

Dear Colleague,

In this issue we feature two high profile NEJM simultaneous publications with presentation at the American College of Cardiology meeting: the [TAVR article](#) on which I am the senior author and a report on the [Momentum trial](#) in which Dr. Yoshifumi Naka was the largest enroller.

This month we have especially robust contributions in cardiac surgery. Some papers have only recently been submitted for publication and will not yet have PubMed references.

A reminder: Journal links may require subscriptions or a log-in through the Columbia library while PubMed links are accessible to all.

This report is a valuable resource for the department, so please continue to email Paul Kurlansky (<mailto:pk2245@columbia.edu?subject=Research%20e-newsletter>) or me (<mailto:crs2@cumc.columbia.edu?subject=Research%20E-Newsletter>) with regular updates on your grants, publications, and presentations by the first of every month.

For easy reference, we now post all issues of this [newsletter](#) on the Center for Innovations and Outcomes Research website.

Craig R. Smith, MD, FACS
Chairman, Department of Surgery

CONGRATULATIONS

Dr. Deborah Keller has received an NIH KL2 Mentored Research Award
Title: Rectal Cancer Resections in the Elderly: A Study on the Current Utilization, Clinical, and Financial Outcomes with Minimally Invasive Surgery.

Dr. Keller has also been accepted in the [Early Career Reviewer \(ECR\) program](#) at the [Center for Scientific Review \(CSR\)](#), National Institutes of Health.

Dr. Damien LaPar has been selected by the American Association for Thoracic Surgery Foundation as the Second Norman Shumway Research Scholar from July 1, 2019 through June 30, 2021.

Dr. David Kalfa has been invited by the Heart Valve Society to be the International Leader of the Congenital and Pediatric Heart Valve Disease Valve Research Network. The Columbia BiomedX accelerator program has also accepted his project: A Growth-accommodating Valve Device for Children with Congenital Heart Disease.

BASIC SCIENCE

Publications

Canals M, Poole DP, Veldhuis NA, Schmidt BL, Bunnett NW. G Protein-Coupled Receptors are Dynamic Regulators of Digestion and Targets for Digestive Diseases. *Gastroenterology*. 2019 Feb 13. pii: S0016-5085(19)30373-7. doi: 10.1053/j.gastro.2019.01.266.

[Journal link](#)

[PubMed link](#)

CARDIAC SURGERY

Presentations

*American College of Cardiology 68th Annual Sessions
New Orleans, LA, March 16-18, 2019*

Anderson BR, Dragan K, Glied S, Woo J, LaPar D, Billings J. Building capacity to assess longitudinal outcomes and health expenditures for children with congenital heart diseases.

Bacha E. Aortic valve replacement for congenital aortic valve disease (in session titled Cutting Edge of Congenital Aortic Valve Disease).

Castillero E, Akashi H, Wang C, Najjar M, Ruiping J, Liao X, Mills A, Alhau R, Yong K, Kiperman J, John J, Homma S, Topkara V, Takeda K, Naka Y, Ferrari G, Colombo P, Schulze C, George I. Bone morphogenic protein-1/tolloid-like metalloproteinase upregulation profile in human and murine ischemic heart failure.

Chiu L, Farr M, Axsom K, Colombo P, De Los Santos J, Garan AR, Goldsmith J, Haythe J, Helmke S, Horn E, Latif F, Lee SH, Lin E, Naka Y, Restaino S, Takayama H,

Takeda K, Teruva S, Yuzefpolskaya M, Maurer M. Outcomes after heart transplantation for light-chain compared to transthyretin amyloidosis.

Gatzoflias S, Beier M, Gailes M, Guaman K, Segall M, Vasireddi A, Wang C, Takayama H, Bapat V, Naka Y, Argenziano M, Smith C, Kurlansky P, George I. Efficacy of surgical and medical intervention for treatment of left-sided infective endocarditis.

George I. Bicuspid aortic valve TAVR is not ready for prime time, SAVR is better.

