May 16th, 1:45 PM

Poster Session Program: 2017 UMass Center for Clinical and Translational Science Research Retreat

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1. **InVitro-Q: A High-throughput Biosensor Used to Evaluate the Mechanism of Phagocytosis of Macrophages Using Different Particles**  
Marynawal Abdou and Abiche Dewilde, PhD  
InVitroMetrix Corporation, Lowell MA

2. **Frequent Cannabis Users Have Reduced Odds for Non Alcoholic Fatty Liver Disease**  
Adeyinka C. Adejumo, MD, MS1,2, Nnaemeka Onyeakusi, MD, MPH3, Samson Alliu, MD, MPH4, Ogooluwa Ojelabi, MS5  
1University of Massachusetts Medical School; 2North Shore Medical Center Salem Hospital, Salem, MA; 3Bronx-Lebanon Hospital Center, Bronx NY; 4Maimonides Medical Center, Brooklyn NY

3. **The Utilization of Video Capsule Endoscopy in Patients with Peutz–Jeghers Syndrome**  
Yasir Al-Azzawi, MD1, Erik Holzwanger, MD1, David Cave, MD, PhD2  
1Department of Medicine1, Division of Gastroenterology2, UMass Memorial Medical Center

4. **Does Pre-Stroke Statin Use Influence Survival and Institutionalization after Hospital Discharge?**  
M. Alcusky, PharmD, MS1; AL Hume, PharmD2; KL Lapane, PhD1  
1University of Massachusetts Medical School; 2University of Rhode Island College of Pharmacy, Kingston, RI

5. **The "Double Loaded" LV: High Prevalence of Hypertensive LVH Preceding the Development of Severe Aortic Stenosis**  
Summer Aldrugh1, Neha Varma2, Colleen Harrington3, Matthew Parker3, Nikolaos Kakouros3, Gerard P. Aurigemma3  
1Department of Medicine, 2Division of Epidemiology, Department of Quantitative Health Sciences, 3Division of Cardiovascular Medicine, University of Massachusetts Medical School

6. **Predictors of Cardiac Mortality in the CCU: A Retrospective Study in a Tertiary Center**  
Summer Aldrugh1, Aditya Vaze1, Adedotun Anthony Ogunsua2, Gloria Shan1, Amrit Vinod3, Modupeola Diyaolu3, Craig Smith2  
1Department of Medicine, 2Division of Cardiovascular Medicine, 3School of Medicine, University of Massachusetts Medical School

7. **Association between Psychosocial Factors, Quality of Life and Atrial Fibrillation**  
Summer Aldrugh1, Mayank Sardana2, Darleen M. Lessard3, Jane S. Szczynski3, David D. McManus2  
1Department of Medicine, 2Division of Cardiovascular Medicine, 3Division of Epidemiology, Department of Quantitative Health Sciences, University of Massachusetts Medical School

8. **An Innovative Nurse-Managed Transition Clinic for Adolescents and Young Adults with Spina Bifida: A Pilot Study**  
Mohammad Alkawaldeh, PhD, MSN, RN1,2; Rebecca Sherlock, MSN, RN2; Estrada Carlos, PhD, MD, Erika Alkhawaldeh, LPN  
1College of Nursing, University of Massachusetts Amherst; 2Boston Children's Hospital; 3Massachusetts General Hospital

9. **The BCH-SBPR: A Multi-disciplinary Registry Collecting Longitudinal Data on Patients with Spina Bifida**  
Mohammad Alkawaldeh, PhD, MSN, RN1,2; Rebecca Sherlock, MSN, RN2; Estrada Carlos, PhD, MD2; Erika Alkhawaldeh, LPN3  
1College of Nursing, University of Massachusetts Amherst; 2Boston Children's Hospital; 3Massachusetts General Hospital

10. **The Effectiveness of Tablet-based application for Older Adults with Diabetes Mellitus Type II: A Pilot Study**  
Mohammad Alkawaldeh, PhD, MS, RN1; Cynthia Jacelon, PhD, RN, FGSA, FAAN1; Jeungok Choi, PhD1; Jenna Marquard, PhD2, John Ridgway, PhD3  
1College of Nursing, 2College of Engineering, University of Massachusetts Amherst; 3Massachusetts College of Art and Design, Boston, MA
11. Broad Repertoire of T Cell Autoreactivity Directly from Islets of Donors with Type 1 Diabetes (T1D)
Jenny Aurielle B. Babon¹, Megan E. DeNicola¹, David M. Blodgett¹, Inne Crèvecoeur¹, Thomas S. Buttrick³, René Maehr⁴, Rita Bottino⁵,⁶, Ali Najj⁷, John Kaddis⁸, Wassim Elyaman⁹, Eddie A. James⁹, Rachana Haliyur¹⁰, Marcela Brissova¹⁰, Lut Overbergh¹¹, Alberto Pugliese¹¹, Martha Campbell-Thompson¹¹, Clayton Mathews¹¹, Mark A. Atkinson¹³, Alvin C. Powers¹⁰,¹⁴,¹⁵, David M. Harlan¹, Sally C. Kent¹
¹Division of Diabetes, Diabetes Center of Excellence, Department of Medicine, University of Massachusetts Medical School; ²Laboratory for Clinical and Experimental Endocrinology, Department of Clinical and Experimental Medicine, KU Leuven, Leuven, Belgium; ³Ann Romney Center for Neurologic Diseases, Brigham and Women’s Hospital and Harvard Medical School, Boston, MA; ⁴Program in Molecular Medicine, Diabetes Center of Excellence, University of Massachusetts Medical School; ⁵Institute of Cellular Therapeutics, Allegheny-Singer Research Institute, Pittsburgh, PA; ⁶Department of Biological Sciences, Carnegie Mellon University, Pittsburgh, PA; ⁷Institute for Diabetes, Obesity, and Metabolism, University of Pennsylvania School of Medicine, Philadelphia, PA; ⁸Department of Information Sciences, Beckman Institute, City of Hope, Duarte, CA; ⁹Benaroya Research Institute at Virginia Mason, Seattle, WA; ¹⁰Division of Diabetes, Endocrinology and Metabolism, Department of Medicine, Vanderbilt University Medical Center, Nashville, TN; ¹¹Department of Immunology and Microbiology, University of Colorado School of Medicine, Denver, Anschutz Medical Campus, Aurora, CO; ¹²Diabetes Research Institute, University of Miami, Miami, FL; ¹³Departments of Pathology, Immunology, and Laboratory Medicine, University of Florida, Gainesville, FL; ¹⁴Department of Molecular Physiology and Biophysics, Vanderbilt University, Nashville, TN; ¹⁵VA Tennessee Valley Healthcare System, Nashville, TN

