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Dear Faculty,

I am pleased to present this month's compendium of research news from the Department of Surgery. I hope that you will enjoy this issue of our newsletter and will continue to email [Paul Kurlansky \(pk2245@columbia.edu\)](mailto:pk2245@columbia.edu) or me (crs2@cumc.columbia.edu) with regular updates. Please be sure to let us know about your confirmed publications, presentations, and grants by the first of every month. In case you may not be aware, all issues of this [newsletter](#) are now available on the Center for Innovations and Outcomes Research web site for easy reference.

PubMed links below should work for everyone. Journal links require a subscription or connection through the Columbia University library e-journal system.

Best regards,
Craig Smith, MD

CONGRATULATIONS

To the winners of the 25th Surgical Research Competition:

| | |
|--|--|
| Brandon Guenthart, MD/Matthew Bacchetta, MD, MBA | A Novel Platform for Prolonged Extracorporeal Lung Support |
| Kazuki Sugahara, MD/Michael Kluger, MD | A Novel Nanosystem for Highly Tumor-Specific Imaging |
| Abhishek Mathur, MD/Jean Emond, MD | Visceral Adiposity is Associated with Increased Recurrence of Hepatocellular Carcinoma Following Liver Transplantation |
| Eric Przybyszewski, BS/Jean Emond, MD | Durable Clinical and Immunologic Advantage of Living Donor Liver Transplantation (LDLT) in Children |

To Emile Bacha on election to the Executive Council of the American Association for Thoracic Surgery.

To Isaac George on receiving the AATS Graham Foundation Surgical Investigator Program Award.

To Isaac George and Hiroo Takayama on election to the membership of the American Association for Thoracic Surgery.

To David Kalfa on selection as a Board Member of the Annals of Cardiology and Cardiovascular Diseases.

To Samuel Gavzy, MS, on receiving the American Society of Transplant Surgeons Presidential Student Mentor Grant for "Impact of IL-17-Producing, Memory T Lymphocytes on Tolerance Induction in Nonhuman Primate Model of Liver Transplantation." Mentor: Adam Griesemer.

To Julie Monteagudo on winning the Poster of Distinction for the Basic Science section of the American Pediatric Surgical Association (see below, Pediatric Surgery).

CARDIAC SURGERY

Presentations

*American Association of Thoracic Surgeons
Annual Meeting, Baltimore, May 14-18, 2016*

Chitwood WR, Barnhart GR, Accola KD, Woo JY, Grossi EA, Mumtaz MA, Sabik JF, Slachman FN, Patel HJ, Borger MA, Garrett HE, Rodriguez E, McCarthy PM, Ryan WH, Duhay FG, Mack MJ. TRANSFORM US Clinical Trial: Safety and Performance of a Rapid Deployment Aortic Valve.

Kalfa D, Kasmi L, Montreuil M, Geronikola N, Lamber V, Murzi E., Belli E, Bonnet D. Cognitive, Neuropsychological and Social Status is Impaired Two Decades after Neonatal Arterial Switch Operation.

Schwann TA, Tatoulis J, Puskas JD, Taggart D, Kurlansky P, Jacobs J, Thourani VH, O'Brien S, Wallace A, Engoren M, Tranbaugh RF, Bonnell MR, Habib RH. Trends in Multi-Arterial CABG Surgery 2004-2014: A Tale of Two Continents.

Smith CR. "Gladiator Session I" Total Arterial Revascularization.

Takayama H, Fukuhara S, Takeda K, Han J, DeRoo S, Li B, Sreekanth S, Topkara V, Garan A, Colombo P, Yuzefpolskaya M, Kurlansky, Naka Y. Novel Perspectives on Postcardiotomy Shock: New Insight to Improve Outcomes.

Takeday K, Takayama H, Graan R, Topkara VK, Han J, Kurlansky P, Yuzefpolskaya M, Colombo PC, Naka Y. Bridge to Durable Left Ventricular Assist Device using Various

Short-term Mechanical Circulatory Support Devices for Patients with an INTERMACS I Profile.

