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Citizenship and/or Visa Information: United States Citizen

Education

	Years	Degree/Date	Field of Study
Dartmouth College	1995-99	A.B., June 1999	Mathematics, Biology
Columbia University	2000-02	M.S., June 2002	Biostatistics
Harvard University	2002-07	Ph.D., June 2007	Biostatistics

Faculty Appointments

Years	Rank	Institution	Department
2007-2011	Assistant Professor	MUSC	Biostatistics and Epidemiology
2012	Associate Professor	MUSC	Biostatistics and Epidemiology
2012-2019	Associate Professor (with Tenure)	UTSPH	Biostatistics and Data Science
2019-present	Professor	UTSPH	Biostatistics and Data Science

Other Experience

Years	Position	Institution	Department
1999-2000	Research Fellow	Centers for Disease Control	Immunology & Infectious Diseases
2000-2002	Research Assistant	Columbia University	Pathology, Epidemiology
2002-2006	Teaching Assistant	Harvard University	Biostatistics
2005-2006	Consultant	Brigham and Women's Hospital	Anesthesiology, Perioperative, & Pain Med
Aug 2008, 2011	Visiting Biotatistician	Karolinska Institute	Epidemiology
2011-2012	Visiting Biotatistician	Cambridge University	MRC Biostatistics Unit

Membership in Professional/Scientific Societies, Current or Former

American Statistical Association
International Biometrics Society (ENAR)
American Statistical Association (Texas Chapter)
American Public Health Association
American Heart Association
College of Problems on Drug Dependence

Journal Editorial Service

Statistical Editor, Circulation (September 2018 - present)
Associate Editor, Statistics in Medicine (January 2018 - present)
Statistical Editor, Journal of the American Heart Association (June 2020-present)

Journal Referee Statistics in Medicine, Biometrics, Biostatistics, Journal of the Royal Statistical Society Series A, Journal of the Royal statistical Society Series C, Statistics and Computing, Statistical Methods in Medical Research, Journal of Applied Statistics, Statistica Neederlandica, Biometrical Journal, Journal of Agricultural, Biological, and Environmental Statistics, Health Services and Outcomes Research, Medical Decision Making, American Journal of Epidemiology, Journal of Clinical Epidemiology, British Medical Journal, British Medical Journal Open, Circulation, American Journal on Addictions, Drug and Alcohol Dependence, American Journal of Drug and Alcohol Abuse, PLOS One, etc.

NIH Service

NIH/NIMH ALACRITY Review Panel, Study Section Oct 9, 2024

NIH Study Section Member Analytics and Statistics for Population Research panel A (ASPA) study section Epidemiology and Population Health branch Division of AIDS, Behavioral and Population Sciences (July 2022-Feb 2024)

NIH Biomedical Research Design (BMRD) Study Section, Invited Study Section Member (July 2022 – Name change per above)

NIH Biomedical Research Design (BMRD) Study Section, Statistical Reviewer (October 2021)

NIH/NIMH Mental Health Services Statistical Reviewer (October 2021)

NIH Biomedical Research Design (BMRD) Study Section, Statistical Reviewer (February 2021)

NIH Biomedical Research Design (BMRD) Study Section, Statistical Reviewer (October 2019)

NIH/NIMH Practice-Based Research Network to Transform Mental Health Care Peer Review (July 2019)

NIH/NIMH Mental Health Services Research Committee (SERV) Peer Review (June 2019)

NIH/NIMH Confirmatory Efficacy and Interventions Special Emphasis Panel, 3 services (October 2016-January 2019)

NIH/NIMH Faculty Member, Research Career Institute in Mental Health of Aging (CIMA) (July 2017)

NIH/NHBLI Clinical and Integrative Cardiovascular Sciences Study Section, Statistical Reviewer (February 2017)

President, Houston Chapter of the American Statistical Association (2015-2016)

NIH Biomedical Research Design (BMRD) Study Section, Statistical Reviewer (June 2016)

NIH/NHBLI Clinical and Integrative Cardiovascular Sciences Study Section, Statistical Reviewer (January 2016)

NIH/NIMH Study Section member, Interventions Committee for Adult Disorders, 9 services (2012-2015).

NIH/NIAAA Clinical, Treatment, and Health Services Review Meeting, Statistical Reviewer (February 2014).

NIH/NIMH Faculty member, Summer Research Institute in Geriatric Mental Health, Cornell University (July 2011-2017).

NIH/ORP Healthcare Delivery and Methodologies Integrated Review Group, Statistical Reviewer (September 2011).

Data Safety and Monitoring Boards/Committees

Statistician, Data Safety and Monitoring Committee, "Non-Invasive Monitoring of Traumatic Brain Injury Progression using the Infrascanner 1 (MOBI-1)." PI: Jan Jansen (2022-), Department of Defense.

Statistician, Data Safety and Monitoring Committee, "A Pilot Randomized Clinical Trial of the Xstat Hemostatic Device in the PreHospital Setting (PhoXSTAT)." PI: Jan Jansen (2022-), Department of Defense.

Statistician, Data Safety and Monitoring Committee, "Video-based Intervention to Reduce Treatment and OUtcome Disparities in Adults Living with Stroke or Transient Ischemic Attack (VIRTUAL).", PI:Sharrief (2022-2027), NIH/NINDS.

Statistician, Data Safety and Monitoring Committee, "Cognitive Remediation Delivered Via Mobile Technology Randomized Controlled Trial", PI: Gunning (2016-2018), NIH/NIMH.

Statistician, Data Safety and Monitoring Board, "A Randomized, Double Blind, Placebo Controlled Study of Omega Fatty Acid Supplementation in Autism"**,** PI: Laura Carpenter (2009-2010), NIH.

Statistical Reviewer, Hollings Cancer Center Internal Awards, Medical University of South Carolina, Charleston, SC (2008).

Conference Organization and Contribution to the Statistical Community

American Public Health Association (APHA) 2021 Session Organizer, "Epidemiology Special Section: Understanding the Human Antibody Response to SARS-CoV-2 in Diverse Populations: The Texas Coronavirus Antibody Response Survey (CARES): Oct 25, 2021, Denver, CO.

International Society for Clinical Biostatistics (ISBC 2021) Conference Organizing Committee and Session Organizer, July 19-22, 2021 Lyon, France.

American Statistical Association Committee on Minorities in Statistics "Stat Fest" co-host, University of Texas Health Science Center at Houston, School of Public Health, Houston, TX, September 21, 2019.

Conference on Big Data and Information Analytics, Session Organizer, "Propensity scoring methods for big data sets," December 17, 2018, Houston TX.

Southern Regional Council on Statistics, Session Organizer, "Semiparametric Inferences in Penalized Splines and Missing Data," June, 2008, Charleston, SC.

Current Research Grants:

NIH/NHLBI   8/10/2022-7/31/2027
1 U24 HL157310-01A1 (Role: PI *40%*)
Trauma Resuscitation with Group O Whole Blood or Products (TROOP)

HT9425-23-S-BAA1   1/01/2024-12/31/2027
USAMMRAA (Role: Subcontract PI *5%*)
BioTROOP Study: A muliomic bioanalysis of Trauma Resuscitation with Group O Whole Blood or Products (TROOP)

HHS00086660001 (Role: DCC MPI, *20%*)   8/07/2020 - 8/31/2022
Texas Coronavirus Antibody Response Surveillance $7,645,231

R61NS113316 (PI: Prossin, Role: Co-I *10-15%*)   9/01/2019-7/31/2024
NIH/NIDA $3,000,000
(Phase II of the study is expected to be 8/1/2022-7/31/2024)
Discovery and analytical validation of inflammatory bio-signatures of the human pain experience

R21DE031440-01A1 (PI: CT Lee, Role: Co-I *2.5%*)   09/01/2022-08/31/2024
NIH $454,028
The impact of race/ethnicity on inflammation regulation and microbiome interactions in pediodontitis

Completed Research Grants as Principal Investigator:

T32 GM074902 Predoctoral Training Grant (PI: DeSantis)   7/01/2016-09/30/2019
NIH/NIGMS $139,691
Predoctoral Training Grant in Biostatistics

R21MH110110 with competitive suppl. (PI: DeSantis, *40%*)   12/6/2016-12/05/2018
NIH/NIMH $432,000
Aiding Clinical Decision-Making Using Multivariate Network Meta-Analysis
(Competitive Supplement awarded, $46,200, extension granted to 11/30/2019, 37.5%)

American Statistical Association (PI: DeSantis)   1/01/2017-12/31/2018
Biometrics Division $5,000

Developing the Next Generation of Biostatisticians
(Grant awarded to facilitate recruitment of Texas minorities into Biostatistics)

R03 AA020648   8/01/2011-7/30/2013
NIH/NIAAA (PI: DeSantis, *30%*) $147,000
Robust Transition Models for the Analysis of Longitudinal Drinking Outcomes
(*No cost extension*)

L30 DA027346   8/01/2009-7/31/2011
NIH/NIDA $35,000
Biostatistical Applications in Substance Use Research (Loan Repayment Award)

American Statistical Association   12/01/2008-11/01/2009
Biometrics Division $3,000
Developing the Next Generation of Biostatisticians

Completed Research Grants as Co-Investigator:

Harvard/Cure Alzheimer's Fund (Role: Subcontract PI *15-20%*)   9/01/2019-01/14/2022
Analytical and statistical tools for sequence analysis for Alzheimer's Disease (subcontracted from
Harvard TH Chan School of Public Health)

Dept of Defense (PI: Yamal, Role: Co-I *10%*)   9/01/1020-02/28/2022
W81XWH2010770 $748,708
Leveraging FITBIR Data to Improve Clinical Practice of Severe TBI

U34 (PI:Jansen, Role: co-I, *9%*)   8/1/2019-7/31/2020
NIH/NHLBI $120,377
Trauma Resuscitation with Group O Whole Blood or Products (TROOP) Trial

Prytime Medical Devices, Inc (subcontract PI: DeSantis, *35%*)   6/01/2017-12/31/2019
Emergent Truncal Hemorrhage Control Study $226,928

W81XWH14-1-0112 Department of Defense (Subcontract PI: DeSantis *10%*)   9/15/2014-12/31/2018
USAMRAA $1,991,317
Hemorrhage Control for Major Traumatic Vascular Injuries

U01HL77863 (Holcomb, **Role: Co-I 40%**)   1/16/2015-12/31/2018
NIH/NHLBI
Prehospital Resuscitation on Helicopter Study
The objective of this study is to compare the effectiveness of two different existing prehospital resuscitation approaches in
severely injured trauma patients transported by air ambulance in a pragmatic, multicenter, prospective observational study.

U24MD006941 (Tilley**, Role: Co-I 20%**)   9/20/2011-06/30/2018
NIH/NIMHD
A Randomized Recruitment Intervention
This is a randomized trial of an intervention to increase racial and ethnic diversity in clinical trials of low prevalence conditions.

CIPRIT Cancer Prevention Research of Texas (Xu, **Role: Co-I 5%**)   11/1/2013-10/31/2015
Repurposing Existing Drugs for Cancer Treatment using Electronic Health Records.

NASA/National Space Biomedical Research Institute (Bershad, **Role: Co-I 12%**)   4/1/2013-3/31/2015
The Suitability of the Vittamed Two-Depth Transcranial Doppler for the Non-Invasive Assessment of Intracranial Pressure in
Astronauts Before and After Spaceflight

U01HL77863   10/1/2010 – 9/30/2015

NIH/NHLBI (Tilley, *Role: Co-I 20%*)
Prospective, Randomized Optimal Platelets & Plasma Ratios
The Center oversees the design, data management, analysis, and reporting including reporting to the Data and Safety monitoring committee and publications for a multi-site randomized trial of blood products for patients presenting to emergency departments in need of massive transfusions.

Completed Research Grants as Co-Investigator (more than 5 years ago):

1 R01 HL095608 (Spinale)   1/15/2010 – 12/31/2013
NIH/NHLBI $262,881
Myocardial Protection and Matrix Proteases
This study is focused upon the use of a large animal model of post-myocardial infarction (MI) in order to examine the potential role of targeted MMPs and TIMPs in the process of post-MI remodeling.

5U01NS059041 (Palesch)   8/01/2010-7/31/2012
NIH/NINDS
Neurological Emergencies Treatment Trials Network and Statistical Data Management

P50 DA016511 (PI: Brady)   9/30/2007-6/30/2012
NIH/NIAMS $596,417
Specialized Center of Research (SCOR) on Sex and Gender Factors Affecting Women's Health
This center grant is funded through a partnership between ORWH and NIH to develop and conduct innovative, interdisciplinary and collaborative research investigating substance use disorders among women.

1 K12 HD055885-02 (PI: Brady)   9/28/2007-7/31/2012
NIH/NICHD $459,990
Building Interdisciplinary Research Careers in Women's Health (BIRCWH)
The overall objective of the program is to promote the performance of research in women's health by bridging advanced training with research independence. A major aim is to attract clinical, basic, behavioral and biostatistical scientists to broaden interdisciplinary research related to women's health in South Carolina and throughout the U.S.

1 R01 DA023188-02 (PI: Brady)   6/01/2008-5/31/2012
NIH/NIDA $250,000
D-Cycloserine Facilitation of Cocaine-Cue Extinction
The purpose of this proof of concept study is to explore the application to addictions of an innovative treatment approach which has shown promise in the treatment of anxiety disorders.

1 R25 DA020537-04 (PI: Brady)   5/26/2006-4/30/2011
NIH/NIDA $256,346
Drug Abuse Research Training (DART) Program
The DART program is designed to attract, train, and advance physicians' careers as independent investigators in patient-oriented drug abuse research.

1 R01 DA026777-01 (PI: Gray)   8/01/2009-7/31/2011
NIH/NIDA $250,000
A Controlled Trial of N-Acetylcysteine (NAC) in Cannabis Dependent Adolescents
The purpose of this project is to examine the efficacy of NAC, in combination with contingency management, for treatment of cannabis dependence in adolescents.

RC1 AA019019 (PI: Saladin)   9/30/2009 – 8/31/2011
NIH/NIAAA $282,687
Treatment Implications of Trauma Memory Modulation for PTSD & Alcohol Dependence
The goal is to employ an established cue reactivity/exposure methodology to assess the therapeutic potential of an untested and potentially promising adjunctive pharmacotherapy for one of the most prevalent and intractable mental health comorbidities, PTSD and alcohol dependence.

1 R01DA026782-01 (PI: McRae)   8/15/2009-1/31/2011   .

NIH/NIDA $234,220
Buspirone treatment for Marijuana Dependence
Results from this study could lead to the development of a new pharmacotherapy for marijuana dependence. Increase our knowledge of a potential genetic biomarker for prediction of outcomes, and improve clinical trial methodology in the investigation of marijuana dependence.

R21 & R33 DA026085-03 (PI: Brady)   9/15/2008-8/31/2009
NIH/NIDA $357, 208
The Impact of Real-time fMRI Feedback on Response to Nicotine Cues
The goal is to evaluate whether or not nicotine dependent smokers can learn to modulate activity in critical brain regions that control urges and craving to smoke.

Software

 # Denotes graduate student

1. #Brown DW, #Greene TJ, **DeSantis SM**. (2019). GPSCDF: Generalized Propensity Score Cumulative Distribution Function. R package version 0.1.1. https://CRAN.R-project.org/package=GPSCDF

2. #Hwang H, **DeSantis SM**. Multivariate network meta-analysis. (2019). GitHub. https://doi.org/10.5281/zenodo.2581561

Book Chapters

 # Denotes graduate student

1. **DeSantis SM**, Xiong M, Yamal J-M, et al. Chapter 7: Causal inference and analysis for EHR data, in Statistics and machine learning methods for EHR: From data extraction to data analytics by Wu, H., et al. Taylor & Francis (In press); 2020.

2. #Zhu G, #Brito F, **DeSantis SM**, Maroufy V. Chapter 8: EHR data exploration, analysis and predictions: Statistical models and methods in Statistics and machine learning methods for EHR: From data extraction to data analytics by Wu, H., et al. Taylor & Francis (In press); 2020.

Publications

 # Denotes graduate student or post-doctoral researcher

2024

1. #Patel RR, Delclos GL, **DeSantis SM**, Cannell MB, Lupo PJ, Bishop AJ, Lazar AJ, Lin PP, Benjamin RS, Patel SR, Ludwig J, Ravi V, Livingston JA, Somaiah N, Zarzour MA, Conley AP, Araujo DM. Does the Primary Tumor Site Drive Biology for Patients With Synovial Sarcoma? Am J Clin Oncol. 2024 Sep 3. doi: 10.1097/COC.0000000000001142. Epub ahead of print. PMID: 39224003.

2. Messiah SE, Abbas R, Bergqvist E, Kohl HW 3rd, Swartz MD, Talebi Y, Sabharwal R, Han H, Valerio-Shewmaker MA, **DeSantis SM**, Yaseen A, Gandhi HA, Amavisca XF, Ross JA, Padilla LN, Gonzalez MO, Wu L, Silberman MA, Lakey D, Shuford JA, Pont SJ, Boerwinkle E. Factors associated with elevated SARS-CoV-2 immune response in children and adolescents. Front Pediatr. 2024 Aug 15;12:1393321. doi: 10.3389/fped.2024.1393321. PMID: 39228441; PMCID: PMC11369978.

3. Messiah SE, Talebi Y, Swartz MD, Sabharwal R, Han H, Bergqvist E, Kohl HW 3rd, Valerio-Shewmaker M, **DeSantis SM**, Yaseen A, Kelder SH, Ross J, Padilla LN, Gonzalez MO, Wu L, Lakey D, Shuford JA, Pont SJ, Boerwinkle E. Long-term immune response to SARS-CoV-2 infection and vaccination in children and adolescents. Pediatr Res. 2024 Jul;96(2):525-534. doi: 10.1038/s41390-023-02857-y. Epub 2023 Oct 24. PMID: 37875728; PMCID: PMC11343709.

4. #Hahn G, Prokopenko D, Hecker J, Lutz SM, Mullin K, Sejour L, Hide W, Vlachos I, **DeSantis SM**, Tanzi RE, Lange C. (2024). Prediction of disease-free survival for precision medicine using cooperative learning on multi-omic data. Accepted, *Briefings in Bioinformatics*.