Nouri SN, Madhaven M, Lumish HS, Lavelle M, Gavalas M, Brown T, Li J, Rosenzweig EB, Parikh S, Kirtane A, Garan A, Brodie D, Agerstrand C, Takeda K, Sethi S, Green P, Einstein A. Pulmonary embolism response teams: Do they result in better outcomes in severe pulmonary embolism? A single center retrospective analysis.

Tang D, Pianka M, Lifrieri A, Wang C, Armenta P, Guaman K, Alhau R, Vasireddi A, Agarwal V, Wolbinski M, Rubin J, Khera S, Ng V, Patel A, Vahl T, Khalique O, Bapat VN, Leon M, Hahn R, Nazif T, Kodali S, George I. Predictors of worsening or persistent tricuspid regurgitation after transcatheter aortic valve replacement.

Zaid S, Kamioka N, Terre J, Miyasaka M, Hirji S, Hensey M, Geloo N, Petrossian G, Robinson N, Sarin E, Yoon SH, George I, Kaneko T, Shah P, Sharma K, Szerlip M, Don C, Ahmad H, Kini A, Mack M, Webb J, Babliaros V, Kodali S, Makkar R, Tang G. 1-Year results of transcatheter aortic valve replacement in extremely large annuli >683mm² with Edwards Sapien 3 valve: A multicenter experience.

Publications

Baron SJ, Wang K, House JA, Magnuson EA, Reynolds MR, Makkar R, Herrmann HC, Kodali S, Thourani VH, Kapadia S, Svensson L, Mack MJ, Brown DL, Russo MJ, Smith CR, Webb J, Miller C, Leon MB, Cohen DJ. Cost-Effectiveness of Transcatheter Versus Surgical Aortic Valve Replacement in Patients With Severe Aortic Stenosis at Intermediate Risk. *Circulation*. 2019 Feb 12;139(7):877-888.

[Journal link](#)

[PubMed link](#)

Breslin NT, Salerno DM, Topkara VK, Latif F, Restaino S, Takeda K, Takayama H, Farr M, Colombo PC, Jennings DL. Prior Amiodarone Exposure Reduces Tacrolimus Dosing Requirements in Heart Transplant Recipients. *Prog Transplant*. 2019 Mar 7:1526924819835840. doi: 10.1177/1526924819835840.

[Journal link](#)

[PubMed link](#)

Cevasco MR, Li B, Han J, Chiuzan C, Mauro CM, Kurlansky P, Garan AR, Takeda K,

Naka Y, Takayama H. Adverse Event Profile Associated with Prolonged Use of CentriMag Ventricular Assist Device for Refractory Cardiogenic Shock. *ASAIO J*. 2019 Feb 20. doi: 10.1097/MAT.0000000000000893.

[Journal link](#)

Cheng YT, Garan AR, Sanchez J, Kurlansky P, Ando M, Cevasco M, Yuzefpolskaya M, Colombo PC, Naka Y, Takayama H, Takeda K. Mid-term outcomes of bridge-to-recovery patients after short-term mechanical circulatory support. *Ann Thorac Surg*. 2019, published online March 6.

[Journal link](#)

DeFilippis EM, Truby LK, Garan AR, Givens RC, Takeda K, Takayama H, Naka Y, Haythe JH, Farr MA, Topkara VK. Sex-Related Differences in Use and Outcomes of Left Ventricular Assist Devices as Bridge to Transplantation. *JACC Heart Fail*. 2019 Mar;7(3):250-257.

[Journal link](#)

[PubMed link](#)

DeRoo SC, Takayama H, Nemeth S, Garan AR, Kurlansky P, Restaino S, Colombo P, Farr M, Naka Y, Takeda K. Extracorporeal membrane oxygenation for primary graft dysfunction after heart transplant. *J Thorac and Cardiovasc Surg*. Accepted February 17, 2019.

[Journal link](#)

Hahn RT, Nabauer M, Zuber M, Nazif TM, Hausleiter J, Taramasso M, Pozzoli A, George I, Kodali S, Bapat V, Maisano F. Intraprocedural Imaging of Transcatheter Tricuspid Valve Interventions. *JACC Cardiovasc Imaging*. 2019 Mar;12(3):532-553.

