



# Highlights of current BIDMC Anesthesiology Resident activities, awards, and publications

## AMIT BARDIA, MD

PGC-1 $\alpha$  promotes recovery after acute kidney injury during systemic inflammation in mice. PMID: 21881206

## JACOB CLARK, MD

Interstitial Laser Thermal Therapy for Benign Prostatic Hyperplasia: Anesthetic Consideration  
Neesann Puangsuwan Marietta, M.D., Jacob Andrew Clark, M.D., Ajita Thakor Amin, M.D., M.S

Department Journal Club Resident Coordinator

## ERIN DANAHY, MD

SOAP Case Report published in Japanese Journal of Anesthesia

Global Health Initiative - Away Rotation Ethiopia Jan 2012

## CARIE FURUYA, MD

Furuya C, Warraich H, Matyal R. Literature Review - Higher Vs. Lower Positive End Expiratory Pressure in Patients with Acute Lung Injury and Acute Respiratory Distress Syndrome. SCA Bulletin, Vol 9, #4, August 2010

Associate member BIDMC Academy of Educators

ASA Poster Intraoperative Management of an Undiagnosed Paraganglioma Carolyn Furuya, MD and Robina Matyal, MD

## ANN HAU, MD

Chief Resident - 7/1/2011 - 6/30/2012

Global Health Fellowship July 2010

Development of departmental mock oral board curriculum

Applicant Dinner Chair 2010-2011

Research Project: Global Health in Anesthesiology Residency: Survey of Interest and Opportunities. This is an original project proposal. Mentor: Craig McClain, MD Children's Hospital and Carol Warfield, MD (1 Mo)

SOAP Case RPT: Virginia Apgar: Beyond the APGAR Score

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Applicant Dinner Chair 2010-2011

Global Health Initiative - Away Rotation Botswana April 2012

## KYLENE HALLORAN, MD

Resident GMEC Representative

Applicant Dinner Co-Chair 2011-2012

## GRACE HSU, MD

Global Health Fellowship July 2011

## ROMINA ILIC, MD

Chief Resident - 7/1/ 2011 - 6/30/2012

Romina G. Ilic, MD, Phil Hess, MD, Frank Sellke, MD, Michael Robich, MD, Robina Matyal, MD Neuropeptide Y leads to angiogenesis in the chronic myocardial ischemia porcine model. ASA Annual Meeting 10/2010

SCA MTG Poster: Cardiac tissue of diabetics has low levels of leptin and high levels of pro-apoptotic and anti-angiogenic factors. Romina G. Ilic, MD, Haider Warraich, MD, Feroze Mahmood, MD, Robina Matyal, MD

Research Project: Neuropeptide Y3-36 (NPY 3-36) and leptin pre-treated mesenchymal stem cells acquired from bone marrow reverses remodeling after myocardial infarction in a pig model of acute LAD ischemia. Mentor: Robina Matyal, MD.

## SUSIE JANG, MD

Agwu AL, Jang SS, Korthuis PT, Araneta MRG, Gebo KA. Pregnancy Incidence and Outcomes in Vertically and Behaviorally HIV-Infected Youth. JAMA. 2011;305(5):468-470.

## MELANIE KALMANOWICZ, MD

Residents as Teachers: A Multi-Media Web-Based Teaching Aid. Fisher LJ, Dalmia MK, Kalmanowicz MR, Marietta N, Patel SA, Pirzadeh S, Mitchell JD awarded first place for "best instructional exhibit" by the Post-graduate Assembly in Anesthesiology.

International Anesthesia Research Society 2011 Annual Meeting Vancouver, BC Scientific Exhibit 3rd Place Award Winner "Residents as Teachers" A Multi-Media Web-Based Teaching Aid" Lauren Fisher, DO; John Mitchell, MD; Manoj Dalmia, MD; Melanie Kalmanowicz, MD; Sohni Patel, MD; Solmaz Pirzadeh, MD; Geoffrey Hayward, MD' Aseem Kumar, MD; Neesann Marietta, MD

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SEA-HVO Fellowship Away Rotation Ethiopia Jan 2012

## NEESANN MARIETTA, MD

Abstract: Use of a Helium-Oxygen Mixture to Facilitate Ventilation During Bronchoscopy Through a Laryngeal Mask Airway J Intensive Care Med May 2010 vol. 25 no. 3 168-171

Interstitial Laser Thermal Therapy for Benign Prostatic Hyperplasia: Anesthetic Consideration Neesann Puangsuwan Marietta, M.D. Jacob Andrew Clark, M.D. Ajita Thakor Amin, M.D., M.S.

