

The Innovator

Baystate  Health



Summer 2017

A Productive Collaboration

As with the best partnerships, whether in business or in private life, two axioms hold. The first is a requirement for patience and a respect for the complementary skills of the other party. The second is a recognition of how difficult partnerships are to maintain!

At Baystate, the marriage of basic/bench science and medical/clinical research has been particularly fruitful. Baystate is a leader in breast cancer treatment and the Rays of Hope has been a generous research sponsor via the Center for Breast Cancer Research – a joint project between Baystate Medical Center and UMass Amherst investigators. Added to these ingredients for success is a collaborative academic environment where surgeons, pathologists and laboratory scientists willingly share their expertise and resources with each other.

A recent publication in the *Journal of Cell Physiology* highlights this collaborative approach. Using breast tissue specimens collected during breast reduction and cancer surgeries, the authors discovered that mitochondrial respiration was different in breast cells from women who had breast cancer compared to those who did not. This metabolic measure of how cells get their energy may become an important marker for the future development of cancer. Further research using cells in the Breast Registry may lead to other provocative findings.

In addition to the Rays of Hope funding, UMass and Baystate recently received funding under a large NIH (National Institute of Health) U01 cooperative research grant. Joe Jerry, PhD of UMass Amherst and Sally Schneider, PhD of Baystate Medical Center, are the PIs of the grant entitled “Disruption of parity – induced tumor suppressor pathways by xenoestrogen exposures during pregnancy”. Drs. Grace Makari-Judson



Drs. Sallie Schneider, Joe Jerry, and Nagendra Yadava (from left to right)

(Baystate Oncology), Giovanna Crisi (Baystate Pathology) and Richard Arenas (Baystate Surgical Oncology) are co-investigators on the grant. Baystate’s Nagendra Yadava, PhD, received supplemental funds on the grant to add metabolic endpoints (and whose metabolic analyses led to the finding at the heart of the *J Cell Physiol* article mentioned above).

We are hopeful that this bountiful partnership continues to grow and flourish!

**[Individual-Specific Variation in the Respiratory Activities of HMECs and their Bioenergetic Response to IGF1 and TNF α . Schneider SS, Henchey EM, Sultana N, Morin SM, Jerry DJ, Makari-Judson G, Crisi GM, Arenas RB, Johnson M, Mason HS, Yadava N.]. One can get the abstract via <http://onlinelibrary.wiley.com/doi/10.1002/jcp.25932/abstract>. The full article is available at <http://onlinelibrary.wiley.com/doi/10.1002/jcp.25932/epdf>.*

Research Question? Call the Office of Research at our central number: (413) 794-3391



Dr. Brennan, Chief of the Division of Geriatrics

A Little TLC

When Maura Brennan, MD, speaks of TLC, she is probably referencing “Transformation through Learning and Collaboration”, the operative theme to her \$2.5 million grant from HRSA (Health Resources and Service Administration). The aims of the grant are very broad and include

educational goals and improvements to inter-professional teamwork for Geriatrics and Palliative (Geri-Pal) care initiatives at Baystate.

Dr. Brennan, Chief of the Division of Geriatrics, Palliative Care and Post-acute Medicine, has been part of the Baystate Community since she trained here as a resident and fellow. As a young faculty member in Internal Medicine, she found herself in a teaching role in Geriatrics. She managed, she noted, to stay at least one day ahead of the residents she was training! She also came to realize that she loved the complexity and breadth of geriatric medicine – not only caring for patients and their families but also clarifying values and goals.

Baystate is unusual in several ways. It has a rich tradition of trail-blazing in medical education. It has a hospice caring for many elders and three community health centers dedicated to caring for the underserved. It also has a growing ACE (Acute Care for Elders) program. Dr. Brennan and her team successfully highlighted these strengths in their grant application. The proposal focused on caring for frail, disadvantaged older adults and those struggling with dementias. The application was funded in 2015; Baystate is now one of only 44 federally supported geriatric education centers and is the only facility in Massachusetts to receive this funding.

Dr. Brennan is passionate about Geri-Pal education, and is thrilled to have these new resources to improve care for patients and families and develop the workforce for some of those in our community who need help most. Her partners include, among others, the American International College (AIC) nursing program, Partners for a Healthier Community, Bay Path University’s Physician Assistant program, The Alzheimer’s Association, Greater Springfield Senior Services and the Springfield College School of Social Work.