5. #Hahn G., Prokopenko D, Hecker J, Lutz SM, Mullin K, Tanzi RE, **DeSantis SM**, Lange C. (2024) Polygenic hazard score models for the prediction of Alzheimer's free survival using the lasso for Cox's proportional hazards model. *Genetic Epidemiology*, Epub.

6. Dixon A, Kenny JE, Buzzard L, et al, and PROPPR Study Group including **DeSantis SM**. (2024). Acute respiratory distress syndrome, acute kidney injury, and mortality after trauma are associated with increased circulation of syndecan-1, soluble thrombomodulin, and receptor for advanced glycation end products. *J Trauma Acute Care Surg*. 2024 Feb 1;96(2):319-325.

7. Yaseen A, **DeSantis SM,** Sabharwal R, Talebi Y, Swartz MD, Zhang S, Leon Novelo L, Pinzon-Gomez CL, Messiah SE, Valerio-Shewmaker M, Kohl HW 3rd, Ross J, Lakey D, Shuford JA, Pont SJ, Boerwinkle E. Baseline characteristics of SARS-CoV-2 vaccine non-responders in a large population-based sample. *PLoS One*. 2024 May 13;19(5):e0303420. doi: 10.1371/journal.pone.0303420. PMID: 38739625; PMCID: PMC11090326.

8. #Patel RR, Delclos GL, **DeSantis SM**, Cannell MB, Lupo PJ, Lin PP, Araujo DM. (2024). Epidemiological trends of synovial sarcoma by primary tumor sites in the US from 2000 to 2020. *Cancer Epidemiology*. In press.

2023

1. **DeSantis SM**, Yaseen A, Swartz MD, et al. Incidence of SARS-CoV-2 breakthrough infections after vaccination in adults: A population-based survey through March 1, 2023. Accepted, *Open Forum Infectious Diseases*.

2. **DeSantis SM,** Yaseen A, #Hao T, León-Novelo L, #Talebi Y, Valerio-Shewmaker MA, #Pinzon Gomez CL, Messiah SE, Kohl HW, Kelder SH, Ross JA, #Padilla LN, Silberman M, Tuzo S, Lakey D, Shuford JA, Pont SJ, Boerwinkle E, Swartz MD. Incidence and Predictors of Breakthrough and Severe Breakthrough Infections of SARS-CoV-2 After Primary Series Vaccination in Adults: A Population-Based Survey of 22 575 Participants. *J Infect Dis*. 2023 May 12;227(10):1164-1172. doi: 10.1093/infdis/jiad020. PMID: 36729177.

3. Messiah SE, #Talebi Y, Swartz MD, Sabharawal R, Han H, Bergqvist E, Kohl HW III, Valerio-Shewmaker M, **DeSantis SM**, Yaseen A, Kelder SH, Ross J, Padilla LN, Gonzalez MO, Wu L, Lakey D, Shuford JA, Pont SJ, Boerwinkle E. (2023). Long-term immune response to SARS-CoV-2 infection and vaccination in children and adolescents. *Pediatric Research* Oct 24. doi: 10.1038/s41390-023-02857-y. Online ahead of print.

4. #Hebballi NB, **DeSantis S**, Brown EL, Markham C, Tsao K. Body Mass Index Is Associated With Pediatric Complicated Appendicitis and Postoperative Complications. *Annals of Surgery*. 2023 Sep 1;278(3):337-346. doi: 10.1097/SLA.0000000000005965. Epub 2023 Jun 15. PMID: 37317845.

5. Yaseen A, Robertson C, Cruz Navarro J, Chen J, Heckler B, **DeSantis SM**, Temkin N, Barber J, Foreman B, Diaz-Arrastia R, Chesnut R, Manley GT, Wright DW, Vassar M, Ferguson AR, Markowitz AJ, Yamal JM. Integrating, Harmonizing, and Curating Studies With High-Frequency and Hourly Physiological Data: Proof of Concept from Seven Traumatic Brain Injury Data Sets. *J Neurotrauma*. 2023 Aug 16. doi: 10.1089/neu.2023.0023. Epub ahead of print. PMID: 37341031.

6. #Xie L, Chandrasekhar A, **DeSantis SM**, Almandoz JP, de la Cruz-Muñoz N, Messiah SE. Discontinuation and reduction of asthma medications after metabolic and bariatric surgery: A systematic review and meta-analysis. *Obes Rev*. 2023 Feb;24(2):e13527. doi: 10.1111/obr.13527. Epub 2022 Nov 7. PMID: 36345564.

7. #Tadese BK, **DeSantis SM**, Mgbere O, Fujimoto K, Darkoh C. Clinical Outcomes Associated with Co-infection of Carbapenem-Resistant Enterobacterales and other Multidrug-Resistant Organisms. *Infect Prev Pract*. 2022 Oct 17;4(4):100255. doi: 10.1016/j.infpip.2022.100255. PMID: 36387607; PMCID: PMC9649373.

8. Messiah SE, Swartz MD, Abbas RA, Talebi Y, Kohl HW 3rd, Valerio-Shewmaker M, **DeSantis SM**, Yaseen A, Kelder SH, Ross JA, Padilla LN, Gonzalez MO, Wu L, Lakey D, Shuford JA, Pont SJ, Boerwinkle E. SARS-CoV-2 Serostatus and COVID-19 Illness Characteristics by Variant Time Period in Non-Hospitalized Children and Adolescents. *Children (Basel).* 2023 Apr 30;10(5):818. doi: 10.3390/children10050818. PMID: 37238366; PMCID: PMC10217706.

9. Swartz MD, **DeSantis SM**, Yaseen A, et al. (2023). Antibody duration after infection from SARS-CoV-2 in the Texas Coronavirus Antibody Response Survey. *Journal of Infectious Diseases*. 227(2):193-201.

   ^The above paper received 23 citations in less than one year.

2022

1. #Kim HS, Xiao X, Byun J, Jun G, **DeSantis SM,** Chen H, Thrift AP, El-Serag HB, Kanwal F, Amos CI. Synergistic Associations of PNPLA3 I148M Variant, Alcohol Intake, and Obesity With Risk of Cirrhosis, Hepatocellular Carcinoma, and Mortality. *JAMA Netw Open*. 2022 Oct 3;5(10):e2234221. doi: 10.1001/jamanetworkopen.2022.34221. PMID: 36190732; PMCID: PMC9530967.

2. **DeSantis SM**, Leon-Novelo L, Swartz MD et al. (2022). Methodology to estimate natural- and vaccine-induced antibodies to SARS-CoV-2 in a large geographic region. *PLOS On*e, Sept 9, 2022 https://doi.org/10.1371/journal.pone.0273694

3. #Tadese BK, Darkoh C, **DeSantis SM**, Mgbere O, Fujimoto K. Clinical epidemiology of carbapenem-resistant Enterobacterales in the Greater Houston region of Texas: a 6-year trend and surveillance analysis. *J Glob Antimicrob Resist*. 2022 Sep;30:222-227. doi: 10.1016/j.jgar.2022.06.019. Epub 2022 Jun 25. PMID: 35764216; PMCID: PMC9486688.

4. #Tadese BK, Fujimoto K, **DeSantis SM**, Mgbere O, Darkoh C. (2022). Clinical Epidemiology of Carbapenem-Resistant Enterobacterales in the Greater Houston Region of Texas: A 6-year Trend and Surveillance Analysis Journal of Global Antimicrobial Resistance. Accepted to *Journal of Global Antimicrobial Resistance*.

5. Messiah SE, #Hao T, **DeSantis SM**, Swartz MD, Talebi Y, Kohl HW 3rd, Zhang S, Valerio-Shewmaker M, Yaseen A, Kelder SH, Ross J, Gonzalez MO, Wu L, Padilla LN, Lopez KR, Lakey D, Shuford JA, Pont SJ, Boerwinkle E. Comparison of Persistent Symptoms Following SARS-CoV-2 Infection by Antibody Status in Nonhospitalized Children and Adolescents. *Pediatr Infect Dis J*. 2022 Oct 1;41(10):e409-e417. doi: 10.1097/INF.0000000000003653. Epub 2022 Aug 1. PMID: 35939608.

6. Messiah SE, #Hao T, **DeSantis SM** et al (2022). Comparison of persistent symptoms of SARS-CoV-2 infection by antibody status in non-hospitalized children and adolescents. *The Pediatric Infectious Disease Journal*, 41(10):e409-417.

7. Messiah SE, **DeSantis S**, Leon-Novelo L, Talebi Y, Brito F, Kohl III HW, Valerio-Shewmaker M, Ross J, Swartz MD, Yaseen A, Kelder SH, #Zhang S, Omega-Njemnobi OS, Gonzalez MO, Wu L, Boerwinkle E, Lakey D, Shuford JA, Pont SJ. Durability of SARS-CoV-2 Antibodies From Natural Infection in Children and Adolescents. *Pediatrics*. 2022 Mar 18. doi: 10.1542/peds.2021-055505. *Epub ahead of prin*t.