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## MARC MECOLI, MD

Chief Resident - 7/1/ 2011 - 6/30/2012

Resident GMEC Representative

Department Journal Club Resident Coordinator

Research Project: Preoperative TTE derived MPI and postoperative afib following thoracic surgery and validation of prior TEE study showing this association. Attached to Robina's project. Mentor: Robina Matyal, MD (1 Mo)

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## DAVID NICOLIA, MD

Research Project: TEE simulator curriculum for residents He is attached to John Mitchell's and Robina Matyal's. Mentor: John Mitchell, MD (1 Mo)

Associate member BIDMC Academy of Educators

## SOLMAZ PIRZEDAH, MD

Residents as Teachers: A Multi-Media Web-Based Teaching Aid. Fisher LJ, Dalmia MK, Kalmanowicz MR, Marietta N, Patel SA, Pirzadeh S, Mitchell JD awarded first place for "best instructional exhibit" by the Post-graduate Assembly in Anesthesiology.

SOAP Case RPT/Case Study: A 20 y.o. parturient with preeclampsia complicated by thyrotoxicosis and heart failure

International Anesthesia Research Society 2011 Annual Meeting Vancouver, BC Scientific Exhibit 3rd Place Award Winner "Residents as Teachers" A Multi-Media Web-Based Teaching Aid" Lauren Fisher, DO; John Mitchell, MD; Manoj Dalmia, MD; Melanie Kalmanowicz, MD; Sohin Patel, MD; Solmaz Pirzadeh, MD; Geoffrey Hayward, MD' Aseem Kumar, MD; Neesann Marietta, MD

## SHEILA RAJASHEKARA, MD

FAER Resident Scholar during the 2011 American Society of Anesthesiologists Annual Meeting

Transesophageal echocardiography: Rapid expansion in perioperative medicine in emerging economies - Are we ready for a safe and effective practice?" has been published in "Annals of Cardiac Anaesthesia B. Subramaniam, S. Rajashekara

## CAROLYN SENGAR, MD

Pilot Implementation of a Perioperative Protocol to Guide Operating Room-to-ICU Patient Handoffs Journal: Journal of Cardiothoracic and Vascular Anesthesia, date of publication TBD Authors: Petrovic M, Gill R, Camp M, Senger C, Chang T, Ling D, Kaiser L, Krenzischek D, Yanjun X, Jurdi Z, Martinez E, and Aboumatar H.

## VIPUL SHAH, MD

BIDMC Resident Research Course 2010-2011

Project: PPV based fluid optimization in pancreatic surgery. Original project

Pulse Pressure Variation directed fluid therapy in patients undergoing pancreatic resections (Mentor: Bala Subramaniam). Ongoing project.

## AMY VINSON, MD

Chair, Resident Special Projects 2011-2012 Chair, Resident Special Projects 2011-2012

Unresponsive Intra-Operative Oliguria: What Can Be Done in the Face of Mechanical Obstruction to Renal Blood Flow? ASSA Annual Meeting 10/2010

Project: National Survey of Anesthesia Residency Programs to determine the prevalence and nature of anesthesia resident support services. Original project. Mentor: John Mitchell, MD

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Chair, Resident Wellness Committee

## NICHOLAS WASSON, MD

Transesophageal Echocardiographic Monitoring in a Patient with Unanticipated Critical Aortic Stenosis during Vascular Surgery ASA poster

## GRANT YOUNG, MD

Young G, Jones SB. Preoperative Risk Management - Anesthesia. In: Sages Manual on Quality Outcome and Safety. Springer 2010

John Hedley-Whyte Award in Critical Care Medicine



# Department of Anesthesia, Critical Care and Pain Medicine

## Resident Class of 2012 Fellowship Programs

ELIZABETH COHEN, MD	Pediatric - Children's Hospital, St. Louis MO
ANN HAU, MD	Pediatric - Children's Hospital, Baylor TX
ROMINA ILIC, MD	Critical Care - BIDMC
NATHAN JONES, MD	Cardiothoracic - BIDMC
MELANIE KALMANOWICZ, MD	Critical Care - BIDMC
DAVID NICOLAI, MD	Pediatrics - Children's Hospital Boston
AMAR PARIKH, MD	Pain Management - BIDMC
VIPUL SHAH, MD	Critical Care - University of Washington, Seattle WA
AMY VINSON, MD	Pediatrics - Children's Hospital Boston
GRANT YOUNG, MD	Pediatrics - Children's Hospital Boston



## Elective Research Program – Research Methodology and Biostatistics

The Elective Research Program is a longitudinal program designed to introduce motivated resident to the principles and practice of clinical and translational research. At its core are two elements: a two-week series of intensive dietetics aimed at teaching residents the basics of how to conduct successful clinical research and a longitudinal mentored research project. Topics covered in the Elective Research Program include study design, biostatistics, novel research techniques, research ethics, and getting research approved.

