Alvin G. Thomas Curriculum vitae

# CONTACT Information

The University of North Carolina at Chapel Hill E-mail: alvin@unc.edu School of Public Health, Department of Epidemiology Github: alvinthomas 123 West Franklin Street, Suite 410 Twitter: @alvinthomas 13 Chapel Hill, NC 27516 USA LinkedIn: @alvinthomas 13

# RESEARCH INTERESTS

Healthy Aging with Chronic Disease: My research explores epidemiologic questions at the intersection of vascular and cognitive aging. I hope to identify new targets for pharmaceutical and public health interventions that can improve the clinical care of older adults.

Advancing Epidemiologic Methods: As an educator, I hope to train the next generation of public health practitioners and researchers in causal inference and careful study design in the context of abundant data sources not generated for research.

**Patient-Centered eHealth:** I am an entrepreneur involved in the development of a number of eHealth tools designed to connect, educate, and empower patients, primarily in the field of kidney disease and organ transplantation.

# CURRENT POSITION

**Doctoral Student**, The University of North Carolina School of Public Health, Department of Epidemiology 2018-Present

#### EDUCATION

## The University of North Carolina, Chapel Hill, NC

PhD, Epidemiology, In Progress

- Focus: Cardiovascular Epidemiology
- Adviser: Gerardo M. Heiss, MD, PhD

# The Johns Hopkins University, Baltimore, MD

MSPH, International Health, May 2016

- Focus: Global Disease Epidemiology and Control (GDEC)
- Thesis: The mLAKE Community Trial: Using mHealth to Empower CHWs to Encourage Combination HIV Prevention
- Adviser: Larry W. Chang, MD, MPH

## Washington and Lee University, Lexington, VA

BS, Chemistry-Engineering, May 2014

- *Honors* in Engineering
- Minor in Poverty and Human Capabilities
- Thesis: Plasticity in Dissociated Neuronal Networks under Chronic Stimulation
- Adviser: Jonathan Erickson, PhD

#### AWARDS

#### American Transplant Congress 2019

• Best of Congress Poster for "Patterns Of Anti-retroviral Use Among US Liver Transplant Candidates With HIV"

American Society of Nephrology Kidney Week 2018

• Kidney STARS (Students and Residents) Travel Award

American Transplant Congress 2017

- Best of Congress Poster for "Use of Pulsatile Perfusion Modifies the Effect of Delayed Graft Function on Graft Failure"
- Poster of Distinction for "Use of Pulsatile Perfusion Modifies the Effect of Delayed Graft Function on Graft Failure"

Johns Hopkins University Bloomberg School of Public Health

• Center for Global Health Established Field Placement, 2015

#### Washington and Lee University

- Algernon Sydney Sullivan Award, 2014
  - Highest student honor bestowed by the University faculty to 2 recipients at graduation.
- Omicron Delta Kappa Leader of the Year, 2014
  - Highest leadership honor awarded by the ODK to a single recipient annually.
- Sigma Pi Sigma Physics Honor Society, 2013
- Johnson Opportunity Grant, 2013
  - Competitive award of \$3000 to support a summer experience.
- Evans International Grant, 2013
  - Competitive award of \$1000 to support an international summer experience.
- Avis P. Waring Scholarship, 2013
  - Competitive award of \$1500 to support a summer experience focused on community service and physics/engineering.
- Omicron Delta Kappa Leadership Honor Society, 2013
- Beta Beta Biological Honor Society, 2011
- Bonner Scholarship, 2010
  - Four-year, service-based scholarship designed to develop community service leaders.
- Johnson Scholarship, 2010-2014
  - Highly competitive, merit-based four-year full-ride scholarship.

# EXTRAMURAL FUNDING

## NIH, National Heart, Lung, and Blood Institute (NHLBI)

T32HL007055 Rosamond & Heiss (Co-PIs) 8/18/2018-8/17/2020 12 months (100%)

Cardiovascular Epidemiology Training Grant

Direct Cost: \$457,976

Primary Goals: Pre-doctoral traning grant to develop the requiste research skills and expertise

in the area of cardiovascular disease epidemiology.