8. #Essigmann H, Hanis S, **DeSantis SM**, Perkison W, Aguilar D, Goo J, Robinson D, Brown EL. Worsening glycemia increase the odds of intermittent but not persistent Staphyloccocus aureus nasal carriage in two cohorts of Mexican-American adults. *Microbiology Spectrum*, 10(3):e0000922

9. #Tadese BK, Fujimoto K, **DeSantis SM**, Mgbere O, Darkoh C. (2022). Regional transmission of patterns of carbapenamase-producing enterobacterales: A healthcare network analysis. *Infection Control & Hospital Epidemiology*.

2021

1. Valerio-Shewmaker MA, **DeSantis SM**, Swartz MD, Yaseen A, Gonzalez MO, Kohl HB III, Kelder SH, Messiah SE, Aguillard KA, Breaux C, Wu L, Shuford J, Pont S, Lakey D, Boerwinkle E. (2021). Strategies to Estimate Prevalence of SARS-CoV-2 Antibodies in a Texas Vulnerable Population: Results from Phase I of the Texas Coronavirus Antibody REsponse Survey (TX CARES), *Frontiers in Public Health* Dec 14;9:753487.

2. Messiah, S, Valerio-Shewmaker, MA, **DeSantis SM,** Swartz MD, Yaseen A, Brito FA, Kohl, III HW, Kelder SH, Aguillard, KA and Omega-Njemnob OS. Breaux C, Ross JA, Gonzalez MO, Zhang S, Wu L, Lakey D, Shuford JA, Pont SJ, Boerwinkle E. (2021). Estimated Prevalence of SARS-CoV-2 Antibodies in the Texas Pediatric Population. Available at SSRN: https://ssrn.com/abstract=3868061 or http://dx.doi.org/10.2139/ssrn.3868061

3. #Custer, J, #Patel R, Delclos G, **DeSantis SM**. (2021) Concurrent and concordant oral and genital high-risk human papillomavirus infections in the US: Results from the National Health and Nutrition Examination Survey. *Journal of Infectious Disease,* 223(8):1400-1409.

4. #Greene TJ, **DeSantis SM**, Brown, D, Wilkinson A, Swartz MD. (2021). A machine learning compatible method for ordinal propensity scoring and matching. *Statistics in Medicine.*40(6):1383-1399.

5. #Brown D, Greene TJ, Swartz MD, Wilkinson A, **DeSantis SM.** (2021). Propensity score stratification methods for continuous treatments. *Statistics in Medicine* 40(5):1189-1203.

6. Tilley BC, Mainous AG, Amorrortu RP, McKee MD, Smith DW, Li R, **DeSantis SM**, Vernon SW, Koch G, Ford ME, Diaz V, Alvidrez J, and RECRUIT Trial Center and Parent Trials' Investigators. (2021). Using increased trust in medical researchers to increase minority recruitment: The RECRUIT cluster randomized clinical trial. Epub, *Contemporary Clinical Trials*.

7. Johnson NL, Wade CE, Fox EE et al inc **DeSantis SM**. Determination of optimal deployment strategy for REBOA in patients with non-compressible hemorrhage below the diaphragm. *Trauma Surgery and Acute Care Open*, 23:6(1).

8. Allana A, Samannodi M, Hansen MA, **DeSantis S**, Ho LT, Hasbun R. (2021) Adjunctive steroids in adults with encephalitis: A propensity score analysis. *Journal of Neurology*, Jun;268(6):2151-2160.

9. #Sharath SE, Zamani N, **DeSantis S**, Kougias P. (2021). Treatment of early deep wound infections after arterial reconstructions: A meta-analysis and survey. *Annals of Vascular Surgery*. Jul;74:356-366.

10. Johnson NL, Wade CE, Fox EE, Meyer DE, Fox CJ, Moore EE, Morrison J, Scalea T, Bulger EM, Inaba K, Morse BC, Moore LJ; **Emergent Truncal Hemorrhage Control Study Group**. Determination of optimal deployment strategy for REBOA in patients with non-compressible hemorrhage below the diaphragm. Trauma Surg Acute Care Open. 2021 Feb 23;6(1):e000660. doi: 10.1136/tsaco-2020-000660. PMID: 33693060; PMCID: PMC7907878.

2020

1. Miao H, Cao Q, Feng H, Zhong C, Zhu P, Wu L, Swartz MD, Luo X, **DeSantis SM**, Lai D, Bauer C, Perez A, Rong L, Lairson D. Mathematical modeling of business reopening when facing SARS-CoV-2 pandemic: Protection, cost and risk. *Accepted, Frontiers Applied Mathematics & Statistics*, Aug 11, 2020.

2. **DeSantis SM**, Li R, #Wang X, Vernon SB, Tilley BC, Koch G.(2020). Intent-to-treat analysis of cluster randomized trials when clusters report non-identifiable outcome proportions. *Clinical Trials* 17(6):627-636.

3. #Brown DW, **DeSantis SM**, Greene TJ, Maroufy V, Yaseen A, Wu H, Williams G, Swartz MD. (2020). A novel approach for propensity score matching and stratification for multiple treatments: Application to an EHR-derived study. *Statistics in Medicine*. 39(17):2308-2323.

   ^The above paper won a "high citation" award from Statistics in Medicine for the year following its publication by my PhD student, Derek Brown

4. **DeSantis SM**, #Hwang H**.** (2020). Sample size estimation for future studies using Bayesian multivariate network meta-analysis. *Statistics and its Interface*. 13(4):511-517.

5. #Crow E, **DeSantis SM**, #Bonette A, Jansen JO, Yamal J-M, Holcomb JB, Pedroza C, Harvin JA, Marques MB, Avritscher EBC, Wang HE. (2020). The effectiveness of whole blood transfusion versus component therapy in traumatic resuscitation: A systematic review and meta-analysis. *Journal of the American College of Emergency Physicians Open* 1(4): 633-641.

6. Williams G, Maroufy V, Rasmy L, #Brown D, Yu D, Zhu H, Talebi Y, Wang X, Thomas E, Zhu G, Yaseen A, Miao H, Leon Novelo L, Zhi D, **DeSantis SM**, Zhu H, Yamal JM, Aguilar D, Wu H. (2020). Vassopressor treatment and mortality following non traumatic subarachnoid hemorrhage: A nationwide electronic health record analysis. Neurosurgical Fovis. 48(5): E4.

7. Jansen JO, Wang H, Holcomb JB, Harvin JA, Richman J, Avritscher E, Stephens SW, Trong VTT, Marques MB, **DeSantis SM**, Yamal JM, Pedroza C. (2020). Elicitation of prior probability distributions for a proposed Bayesian randomized clinical trial of whole blood for trauma resuscitation. *Transfusion*, 60(3):498-506.

8. **DeSantis SM**, Swartz MD, #Greene TJ, Holcomb JB, Fox EE. Wade CE. (2020). Interim monitoring of non-randomized prospective studies that invoke propensity scoring methods for decision-making. *Journal of Trauma and Acute Care Surgery,* 88(2): e46-e52.

2019

1. #Yang M, **DeSantis SM**, Luo S. (2019). Bayesian quantile regression joint models: inference and dynamic predictions. *Statistical Methods in Medical Research*, 28(8):2524-2537.

2. **DeSantis SM**, #Brown DW, Jones AR, Yamal J-M, Pittet J-F, Patel RP, Wade CE, Holcomb JB, Wang H. (2019). Characterizing blood age exposure in massive transfusion therapy: the scalar age of blood index (SBI). *Transfusion*, 59(8):2699-2708.

3. #Advani SM, #Advani PS, #Brown DW, **DeSantis SM**, Korphaisarn K, Vonville HM et al. (2019). Global differences in the prevalence of the CpG island methylator phenotype of colorectal cancer. *BMC Canc*er 19(1):964.

4. Spinale FG, Meyer T, Stolen C, Van Eyk J, Gold M, Mittal S, **DeSantis SM**, Wold N, Beshai J, Stein K, Ellenbogen K. (2019). Development of a biomarker panel to predict cardiac resynchronization therapy response: Results from the SMART-AV trial. *Heart Rhythm* 16(5):743-753.

5. Jones AR, Patel RP, Marques MB, Donnelly JP, Pittet JF, Kerby JD, Stephens SW, **DeSantis SM**, Hess JR, Wang HE. And the PROPPR study group. (2019). Older blood is associated with increased mortality and adverse events in massively transfused trauma patients: secondary analysis of the PROPPR trial. *Annals of Emergency Medicine.* 73(6):650-661.

6. Prisciandaro JJ, **DeSantis SM**, Tolliver B. (2019). Identification and initial validation of empirically-derived bipolar symptom states from a large longitudinal dataset: an application of hidden Markov modeling to the Systematic Treatment Enhancement Program for Bipolar Disorder (STEP-BD) study. *Psychological Medicine,* 49(7):1102-1108.

2018

1. #Yucel E, **DeSantis SM**, Smith MA, Lopez DS. (2018). Association between low-testosterone and kidney stones in US men: The national health and nutrition examination survey (NHANES) 2011-2012. *Preventative Medicine Reports,* 10:248-253.

2. #Hwang H, **DeSantis SM**. (2018). Multivariate network meta-analysis to mitigate the effects of outcome reporting bias. *Statistics in Medicine*, 37(22):3254-3266.

3. #Liu, Y, ^**DeSantis SM**, Chen Y. (2018). Bayesian network meta-analysis with correlated outcomes subject to reporting bias, *Journal of The Royal Statistical Society Series C,* 67(1):127-144.