12. Geographic Variation in Hospital Costs Associated with Isolated Coronary Artery Bypass Grafting
Ricardo Bello, MD¹, Wei Huang, PhD¹, Jennifer Walker, MD¹, William Hoffman, MD², Christina Vassileva, MD¹
¹Department of Surgery, ²Department of Anesthesiology, University of Massachusetts Medical School

13. Trends in Cause of Death among Puerto Rican and United States Multiple Myeloma Patients
Castañeda-Avila MA, MS¹; Ortiz-Ortiz KJ, DrPH²; Torres-Cintrón CR, MPH²; Epstein MM, ScD³
¹Graduate School of Biomedical Sciences, University of Massachusetts Medical School; ²Puerto Rico Comprehensive Cancer Center; ³Meyers Primary Care Institute and the Department of Medicine, University of Massachusetts Medical School

14. The Effects of Early Adoption of Academic Electronic Health Records System (EHRs) on Patient Outcome in Nursing
Joohyun Chung, PhD, MStat, RN¹, Donghui Yan, PhD², Gray Davis, PhD²
¹Adult Department, College of Nursing, ²Department of Mathematics, College of Art and Sciences, University of Massachusetts Dartmouth

15. Gastrointestinal Perforations: Examining the Overlooked Unintentional Consequences of Our Nation’s Epidemic of Antibiotic Exposure
Vijaya T. Daniel MD, MPH¹,², Stacy B. Sanders MD, MS, MHA¹,², Didem Ayturk MS³, Beth A. McCormick PhD⁴, Heena P. Santry MD, MS²,⁴ ²Surgical Research Scholars, Department of Surgery, ³Department of Surgery, ⁴Center for Microbiome Research, ⁵Department of Quantitative Health Sciences, University of Massachusetts Medical School

16. Impact of Body Mass Index and Weight Change on Risk of Recurrence in Patients Treated for Endometrial Adenocarcinoma
Geneva A. DeGregorio, BA, Katherine G. Leung, MPH, Leslie S. Bradford, MD
Department of Obstetrics and Gynecology, University of Massachusetts Medical School

17. C1QBP Inhibits DUX4-Dependent Gene Activation and can be Targeted with 4MU
Alec M. DeSimone¹,², Genila Bibat³, Kathryn Wagner³, Guido Stadler⁴, Woodring E. Wright⁵, John Leszyk⁶, and Charles P. Emerson, Jr.¹,² ¹Wellstone Center for FSHD Research; ²Department of Neurology, University Of Massachusetts Medical School; ³Center for Genetic Muscle Disorders, Kennedy Krieger Institute, Johns Hopkins School of Medicine, Baltimore, MD; ⁴Department of Cell Biology, University of Texas Southwestern Medical Center, Dallas TX; ⁵Proteomics and Mass Spectrometry, University Of Massachusetts Medical School

Eileen Diggins, BA, Andrew Zimmerman, MD, Kanwaljit Singh, MD, Susan Connors, MD
Division of Neurology, Department of Pediatrics, University of Massachusetts Medical School
19. Altered Baroreflex-Mediated Cardiovascular Responses to Acute Hypotension in Heart Failure Patients Compared to Healthy Adults
Rachel C. Drew, PhD1,2, Chelsea N. Lindblad, MS3, Soraya M. Samii, MD, PhD2, Cheryl A. Blaha, RN2, Michael J. White, PhD4, Lawrence I. Sinoway, MD2
1Department of Exercise and Health Sciences, University of Massachusetts Boston; 2Penn State Heart and Vascular Institute, Penn State College of Medicine, Hershey, PA; 3Penn State College of Medicine, Hershey, PA; 4School of Sport, Exercise and Rehabilitation Sciences, University of Birmingham, Birmingham, UK

Michelle L. Dubuke1,2, Guillaume L. Poirer3, Laurellee Payne3, Arlene Lim4, Pranoti Mandrekar4, Constance M. Moore3, Jean A. King3, Scott A. Shaffer1,2
1Department of Biochemistry and Molecular Pharmacology, 2Proteomics and Mass Spectrometry Facility, 3Center for Comparative Neuroimaging, 4Department of Medicine, University of Massachusetts Medical School