Role: Predoctoral Trainee

## Intramural Funding

#### Johns Hopkins University

Masters Tuition Scholarship **Thomas** 9/1/2015–5/31/2016 9 months (75%)

Direct Cost: \$40,600

Description: This scholarship is awarded by the Department of International Health to students

in their second year of training.

Role: Masters Student

# Washington and Lee University

Johnson Scholarship **Thomas** 8/1/2010–5/31/2014 12 months (100%)

Direct Cost: \$282,000

Description: Winners of this highy competitive, merit-based scholarship receive four-year awards

to cover tuition, room and board to attend Washington and Lee University.

Role: Johnson Scholar

#### **PUBLICATIONS**

Total articles: 41; Total citations: 262 (2020/01/13); h-index: 9; i10-index: 9

First author: 2; Co-first author (listed second): 3

# PEER-REVIEWED JOURNAL ARTICLES

AG Thomas in bold: † Indicates Equal Effort: Sorted by Publication Date (Last in/First Out)

- [40] Waldram MM†, Thomas AG†, Yu Yifan, Holscher CM, Nguyen AQ, Halpern SE, Ottman S, Muzaale AD, Henderson ML, Lentine KL, Al Ammary F, Brennan DC, Garonzik-Wang JM, Segev DL, Massie AB. Long-term renal function in living kidney donors with simple renal cysts: A retrospective cohort study. Clinical Transplantation. Accepted.
- [39] Jackson KR†, Motter JD†, Kernodle A, Desai N, **Thomas AG**, Massie AB, Garonzik Wang JM, Segev DL. How Do Highly Sensitized Patients Get Kidney Transplants in the United States? Trends Over The Last Decade. *American Journal of Transplantation*. Accepted.
- [38] Verbesey M, Thomas AG, Ronin M, Beaumont J, Waterman A, Segev DL, Flechner SM,

- Cooper M. Early Graft Losses in Paired Exchange: Gone, But Lost Forever? Experience from 10 Years of the National Kidney Registry. *American Journal of Transplantation*. Accepted.
- [37] Leeser DB, Thomas AG, Shaffer AA, Veale JL, Massie AB, Cooper M, Kapur S, Turgeon N, Segev DL, Waterman AD, Flechner SM. Patient and Kidney Allograft Survival with National Kidney Paired Donation. Clinical Journal of the American Society of Nephrology. Accepted.
- [36] Massie AB, Holscher CM, Henderson ML, Fahmy L, **Thomas AG**, Al Ammary F, Getsin SN, Snyder J, Lentine KL, Garg AX, Segev DL. Early Post-Donation Renal Function and Subsequent Risk of End-Stage Renal Disease in Living Kidney Donors. *JAMA Surgery*. Accepted.
- [35] Haugen CE†, **Thomas AG**†, Chu N, Shaffer AA, Norman SP, Bingaman AW, Segev DL, McAdams-DeMarco M. Prevalence of Frailty among Kidney Transplant Candidates and Recipients in the United States: Estimates from a National Registry and Multi-center Cohort Study. *American Journal of Transplantation*. Accepted.