4. #Zhu H, **DeSantis SM**, Luo S. (2018). Joint modeling of a longitudinal zero-inflated count and survival data: A Bayesian perspective. *Statistical Methods in Medical Research*, 27(4):1258-1270.

5. #Advani S, Advani P, **DeSantis SM**, Brown D, VonVille H, Loree J, Lam M, Sarkshekeh AM, Bressler J, Lopez DS, Daniel-MacDougall C, Swartz M, Kopetz S. (2018). Clinical, pathological and molecular characteristics of CpG island methylator phenotype in colorectal cancer: A systematic review and meta-analysis. *Translational Oncology*, 11(5):1188-1201.

6. #Greene JT, **DeSantis SM**, Fox EE, Wade CE, Holcomb JB, Swartz MD. (2018). Utilizing propensity score analyses in prehospital blood product transfusion studies: Lessons learned and moving towards best practice. *Military Medicine*, 183(Suppl_1):124-133.

7. Chang R, Fox EE, #Greene TJ, Swartz MD, **DeSantis SM**, et al, PROHS Study Group. (2018). Abnormalities of laboratory coagulation tests versus clinically evident coagulopathic bleeding: results from the prehospital resuscitation on helicopters study (PROHS). *Surgery*, 163(4):819-826.

2017

1. Tilley, BC, Mainus AG, Smith DW, McKee MD, Amorrortu RP, Alvidrez J, Diaz V, Ford ME, Fernandez ME, Hauser RA, Singer C, Landa V, Trevino A, **DeSantis SM**, Zhang Y, Daniels E, Tabor D, Vernon SW. (2017). Design of a cluster-randomized minority recruitment trial: RECRUIT. *Clinical Trials*, 14(3):286-298.

2. Lewis BR, Bandyopadhyay D, **DeSantis SM**, John MT. (2017). Augmenting beta regression for periodontal proportion data via the SAS NLMIXED procedure. *Journal of Applied Probability and Statistics,* 12(1):49-66.

3. #Zhu H, Luo S, **DeSantis SM**. (2017). Zero-inflated count models for longitudinal measurements with heterogeneous random effects. *Statistical Methods in Medical Research*, 26(4):1774-1786.

4. Holcomb JB, Swartz M, **DeSantis SM**, et al. (2017). Multicenter observational prehospital resuscitation on helicopter study (PROHS). *Journal of Trauma and Acute Care*, 83(1 Suppl 1):S83-S91.

5. Chang R, Fox EE, #Greene TJ, Eastridge BJ, Chung KK, **DeSantis SM**, DuBose JJ, Tomasek JS, Fortuna JR, Sams VG, Todd SR, Podbielski JM, Wade CE, Holcomb JB, NCTH Study Group, (2017). Multicenter retrospective study of noncompressible torso hemorrhage: Anatomic locations of bleeding and comparison of endovascular versus open approach. *Journal of Trauma and Acute Care Surgery,* 83(1):11-18.

2016

1. #Weng Y, Palesch Y, **DeSantis SM**, Zhao W. (2016). Assessing the impact of safety monitoring on the efficacy analysis in large phase III group sequential trials with non-trivial safety event rate. *Journal of Biopharmaceutical Statistics*, 26(4):672-685.

2. #Wu Y, Cohen T, **DeSantis S**, Iyengar MS, Hoot N, Soysal E, Tao C, Jiang M, Xu H. (2016) Mining Patient Claim Data to Detect Drug Signals That Can Reduce The Risk Of Barrett's Esophagus Patients Developing Esophageal Adenocarcinoma. *Value in Health*. 2016 May 1;19(3):A141-142.

3. Back SE, McCauley JL, Korte KJ, Gros DF, Leavitt V, Gray KM, Hamner MB, **DeSantis SM**, Malcolm R, Brady KT, Kalivas PW. (2016). A double-blind randomized controlled pilot trial of N-Acetylcysteine in veterans with PTSD and substance use disorders. *Journal of Clinical Psychiatry*, 77(11):e1439-31446.

4. Wheaton MH, **DeSantis SM**, Simpson HB. (2016). Network meta-analyses and treatment recommendations for obsessive-compulsive disorder. *Lancet Psychiatry*, 3(10):920.

5. Bershad EM, Anand A, **DeSantis SM**, et al. (2016). Clinical validation of a transcranial Doppler based non-invasive ICP meter: A prospective cross-sectional study. *World Neurosurgery*, 89:647-653.

2015

1. Lazaridis C, Yang M, **DeSantis SM**, Luo S, Robertson CS. (2015). Predictors of intensive care unit length of stay and intracranial pressure in severe traumatic brain injury. *Journal of Critical Care*. 30(6):1258-1262.

2. Holcomb JB, et al, with the **PROPPR Study Group including DeSantis SM**. (2015). Transfusion of plasma, platelets, and red blood cells in a 1:1:1: vs 1:1:2 ratio and mortality in patients with severe trauma: the PROPPR randomized clinical trial. *JAMA*, 313(5):471-482

3. #Chua, A, **DeSantis, SM**, Teo I, Fingeret MC. (2015). Body image investment in breast cancer patients undergoing reconstruction: Taking a closer look at the Appearance Schemas Inventory-Revised. *Body Image*, 13:33-37.

4. Lazaridis C, Maas A, Souter MJ, Martin RH, Chesnut RM, **DeSantis SM**, et al, Second Neurocritical Care Research Conference Investigators. (2015). Alternative clinical trial design in neurocritical care. *Neurocritical Care*, 22(3):378-384.

5. Joseph J, Thomas K, Zhu X, **DeSantis SM**, Lee DC, Jiang Y, Lynam D. (2015). Influence of neurobehavioral incentive valence and magnitude on alcohol drinking behavior. *NeuroImage*, 104:373-385.

2014

1. DeSantis, SM, #Zhu, H. (2014). Bayesian mixed treatment comparisons meta-analysis of treatments for alcohol dependence and implications for planning future trials, *Medical Decision Making*, 34(7):899-910.

2. Luo S, Xiao S, **DeSantis SM**, Huang X, Yi M, Hunt K. (2014). Joint model for a misclassified outcome in the presence of a dependent terminal event. *Statistics in Medicine*, 33(15):2554-2566.

3. **DeSantis, SM,** Lazaridis, C, Ji, S, Spinale, FG. (2014). Modeling propensity matched zero-inflated count outcomes in observational studies. *Journal of Applied Statistics*, 41(1):127-141.

4. Lazaridis C, **DeSantis SM**, Smielewski P, Menon DK, Hutchinson P, Pickard JD, Czosnyka M. (2014). Patient-specific thresholds of intracranial pressure in patients with severe traumatic brain injury, *Journal of Neurosurgery,* 120(4):893-900.

5. **DeSantis SM**, Lazaridis C. (2014). Aprotinin revisited. *Intensive Care Medicine*, 40:122.

6. **DeSantis SM**, Lazaridis C, Palesch Y, Ramakrishnan V. (2014). Regression analysis of ordinal stroke clinical trial outcomes: An application to the NINDS t-PA trial. *International Journal of Stroke*, 9(2):226-231.

2013

1. **DeSantis, SM**, Bandyopadhyay, D, Baker, NL, Randall, P, Anton, RA, Prisciandaro, JJ. (2013). Modeling longitudinal drinking data in clinical trials: An application to the COMBINE study. *Drug and Alcohol Dependence*, 132(1-2):244-250.

2. Mukherjee R, Akar JG, Wharton JM, Adams, DK, McClure CD, Stroud RE, Rice AD, **DeSantis SM**, Spinale FG, Gold MR. (2013). Plasma Profiles of Matrix Metalloproteinases and Tissue Inhibitors of the Metalloproteinases Predict Recurrence of Atrial Fibrillation Following Cardioversion. *Journal of Cardiovascular Translational Research*, 6(4):528-535.

3. Lazaridis, C, **DeSantis, SM**, Jauch, E, Adams RJ. (2013). Telestroke in South Carolina. *Journal of Stroke and Cerebrovascular Diseases*, 22(7):946-950.

4. Lazaridis C, Bodle, J, Neyens, R, **DeSantis SM**. (2013). High-Osmolarity Saline in Neurocritical Care: A Systematic Review and Meta-Analysis. *Critical Care Medicine*, 41(5):1353-1360.

5. #Sequeira, KM, Tabesh A, Sainju RK, **DeSantis SM**, Joseph JE, Ahlman MA, Spicer KM, Glazier SS, Edwards JC, Bonilha L. (2013). Functional limbic reorganization during seizures in medial temporal lobe epilepsy. *PLOS ONE*, 8(1).

6. Hartwell KJ, Moran-Santa Maria MM, Twal W, McRae-Clark A, **DeSantis, SM**, Shaftman SR, Brady KT. (2013). Association of elevated cytokines with childhood adversity in a sample of healthy adults. *Journal of Psychiatric Research*, 47(5):604-610.

7. Price KL, Baker NL, McRae-Clark AL, Saladin ME, **DeSantis SM**, Santa Ana EJ, Brady, KT. (2013). A randomized placebo-controlled laboratory study of the effects of D-cycloserine on craving in cocaine-dependent individuals. *Psychopharmacology*, 226(4):739-746.