21. Effects of Positive Regard and Induced Social Stress on Cognitive Function: A Psychophysiological Perspective
Sherief Y. Eldeeb1, Kate Romero2, Kymberlee O'Brien, PhD2
1Department of Psychology, Clark University; 2Department of Social Science and Policy, Worcester Polytechnic Institute

22. Survivors of an Acute Coronary Syndrome with Lower Patient Activation Are More Likely to Experience Declines in Health-Related Quality of Life
Nathaniel A. Erskine, BA1, Barbara Gandek, PhD1,2, Molly E. Waring, PhD1, Rebecca L. Kinney, MPH1, Darleen M. Lessard MS1, Randolph S. Devereaux PhD, MSPH1, Stavroula A. Chrysanthopoulou PhD1, Catarina I. Kiefe, PhD, MD1, Robert J. Goldberg, PhD1
1Department of Quantitative Health Sciences, University of Massachusetts Medical School; 2John Ware Research Group, Watertown, MA; 3Mercer University College of Medicine, Macon, GA

23. Functional vs. Traditional Resistance Training: Affective Response and Exercise Enjoyment in College-Age Females
Jamie Faro, MS1, Jessica Whiteley, PhD1, Laura L. Hayman, PhD2
1Department of Exercise and Health Sciences; 2Department of Nursing, University of Massachusetts Boston

24. Identification and Characterization of Human Monoclonal Antibodies for Immunoprophylaxis against Enterotoxigenic Escherichia coli
Serena Giuntini, Matteo Stoppato, Maja Sedic, Monir Ejemel, Danielle Wisheart, Mark S. Klempner, Yang Wang
MassBiologics of UMMS, Boston, MA

25. Understanding the Structure of Amyloid Fibrils using Atomic Force Microscopy (AFM) to Design New Therapeutic Strategies for Neurodegenerative Diseases
Sumeyra Gokalp, MS and Michelle Foster, PhD
Department of Chemistry, University of Massachusetts Boston

Miriam A. Goldberg1, Leigh R. Hochberg2, Dawn Carpenter3, Johnny Isenberger2, Stephen O. Heard4, J. Matthias Walz4
1Graduate School of Biomedical Sciences, University of Massachusetts Medical School; 2Department of Neurology, Massachusetts General Hospital, Boston, MA and Department of Engineering, Brown University; 3UMass Graduate School of Nursing; 4Department of Anesthesiology & Perioperative Medicine, University of Massachusetts Medical School

27. Testing a Novel Manual Communication System for Mechanically Ventilated ICU Patients
Miriam A. Goldberg1, Leigh R. Hochberg2, Dawn Carpenter3, Johnny Isenberger2, Stephen O. Heard4, J. Matthias Walz4
1Graduate School of Biomedical Sciences, University of Massachusetts Medical School; 2Department of Neurology, Massachusetts General Hospital, Boston, MA and Department of Engineering, Brown University; 3UMass Graduate School of Nursing; 4Department of Anesthesiology & Perioperative Medicine, University of Massachusetts Medical School

28. Pericardial Fat Thickness Increases with Greater Burden of Adverse Metabolic Factors Among Adults with Normal-Range Body Mass Index: The Framingham Heart Study
Philimon N. Gona, PhD1, Jane J. Lee, MD2, Noriko Oyama-Manabe, MD, PhD3, Carol J. Salton, BA4, Warren J. Manning, MD4, Michael L. Chuang, MD4, Christopher J. O'Donnell, MD, MPH5
1University of Massachusetts Boston; 2Boston Children's Hospital, Boston, MA; 3University of Hokkaido, Sapporo, Japan; 4Beth Israel Deaconess Medical Center, Boston, MA; 5VA Boston Healthcare System, Boston, MA
29. Teen Distracted Reality an Interactive Virtual Education (D.R.I.V.E.): Experience and Impact on Teenage Drivers
Jonathan Green, MD1, Gregory Keefe, BS2, Rachelle N. Damle, MD, MS3, Pradeep P. Nazarey, MD4, Jeremy T. Aiden, MD5, Mariann Manno, MD, EdM6, Michael P. Hirsh, MD7
1Division of Pediatric Surgery, Department of General Surgery; 2University of Massachusetts Medical School; 3Division of Pediatric Emergency Medicine, Department of Pediatrics, University of Massachusetts Medical School

30. Evolution of the Alpha-1 Antitrypsin Muscle Gene Therapy: Translation from Clinical Trial to Benchtop and Back Again
Alisha M. Gruntman DVM, PhD1,2,5, Gwladys Gernoux PhD1, Gensheng Wang PhD3, Janet Benson PhD3, Jeff Chulay MD4, Dave Knop4, Christian Mueller PhD1,5, Terence R Flotte MD1,5
1Horae Gene Therapy Center, University of Massachusetts Medical School; 2Department of Clinical Sciences, Tufts Cummings School of Veterinary Medicine; 3Lovelace Respiratory Research Institute; 4Applied Genetics Technologies Corporation; 5Department of Pediatrics, University of Massachusetts Medical School