- [34] **Thomas AG**, Ruck JM, Chu N, Agoons D, Shaffer AA, Haugen CE, Swenor B, Norman SP, Garonzik Wang J, Segev DL, McAdams-DeMarco M. Kidney Transplant Outcomes in Recipients with Visual, Hearing, Physical, and Walking Impairments: A Prospective Cohort Study. *Nephrology Dialysis Transplantation*. In Press. PMID:31411724 doi:10.1093/ndt/gfz164
- [33] Nassiri N, Kwan L, Bolagani A, Thomas AG, Sinacore J, Ronin M, Cooper M, Segev DL, Veale JL. The oldest and coldest shipped living donor kidneys transplanted through kidney paired donation. American Journal of Transplantation. In Press. PMID:31278819 doi:10.1111/ajt.15527
- [32] Koons B, Moriarty H, Kear T, **Thomas AG**, Henderson ML. Factors Related to International Travel for Transplantation Among U.S.-listed Kidney Transplant Candidates. *Nephrology Nursing Journal*. In Press. PMID:31490049
- [31] Eno AK, Ruck JM, Rasmussen SEVP, Waldram MM, **Thomas AG**, Purnell TS, Garonizk-Wang JM, Massie AB, Al Almmary F, Cooper LM, Segev DL, Levan MA, Henderson ML. Perspectives on Implementing Mobile Health Technology for Living Kidney Donor Follow-up: In-Depth Interviews with Transplant Providers. *Clinical Transplantation*. In Press. PMID:31194892 doi:10.1111/ctr.13637
- [30] Al Ammary F, Bowring MG, Massie AB, Yu S, Waldram MM, Garonzik Wang J, Thomas AG, Holscher CM, Qadi MA, Henderson ML, Wiseman A, Gralla J, Brennan DC, Segev DL, Muzaale AD. The Changing Landscape of Live Kidney Donation in the United States From 2005 to 2017. American Journal of Transplantation. In Press. PMID:30903733 doi:10.1111/ajt.15368
- [29] Rasmussen SEVP, Zhou S, **Thomas AG**, Segev DL, Nicholas LH. Transplant Community Perceptions of the Benefits and Drawbacks of Alternative Quality Metrics for Regulation. *Clinical Transplantation*. In Press. PMID:30773685 doi:10.1111/ctr.13500
- [28] Al Ammary F†, Thomas AG†, Massie AB, Muzaale AD, Shaffer AA, Koons B, Qadi MA, Crews DC, Garonzik-Wang J, Fang H, Brennan DC, Lentine KL, Segev DL, Henderson ML. The Landscape of International Living Kidney Donation in the United States. American Journal of Transplantation. In Press. PMID:30615253 doi:10.1111/ajt.15256
- [27] Ruck JM†, Henderson ML†, Eno AK, Rasmussen SEVP, DiBrito SR, Thomas AG, Li R, Singer L, Massie I, Waldram MM, Konel JM, Helfer DR, Garonzik-Wang JM, Purnell T, Mogul DB, Lentine K, Waterman AD, Segev DL. Use of Twitter in Communicating Living Solid Organ Donation Information to the Public: An Exploratory Study of Living Donors and Transplant Professionals. Clinical Transplantation. In Press. PMID:30421841 doi:10.1111/ctr.13447