[Journal link](#)

[PubMed link](#)

Kalfa D. Commentary: What is the best surgical technique to repair partial anomalous pulmonary venous return into the superior vena cava? We still do not know. *J Thorac Cardiovasc Surg*. 2019 Feb 6. pii: S0022-5223(19)30313-7. doi: 10.1016/j.jtcvs.2019.01.098.

[Journal link](#)

[PubMed link](#)

Kurlansky PA. Left-sided complete revascularization with bilateral internal thoracic arteries in diabetic patients. *Ann Thorac Surg*. 2019 Feb 2. pii: S0003-4975(19)30135-3. doi: 10.1016/j.athoracsur.2018.12.057.

[Journal link](#)

[PubMed link](#)

Kurlansky P. Commentary: A tree in winter: The case for arterial grafting in the diabetic patient. *J Thorac Cardiovasc Surg*. 2019 Feb 19. pii: S0022-5223(19)30456-8. doi: 10.1016/j.jtcvs.2019.02.023.

[Journal link](#)

[PubMed link](#)

Law S, Chai P, Ündar A. Welcome to the Fifteenth International conference on Pediatric Mechanical Circulatory Support Systems and Pediatric Cardiopulmonary Perfusion. *Artif Organs*. 2019 Mar 25. doi: 10.1111/aor.13437.

[Journal link](#)

[PubMed link](#)

Mack MJ, Leon MB, Thourani VH, Makkar R, Kodali SK, Russo M, Kapadia SR, Malaisrie SC, Cohen DJ, Pibarot P, Leipsic J, Hahn RT, Blanke P, Williams MR, McCabe JM, Brown DL, Babaliaros V, Goldman S, Szeto WY, Genereux P, Pershad A, Pocock SJ, Alu MC, Webb JG, Smith CR; PARTNER 3 Investigators. Transcatheter Aortic-Valve Replacement with a Balloon-Expandable Valve in Low-Risk Patients. *N Engl J Med*. 2019 Mar 17. doi: 10.1056/NEJMoa1814052.

[Journal link](#)

[PubMed link](#)

Mehra MR, Uriel N, Naka Y, Cleveland JC Jr, Yuzefpolskaya M, Salerno CT, Walsh MN, Milano CA, Patel CB, Hutchins SW, Ransom J, Ewald GA, Itoh A, Raval NY, Silvestry SC, Cogswell R, John R, Bhimaraj A, Bruckner BA, Lowes BD, Um JY, Jeevanandam V, Sayer G, Mangi AA, Molina EJ, Sheikh F, Aaronson K, Pagani FD, Cotts WG, Tatoes AJ, Babu A, Chomsky D, Katz JN, Tessmann PB, Dean D, Krishnamoorthy A, Chuang J, Topuria I, Sood P, Goldstein DJ; MOMENTUM 3 Investigators. A Fully Magnetically Levitated Left Ventricular Assist Device – Final Report. *N Engl J Med*. 2019 Mar 17. doi: 10.1056/NEJMoa1900486.

[Journal link](#)

[PubMed link](#)

Moore SKL, Chau KH, Chaudhary S, Rubin G, Bayne J, Avula UMR, Wang DY, Sorbera C, Dizon J, Biviano A, Waase M, Iyer V, George I, Kodali SK, Nazif TM, Garan H, Wan EY. Leadless pacemaker implantation: A feasible and reasonable option in transcatheter heart valve replacement patients. *Pacing Clin Electrophysiol*. 2019 Mar 4. doi: 10.1111/pace.13648.

[Journal link](#)

[PubMed link](#)

Russo J, Alesova N, Pitcher I, Couture E, Parlow S, Faraz M, Visintini S, Simard T,

DiSanto P, Mathew R, So DY, Takeda K, Garan AR, Karmaliotis D, Takayama H, Kirtane AJ, Hibbet B. Left Ventricular Unloading During Extracorporeal Membrane Oxygenation in Patients With Cardiogenic Shock. *J Am Coll Cardiol*. 2019 Feb 19;73(6):654-662.