31. A Randomized Controlled Trial of Community Health Workers Using Patient Stories to Support Hypertension Management: Preliminary Results
J. Lee Hargraves, PhD1, Debra Bonollo, BA2, Warren Ferguson, MD, MPH2, Elizabeth Orvek, MS, MBA3
1American Institutes for Research (AIR); 2Family Medicine and Community Health, 3Quantitative Health Sciences, University of Massachusetts Medical School

32. The Home Matters: Adolescents Drink More SSB’s When Available at Home
Christina F. Haughton, MPH1, Molly Waring, PhD2, Lori Pbirt, PhD1, Milagros C. Rosal, PhD1, Stephenie C. Lemon, PhD1
1Department of Preventative and Behavioral Medicine, 2Department of Quantitative Health Sciences, University of Massachusetts Medical School

33. Video Capsule Endoscopy in Patients with Muir-Torre Syndrome
Erik Holzwanger, MD1, Yasir Al-Azzawi, MD1, David Cave, MD, PhD2
Department of Medicine1, Division of Gastroenterology2, UMass Memorial Medical Center

34. Pleural Sepsis Associated with High Mortality in Orthotopic Liver Transplantation Recipients
Erik Holzwanger, MD1, Soumil Patwardhan, MBBS1, and Sunkaru Touray, MBChB2, Daniel B. Knox, MD2
Department of Medicine1, Department of Pulmonary Allergy & Critical Care Medicine2, UMass Memorial Medical Center

35. Theoretical and Experimental Analysis of the Antioxidant Features of Phenol and Aniline Model Compounds
William Horton, Swarada Peerannawar, Clifford J. Ellstrom, Béla Török, Marianna Török
Department of Chemistry, University of Massachusetts Boston

36. Emergency Department Super-utilizer Program Involvement: Pilot Data and Methods Challenges
Colette Houssan, BA, Arlene Ash, PhD, Rachel Davis-Martin, PhD, Laurel Banach, BA, Eric Dickson, MD, Edwin Boudreaux, PhD
Department of Emergency Medicine, University of Massachusetts Medical School

37. Collaborating to Cure the Most Common Parasites on the Planet
Yan Hu, Jason Noon, Ambily Abraham, Hanchen Li, Florentina Rus, Deysy Tatiana Pinto Rodriguez, Gary Ostroff, and Raffi Aroian
Program in Molecular Medicine, University of Massachusetts Medical School

38. Resident and Facility-level Correlations of Long-term Opioid Use in United States Nursing Homes
Jacob N. Hunnicutt, MPH1; Christine Ulbricht, PhD1; Anne Hume, PharmD2; Kate Lapane, PhD1
1University of Massachusetts Medical School; 2University of Rhode Island, Kingston, RI

39. Oxycodone Ingestion Patterns in Acute Fracture Pain: a Pilot Study Using a Digital Pill
Brendan J. Innes1, Peter R. Chai, MD, MMS2,3, Stephanie C. Carreiro, MD2, Brittany Chapman2, Matthew K. Griswold, MD2, Edward W. Boyer, MD, PhD2,3
1School of Medicine, 2Division of Medical Toxicology, Department of Emergency Medicine, University of Massachusetts Medical School; 3Division of Medical Toxicology, Department of Emergency Medicine, Brigham and Women’s Hospital
40. Health Applications of Network Science and Computational Social Science
James A. Kitts, PhD
Computational Social Science Institute, Department of Sociology, University of Massachusetts Amherst

41. Selective Environmentally Benign Synthesis of Isotope Labeled Compounds: Introduction of Deuterium into Compounds of Medicinal Relevance
Anne Kokel, Dora Kadish, Béla Török
Department of Chemistry, University of Massachusetts Boston

42. Combination Photodynamic Therapy and Chemotherapy for Temozolomide-Resistant Glioblastoma
Janel Kydd, MS¹, Rahul Jadia, MS¹, Prakash Rai, PhD¹,²
¹Biomedical Engineering and Biotechnology Program, ²Department of Chemical Engineering, University of Massachusetts Lowell

43. Pharmacotherapy Use in Older Patients with Heart Failure and Reduced Ejection Fraction Living in Skilled Nursing Facilities
Lin Li, PhD¹, Bill M. Jesdale, PhD¹, Anne Hume, PharmD², Giovanni Gambassi, MD³, Robert J. Goldberg, PhD¹, Kate L. Lapane, PhD¹
¹Department of Quantitative Health Sciences, University of Massachusetts Medical School; ²University of Rhode Island College of Pharmacy, Kingston, RI; ³Department of Medical Sciences, Division of Internal Medicine and Angiology, Catholic University of Sacred Heart, Largo Agostino Gemelli, Rome, Italy

44. Sex Differences in Neighborhood Perceptions and Physical Activity among Older Adults Living in Car-dependent Neighborhoods
Wenjun Li¹, Elizabeth Procter-Gray¹, Linda Churchill¹, Scott Crouter², Kevin Kane¹, Jie Cheng¹, Fuding Rui¹, Jie Tian¹, Patricia Franklin³, Judith Ockene¹, Jerry Gurwitz¹, MD
¹Department of Medicine, University of Massachusetts Medical School; ²Department of Kinesiology, Recreation, and Sport Studies, University of Tennessee Knoxville; ³Department of International Development, Community, and Environment, Clark University; ⁴Department of Orthopedics and Physical Rehabilitation, University of Massachusetts Medical School