- [26] Haugen CE, Holscher CM, Luo X, Bowring MG, Orandi BJ, Thomas AG, Garonzik Wang J, Massie AB, Philosophe B, McAdams-DeMarco M, Segev DL. Assessment of Trends in Transplantation of Liver Grafts from Older Donors and Outcomes in Recipients of Liver Grafts from Older Donors, 2003-2016. JAMA Surgery. In Press. PMID:30758494 doi:10.1001/jamasurg.2018.5568
- [25] Henderson ML, Thomas AG, Eno AK, Waldram MM, Bannon J, Massie AB, Levan MA, Segev DL, Bingaman AW. The impact of the Mkidney mHealth system on live donor follow-up compliance: Protocol for a randomized controlled trial. *Journal of Internet Medical Research Research Protocols*. In Press.
- [24] Holscher CM, Leanza J, Thomas AG, Waldram MM, Haugen CE, Jackson K, Bae S, Massie AB, Segev DL. Anxiety, Depression, and Regret of Donation in Living Kidney Donors. BMC Nephrology. In Press. PMID:30180815 doi:10.1186/s12882-018-1024-0
- [23] Shaffer AA, Thomas AG, Bowring MG, Rasmussen SEVP, Cash A, Kucirka L, Alqahtani S, Gurakar A, Sulkowski M, Cameron A, Segev DL, Durand CM. Changes in Practice and Perception of Hepatitis C and Liver Transplantation: Results of a National Survey. Transplant Infectious Disease. In Press. PMID:30144258 doi:10.1111/tid.12982
- [22] Thomas AG†, Ruck JM†, Shaffer AA, Haugen CE, Ying H, Warsame F, Chu N, Carlson MC, Gross AL, Norman SP, Segev DL, McAdams-DeMarco M. Cognitive Impairment and Graft Loss in Kidney Transplant Recipients. *Transplantation*. In Press. PMID:30153224 doi:10.1097/TP.0000000000002431
- [21] Holscher CM, Bae S, Thomas AG, Henderson ML, Haugen CE, DiBrito SR, Muzaale AD, Garonzik-Wang JM, Massie AB, Lentine KL, Segev DL. Early Hypertension and Diabetes after Living Kidney Donation. *Transplantation*. In Press. PMID:30247449 doi:10.1097/TP.00000000000002411
- [20] Warsame F, Ying H, Haugen CE, Thomas AG, Crews DC, Shafi T, Jaar B, Segev DL, McAdams-DeMarco MA. Intradialytic Activities and Health-Related Quality of Life among Hemodialysis Patients. American Journal of Nephrology. In Press. PMID:30176670 doi:10.1159/000492623
- [19] Holscher CM, Jackson K, Thomas AG, Haugen CE, DiBrito SR, Covarrubias K, Gentry SE, Ronin M, Waterman AD, Massie AB, Garonzik Wang J, Segev DL. Temporal Changes in the Composition of a Large Multicenter Kidney Exchange Clearinghouse: Do the Hardto-Match Accumulate? American Journal of Transplantation. In Press. PMID:30063811 doi:10.1111/ajt.15046
- [18] Eno AK, Thomas AG, Ruck JM, Rasmussen SEVP, Halpern SE, Waldram MM, Muzaale AD, Purnell TS, Massie AB, Garonzik Wang J, Lentine KL, Segev DL, Henderson ML. Assessing the Attitudes and Perceptions Regarding the Use of Mobile Health Technologies for Living Kidney Donor Follow-Up: Survey Study. Journal of Internet Medical Research mHealth and uHealth. Accepted. PMID:30305260 doi:10.2196/11192
- [17] Zhou S, Massie AB, Holscher CM, Waldram MM, Ishaque T, **Thomas AG**, Segev DL. Prospective Validation of Prediction Model for Kidney Discard. *Transplantation*. In Press. PMID:30015701 doi:10.1097/TP.0000000000002362
- [16] Bae S, Massie AB, Thomas AG, Bahn G, Luo X, Jackson KR, Ottmann SE, Brennan DC, Desai NM, Coresh J, Segev DL, Garonzik Wang JM. Who Can Tolerate a Marginal Kidney? Predicting Survival after Deceased-Donor Kidney Transplantation by Donor-Recipient Combination. American Journal of Transplantation. In Press. PMID:29935051 doi:10.1111/ajt.14978
- [15] Rasmussen SEVP, Thomas AG, Garonzik Wang J, Henderson ML, Stith SS, Segev DL, Nicholas LH. Reported Effects of the SRTR 5-tier Rating System on US Transplant Centers. Transplant International. In Press. PMID:29802802 doi:10.1111/tri.13282