[Journal link](#)

[PubMed link](#)

Sanchez JE, Takayama H, Ando M, Han J, Kurlansky P, Garan AR, Topkara VK, Farr M, Colombo P, Naka Y, Takeda T. Outcomes of bridge to cardiac re-transplantation in the contemporary mechanical circulatory support era. *J Thorac Cardiovasc Surg*. Accepted Jan 4, 2019.

[Journal link](#)

Smith CR. Commentary: Move fast and break things. *J Thorac Cardiovasc Surg*. 2019 Feb 21. pii: S0022-5223(19)30468-4. doi: 10.1016/j.jtcvs.2019.02.034.

[Journal link](#)

[PubMed link](#)

Smith CR. Commentary: Massachusetts exceptionalism. *J Thorac Cardiovasc Surg*. 2019 Feb 11. pii: S0022-5223(19)30341-1. doi: 10.1016/j.jtcvs.2018.12.103.

[Journal link](#)

[PubMed link](#)

Truby LK, Sridharan L, Flores RJ, Garan R, Jennings D, Yuzepolskaya M, Takeda K, Takayama H, Naka Y, Colombo PC, Topkara VK. Red cell distribution width predicts 90 day mortality in continuous-flow left ventricular assist device patients. *ASAIO Journal*. 2019;65:233-240.

[Journal link](#)

[PubMed link](#)

Uriel N, Imamura T, Sayer G, Agarwal R, Sims DB, Takayama H, John R, Pagani FD, Naka Y, Sundareswaran KS, Farrar DJ, Jorde UP; HeartMate II Clinical Investigators. High Transpulmonary Artery Gradient Obtained at the Time of Left Ventricular Assist Device Implantation Negatively Impacts Survival following Cardiac Transplantation. *J Card Fail*. 2019 Mar 20. pii: S1071-9164(18)31147-3. doi: 10.1016/j.cardfail.2019.03.010.

[Journal link](#)

[PubMed link](#)

Publications

Keller DS, Brown G. Invited editorial re: "Response assessment after (chemo) radiotherapy for rectal cancer: Why are we missing complete responses with MRI and endoscopy?" *Eur J Surg Oncol*. 2019 Feb 20. pii: S0748-7983(18)32035-3.

[Journal link](#)

[PubMed link](#)

Keller DS, Reali C, Spinelli A, Penna M, Di Candido F, Cunningham C, Hompes R. Patient-reported functional and quality-of-life outcomes after transanal total mesorectal excision. *Br J Surg*. 2019 Mar;106(4):364-366.

[Journal link](#)

[PubMed link](#)

Keller DS, Windsor A, Cohen R, Chand M. Colorectal cancer in inflammatory bowel disease: review of the evidence. *Tech Coloproctol*. 2019 Jan;23(1):3-13.

[Journal link](#)

[PubMed link](#)

Keller DS, Hompes R. The learning curve in TaTME—considerations to guide safe implementation. *Ann Laparosc Endosc Surg* 019;4:7.

[Journal link](#)

Kim M, Kiran RP, Li G. Acute kidney injury after hepatectomy can be reasonably predicted after surgery. *J Hepatobiliary Pancreat Sci*. 2019 Feb 22. doi: 10.1002/jhbp.615.

[Journal link](#)

[PubMed link](#)

Kuritzkes BA, Cao Y, Baser O, Thomas N, Forde KA, Kiran RP. New barrier attire regulations in the operating room: A mandate without basis? *Am J Surg*. 2019 Feb 12. pii: S0002-9610(18)31713-6. doi: 10.1016/j.amjsurg.2019.02.002.

[Journal link](#)

[PubMed link](#)

Neugut AI, Lin A, Raab GT, Hillyer GC, Keller DS, O'Neil DS, Accordino MK, Kiran RP, Wright J, Hershman DL. FOLFOX and FOLFIRI use in Stage IV Colon Cancer: Analysis of SEER-Medicare Data Clinical Colorectal Cancer. 2019 Jan 31 doi: 10.1016/j.clcc.2019.01.005.

[Journal link](#)

[PubMed link](#)

van Dalen ASHM, Ali UA, Murray ACA, Kiran RP. Optimizing Patient Selection for

Laparoscopic and Open Colorectal Cancer Resections: A National Surgical Quality Improvement Program-Matched Analysis. *Am Surg.* 2019 Feb 1;85(2):206-213.