45. Clot Characterization in Acute Ischemic Stroke
Joshua Litchman, BA¹, Juyu Chueh, PhD¹, Rose Arslanian¹, Srinivasan Vedantham, PhD¹, Sarena Carniato⁵, David Rex, MD, PhD³, Mary Howk, MS¹, Matthew Gounis, PhD¹, Ajit Puri, MD, PhD³
¹New England Center for Stroke Research, University of Massachusetts Medical School; ⁵Department of PreClinical Science, Stryker Neurovascular

46. A Novel Bromodomain and Extra-terminal Domain Inhibitors (BETi) that Reverses HIV-1 Latency
Shuai Liu¹, Huachao Huang², Maxime Jean², Wei Zhang¹, Jian Zhu²
¹Department of Chemistry, University of Massachusetts Boston; ²Department of Microbiology and Immunology, University of Rochester Medical Center, Rochester, NY

47. Emotional Eating is Associated with Intake of Energy-dense Foods in Latinos
Andrea Lopez-Cepero, MHSN¹,², Christine Frisard, MS², Stephenie C. Lemon, PhD², and Milagros C Rosal, PhD²
¹Clinical and Population Health Research Program, Department of Quantitative Health Sciences, Division of Preventive and Behavioral Medicine, Department of Medicine, University of Massachusetts Medical School

48. Poly (GR) in C9ORF72-related ALS/FTD Compromises Mitochondrial Function and Increases Oxidative Stress and DNA Damage in iPSC-derived Motor Neurons
Rodrigo Lopez-Gonzalez, PhD¹, Yubing Lu, PhD¹, Tania F. Gendron, PhD², Anna Karydas³, Helene Tran, PhD¹, Dejun Yang, PhD¹, Leonard Petrucelli, PhD², Bruce L. Miller, MD³, Sandra Almeida, PhD¹, and Fen-Biao Gao PhD¹
¹Department of Neurology, University of Massachusetts Medical School; ²Department of Neuroscience, Mayo Clinic Florida, Jacksonville, FL; ³Memory and Aging Center, Department of Neurology, University of California, San Francisco, San Francisco, CA

49. Hepatic Changes Associated with Chronic Alcohol Exposure in an Alpha-1 Antitrypsin PiZ Mouse Model
Zhuoyao Lyu¹, Alisha M. Gruntman DVM, PhD¹,², Brian O’Sullivan-Murphy MD, PhD³, Christian Mueller PhD¹,², Terence R Flotte MD¹,²
¹Horae Gene Therapy Center, University of Massachusetts Medical School; ²Department of Clinical Sciences, Tufts Cummings School of Veterinary Medicine; ³Lovelace Respiratory Research Institute; ⁴Department of Pediatrics, University of Massachusetts Medical School

50. Black-White Disparities in Pain Management among Nursing Home Residents with Cancer
Deborah Mack, MPH¹, Jacob Hunnicutt, MPH¹, Bill Jesdale, PhD², Christine Ulbricht, PhD², Kate Lapane, PhD²
51. Affordable Pressure Ulcer Prevention: Device, System and Algorithm
John McNeill, PhD1, Yitzhak Mendelson, PhD1, Raymond Dunn, MD2, Xinming Huang, PhD1, Devdip Sen1 Kelli Hickle MD2
1Worcester Polytechnic Institute, Worcester, MA; 2University of Massachusetts Medical School

52. Cancer Diagnosis using LIBS and Machine Learning Tools: Progress and Challenges
Noureddine Melikechi, PhD1, Rosalba Gaudioso, PhD1,2, Ebo Ewusinan, PhD1
1Department of Physics and Applied Physics, University of Massachusetts Lowell; 2Institute of Nanotechnology Nanotec-CNR, Italy

53. PLANET MassCONECT – Community-engaged Capacity-building Around Evidence-based Programs: Key Takeaways
Sara Minsky, MPH1, Carmenza Bruff, BS1, Diana Cortes, BA1, Shoba Ramanadhan, ScD, MPH1,2, Kasisomayajala Viswanath, PhD1,2, PLANET MassCONECT Community Partners Advisory Committee (names and affiliations to be highlighted on poster)
1Center for Community-based Research, Dana-Farber Cancer Institute, Boston, MA; 2Department of Social and Behavioral Sciences, Harvard T.H. Chan School of Public Health, Boston, MA

54. Variable Knowledge, Use and Perceptions of the IMPACT Model among Physicians during Prognostication Meetings for Critically-ill Traumatic Brain Injury Patients – Results from a Qualitative Study
Jesse Moskowitz, BS1; Thomas Quinn, BS1; Muhammad W. Khan, MBBS1; Lori Shutter, MD2; Robert Goldberg, PhD3; Nananda Col, MD, MPP, MPH1; Kathleen M. Mazor, EdD3,6; Susanne Muehlischlegel, MD, MPH1,7,8
1Departments of Neurology (Neurocritical Care), University of Massachusetts Medical School; 2Departments of Critical Care Medicine and Neurology, University of Pittsburgh School of Medicine, Pittsburgh, PA; 3Department of Quantitative Health Sciences, University of Massachusetts Medical School; 4Shared Decision Making Resources, Georgetown, ME; 5Meyers Primary Care Institute, 6Internal Medicine, 7Anesthesiology/Critical Care and 8Surgery, University of Massachusetts Medical School