2012

1. **DeSantis, SM**, Houseman, EA, Coull, BA, Nutt, CL, Betensky, RA. (2012). Supervised Bayesian latent class models for high dimensional data. *Statistics in Medicine*, 31(13):1342-1360.

2. Graham EM, Atz AM, Gillis J, **DeSantis SM**, Haney AL, Deardorff RL, Uber WE, Reeves ST, McGowan FX Jr, Bradley SM, Spinale FG. (2012). Differential effects of aprotinin and transexamic acid on outcomes and cytokine profiles in neonates undergoing cardiac surgery. *Journal of Thoracic and Cardiovascular Surgery*, 143(5):1069-1076.

3. Lazaridis, C, **DeSantis, SM**, McLawhorn, MC, Krishna, V. (2012). Liberation of Neurosurgical Patients from Mechanical Ventilation and Tracheostomy in Neurocritical Care. *Journal of Critical Care* 27(4):417. e1-8.

4. Prisciandaro, JJ, **DeSantis, SM**, Bandyophadyay, D. (2012). Simultaneous modeling of the impact of treatments on alcohol consumption and quality of life in the COMBINE study: a coupled hidden Markov analysis. *Alcoholism and Experimental Research*, 36(12):2141-2149.

5. Gray, KM, Carpenter, MJ, Baker, NL, **DeSantis, SM**, Kryway, E, Hartwell KJ, McRae-Clark AL, Brady KT. (2012). A double-blind randomized controlled trial of N-acetylcysteine in cannabis-dependent adolescents. *American Journal of Psychiatry*, 169(8):805-812.

6. Lazaridis, C, **DeSantis, SM**. (2012). Cerebral blood flow velocity changes and the value of the pulsatility index post decompressive craniectomy: Report of 2 Cases and Literature Review. *Journal of Clinical Neuroscience*, 19(7), 1052-1054.

7. Tolliver BK, Price KL, Baker NL, Larowe SD, Simpson AN, McRae-Clark AL, Saladin ME, **DeSantis SM**, Chapman E, Garrett M, Brady KT. (2012). Impaired cognitive performance in subjects with methamphetamine dependence during exposure to neutral versus methamphetamine-related cues. *American Journal of Drug and Alcohol Abuse*, 38(3), 251-259.

8. Tolliver BK, **DeSantis SM**, Brown DG, *Prisciandaro JJ, Brady KT. (2012). A randomized, double-blind, placebo-controlled clinical trial of acamprosate in alcohol-dependent individuals with bipolar disorder. *Bipolar Disorders*, 14(1), 54-63.

9. Prisciandaro, JJ, **DeSantis SM**, #Chiuzan, C, Brady, KT, Tolliver, BK. (2012). Impact of depressive symptoms on future alcohol use in patients with co-occurring bipolar disorder and alcohol dependence: A prospective study. *Alcoholism and Experimental Research*, 36(3), 490-496.

10. Saladin ME, Gray KM, Carpenter MJ, LaRowe SD, **DeSantis SM**, Upadhyaya HP. (2012). Gender differences in craving and cue reactivity to smoking and negative affect/stress cues, *American Journal of Addiction*, 21(3), 210-220.

2011

1. Saladin ME, Gray KM, Carpenter MJ, LaRowe SD, **DeSantis SM**, Upadhyaya HP. (2012). Gender differences in craving and cue reactivity to smoking and negative affect/stress cues, *American Journal of Addiction*, 21(3), 210-220.

2. **DeSantis, SM**, Bandyopadhyay, D. (2011). Response to "Comment on 'Hidden Markov models for zero-inflated Poisson counts with an application to substance use'", by R.A. Altman. Letter to the editor of *Statistics in Medicine*, 30(29):3471-3472.

3. **DeSantis, SM,** Bandyopadhyay, D. Hidden Markov models for zero-inflated Poisson counts with an application to substance use. (2011). *Statistics in Medicine*, 30(14):1678-1694.

4. **DeSantis, SM**, Toole, JM, Kratz, JM, Uber, W, Wheat, M, Stroud, MR, Ikonomidis, JS, Spinale, FG. (2011). Early post-operative outcomes and blood product utilization in adult cardiac surgery – The post aprotinin era. *Circulation*, 124(11):S62-69.

5. Zile, MR, **DeSantis, SM,** Baicu, CF, Stroud RE, Thompson, SB, McClure, CD, #Mehurg, SM, Spinale, FG. (2011). Plasma biomarkers that reflect determinants of matrix composition identify the presence of left ventricular hypertrophy and diastolic heart failure. *Circulation: Heart Failure*, 4(3):246-256.

6. Zile, MR, Mehurg, SM, Arroyo, JE, Stroud, RE, **DeSantis, SM**, Spinale, FG. (2011). Relationship between the temporal profile of plasma microRNA and left ventricular remodeling in patients following myocardial infarction. *Circulation: Cardiovascular Genetics,* 4(6):615-619.

7. Graham, EM, Atz, AM, Butts, RJ, Baker, NL, Zyblewski, SC, Deardorff, RL, **DeSantis, SM**, Reeves, ST, Bradley, SM, Spinale, FG. (2011). Standard preoperative corticosteroid treatment in neonates undergoing cardiac surgery - results from a randomized trial. *Journal of Thoracic and Cardiovascular Surgery*, 142(6):1523-1529.

8. Bandyopadhyay, D, **DeSantis SM**, Korte, J, Brady, KT. (2011). Mixture or hurdle zeros: Some considerations in substance abuse research. *American Journal of Drug and Alcohol Abuse*, 37(5):376-382.

9. #Price, KL, **DeSantis SM**, Saladin ME, Tolliver BK, Simpson AN, Baker NL, Wagner MT, McRae-Clark AL, Brady KT. (2011). The impact of clinical and demographic variables on cognitive performance in methamphetamine-dependent individuals in rural South Carolina. *American Journal on Addiction,* 20(5):447-455.

10. **DeSantis, SM**, Baker, NL, Back, SE, Spratt, EG, #Ciolino, JD, Moran-Santa Maria, M, Bandyopadhyay, D, Brady, KT. (2011). Gender differences in the effect of early life trauma on HPA axis functioning. *Depression and Anxiety*, 28(5):383-392.

11. Warters, RD, Szabo, TA, Spinale, FG, **DeSantis, SM**, Reves, JG. (2011). Neuromuscular blockade facilitates mask ventilation. *Anesthesia*, 66:163-16.

2002-2010

1. Grebregziabher, M, **DeSantis, SM**. (2010) Latent class based multiple imputation approach for missing categorical data, *Journal of Statistical Planning and Inference*. 140(11):3252-3262.

2. Gray KM, **DeSantis SM**, Carpenter MJ, Saladin ME, LaRowe SD, Upadhyaya HP. (2010). Menstrual cycle and cue reactivity in women smokers. *Nicotine & Tobacco Research*, 12:174-178.

3. Eriksson J, **DeSantis SM**, Neovius M. (2010). Long-term mortality outcomes in Swedish premature infants: A population based study. Acta Paediactrica 99:45.

4. Back, SE, Hartwell, K, **DeSantis, SM,** Saladin, M, McRae-Clark, AL, Price, KL, Moran-Santa Maria, M, Baker, NL, Spratt, E, Kreek, MJ, & Brady, KT. (2010). Reactivity to laboratory stress provocation predicts relapse to cocaine. *Drug and Alcohol Dependence*, 106:21-27.

5. McQuinn, TC, Deardorff, RL, Mukherjee, R, Taylor, AGB, Graham, EM, Atz, AM, Forbus, GA, **DeSantis, SM**, Young, JB, Stroud, RE, Hsia, TY, Crawford, FA, Bradley, SM, Reeves, ST, Spinale, FG. (2010). Circulating matrix metalloproteinase levels following ventricular septal defect repair in infants, *Journal of Thoracic and Cardiovascular Surgery,* 140(6), 1257-65.

6. Moran, MM, McRae, SE, Back, SE, **DeSantis, SM**, Baker NL, Spratt, EG, Simpson, AN, Brady, KT. (2010). Influence of cocaine dependence and early childhood trauma on neuroendocrine responding to pharmacological and psychosocial stress tasks. *Psychoneuroendocrinology,* 35(10):1492-1495.

7. Price, KL, Saladin, ME, Baker, NL, Tolliver, BK, **DeSantis, SM**, McRae-Clark, AL, Brady, KT. (2010). Extinction of drug cue reactivity in methamphetamine-dependent individuals. *Behavioral Research and Therapy*, 48(9):860-5.

8. Waldrop, A, Price, KL, Mcrae-Clark, A, Back, SE, **DeSantis, SM**, Simpson, AE, Spratt, EG, Brady, KT, Kreek MJ. (2010). Community-dwelling cocaine-dependent men and women respond differently to social stressors versus cocaine cues. *Psychoneuroendocrinology*, 35(6):798-806.

9. Tolliver, BK, McRae-Clark, AL, Saladin, M, Price, KL, Simpson, AN, **DeSantis, SM**, Baker, NL, Brady, KT. (2010). Determinants of cue-elicited craving and physiological reactivity in methamphetamine-dependent subjects in the laboratory. *American Journal of Drug and Alcohol Abuse*, 36(2):106-113.

