee for the Asia Pacific Congress of Doppler Echocardiography held at Surya Hotel, New Delhi, Nov 2005.
- Chairman of Organizing Committee for HRPP 2013 Conference: Practical Solutions
  to Challenges in Research Ethics held on 29th & 30th June 2013 at The Leela
  Kempinski, Gurgaon.
- Course Co- Chairman at Echo and Cardiology held on 15<sup>th</sup> April 2017 at Leela Kempinski Gurgaon

7.

#### PERSONAL INFORMATION:

Name: Dr. Sanjay Mittal
Father Name: Mr N. K. Mittal
Date of Birth: 26.7.1965
Sex: Male

Marital Status: Married

Children: Two (Daughter And Son)

Nationality: Indian

Languages Known: English, Hindi

Address: Medanta THE MEDICITY

Sector-38, Gurgaon,

Haryana-122001, India +91-9910044477

Residence: 0124 – 4141414

Email id: sanjay.mittal@medanta.org

san mit@hotmail.com

Registration Number: 6657 (Delhi Medical Council)

LM-2146 -153(CSI)

HN-004672

#### **DECLARATION:**

Mobile:

I hereby declare that the information furnished above is true and correct to the best of my knowledge and belief.

Date: Place:	Signature
Trace.	Dr Sanjay Mittal