- [14] Kumar K, Tonascia JM, Muzaale AD, Purnell TS, Ottmann SE, Al Ammary F, Bowring MG, Poon A, King EA, Massie AB, Chow EKH, Thomas AG, Ying H, Borja M, Konel JM, Henderon ML, Cameron AM, Garonzik-Wang JM, Segev DL. Racial differences in completion of the living kidney donor evaluation process. *Clinical Transplantation*. In Press. PMID:29791039 doi:10.1111/ctr.13291
- [13] Henderson ML, Adler JT, Rasmussen SEVP, Thomas AG, Herron PD, Waldram M, Ruck JM, Purnell TS, DiBrito SR, Holscher CM, Haugen CE, Alimi Y, Konel JM, Eno AK, Garonzik-Wang JM, Gordon EJ, Lentine KL, Schaffer RL, Cameron AM, Segev DL. How Should Social Media Be Used in Transplantation? A Survey of The American Society of Transplant Surgeons. Transplantation. In Press. PMID:29684002 doi:10.1097/TP.00000000000002243
- [12] Haugen CE, Mountford A, Warsame F, Berkowitz R, Bae S, Thomas AG, Brown C, Brennan D, Neufeld KJ, Carlson MC, Segev DL, McAdams-DeMarco M. Incidence, Risk Factors, and Sequelae of Post-kidney Transplant Delirium. *Journal of the American Society of Nephrology*. In Press. PMID:29685884 doi:10.1681/ASN.2018010064
- [11] McAdams-DeMarco MA, Ying H, Thomas AG, Warsame F, Shaffer AA, Haugen CE, Garonzik Wang JM, Desai NM, Varadhan R, Walston J, Norman SP, Segev DL. Frailty, Inflammatory Markers, and Waitlist Mortality Among Patients with End-Stage Renal Disease in a Prospective Cohort Study. *Transplantation*. In Press. PMID:29677074 doi:10.1097/TP.00000000000002213
- [10] Flechner SM, Thomas AG, Ronin M, Veale JL, Leeser DB, Kapur S, Piepert JD, Segev DL, Henderson ML, Shaffer AA, Cooper M, Hil G, Waterman AD. The First 9 years of Kidney Paired Donation Through the National Kidney Registry: Characteristics of Donors and Recipients Compared to National Live Donor Transplant Registries. American Journal of Transplantation. In Press. PMID:29603640 doi:10.1111/ajt.14744
- [9] Haugen CE, Thomas AG, Garonzik Wang J, Massie AB, Segev DL. Minimizing Risk Associated with Older Liver Donors by Matching to Preferred Recipients: A National Registry and Validation Study. *Transplantation*. In Press. PMID:29570165 doi:10.1097/TP.0000000000002190
- [8] Durand CM<sup>†</sup>, Bowring MG<sup>†</sup>, Thomas AG, Kucirka LM, Massie AB, Cameron A, Desai NM, Sulkowski M, Segev DL. The Drug Overdose Epidemic and Deceased-Donor Transplantation in the United States: A National Registry Study. Annals of Internal Medicine. 2018 April 17. PMID:29710288 doi:10.7326/M17-2451
- [7] Holscher CM, Jackson K, Chow EKH, Thomas AG, Haugen CE, DiBrito SR, Purcell C, Ronin M, Waterman AD, Garonzik-Wang J, Massie AB, Gentry SE, Segev DL. Kidney Exchange Match Rates in a Large Multicenter Clearinghouse. *American Journal of Transplantation*. 2018 March 9. PMID:29437286 doi:10.1111/ajt.14689
- [6] Henderson ML†, DiBrito SR†, Thomas AG, Holscher CM, Shaffer AA, Bowring MG, Purnell TS, Massie AB, Garonzik-Wang JM, Waldram M, Lentine KL, Segev DL. Landscape of Living Multi-organ Donation in the United States: A Registry-Based Cohort Study. Transplantation. 2018 Jan 11. PMID:29952925 doi:10.1097/TP.00000000000002082
- [5] Ruck JM, Zhou S, Thomas AG, Cramm SL, Massie AB, Montgomery JR, Berger JC, Henderson ML, Segev DL. Electronic messaging and communication with living kidney donors. Clinical Transplantation. 2017 Dec 27. PMID:29281129 doi:10.1111/ctr.13184
- [4] Henderson ML<sup>†</sup>, Thomas AG<sup>†</sup>, Shaffer A, Massie AB, Luo X, Holscher CM, Purnell TS, Lentine K, Segev DL. The National Landscape of Living Kidney Donor Follow-up in the United States. American Journal of Transplantation. 2017 Dec 1. PMID:28510355 doi:10.1111/ajt.14356
- [3] Treat E, Chow EKH, Peipert JD, Waterman A, Kwan L, Massie AB, **Thomas AG**, Bowring MG, Leeser D, Flechner S, Melcher ML, Kapur S, Segev DL, Veale J. Shipping Living