Baystate’s work on this grant and its many corollaries will be reported at meetings and in publications nationally. Our successful innovations will become examples for others to adopt!

Baystate Sends Investigators and Coordinators to the Pfizer Investigator Training Program

In mid-April, our affiliation with Tufts Medical School and their NIH-funded CTSI (Clinical and Translational Science Institute) was of great benefit to fourteen of our Baystate researchers interested in honing their skills in clinical trials. Tufts hosted a two-day program put on by the Pfizer pharmaceutical company which encompassed training to improve recruitment, management, conduct and reporting of clinical trials. The participants will be invited to “pay it forward” by conducting a summarizing seminar for their peers in the fall. The attendees were:

Dr. Adam Adamidis	Dr. Patrick Lee	Vida Rastegar
Barbara Burkott	Dr. Peter Lindenauer	Dr. Ira Schmelkin
Victoria Cobb	Dr. Laura Madore	Dr. Corina Shoen
Diana Colucci	Dr. Angela Martagon-Villamil	Dr. Rohit Singhania
Dr. Susan Kartiko		Dr. Ruben Vaidya

We’ve moved to 3601 Main Street!

(Our phone numbers remain the same)



Before

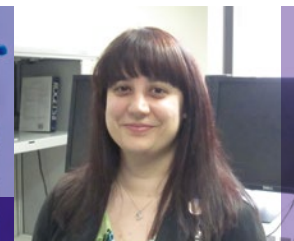


After



Compliance Corner

with Jennifer Pacheco



After a long path to a final ruling (it began in 2011 and ended on Obama's penultimate day in office!), the federal policy governing the protection of human subjects known as "The Common Rule" has been published.

The new rules become effective in two waves. As of January 2018, the majority of the changes will need to be implemented. In January of 2020, the requirement to use a single IRB for cooperative research must be in place.

Key changes include:

- Establishing new requirements regarding the information that must be given to prospective research subjects as part of the informed consent process
- Allowing the use of broad consent (i.e., seeking prospective consent to unspecified future research) within specified instances
- Creation of new exempt categories of research based on risk profile
- Removing the requirement to conduct continuing reviews of ongoing research for some studies

Baystate HRPP is actively working with our federal partners and community colleagues to address the new regulation. We are working on an education series for our research community to review Baystate's plan for regulatory compliance. The first session was held in May and discussed the new exempt categories. Be on the look out to register for our next session regarding changes in Informed Consent and Broad Consent: **Modernized Evolution of the Research "Common Rule" - Part 2; October 3, 2017 @ 12 noon.**

Notable Recent Published Papers

[Contact Baystate's Health Science Library for more information at libraryinfo.bhs.org/home]



Chamoun N, **Macias CG**, Donovan JL, Klugman R, Gore J, Salameh P, Tran MT. Implications of an inpatient warfarin dosing nomogram on safety outcomes post-discharge. *J Thromb Thrombolysis*. 2017 May;43(4):454-462.

Oncken C, **Ricci KA**, Kuo CL, Dornelas E, Kranzler HR, **Sankey HZ**. Correlates of Electronic Cigarettes Use Before and During Pregnancy. *Nicotine Tob Res*. 2017 May 1;19(5):585-590.

Eustache E, Gerbasi ME, Smith Fawzi MC, Fils-Aimé JR, **Severe J**, Raviola GJ, Legha R, Darghouth S, Grelotti DJ8, Thérosme T, Pierre EL, Affricot E, Alcindor Y, Becker AE. High burden of mental illness and low utilization of care among school-going youth in Central Haiti: A window into the youth mental health treatment gap in a low-income country. *Int J Soc Psychiatry*. 2017 May;63(3):261-274.

Alameddine AK, Visintainer P, Normand ST, Wolf RE, Alameddine YA. Cancer Rates in Adults After Cardiac Interventions: A Preliminary Observational Report. *Am J Clin Oncol*. 2017 Apr;40(2):122-124.

Peacock-Chambers E, Del Canto P, Ahlers D, Valdivia Peralta M, Palfrey J. School-Based Disaster Recovery: Promotion of Children's Mental Health Over the Long Haul. *Disaster Med Public Health Prep*. 2017 Apr 11:1-4.