10. **DeSantis, SM**, Houseman, EA, Coull, BA, Louis, DN, Betensky, RA. (2009). A latent class model with hidden Markov dependence for array CGH data. *Biometrics*, 65(4):1296-1305.

11. **DeSantis, SM**, Bandyopadhyay, D, Back, SE, Brady, KT. (2009). Laboratory stress- and cue-reactivity studies are associated with decreased substance use among drug-dependent individuals. *Drug and Alcohol Dependence*, 105(3):227-233.

12. Brady, KT, McRae, AL, Moran-Santa Maria, MM, **DeSantis, SM**, Simpson, AN, Waldrop, AE, Back, SE, Kreek, MJ. (2009). Response to CRH infusion in cocaine-dependent individuals. *Archives of General Psychiatry*, 66(4):422-430.

13. Johansson, K, Rossner, X, **DeSantis, SM**, Neovius, K, Neovius, M. (2009). Clinical relevance of findings in meta-analyses of the effects of anti-obesity drugs on blood pressure. *Obesity Facts*, 2:21.

14. Neovius, M, Johansson, K, **DeSantis, SM**, Neovius, K, Rossner, S. (2009). Discontinuation due to adverse events in randomized trials of orlistat, sibutramine, and rimonabant: A meta-analysis. *Obesity Reviews*, 10(5), 564-575.

15. Price, KL, McRae, AL, Saladin, ME, Moran-Santa Maria, MM, **DeSantis, SM**, Back, SE, Brady, KT. (2009). D-Cycloserine and cocaine cue reactivity: Preliminary Findings. *American Journal of Drug and Alcohol Abuse*, 35(6):434-438.

16. Carpenter, MJ, Saladin, ME, **DeSantis, SM**, Gray, KM. LaRowe, SD, Upadhyaya, HP. (2009). Laboratory-based, cue-elicited craving and cue reactivity as predictors of naturally occurring smoking behavior. *Addictive Behaviors*, 34 (6-7):536-541.

17. **DeSantis, SM**, Houseman, EA, Coull, BA, Betensky, RA, Stemmer-Rachamimov AO. (2008). A penalized latent class model for ordinal data. *Biostatistics*, 9(2):249-262.

18. Rogers, JL, **DeSantis, SM**, and See RE. (2008). Extended methamphetamine self- administration enhances reinstatement of Drug- seeking and impairs novel object recognition in rats. *Psychopharmacology*, 199(4):615-624.

19. Fox, AM, Shernan, SK, Collard, CD, Liu, KY, Aranki, SF, **DeSantis**, **SM**, Jarolim, P, Body, SC. (2008). Preoperative B-type Natriuretic Peptide is an independent predictor of ventricular dysfunction and mortality after primary coronary artery bypass grafting. *Journal of Thoracic and Cardiovascular Surgery*, 136:452-461.

20. Snuderl, M, Chi, SN, **DeSantis, SM**, Stemmer-Rachamimov, A, Betensky, RA, De Girolami, U, Kieran, MW. (2008). Prognostic value of tumor microinvasion and metalloproteinase expression in intracranial pediatric ependymomas. *Journal of Experimental Neuropathology*, 67(9):911-920.

21. Stemmer-Rachamimov, AO, Poliani, PL, **DeSantis, SM**, Betensky, RA, Hurwitz, E, Nutt, C, MacCollin M. (2006). Schwannoma histology revisited. *Journal of Neuropathology and Experimental Neurology,* 64(5):470.

22. Quiroz, R, Gerhard-Herman, M, Kosowsky, JM, **DeSantis, SM**, Kucher, N, McKean SC, Goldhaber, SZ. (2006). Comparison of a single endpoint to determine optimal initial warfarin dosing (5mg Versus 10 mg) for venous thromboembolism. *American Journal of Cardiology*, 98(4):535-537.

23. **DeSantis, SM**, Pau, CP, Archibald, LK, Nwanyanwu OC, Kazembe, PN, Dobbie, H, Jarvis, WR, Jason, JM. (2002). Demographic and immune correlates of HHV-8 in Malawi, Africa. *International Journal of Infectious Diseases*, 6:266-71.

Other Publications

Eriksson, J, **DeSantis, SM**, Neovius, M. Long-term mortality and trends in short-term survival in preterm infants: A population based study. *Abbott Laboratories.*

DeSantis SM, Leon-Novelo LG, Swartz MD, Yaseen AS, Valerio-Shewmaker MA et al. Estimation of total immunity to Sars-Cov-2 in Texas. medRxiv 2021.08.05.21261610; doi:https://doi.org/10.1101/2021.08.05.21261610.

Valerio-Shewmaker MA, **DeSantis SM**, Swartz MD, Yaseen AS, et al. (2021). Strategies to estimate prevalence of SARS-CoV-2 Antibodies in a Texas vulnerably population: Results from phase I of the Texas Antibody REsponse Surveillance (TX CARES). medRxiv doi: https://doi.org/10.1101/2021.08.04.21261613

Major Teaching Responsibilities
Graduate Education
2008	NRPHD 807 Advanced Applied Statistical Methods for Nursing
	BMTRY 726 Multivariate Methods Medicine (Multivariate Analysis)
2010	BMTRY 722 Analysis of Survival Data (Survival Analysis)
2011	BMTRY 722 Analysis of Survival Data (Survival Analysis)
	BMTRY 789 Statistical Computing for Research (Guest Lecturer)
2012	BMTRY 789 Current Topics in Biostatistics and Epidemiology
2013	PH 1821 Applied Statistical Analysis II (Multivariate Analysis)
	PH 1915 Linear Models
2014	PH 1821 Applied Statistical Analysis II (Multivariate Analysis)
	PH 1915 Linear Models
2015	PH 1915 Linear Models
2016	PH 1915 Linear Models
	PH 1997 Teaching and Learning Experiences for Biostatistics PhD
	PH 1431 Tools & Methods Systematic Review and Meta-analysis (1 credit, meta-analysis section)
2017	PH 1915 Linear Models
	PH 1997 Teaching and Learning Experiences for Biostatistics PhD
	PH 1431 Tools & Methods Systematic Review and Meta-analysis
2018	PH 1997 Teaching and Learning Experiences for Biostatistics PhD
	PH 1431 Tools & Methods Systematic Review and Meta-analysis
2019	PH 1997 Teaching and Learning Experiences for Biostatistics PhD
	PH 1431 Tools & Methods Systematic Review and Meta-analysis
2020	PH 1830 Categorical Data Analysis
2021	PH 1830 Categorical Data Analysis
	PH 1861 Meta-Analysis
2022	PH 1830 Categorical Data Analysis
2023	PH 1861 Meta-Analysis
	PH 1830 Categorical Data Analysis
2024	PH 1830 Categorical Data Analysis

Ph.D. in Biostatistics Dissertation Supervisor/Chair
Huirong Zhu, PhD, conferred 2016 Biostatistics (Assistant Professor, Texas Children's Hospital)
Ming Yang, PhD, conferred 2017 Biostatistics (Genentech)
Jay Thomas Greene, Ph.D., conferred 2017 Biostatistics (GlaxoSmithKline): *Student paper award, American Statistical Association Mental Health Section, Aug 2018*
Hyunsoo Hwang, Ph.D., conferred 2018 Biostatistics (MD Anderson)
Derek Brown, PhD., conferred 2019 Biostatistics and Data Science (National Cancer Institute)
Elysia Garcia, PhD., conferred 2020 Biostatistics and Data Science (Food and Drug Administration)
Jada M Johnson, PhD, conferred 2021 Biostatistics and Data Science (Johnson and Johnson)
Tianyao Hao, in progress
Haoting Han

Ph.D. (Non-Biostatistics) Committee Member in Public Health
Riddhi Patel, Epidemiology, Conferred 2023, Epidemiology

Natalie Hasbani, Conferred 2023, Epidemiology
Nutan Hebballi, Conferred 2023, Epidemiology
Bekana Tadese, PhD Conferred 2022, Epidemiology
Heather Essignmann, PhD Conferred 2022, Epidemiology
Timothy Erickson, PhD Conferred 2019, Epidemiology
Rodion Gorchakov, PhD, conferred 2018, Epidemiology
Emri Yucel, PhD, conferred 2017, Epidemiology
Michelle Cook, PhD, conferred 2017, Epidemiology
Vanessas Cox, PhD, conferred 2017, Epidemiology
Vancheswaran Gopalakrishnan, PhD, conferred 2017 Epidemiology
Malachy Nkem, PhD, conferred 2014, Health Promotions & Behavioral Sciences

Ph.D. Biostatistics Committee Member
Mary Tress, PhD, conferred 2011
Matthew Shotwell, PhD, conferred 2011 (Associate Professor at Vanderbilt University)
Yanqiu Weng, PhD, conferred 2013 (Novartis)
Yulun Liu, PhD, conferred 2016 (Post Doctoral Researcher at University of Pennsylvania)

M.S. Biostatistics Primary Adviser
Priya Reddy, in progress
Maryam Jamal, conferred 2021
Alicia Chua, conferred 2014 (PhD student at BU)
Megan Schuler, PhD, conferred 2009 (Rand Corporation)

M.S. in Clinical Research Adviser
Crystal Flynn-Longmire, conferred 2008
William Goodnight, conferred 2008
Joshua Eischenberger, conferred 2010
James McElligott, conferred 2011