The Pediatric Cardiology Society of Greater New York
May 18, 2016

D Kalfa, E Belli, E Bacha, V Lambert, D di Carlo, H Sairanen, J Rubay, M Kostolny, C Schreiber, M Nosal, M Hazekamp, H Berggren, I Yemets, B Maruszewski, G Sarris, M Pozzi, T Ebels, F Lacour-Gayet; European Congenital Heart Surgeons Association (ECHSA). Pulmonary Vein Stenosis: Outcomes, Prognostic Factors and Severity Score in a Large Multicentric Study.

D Kalfa, M Pontailier, B Ahmad, G Williams, P Pouponneau, M Blanchy, K Thibaut, P Hommes-Schattmann, A Neffe, V Vanneaux, Penasche. Tissue Engineering of the Right Heart Outflow Tract by a Biofunctionalized Bioresorbable Polymeric Valved TUBE: Mid-term Results of the TEH-TUBE Program.

D Kalfa, Y Nakamura, S Levasseur, A Shah, L Freud, A Chelliah, P Chai, J Quaegebeur, E Bacha. Outcomes after Anatomic Repair for D-Transposition of Great Arteries with Ventricular Septal Defect and Left Ventricular Outflow Tract Obstruction.

D Kalfa, L. Kasmi, M Montreuil, N Geronikola, V Lambert, E Murzi, E Belli, D Bonnet. Cognitive, Neuropsychological and Social Status is Impaired Two Decades after Neonatal Arterial Switch Operation. Best Abstract award.

Publications

Baruteau AE, Vergnat M, Kalfa D, Delpy JG, Ly M, Capderou A, Lambert V, Belli E. Long term outcomes of the arterial switch operation for transposition of the great arteries and ventricular septal defect and/or aortic arch obstruction. *Interactive Cardiovascular and Thoracic Surgery*. 2016 May 1. pii: ivw102. [Epub ahead of print]

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Dadson K, Kovacevic V, Rengasamy P, Kim GHE, BooS, Li RK, George I, Schulze PC, Hinz B, Sweeney G. Cellular, structural and functional cardiac remodelling following pressure overload and unloading. *International Journal of Cardiology* 08/2016; 216:32-42.

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De Bonis M, Al-Attar N, Antunes M, Borger M, Casselman F, Falk V, Foliguet T, Iung B, Lancellotti P, Lentini S. Surgical and interventional management of mitral valve regurgitation: a position statement from the European Society of Cardiology Working Groups on Cardiovascular Surgery and Valvular Heart Disease. *European Heart Journal* 2016;37: 133-1139.

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Hickey KT, Garan H, Mancini DM, Colombo PC, Naka Y, Sciacca RR, Abrams MP, Solove M, Zeoli N, Flannery M. Atrial Fibrillation in Patients With Left Ventricular Assist Devices. *JACC Clinical Electrophysiology* 05/2016; DOI:10.1016/j.jacep.2016.03.009.

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Kodali S, Thourani V, White J, Malaisrie sC, Lim S, Greason KL, Williams M, Guerrero M, Eisenhauer AC, Kapadia S, Kereiakes DJ, Hermann HC, Babaliaros V, Szeto WY, Hahn RT, Pibarot P, Weissman NJ, Leipsic J, Blanke P, Whisenant BK, Suri RM, Makkar RR, Ayele GM, Svensson LG, Webb JG, Mack MJ, Smith CR, Leon MB. Early clinical and echocardiographic outcomes after SAPIEN 3 transcatheter aortic valve replacement in inoperable, high-risk and intermediate-risk patients with aortic stenosis. *European Heart Journal*. 2016 Mar 31. pii: ehw112.