Merchant S, Medow MS, **Visintainer P**, Terilli C, Stewart JM. Oscillatory lower body negative pressure impairs working memory task-related functional hyperemia in healthy volunteers. *Am J Physiol Heart Circ Physiol*. 2017 Apr 1;312(4):H672-H680.

Shah KH, Jordan J, Jahnes K, Lisbon DP, **Lutfy-Clayton L**, Wei G, Winkel G, Santen SA. Audience Response System Facilitates Prediction of Scores on In-Training Examination. *West J Emerg Med*. 2017 Apr;18(3):525-530.

Trotter Z, **Spirko B, Smithline H, Garb J**. Prevalence of Inconsistencies in the Recorded Outcomes of Clinical Evaluations. *Pediatr Emerg Care*. 2017 Apr;33(4):245-249.

Gangadharan A, Choi SE, Hassan A, Ayoub NM, **Durante G**, Balwani S, Kim YH, Pecora A, Goy A, Suh KS. Protein calorie malnutrition, nutritional intervention and personalized cancer care. *Oncotarget*. 2017 Apr 4;8(14):24009-24030.

Bucci MN, **Oh D**, Cowan RS, Davis RJ, Jackson RJ, Tyndall DS, Nehls D. The ROI-C zero-profile anchored spacer for anterior cervical discectomy and fusion: biomechanical profile and clinical outcomes. *Med Devices (Auckl)*. 2017 Apr 18;10:61-69.

Feinberg RK, Hu J, Weaver MA, Fillingim RB, Swor RA, Peak DA, Jones JS, **Rathlev NK**, Lee DC, Domeier RM, Hendry PL, Liberzon I, McLean SA. Stress-related psychological symptoms contribute to axial pain persistence after motor vehicle collision: path analysis results from a prospective longitudinal study. *Pain*. 2017 Apr;158(4):682-690.

Umanath K, **Greco B**, Jalal DI, McFadden M, Sika M, Koury MJ, Niecestro R, Hunsicker LG, Greene T, Lewis JB, Dwyer JP. The safety of achieved iron stores and their effect on IV iron and ESA use: post-hoc results from a randomized trial of ferric citrate as a phosphate binder in dialysis. *Clin Nephrol*. 2017 Mar;87(2017)(3):124-133.

Morrow JD, Zhou X, Lao T, Jiang Z, DeMeo DL, Cho MH, Qiu W, Cloonan S, **Pinto-Plata V**, Celli B, Marchetti N, Criner GJ, Bueno R, Washko GR, Glass K, Quackenbush J, Choi AM, Silverman EK, Hersh CP. Functional interactors of three genome-wide association study genes are differentially expressed in severe chronic obstructive pulmonary disease lung tissue. *Sci Rep*. 2017 Mar 13;7:44232.

Ruppel EH, Karpman HE, **Delk CE**, Merryman M. Online maternity information seeking among lesbian, bisexual, and queer women. *Midwifery*. 2017 Mar 1;48:18-23.

Bordt EA, Clerc P, Roelofs BA, Saladino AJ, Tretter L, Adam-Vizi V, Cherok E, **Khalil A, Yadava N**, Ge SX, Francis TC, Kennedy NW, Picton LK, Kumar T, Uppuluri S, Miller AM, Itoh K, Karbowski M, Sesaki H, Hill RB, Polster BM. The Putative Drp1 Inhibitor mdivi-1 Is a Reversible Mitochondrial Complex I Inhibitor that Modulates Reactive Oxygen Species. *Dev Cell*. 2017 Mar 27;40(6):583-594.e6.

Dong T, Cursio JF, Qadir S, **Lindenauer PK**, Ruhnke GW. Discharge disposition as an independent predictor of readmission among patients hospitalized for community-acquired pneumonia. *Int J Clin Pract*. 2017 Mar;71(3-4).

Goff SL, Murphy L, **Knee AB, Guhn-Knight H, Guhn A, Lindenauer PK**. Effects of an enhanced primary care program on diabetes outcomes. *Am J Manag Care*. 2017 Mar 1;23(3):e75-e81.

Solomkin J, Evans D, Slepavicius A, **Lee P**, Marsh A, Tsai L, Sutcliffe JA, Horn P. Assessing the Efficacy and Safety of Eravacycline vs Ertapenem in Complicated Intra-abdominal Infections in the Investigating Gram-Negative Infections Treated With Eravacycline (IGNITE 1) Trial: A Randomized Clinical Trial. *JAMA Surg*. 2017 Mar 1;152(3):224-232.