[Journal link](#)

[PubMed link](#)

GI/ENDOCRINE SURGERY

Presentations

Annual Meeting of the Americas Hepato-Pancreato-Biliary Association

Miami, FL, March 2019

Kluger MD & Martin RC. Professor rounds: IRE for pancreatic cancer.

Mayeux S, Najjar M, Epelboym I, Rosario V, Schrope B, Chabot J, Kluger MD. Long-term health after pancreatic surgery: the view from 9 years.

Mayeux S, Beier MA, Schrope BA, Chabot JA, Kluger MD. Toward Determining an Appropriate Indication for Completion Pancreatectomy after Recurrence of Pancreatic Adenocarcinoma in the Remnant Pancreas.

IMMUNOLOGY/TRANSPLANTATION SURGERY

Publications

Nguyen MJP, Carpenter D, Tadros J, Mathur A, Sandoval PR, Woodle ES, Diwan T, Ratner LE. Bariatric surgery prior to living donor nephrectomy: a solution to expand the living donor kidney pool – a retrospective study. *Transpl Int.* 2019 Feb 5. doi: 10.1111/tri.13408.

[Journal link](#)

[PubMed link](#)

PALLIATIVE CARE SURGERY

Presentations

Annual Assembly of the American Academy of Hospice and Palliative Medicine

Orlando, FL, March 13-16, 2019

Surgical and Perioperative Palliative Care: Updates from 2018 (TH307 – With

Christopher Woodrell, Rebecca Aslakson, and Miriam Arnheim).

When the Best Palliative Care Is an Operation – And Your Surgeon Won't Operate: Pushing Interdisciplinary Palliative Care to the Max (FR442A – with Buddy Marterre, Susan Quinby, and Kara Kerns).

PEDIATRIC SURGERY

Presentations

35th Annual Children's National Symposium: ECMO and the Advanced Therapies for Cardiovascular and Respiratory Failure
Keystone, CO, February 16, 2019

Zenilman A, Corda R, Salna M, Shakoor A, Cheung E, LaPar D, Middlesworth W. An Evaluation of Mediastinal Infections in Central ECMO After Pediatric Congenital Cardiac Surgery.

American College of Cardiology 68th Annual Sessions
New Orleans, LA, March 16-18, 2019

Bacha E. Aortic valve replacement for congenital aortic valve disease (in session titled Cutting Edge of Congenital Aortic Valve Disease).

Publications

Gates RL, Price M, Cameron DB, Somme S, Ricca R, Oyetunji TA, Guner YS, Gosain A, Baird R, Lal DR, Jancelewicz T, Shelton J, Diefenbach KA, Grabowski J, Kawaguchi A, Dasgupta R, Downard C, Goldin A, Petty JK, Stylianos S, Williams R. Non-operative management of solid organ injuries in children: An American Pediatric Surgical Association Outcomes and Evidence Based Practice Committee systematic review. *J Pediatr Surg*. 2019 Jan 31. pii: S0022-3468(19)30049-1. doi: 10.1016/j.jpedsurg.2019.01.012.

[Journal link](#)

[PubMed link](#)

Shieh HF, Estroff JA, Barnewolt CE, Zurakowski D, Tan WH, Buchmiller TL. Prenatal imaging throughout gestation in Beckwith-Wiedemann syndrome. *Prenat Diagn*. 2019 Feb 19. doi: 10.1002/pd.5440.

[Journal link](#)

[PubMed link](#)

Stylianos S. To save a child's spleen: 50 years from Toronto to ATOMAC. *J Pediatr*

Surg. 2019 Jan;54(1):9-15.

[Journal link](#)

[PubMed link](#)

Kalfa D. Commentary: What is the best surgical technique to repair partial anomalous pulmonary venous return into the superior vena cava? We still do not know. *J Thorac Cardiovasc Surg.* 2019 Feb 6. pii: S0022-5223(19)30313-7. doi: 10.1016/j.jtcvs.2019.01.098.