- Donor Kidneys and Transplant Recipient Outcomes. American Journal of Transplantation. 2017 Nov 22. PMID:29165871 doi:10.1111/ajt.14597
- [2] Long A, Mbabali I, Hutton HE, Thomas AG, Bugos E, Mulamba J, Amico KR, Nalugoda F, Gray RH, Wawer MJ, Nakigozi G, Chang LW. Design and Implementation of a Community Health Worker HIV Treatment and Prevention Intervention in an HIV Hotspot Fishing Community in Rakai, Uganda. Journal of the International Association of Providers of AIDS Care. 2017 May 22. 5:499-505 PMID:28528560 doi:10.1177/2325957417709089
- [1] Perin J, **Thomas AG**, Oldja L, Ahmed S, Parvin T, Bhuyian SI, Sarker B, Biswas SK, Faruque AS, Sack RB, and George CM. Geophagy is associated with growth faltering in children in rural Bangladesh. *The Journal of Pediatrics*. 2016 Nov 30; 178:34-9. PMID:27496267 doi:10.1016/j.jpeds.2016.06.077

# OTHER ARTICLES

- AG Thomas in bold; † Indicated Equal Effort; Sorted by Submission Date (Last In/First Out)
  - [3] Razavi A, Gingras V, Michos E, Navar AM, Brown SA, Delker E, Foti K, Harrison S,Lu Y, Nierenberg J, Scott J, Tang O, **Thomas AG**, Turkson-Ocran RA, Wallace A, Zhang M, Lancaster K, Lutsey P, Selvin E. American Heart Association EPI|LIFESTYLE Scientific Sessions: 2020 Meeting Highlights. *Journal of the American Heart Association*. Accepted.
  - [2] Alonso A, Anderson MD, Bancks MP, Brown S, Caughey MC, Chang AR, Delker E, Foti K, Gingras V, Nanna MG, Razavi AC, Scott J, Selvin E, Tcheandjieu C, Thomas AG, Turkson-Ocran RN, Webel A, Young DR, DeBarmore BM. Highlights from the American Heart Association's EPI|Lifestyle 2019 Scientific Sessions. Journal of the American Heart Association. In Press. PMID:31433702 doi:10.1161/JAHA.119.012925
  - [1] Contributors to the C4 Article. Current opinions in organ allocation. American Journal of Transplantation. 2018 October 10. PMID:30303603 doi:10.1111/ajt.15094

## JOURNAL ARTICLES UNDER REVIEW

- AG Thomas in bold; † Indicated Equal Effort; Sorted by Submission Date (First In/First Out)
- [1] Waldram M, Henderson ML, DiBrito SR, Thomas AG, Al Ammary F, Ottman S, Bannon J, Brennan DC, Massie AB, Scalea J, Barth RN, Segev DL, Garonzik-Wang JM. Financial Incentives versus Standard of Care to Improve Patient Compliance with Live Kidney Donor Follow-Up: Protocol for a Multi-Center, Parallel-Group Randomized Controlled Trial. First Submitted 4/2019.
- [2] Shaffer A, Thomas AG, Massie AB, Locke J, Reed R, Shelton B, Gustafson S, Snyder JJ, Hess G, Purnell T, Jackson J, Althoff K, McAdams-DeMarco M, Segev DL, Durand CM. The US Landscape of Liver Transplant Candidates with HIV from 2001 to 2016: A Pharmacy Claims-Linked National Registry Study. First Submitted 5/2019.
- [3] Boyarsky BJ, Massie AB, Love AD, Werbel WA, Durand CM, Avery RK, Jackson KR, Kernodle AB, **Thomas AG**, Ronin M, Altrich M, Niles P, Trahan C, Hewlett J, Segev DL, Garonzik-Wang JM. Early experiences with COVID-19 testing in transplantation. First Submitted 4/2020.
- [4] Al Ammary F, Yu Y, Ferzola A, Motter JD, Massie AB, Yu S, Thomas AG, Crews DC, Segev DL, Muzaale AD, Henderson ML. The First Increase in Live Kidney Donation in The United States in 15 Years. First Submitted 4/2020.
- [5] Beres LK, Mbabali I, Anok A, Katabalwa C, Mulamba J, Thomas AG, Bugos E, Grabowski MK, Nakigozi G, Chang LW. Acceptability and feasibility of mobile phone-based ecological momentary assessment and intervention in Uganda. First Submitted 5/2020.

Journal Articles Under Revision

- AG Thomas in bold; † Indicated Equal Effort; Sorted by Submission Date (First In/First Out)
- [1] Jackson KR, Holscher CM, **Thomas AG**, Ronin M, Waterman AD, Cooper M, Hiller JM, Cecka M, Henderson M, Massie AB, Desai NM, Gentry S, Segev DL, Garonzik Wang J. Desensitization in a Large, Multicenter Kidney Paired Donation Clearinghouse.
- [2] Holscher CM<sup>†</sup>, Thomas AG<sup>†</sup>, Haugen CE, Jackson KR, Massie AB, Segev DL, Henderson ML, Al Ammary F, Brennan DC, Garonzik-Wang JM. ESRD Cause-Specific Benefits of Preemptive Living Donor Kidney Transplant. First Submitted 1/2019.