Lead Administrative Roles in Universiy of Texas School of Public Health
> Academic Program Coordinator for Biostatistics 2017-Current
> Academic Council Representative for Biostatistics 2017-Current
> Tenure and Promotion Co-Chair 2022
> Tenure and Promotion Chair 2023

Institutional and Departmental Service and Committees
> Student Recruitment Committee 2012-current
> Preliminary Exam Committee 2012-current
> Biostatistics Faculty Search Chair 2017-2019
> Admissions Committee 2015-2018
> Big Data Faculty Search Committee 2012
>
> (Prior to UTHealth):
> Preliminary Exam committee 2008-2012
> Student Recruitment committee 2007-2010
> Seminar Speaker Committee 2009-2012
> Hollings Cancer Center Biostatistical Reviewer 2008

Oral Presentations/Lectures/Short Courses

DeSantis, SM. "Responding to a Novel Pandemic: Adapting an Antibody Surveillance System: Part II" *UTHealth Department of Biostatistics and Data Science*: Sept 19, 2023, Houston, TX. (Invited)

DeSantis SM. (delivered by Eric Boerwinkle due to illness). "Behavior of Antibodies to SARS-CoV-2 over Time in a Texas Sample" *American Public Health Association* (APHA) 2022, Nov 7, 2022, Boston, MA. (Invited)

DeSantis SM. 5th "A novel propensity scoring framework for multiple and ordinal treatments: Application to an EHR-derived study of vasopressor treatments for subarachnoid hemorrhage," *International Conference on Econometrics and Statistics (EcoSta)*, June 23, 2022, Kyoto, Japan. (Invited)

DeSantis SM, Valerio-Shewmaker MA, Messiah S, Kohl HW, Yaseen A. "Texas Coronavirus Antibody REsponse Surveillance (TX CARES)", *American Public Health Association*, Denver, CO, October 23, 2021. (Chaired Session/Invited)

DeSantis SM. "A Propensity Scoring Framework for Multiple Treatments and its Applicability to Big Data Sets" National Institute of Health and Medical Research (*Institut National de la Sante et de la Recherche Medical, INSERM*), Bordeaux, France, June 25, 2020. (Invited)

DeSantis SM. "A Propensity Scoring Framework for Multiple Treatments and its Applicability to Big Data Sets" *Big Data Analytics Conference,* Houston, TX, Dec 17-19, 2018. (Invited)

DeSantis SM. "Multivariate Network Meta-analysis to Mitigate Outcome Reporting Bias" *Joint Statistical Meetings*, Vancouver, Canada, August 8, 2018. (Contributed)

DeSantis SM. "Multivariate Mixed Treatments Meta-analysis to Reduce Effects of Publication and Outcome Reporting Bias" *Virginia Commonwealth University*, Richmond, VA, April 23, 2017. (Invited)

DeSantis SM. "Latent Variable Methods for High-Dimensional Data" National Institute of Health and Medical Research (*Institut National de la Sante et de la Recherche Medical, INSERM*), Bordeaux, France June 22, 2016. (Invited)

DeSantis SM. "Statistical Methods and Health Technology Assessment," NIH/NINDS sponsored Neurocritical Care Research Conference, *Baylor University*, Houston, Texas, August 16, 2014. (Invited)

DeSantis SM. "Multivariate Mixed Treatment Meta-analysis and Implications for Planning Future Trials," *Cedar Sinai Medical Center, Division of Biostatistics*, Los Angeles, California, May 23, 2014. (Invited)

DeSantis SM. "Modeling high resolution drinking data in clinical trials: An application to the COMBINE study." *Poster Presentation*, *Research Society on Alcoholism*, Tampa Florida, July 2013. (Contributed)

Lazaridis C, DeSantis SM, Smielewski P, Menon DK, Hutchinson P, Pickard JD, Czosnyka M. "Patient-specific thresholds of intracranial pressure in patients with severe traumatic brain injury," *Neurocritical Care Society*, *Winner -Distinguished Oral Poster Presentation*, Philadelphia, Pennsylvania, October 2, 2013 (Invited)

DeSantis, SM. "Mixed Treatment Comparisons Meta-Analysis of Alcohol Dependence Trials," *Health Research Unit, Athens Greece*, May 6-9, 2013. (Contributed)

DeSantis, SM. "Mixed Treatment Comparisons Meta-Analysis of Alcohol Dependence Trials*," Houston Chapter of the American Statistical Association*, Houston, Texas April 2013. (Invited)

DeSantis, SM. "Hidden Markov Models for Zero-modified Time Series Count data" *Conference of Texas Statisticians*, Rice University, Houston, Texas, March 22, 2013. (Invited)

DeSantis, SM. "Analysis of Zero Inflated Propensity Matched Count Outcomes in Observational Studies," *University of Texas Health Sciences Center*, School of Public Health, Houston, Texas, Feb 14, 2013. (Invited)

DeSantis, SM. "Challenges in Modeling Longitudinal Drinking Data in Clinical Trials: The COMBINE study," *Medical University of South Carolina*, Division of Biostatistics and Epidemiology, Charleston, SC, Oct 20, 2012. (Invited)

DeSantis, SM. "Hidden Markov Models for Zero Inflated Poisson Counts – Applications in Substance Use," Division of Biostatistics, *University of Texas School of Public Health*, Houston, TX, May 10, 2012. (Invited)

DeSantis, SM. "Hidden Markov Models for Zero Inflated Poisson Counts: Applications in Substance Use," ***Division of Biostatistics, Columbia University Psychiatric Institute***, New York, NY, April 10, 2012. (Invited)

DeSantis, SM. "Survival Analysis using SPSS (***Short Course***)" ***Department of Mathematics, University of Porto***, Porto, Portugal, February 14-15, 2012. (Invited)

DeSantis, SM. "One and Two Sample Hypothesis Testing," Master of Philosophy Lecture, ***Medical Research Council Biostatistics Unit, Cambridge University***, Cambridge, UK, October 2011. (Invited)

DeSantis, SM. "Analysis of Zero Inflated Propensity Matched Count Outcomes," ***Division of Biostatistics and Epidemiology, Medical University of South Carolina***, Charleston, SC, April 2011. (Invited)

DeSantis, SM. "A Hidden Markov Model for Zero-Inflated Poisson Counts," ***College of Problems on Drug Dependence***, *Poster Presentation*, Scottsdale, AZ, June 2010. (Contributed)

DeSantis, SM. "The post-Aprotinin Era," ***American Heart Association***, Chicago, IL, November 2010. (Invited)

DeSantis, SM. "Joint Analysis of a Survival Process and Binary Indicators of Latent Class in High-Dimensional Settings," ***University of Carlos III***, Madrid, Spain, March 2010. (Invited)

DeSantis, SM. "A Hidden Markov Model for Zero-Inflated Poisson Counts with an Application to Cocaine Use Data," ***Joint Statistical Meetings***, *Oral Presentation*, Washington, DC, August 2009. (Contributed, Selected)

Gebregzhiaber, M, DeSantis SM. "Multiple Imputation of Missing Categorical Data: A Latent Class Approach," ***Joint Statistical Meetings***, *Oral Presentation*, Washington, DC, August 2009. (Contributed, Selected)

DeSantis, SM. "A Latent Class Model with Hidden Markov Dependence for Array CGH Data," ***International Biometrics Society***, ***Eastern North American Region***, *Oral Presentation*, San Antonio, TX, March 2009. (Contributed, Selected)

DeSantis, SM, Gebregzhiaber, M. "Latent Class-Based Multiple Imputation of Missing Genotypic Data: An Application to Multiple Myeloma," 8th ***Annual Scientific Research Retreat of Hollings Cancer Center***, *Oral Poster Presentation*, Charleston, SC, December 2008. (Contributed)

DeSantis, SM. "Supervised Bayesian Latent Class Models for High-Dimensional Data," ***Southern Regional Council on Statistics***, *Poster Presentation*, Charleston, SC, June 2008. (Contributed)

DeSantis, SM. "A Latent Class Model with Hidden Markov Dependence for Array CGH Data," ***International Biometrics Society, Eastern North American Region***, Washington DC, March 2008. (Contributed, Selected)

DeSantis, SM. "Supervised and Unsupervised Latent Class Modeling for High-Dimensional Data," ***Medical University of South Carolina***, Charleston, South Carolina, April 2007. (Invited)

DeSantis, SM. "A Latent Class Model with Hidden Markov Dependence for Array CGH Data," ***Harvard University Department of Biostatistics***, *Oral Presentation*, June 2007. (Invited)

DeSantis, SM. "Supervised and Unsupervised Latent Class Modeling for High-Dimensional Data," ***Hoffman La-Roche***, Basel, Switzerland, March 2007. (Invited)

DeSantis, SM. "Supervised Bayesian Latent Class models for High-Dimensional Data***," International Biometrics Society, Eastern North American Region***, *Oral Presentation*, Atlanta, GA, March 2007. (Contributed, Selected)

DeSantis, SM. "A Penalized Latent Class Model for Ordinal Responses," ***International Biometrics Society, Eastern North American Region***, *Oral Presentation*, Tampa, FL, March 2006. (Contributed, Selected)

Stacia DeSantis