Khaja Muneeruddin1,2, Bindesh Shrestha5, Hernandez Olivos5, Sophia Todeasa3,4, Eleonora DAmbrosio3,4, Miguel Sena-Esteves3,4, and Scott A. Shaffer1,2
1Department of Biochemistry and Molecular Pharmacology, 2Proteomics and Mass Spectrometry Facility, 3Department of Neurology, 4Gene Therapy Center, University of Massachusetts Medical School; 5Waters Corporation, Milford, MA

56. The Smoking Paradox in the Development of Psoriatic Arthritis among Psoriasis Patients – A Population-Based Study
Uyen-Sa D. T. Nguyen, DSc, MPH1,2, Yuqing Zhang, DSc, MPH1,2, Na Lu, MPH1,2, Qiong Louie-Gao, PhD2, Jingbo Niu, DSc, MPH2,4, Thorvador J. Love, MD5, Alexis Ogdie, MD, MSCE5, Joel M. Gelfand, MD, MSCE6, Michael P. LaValley, PhD5, Maureen Dubreuil, MD, MSc6, Jeffrey A. Sparks, MD, MMSC7, Elizabeth W. Karlson, MD7, Hyon K. Choi, MD, DrPH2,3
1University of Massachusetts Medical School; 2Boston University School of Medicine; 3Massachusetts General Hospital, Harvard Medical School; 4Baylor Medical School; 5University of Iceland; 6University of Pennsylvania Perelman School of Medicine; 7Brigham and Women’s Hospital, Harvard Medical School

57. Racial Differences in the Effectiveness of Total Knee Arthroplasty (TKA) on Postoperative Pain and Function
Uyen-Sa D. T. Nguyen, DSc, MPH, Anthony Porter, MD, Wenjun Li, PhD, Wenyun Yang, MS, David C. Ayers, MD, and Patricia D. Franklin, MD MBA MPH
Department of Orthopedics and Physical Rehabilitation, University of Massachusetts Medical School

58. Utilizing Mucosal Protrusion Angles to Discriminate Between True and False Masses of the Small Bowel on Video Capsule Endoscopy
Michael G. Noujaim MSc1, May Min MD2, David Cave MD/PhD2,3
1University of Massachusetts Medical School; 2Department of Internal Medicine, 3Division of Gastroenterology, University of Massachusetts Medical School

59. Macroglossia in Inclusion Body Myositis
Jatinder S. Patti, MD, Kate Daniello, MD, Lan Qin, MD
Department of Neurology, University of Massachusetts Medical School
60. Dermatomyositis as Paraneoplastic Manifestation of Tonsillar Squamous Cell Carcinoma
Jatinder S. Patti, MD, Kate Daniello, MD, Lan Qin, MD
Department of Neurology, University of Massachusetts Medical School

61. Using Hospital Discharge Data to Assess Trends of Carbapenem-resistant Enterobacteriaceae in Rhode Island
Seth Peters, MPH, and Sarah Hart Shuford, MPH
Center for Acute Infectious Disease Epidemiology, Division of Preparedness, Response, Infectious Disease, and Emergency Medical Services, Rhode Island Department of Health

62. Fetal and Childhood Effects of Children Exposed to Opioids, Opioid Maintenance Therapy (OMT), and Methamphetamine In Utero
Seth Peters, MPH¹,²
¹First Faculty of Medicine, Charles University, Prague, Czech Republic; ²Rhode Island Department of Health

63. Building Better Tumor Models In Vitro: An Investigation into the Improvement of 3D Cell Culture Techniques
Brandon Piel¹, Micheal Doane¹,², Praveena Velpurisiva², Prakash Rai¹
¹Department of Chemical Engineering, ²Department of Biomedical Engineering and Biotechnology, ³Department of Biological Sciences, University of Massachusetts Lowell

64. Misclassification of Healthy Eating Based on Food Frequency Questionnaires and 24-hour Dietary Recalls in Older Men and Women
Elizabeth Procter-Gray, Barbara Olendzki, Kevin Kane, Linda Churchill, Rashelle Hayes, Annabella Aguirre, Hyung-Joo Kang, Wenjun Li
Department of Medicine, University of Massachusetts Medical School

65. “Can’t You Just Say?” – Contrasting Communication Preferences between Surrogate Decision-Makers and Physicians during Outcome Prognostication in Critically-III Traumatic Brain Injury Patients
Thomas Quinn, BS¹; Jesse Moskowitz, BS¹; Muhammad W. Khan, MBBS¹; Lori Shutter, MD²; Robert Goldberg, PhD³; Nananda Col, MD, MPP, MPH⁴; Kathleen M. Mazor, EdD⁵,⁶; Susanne Muehlenschlegel, MD, MPH⁷,⁸
¹Department of Neurology (Neurocritical Care), ²Departments of Critical Care Medicine and Neurology, University of Pittsburgh School of Medicine, ³Department of Quantitative Health Sciences, ⁴Shared Decision Making Resources, Georgetown, ME, ⁵Meyers Primary Care Institute, ⁶Internal Medicine, ⁷Anesthesiology/Critical Care and ⁸Surgery, University of Massachusetts Medical School

66. Combined Active Humoral and Cellular Immunization Approaches for the Treatment of Synucleonopathies
Edward Rockenstein¹, Gary Ostroff⁵, Fusun Dikengil³, Florentina Rus², Michael Mante¹, Jazmin Florio¹, Anthony Adame¹, Ivy Trinh¹, Cassia Overk¹, Eliezer Masliah¹ and Robert Rissman¹
¹Department of Neurosciences, University of California, San Diego, La Jolla, CA; ²Program in Molecular Medicine, and ³Internal Medicine, University of Massachusetts Medical School