The textbook “Designing Clinical Research” is also provided for all course participants. This highly successful and popular elective was developed by the BIDMC Department of Medicine under the direction of Dr. Ken Mukamal and Dr. Buck Strewler. Thanks to a spirit of collaboration engendered by our Chair, Dr. Brett Simon, Faculty from the Department of Anesthesia, Critical Care and Pain Medicine will also be teaching and facilitating elements of the course and Anesthesia Residents are active participants.

The aim of the program is to help residents take solid preliminary ideas and turn them into robust and successful projects to be completed during CA-3 research elective time. Publication of results in peer review journals is an expected outcome for participants. Once resident self-identifies an interest, the Anesthesia Program Director will assist them in finding appropriate mentorship from within our Department, Hospital, or the wider Harvard/MIT academic community. The cultivation of this mentorship relationship is a vital element of growth through the course and the research project.

As part of the application process, the resident works with their mentor to complete a description of their research project. Residents from the Department of Anesthesia apply for the course during the CA-1 or early CA-2 year. Participants are chosen based on level of interest, academic performance, and quality of the proposal.

A sample course schedule and list of previous projects is included. This exciting program is just one example of our Department’s commitment to academic excellence and resident education.

### 2011 Research Course Schedule

#### Week 1

TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
<b>Introduction</b> Conceiving Research Questions <b>Study Design</b> Collecting and Managing Data <b>Ethics and Compliance</b>	<b>Problem Set Review I</b> Building the Academic Career <b>Secondary Data Analysis</b> Choosing Study Subjects & Measurements <b>IRB Applications</b> Lessons from Past Years	<b>Grand Rounds</b> Problem Set Review II <b>Experimental Intervention</b> Biostatistics I: Doing it with frequency <b>Small Group Protocol Discussion</b>	<b>Biostatistics II: Doing it with confidence</b> Writing Abstracts and Manuscripts <b>Biostatistics IIA: Doing it with more confidence</b> Grant Writing

#### Week 2

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
<b>D300 Computer Workshop: Pub Med End Note</b> Clinical Data Repositories <b>Mentorship</b> Effective Web Searches	<b>M &amp; M</b> Problem Set Review III <b>Technology &amp; Drugs</b> <b>Small Group Statistics Review</b>	<b>Translational Research</b> Genomics <b>Small Group Protocol Discussion</b>	<b>Grand Rounds</b> Jeopardy <b>Advanced Imaging Techniques</b> Giving a Research Talk	<b>Proposal Presentations</b> Debriefing

This exciting program is just one example of our Department’s commitment to academic excellence and resident education.

**CONTACT PHONE: 617-754-2733**

## 2011 – 2012 Research Program Participants

RESIDENT	MENTOR	CATEGORY	PROJECT
Cooper, Edward (Ted)	Oren-Grinberg, Achikam, MD	Clinical Research	Management and Manifestations of Cardiovascular Disease in an Underserved Population
Ilic, Romia	Maytal, Robina, MD	Clinical Research	Neuropeptide Y3-36 (NPY 3-36) and leptin pre-treated mesenchymal stem cells acquired from bone marrow reverses remodeling after myocardial infarction in a pig model of acute LAD ischemia
Mecoli, Marc	Maytal, Robina, MD	Clinical Research	Preoperative TTE derived MPI and postoperative afib following thoracic surgery and validation of prior TEE study showing this association.
Shah, Vipul	Subramaniam Balachundhar, MD	Clinical Research	Pulse pressure directed fluid therapy in patients undergoing pancreatic resections
Black, Martin	Donnino, Michael, MD	Clinical Research	Use of Blood Transfusions in Early-Goal Directed Therapy for Sepsis
Cains, Laurie C.	Fazio, Sara, MD	Education	A medical student curriculum: diagnosis and management of lipid disorders
Cox, Kristin	Donnino, Michael, MD	Clinical Research	Determine if lactate level in patients with diabetic ketoacidosis is associated with ICU length of stay
Crotty, Bradley	Mantzoros, Chris, MD	Clinical Research	Adiponectin as a link between obesity and cancer; Two case controlled studies of Adiponectin in patients with chronic lymphocytic leukemia and pancreatic adenocarcinoma
Cusano, Natalie	Keil, Douglas , MD	Clinical Research	Association of polymorphisms in the gene encoding perilipin with bone mineral density in participants of the Framingham Osteoporosis Study
Davis, Eric	Schuppan, Detlaf, MD, PhD	Basic Science	Use of a model of spontaneously progressive biliary fibrosis in the Mdr2 knockout mouse to study mechanisms and efficacy of pharmacologic inhibitors of liver fibrosis in vivo
Franchetti, Katherine	Goldfine, Alison, MD	Clinical Research	The Role of GLP1 in promoting exaggerated insulin response and neuroglycopenia in patients who have undergone gastric bypass surgery