[Journal link](#)

[PubMed link](#)

PLASTIC SURGERY

Presentations

Columbia Hernia Summit
Park City, UT, February 8, 2019

Grant R. Panniculectomy during abdominal wall reconstruction.

Grant R. Open Approach to repair of diastasis recti.

Annual Meeting of the American Society of Reconstructive Microsurgery
Palm Desert, CA, February 1-5, 2019

Levy AS, Lara D, Lin AJ, Rohde CH, Kutler DI, Reeve GS, Spector JA. When in Doubt Take it Out: Functional Restoration of subtotal hemimandibulectomy defects does not require condylar preservation.

Rohde C. Invited Speaker for Boot Camp for Innovators in Plastic Surgert. Panel: Clinical Trials and the FDA Approval Process.

Publications

Govrin-Yehudain O, Ascherman J. Breast implant weight vs volume: Reappraising breast implant compatibility with tissue characteristics. *Plast Reconstr Surg.* 2019;143:901e-902e.

[Journal link](#)

[PubMed link](#)

Lopez M, Lee J, Morrison K, Hoffman C, Souweidane M, Ascherman J. Calculated blood loss and transfusion requirements in primary open repair of craniosynostosis. *Plast Reconstr Surg Glob Open.* 2019;7:e2112. DOI: 10.1097/GOX.0000000000002112.

[Journal link](#)

Wiviott, LD and Grant RT. Communicating the Role of the Physician Advisor. *Collaborative Case Management*. Winter 2018, 8-12.

[Journal link](#)

THORACIC SURGERY

Presentations

3rd International Symposium on Bronchoscopic and Surgical Treatment of Emphysema
Zurich, Switzerland, February 1, 2019

Ginsburg M. Lung Volume Reduction Surgery after the NETT.

Publications

Bernstein MA, Ronk M, Ebricht MI. Establishing a lung cancer screening program in a non-university hospital. *AME Med J*. 2018;3:102.

[Journal link](#)

Snyder ME, Finlayson MO, Connors TJ, Dogra P, Senda T, Bush E, Carpenter D, Marboe C, Benvenuto L, Shah L, Robbins H, Hook JL, Sykes M, D'Ovidio F, Bacchetta M, Sonett JR, Lederer DJ, Arcasoy S, Sims PA, Farber DL. Generation and persistence of human tissue-resident memory T cells in lung transplantation. *Sci Immunol*. 2019 Mar 8;4(33). pii: eaav5581. doi: 10.1126/sciimmunol.aav5581.

[Journal link](#)

[PubMed link](#)

Wolfe GI, Kaminski HJ, Aban IB, Minisman G, Kuo HC, Marx A, Ströbel P, Mazia C, Oger J, Cea JG, Heckmann JM, Evoli A, Nix W, Ciafaloni E, Antonini G, Witoonpanich R, King JO, Beydoun SR, Chalk CH, Barboi AC, Amato AA, Shaibani AI, Katirji B, Lecky BRF, Buckley C, Vincent A, Dias-Tosta E, Yoshikawa H, Waddington-Cruz M, Pulley MT, Rivner MH, Kostera-Pruszczyk A, Pascuzzi RM, Jackson CE, Verschuuren JJGM, Massey JM, Kissel JT, Werneck LC, Benatar M, Barohn RJ, Tandan R, Mozaffar T, Silvestri NJ, Conwit R, Sonett JR, Jaretzki A 3rd, Newsom-Davis J, Cutter GR; MGTX Study Group. Long-term effect of thymectomy plus prednisone versus prednisone alone in patients with non-thymomatous myasthenia gravis: 2-year extension of the MGTX randomised trial. *Lancet Neurol*. 2019 Mar;18(3):259-268.

[Journal link](#)

[PubMed link](#)

VASCULAR SURGERY

Publications

O'Donnell TFX, Boitano LT, Deery SE, Schermerhorn ML, Schanzer A, Beck AW, Green RM, Takayama H, Patel VI. Open Versus Fenestrated Endovascular Repair of Complex Abdominal Aortic Aneurysms. *Ann Surg*. 2019 Feb 1. doi: 10.1097/SLA.0000000000003094.

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