67. Liposomal Bupivacaine in Total Knee Arthroplasty: Preliminary Results of a Two-Surgeon, Retrospective Study
Hayden B. Rockson, MD, MA¹, Jeffrey N. Metzmaker, MD¹, David C. Ayers, MD¹, Anthony L. Schwagerl, MD, PhD²
¹Department of Orthopedic Surgery, UMass Memorial Medical Center; ²Long Island Anesthesiologists

68. Defining Success in Perioperative Care Pathways for Hip Fracture Patients
Hayden Rockson, MD, MA¹, Brian Clair, MD¹, Christine Motzkus², Amrit Vino², Michael Schoor, MD³, Matthew Stebulis, MD³, Mark Kraus, MD¹
¹Department of Orthopedics, UMass Memorial Medical Center; ²University of Massachusetts Medical School; ³Department of Anesthesia and Perioperative Care, UMass Memorial Medical Center

69. Assessment of a Novel Pediatric Resident Simulation Curriculum
Kyle Schoppel MD¹, Christopher Lops MD², Nicholas Cormier³, Alanna Hickey³, Suzanne Sprague MD¹, Peter Sell DO⁵, Kathryn Wynne MD⁵, Anne Weaver, BSN RN CCRN⁶, Stacey Valentine MD, MPH⁶
¹Department of Pediatrics (Chief-Resident), ²Departments of Medicine and Pediatrics (Chief-Resident), ³University of Massachusetts Medical School, ⁴Division of Pediatric Critical Care, ⁵Division of Pediatric Hospital Medicine, ⁶Department of Nursing, University of Massachusetts Medical School and UMass Memorial Medical Center

70. Development and Evaluation of a Mentorship to Hire Program for Facilitating Nursing Role Development and Transition to Practice
Monika S. Schuler, PhD, RN, CNE
College of Nursing, University of Massachusetts Dartmouth

71. Feasibility, Safety and Acceptability of Soy-Based Diet for Pregnant Women: Preliminary Results from a Pilot Randomized Controlled Trial
Ling Shi, PhD¹, Vidya Iyer, MD², Errol Norwitz, MD², Tiffany A. Moore Simas, MD³, Nirupa R Matthan, PhD⁴, Alice H. Lichtenstein, ScD⁴, Laura L. Hayman, PhD⁵
72. Recruiting Low Income Post-Partum Women into a Weight Loss Trial: In-Person versus Facebook Delivery
Valerie J. Siffee, PhD; Andrea Lopez-Cepero, MPH; Stephenie C. Lemon, PhD; Milagros C. Rosal, PhD
University of Massachusetts Medical School

73. In Vivo Protection with Human Monoclonal Antibody S315 following Challenge with Diphtheria Toxin
Heidi L. Smith, MD, PhD1; Maria Lobikin, PhD1; Wenda Gao, PhD2; Greg Saia, PhD1; Yang Wang, PhD1; Mark Leney, PhD1; Deborah C. Molrine, MD, MPH1
1MassBiologics of UMMS, Boston, MA; 2Antigen Pharmaceuticals, Boston, MA

74. Caste Matters: Perceived Discrimination among Women in Rural India
Apurv Soni1, Jasmine Khubchandani1, Nisha Fahey1, Nitin Raithatha2, Anusha Prabhakaran3, Nancy Byatt1, Tiffany A Moore Simas1, Ajay Phatak2, Milagros Rosal3, Somashekhar Nimbalkar2, Jeroan J Allison1
1University of Massachusetts Medical School; 2Pramukhswami Medical College, Karamsad, India

75. Developing a Community-Based Screening and Referral Mechanism for Atrial Fibrillation in Low Resource Settings: “Smartphone Monitoring for Atrial Fibrillation in Real-Time – India (SMART-India)”
Apurv Soni1, Nisha Fahey1, Harshil Patel2, Kandarp Talati2, Anna Handorf3, John Bosstrom4, Shyamsundar Raithatha5, Ravi Shah5, Sunil Karna5, Robert Goldberg5, Jeroan J Allison1, Ki Chon5, Somashekhar Nimbalkar2, David D. McManus1
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76. Exploring the Contributions of Local Health Departments in Land Use and Transportation Policy: Implications for Cross-sector Collaboration
Meera Sreedhara, MPH1; Karin Valentine Goins, MPH1; Semra Aytur, PhD2; Katie Heinrich, PhD3; Jay Maddock, PhD4; Stephenie Lemon, PhD1
1University of Massachusetts Medical School; 2University of New Hampshire; 3Kansas State University; 4Texas A&M University

77. Imaging Probes for Detecting Inflammation in the Mouse Model of Type 1 Diabetes
Toloo Taghian, PhD1; Suresh Gupta, PhD1; Adam J. Dixon, PhD2; Surong Zhang, PhD1; Alexei A. Bogdanov, PhD1
1Department of Radiology, University of Massachusetts Medical School; 2Department of Biomedical Engineering, University of Virginia, Charlottesville, VA