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Kolh P, Kurlansky P, Cremer J, Lawton J, Siepe M, Fremes S. Transatlantic editorial: A comparison between European and North American guidelines on myocardial revascularization. Simultaneous publication: *Journal of Thoracic and Cardiovascular Surgery*. 2016 May 4. pii: S0022-5223(16)30261-6.

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Annals of Thoracic Surgery. 2016 Jun;101(6):2031-44. doi: 10.1016/j.athoracsur.2016.02.062.

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European Journal of Cardiothoracic Surgery. 2016 May;49(5):1307-17. doi: 10.1093/ejcts/ezw086.

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Kurlansky P. Multiple arterial grafting for coronary revascularization: "A guide for the perplexed". *Trends in Cardiovascular Medicine*. 2016 Apr 13. pii: S1050-1738(16)30019-6. doi: 10.1016/j.tcm.2016.04.002. [Epub ahead of print] Review.

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Leontyev S, Haag F, Davirerwala PM, Lehmkuhl L, Borger MA, Etz CD, Misfeld M, Gutberlet M, Mohr FW. Postoperative Changes in the Distal Residual Aorta after Surgery for Acute Type A Aortic Dissection: Impact of False Lumen Patency and Size of

Descending Aorta. The Thoracic and Cardiovascular Surgeon 04/2016; DOI:10.1055/s-0036-1571813.

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Levin AP, Saeed O, Willey JZ, Levin CJ, Fried JA, Patel SR, Sims DB, Nguyen JD, Shin JJ, Topkara V, Colombo PC, Goldstein D, Naka Y, Takayama H, Uriel N, Jorde UP. Watchful Waiting in Continuous-Flow Left Ventricular Assist Device Patients With Ongoing Hemolysis Is Associated With an Increased Risk for Cerebrovascular Accident or Death. *Circulation: Heart Failure*. 2016 May;9(5). pii: e002896. doi: 10.1161/CIRCHEARTFAILURE.115.002896.

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Sorabella RA, Guglielmetti L, Bader A, Gomez A, Takeda K, Chai PJ, Takayama H, Bacha EA, Naka Y, George I. The Use of Hypothermic Circulatory Arrest During Heart Transplantation Does Not Worsen Posttransplant Survival. *Annals of Thoracic Surgery*. 2016 May 18. pii: S0003-4975(16)30167-9. doi: 10.1016/j.athoracsur.2016.03.058. [Epub ahead of print]

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Takayama H. Knife saves life. *Journal of Thoracic and Cardiovascular Surgery* 2016 Jun;151(6):1659-60. doi: 10.1016/j.jtcvs.2015.12.069. Epub 2016 Jan 27.

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Undar A, Chai P, Bacha E. Welcome to the 12th. International Conference on Pediatric Mechanical Circulatory Support Systems and Pediatric Cardiopulmonary Perfusion. *Artificial Organs* 05/2016; 40(5):431-433.

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Varr BC, Restaino SW, Farr M, Scully B, Colombo PC, Naka Y, Mancini DM. Infectious complications after cardiac transplantation in patients bridged with mechanical circulatory support devices versus medical therapy. *Journal of Heart Lung Transplant* April 2016 DOI: 10.1016/j.healun.2016.04.016.

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Weinberg A, Mongero L, Armstrong B. ECMO cannulation strategy for pulmonary hypertension: an alternative approach to traditional veno-arterial ECMO. *Perfusion*. 2016 Apr 22. pii: 0267659116646179. [Epub ahead of print]

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CENTER INNOVATION AND OUTCOMES RESEARCH

Presentations

International Society for Pharmacoeconomics and Outcomes Research, 21st Annual International Meeting, Washington D.C. May 21-26, 2016

Bashyal R, Du H, Wang L, Yuce H, Baser O. Examining the mortality and readmission rates of patients diagnosed with stroke in the United States Medicare population. PCV6/F21

Bashyal R, Du H, Wang L, Baser O. Examining the incidence and prevalence of alcohol dependence among US veteran patients. PMH19/L7