Shahraz S, **Lagu T**, Ritter GA, **Liu X**, Tompkins C. Use of Systematic Methods to Improve Disease Identification in Administrative Data: The Case of Severe Sepsis. *Med Care*. 2017 Mar;55(3):e16-e24.

Valley TS, Walkey AJ, **Lindenauer PK**, Wiener RS, Cooke CR. Association Between Noninvasive Ventilation and Mortality Among Older Patients With Pneumonia. *Crit Care Med*. 2017 Mar;45(3):e246-e254.



Select Recent Awards

▼ Danyel Adams, PharmD

Patient Preferences Before and After Treatment for Acute Bacterial Skin and Skin Structure Infection (ABSSSI) in the Emergency Room {Sponsor: Hartford Hospital}

▼ James Hoffman, MD

Non-randomized, Open-Label Phase II Study to Assess Olaparib Tablets as a Treatment for Subjects with Different HRD Tumor Status and with Platinum-Sensitive, Relapsed, High-Grade Epithelial Ovarian, Fallopian Tube, or Primary Peritoneal Cancer That Have Received at Least 2 Prior Lines of Chemotherapy {Sponsor: Astra Zeneca}

▼ Peter Lindenauer, MD, MSc

A mixed methods study to analyze the use of pulmonary rehabilitation following hospitalization for COPD, and to identify effective strategies for increasing rates of participation. {Sponsor: National Heart, Lung, and Blood Institute – NIH/NHLBI}

▼ Allyson Rogers

National Children's Alliance 2017 {Sponsor: Massachusetts's Children's Alliance}

And a special note:

The Distinguished Clinical Research Excellence Award from the Clinical Research Forum was presented in April to the authors of the article "Extended-Release Naltrexone to Prevent Opioid Relapse in Criminal Justice Offenders" Joshua D. Lee, M.D., **Peter D. Friedmann, M.D., M.P.H.**, Timothy W. Kinlock, Ph.D., Edward V. Nunes, M.D., Tamara Y. Boney, M.S., C.C.R.C., **Randall A. Hoskinson, Jr., Donna Wilson, M.S.**, Ryan McDonald, M.A., John Rotrosen, M.D., Marc N. Gourevitch, M.D., M.P.H., Michael Gordon, D.P.A., Marc Fishman, M.D., Donna T. Chen, M.D., M.P.H., Richard J. Bonnie, L.L.B., James W. Cornish, M.D., Sean M. Murphy, Ph.D., and Charles P. O'Brien, M.D., Ph.D.

Baystate Office of Research Performance

IRB Indicators

Submission to Approval (*Expedited Review*) (FY17)

	Actual		Target	Rating	
	BH IRB	Contract IRBs		BH IRB	Contract IRBs
Median Days	15.0	13.5	16	✓	NA

SPA Indicators

Baystate Health Proposals (#) (FY17–3rd Qtr.)

BH	Actual	Target	Rating
Research	47	33	✓
All Else/ Publ. Serv.	17	23	✗

Research Finance Indicators

% of Non-Cost Reimbursed Breakeven or Greater (FY17–2nd Qtr.)

Actual	Target	Rating
52%	47%	✓

- ✓✓ At or better than target
- Within 5% of reaching target
- ✗ Outside 5% of the target

Target based on prior year medians or established benchmarks among similar institutions



UMMS-Baystate Office of Research Celebration of Research & Academic Innovation Day

September 27, 2017

(Chestnut 1 & 4)

- 8 am Catarina Kiefe, PhD, MD, Medicine Grand Rounds
- 10 am Research Pilot Award Program (RPAP) Awardee Panel
- 11 am Intellectual Property and Inventions at Baystate

(3601 Main)

- Noon Keynote Address: Catarina Kiefe, PhD, MD
- 1 pm How to Use Secondary Data Panel
- 2 pm Mini Symposia with Drs. Lili Peacock-Chambers and Elizabeth Schoenfeld
- 4 pm Poster Session & Awards Reception

For more information, call 413-794-3391



Baystate Health



University of Massachusetts
UMASS Medical School

The Innovator

We are interested in ensuring that Baystate employees and patients (and their families) are aware of the important research that goes on at Baystate and how it contributes to better patient care. *The Innovator* welcomes feedback and story ideas. Contact Barbara Richard at barbara.richard@baystatehealth.org.