78. Companion Diagnostics for Breast Cancer Chemotherapeutics
Monica Tawadros, BS1; Michael Morin, PhD1; Peter Gaines, PhD1, Abiche Dewilde, PhD2
1Department of Biological Sciences, University of Massachusetts Lowell; 2InVitroMetrix Corporation, Lowell MA

79. The Effects of Yoga on Adults with Type II Diabetes: A Systematic Review and Meta-analysis
Herpreet Thind, PhD1; Lori A. J. Scott-Sheldon, PhD2,3; Ryan Lantini, MA2, Brittany Balletto, BS2, Marissa Donahue, BA2, Melissa Feulner, BS2, Elena Salmoirago-Blotcher, MD, PhD2,3; Beth C. Bock, PhD2,3
1Department of Public Health, University of Massachusetts Lowell; 2Centers for Behavioral and Preventive Medicine, The Miriam Hospital, RI; 3Alpert Medical School, Brown University, RI

80. Inhibition of Insulin Amyloid Formation by Small Organofluorine Molecules
Yanique Thomas, William Horton, Chris D. Tran, Clifford J. Ellstrom, Béla Török, Marianna Török
Department of Chemistry, University of Massachusetts Boston

81. Home Interventions for Older Adults with Asthma
David A. Turcotte, ScD1; Susan Woskie, PhD2; Emily Chaves, MA, MS1; Kelechi Adejumo, MS3, Rebecca Gore, PhD2
1Center for Community Research and Engagement, 2Department of Public Health, University of Massachusetts Lowell

82. Pediatric Critical Care Transfusion and Anemia Expertise Initiative
Stacey Valentine, MD, MPH1; Scot Bateman, MD1, Mela Bembea, MD2, Phillip Spinella, MD3, Allan Doctor, MD3, Nabil Hassan, MD1, Robert Parker, MD5, Marie Steiner, MD6, Marisa Tucci, MD7, Jacques Lacroix, MD7
1Department of Pediatrics, University of Massachusetts Medical School; 2Department of Pediatrics, Johns Hopkins University, Baltimore, MD; 3Department of Pediatrics, Washington University of St. Louis, St. Louis, MO; 4Department of Pediatrics, Michigan State University, Grand Rapids, MI; 5Department of Pediatrics, Stony Brook University, Stony Brook, NY; 6Department of Pediatrics, University of Minnesota, Minneapolis, MN;
83. Transcriptional Regulation of Cardiac Remodeling in a Porcine Model with Validation in Human Subjects
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84. Polymeric Nanoparticles for Targeted Combination Treatment of Temozolomide Resistant Glioblastoma Multiforme (GBM)
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85. Optimizing Microfluidic Design for Cell Separation
Joseph Wakim¹, Marisel De Jesús Vega¹, Nese Orbey¹, Carol Barry²
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86. Implementation of SAMHSA-funded Offender Re-Entry Programs Addressing Substance Use and Co-occurring Disorders among Justice Involved Latino Adults
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87. Accuracy and Coverage of Using the Assigned International Classification of Diseases, 9th and 10th Revision, Clinical Modification Codes for Detecting Bleeding Events in Electronic Health Record
Victoria J. Wang, BS¹, David D. McManus, MD, ScM², Hong Yu, PhD, FACMI¹
¹Department of Quantitative Health Sciences, ²Department of Medicine, University of Massachusetts Medical School

88. Pre-exposure Immunoprophylaxis by Genetically Encoded DMAb anti-OspA Human Monoclonal Antibody to Prevent Lyme Disease
Yang Wang, MD, PhD¹, Seleeke Flingai, PhD², Aurélie Kern, PhD³, Sangya Agarwal, MS⁴, Zachary Schiller, MS¹, Kaori Graybeal, MS¹, Rianne Esquivel, PhD², Ami Patel, PhD², Linden Hu, MD³, David Weiner, PhD², Mark Klempner, MD¹
¹MassBiologics at UMMS, Boston, MA; ²The Wistar Institute, Philadelphia, PA; ³Sackler School of Graduate Biomedical Sciences, Tufts University School of Medicine, Boston, MA

89. Effect of Exercise Training on Microvascular Function in African American and Caucasian Women
Huimin Yan, PhD¹, Keyshla M Melendez-Rosado, BS¹, and Robert C Hickner, PhD²
¹Department of Exercise and Health Sciences, University of Massachusetts Boston; ²Department of Nutrition, Food and Exercise Sciences, Florida State University

90. Enhancement of the Abscopal Effect in Radiotherapy by In-situ Delivered CD40 Antibody: Pancreatic Adenocarcinoma Model
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91. Using mHealth App to Support TKR Decision Making for Knee Arthritis Patients
Hua Zheng, PhD¹, Bengisu Tulu, PhD², Wonchan Choi, PhD², Patricia Franklin, MD, MBA, MPH¹
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92. Direct-to-Patient PRO Collection to Support Quality Improvement in TJR
Hua Zheng, PhD; Celeste Lemay, RN, MPH; Wenyun Yang, MS; Patricia Franklin, MD, MBA, MPH
University of Massachusetts Medical School

93. Roux-en-Y Gastric Bypass Surgery Regulates Mitochondrial Dynamics Proteins in Primary Human Myotubes Derived from Severely Obese Humans
Kai Zou, PhD¹, J. Matthew Hinkley, PhD², Sanghee Park, PhD², Donghui Zheng, PhD², G. Lynis Dohm, PhD², Joseph A. Houmard, PhD²
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