Bashyal R, Du H, Wang L, Baser O. Examining the incidence and prevalence of bipolar disorder among US veteran patients. PMH20/L8

Bashyal R, Du H, Wang L, Yuce H, Baser O. Mortality and prevalence of major depressive disorder in the US Medicare population from 2008-2013. PMH17/L5

Kariburyo MF1, Du J1, Xie L1, Baser O. Assessing the economic burden of rheumatoid arthritis patients with different clinical disease activity index scores: A probabilistic matching study. PMS35/G2

Kariburyo MF, Du J, Xie L, Baser O. Examining the health care resource utilization and economic burden among rheumatoid arthritis patients with different routine assessment of patient Index Data 3 scores: A probabilistic matching study. PMS39/G6

Keshishian A, Tan H, Xie L, Baser O. Examination of the economic burden of dyslipidemia in the veterans health administration population. PCV41/H1

Keshishian A, Du J, Xie L, Yuce H, Baser O. Demographic and socioeconomic characteristics that impact selection of oral anticoagulants among non-valvular atrial fibrillation patients. PCV88/J12

Ogbomo A, Zhao Y, Kariburyo MF, Xie L, Yuce H, Baser O. Retrospective analysis of the economic burden of patients diagnosed with congestive heart failure in the California Medicaid population. PCV42/H2

Ogbomo A, Tan H, Kariburyo MF, Xie L, Baser O. Assessing the economic burden and health care resource utilization of US veterans with chronic obstructive pulmonary disease.

PRS27/J2

Pandya S, Du H, Wang L, Yuce H, Baser O. Mortality and re-hospitalization rates among patients with chronic obstructive pulmonary disease in the US Medicare population.

PRS9/H20

Pandya S, Du H, Wang L, Baser O. Examining the prevalence and incidence rates among patients with drug dependence in the US veteran population. PMH18/L6

Pandya S, Du H, Wang L, Baser O. Examining the prevalence and incidence rates among patients with depressive disorder in the US veteran population. PMH21/L9

Pesa JA, Wang L, Yuce H, Baser O. Proton-pump inhibitor utilization among patients with Hepatitis C Virus. PIN9/D1

Tan H, Xie L, Baser O, Yuce H, Wang Y. Evaluating the economic burden and healthcare utilization of anemia in the US Medicare population. PSY31/K16

Tan H, Xie L, Wang Y, Yuce H, Baser O. Examining the burden of illness of US Medicare patients diagnosed with cataract. PSS11/L17

Wang L, Yuce H, Baser. Mortality and re-hospitalization rates among hospitalized congestive heart failure patients in the US Medicare population. PCV26/G7

Zhang Q, Zhao Y, Keshishian A, Xie L, Yuce H, Baser O. Evaluating the economic burden and health care utilization of coronary artery disease in the US Medi-CAL population.

PCV43/H3

Zhang Q, Zhao Y, Keshishian A, Xie L, Yuce H, Baser O. Evaluating asthma-related expenses and healthcare resource utilization among children in the US Medicaid population.

PRS28/J3

Zhang Q, Zhao Y, Keshishian A, Xie L, Yuce H, Baser O. Assessing the economic burden and health care utilization of attention deficit/hyperactivity disorder among Medicaid patients in the US. PMH33/M1

COLON AND RECTAL SURGERY

Publications

Adelaide Murray AC, Pasam R, Estrada D, Kiran RP. Risk of Surgical Site Infection Varies Based on Location of Disease and Segment of Colorectal Resection for Cancer. *Diseases of the Colon and Rectum*. 2016 Jun;59 (6):493-500. doi: 10.1097/DCR.0000000000000577.

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GI /ENDOCRINE SURGERY

Presentations

50th Annual Pancreas Club

May 2016, San Diego, CA

Kluger MD, Schrope BA, Hecht EM, Manji GA, Saenger Y, Oberstein PE, Chabot JA. High rate of R0 resection following neoadjuvant chemoradiation for locally advanced pancreatic cancer: an incidental finding from irreversible electroporation-assisted resection.

Digestive Disease Week

May 2016, San Diego, CA

Xu MM, Yin S, Schrope BA, Sethi A, Poneris J, Gress F, Genkinger J, Do C, Chabot J, Kluger MD, Siddiqui A, Gonda T. Comparison of the diagnostic yield of current guidelines for the evaluation of asymptomatic pancreatic cystic neoplasms.

Publications

Kluger MD, Lee JA, Chabot JA. Total pancreatectomy. In: UpToDate, Post TW (Ed), UpToDate, Waltham, MA.

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PEDIATRIC SURGERY

Presentations

47th annual meeting of the American Pediatric Surgical Association (APSA)

San Diego, CA, May 2016

Monteagudo J, O'Brien C, Schad CA, Rapido F, Fung K, Bateman DA, Middlesworth W. Ex vivo comparison of extracorporeal membrane oxygenation circuits and cannulae to evaluate sources of hemolysis. Poster of Distinction: Basic Science.

Publications

Blancha VL, Ratneer V, Aspelund G, Chai P, Levasseur S, Krishnan U, Bacha E, Krishnamurthy G. Survival of Three Neonates With Congenital Diaphragmatic Hernia and D-Transposition of the Great Arteries. *World Journal for Pediatric and Congenital Heart Surgery* May 2016, 05/2016; DOI:10.1177/2150135116632509.

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THORACIC SURGERY

Presentations

*American Association for Thoracic Surgery Annual Meeting,
Baltimore, May 2016*

Bacchetta M, ECMO in the Field—The New Logistics of Pump and Run.

*24th European Conference on General Thoracic Surgery
Naples, Italy, May 2016*

Costa J, Sowmya S, Shah L, Robbins H, Raza K, Arcasoy S, Sonett JR, D'Ovidio F. Organ Donors from Asphyxiation are Valuable Source of Lung Allografts.

Publications

Abrams D, Baldwin MR, Champion M, Agerstrand C, Eisenberger A, Bacchetta M, Brodie D. Thrombocytopenia and extracorporeal membrane oxygenation in adults with acute respiratory failure: a cohort study. *Intensive Care Medicine*. 2016 May;42(5):844-52. doi: 10.1007/s00134-016-4312-9. Epub 2016 Mar 23.

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Agerstrand C, Abrams D, Biscotti M, Moroz L, Rosenzweig EB, D'Alton M, Brodie D, Bacchetta M. Extracorporeal Membrane Oxygenation for Cardiopulmonary Failure During Pregnancy and Postpartum. *Annals of Thoracic Surgery*. 2016 May 3. pii: S0003-4975(16)30092-3. doi: 10.1016/j.athoracsur.2016.03.005. [Epub ahead of print]

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Costa J, Sreekanth S, Kossar A, Raza K, Robbins H, Shah L et al. Donors with a prior history of cardiac surgery are a viable source of lung allografts. *European Journal of Cardiothoracic Surgery* 2016; doi:10.1093/ejcts/ezw157.

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Costa J, Sreekanth S, Kossar A, Raza K, Lederer DJ, Robbins H, Shah L, Sonett JR, Arcasoy S, D'Ovidio F. Donor lung assessment using selective pulmonary vein gases. *European Journal of Cardiothoracic Surgery*. 2016 May 30. pii: ezw179. [Epub ahead of print]

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TRANSPLANTATION

Publications

Weiner J, Griesemer A, Island E, Lobritto S, Martinez M, Selvaggi G, Lefkowitz J, Velasco M, Tryphonopoulos P, Emond J, Tzakis A, Kato T. Long term outcomes of auxiliary partial orthotopic liver transplantation in preadolescent children with fulminant hepatic failure. *Liver Transplantation*. 2016 Apr;22(4):485-94.

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