## Conference Talks

- AG Thomas in bold; † Indicated Equal Effort; Presentor(s) underlined; Sorted by Presentation Date (Last in/First Out)
- [14] <u>Thomas AG</u>, Shaffer AA, Segev DL. Kidney Paired Donation Outcomes among High PRA Kidney Recipients. In: *Academic Surgical Congress*, Orlando, FL, USA, February 4-6, 2020.
- [13] <u>Thomas AG</u>, Shaffer AA, Segev DL. Donor/Recipient Relationships Underestimate Kidney Paired Donation in the National Registry. In: *Academic Surgical Congress*, Orlando, FL, USA, February 4-6, 2020.
- [12] <u>Thomas AG</u>, Shaffer AA, Segev DL. Are We Underestimating the Number of Paired Kidney Exchange Transplants in the United States? Relationship Insights from the National Kidney Registry. In: *American Transplant Congress*, Boston, MA, USA, June 1-5, 2019.
- [11] Shaffer AA, <u>Thomas AG</u>, Segev DL. The National Landscape of Heart Transplant Candidates with HIV. In: *American Transplant Congress*, Boston, MA, USA, June 1-5, 2019.
- [10] Shaffer AA, Ying H, Chu N, <u>Thomas AG</u>, Haugen C, Norman S, Segev DL, McAdams-DeMarco M. Access To The Kidney Transplant Waitlist For Patients With HIV And End-stage Renal Disease. In: *American Transplant Congress*, Boston, MA, USA, June 1-5, 2019.
- [9] <u>Thomas AG</u>, Holscher CM, Haugen C, Jackson K, Massie AB, Segev DL, Henderson ML, Al Ammary F, Brennan D, Garonzik Wang J. Benefits of Preemptive Living Donor Kidney Transplant Vary by Cause of Kidney Disease. In: *National Heart, Lung, and Blood Institute Trainee Session*, Houston, TX, USA, March 6, 2019.
- [8] Thomas AG, Ruck JM, Haugen C, Shaffer AA, Ying H, Norman S, Garonzik Wang J, Segev DL, Mara McAdams-DeMarco. Kidney Transplant Outcomes in Recipients with Physical Disabilities. In: Asian Transplant Week, Bexco, Busan, South Korea, November 8-10, 2018.
- [7] Thomas AG, Ruck J, Shaffer A, Ying H, Norman S, Garonzik-Wang J, Segev D, McAdams-DeMarco M. Outcomes for Kidney Transplant Recipients with Hearing, Visual, Physical, and Walking Disabilities. In: American Society of Nephrology Kidney Week, San Diego, CA, USA, October 25-28, 2018.
- [6] Thomas AG, Ruck J, Shaffer AA, Haugen C, Ying H, Warsame F, Chu N, Carlson M, Gross A, Norman S, Segev DL, <u>McAdams-DeMarco M</u>. Cognitive Impairment and Graft Loss in Kidney Transplant Recipients. In: *International Congress of The Transplantation Society*, Madrid, Spain, June 30-July 5, 2018.
- [5] <u>Thomas AG</u>, Shaffer AA, Ying H, Norman S, Segev DL, McAdams-DeMarco M. Prevalence of Frailty among Kidney Transplant Recipients in the United States. In: *American Transplant Congress*, Seattle, WA, USA, June 2-6, 2018.
- [4] <u>Thomas AG</u>, Holscher C, Shaffer AA, Garonzik-Wang J, Massie AB, Segev DL, Henderson ML. Living Liver Donor Follow-Up: Fewer than Half of Centers Meet Follow-Up Requirements in the US. In: *American Transplant Congress*, Seattle, WA, USA, June 2-6, 2018.

- [3] <u>Thomas AG</u>, Henderson ML, Shaffer AA, Massie AB, Koons B, Lentine K, Segev DL, Al Ammary F. Landscape of Living Donor Kidney Transplantation with International Donors in the United States. In: *American Transplant Congress*, Seattle, WA, USA, June 2-6, 2018.
- [2] Ruck JM†, Thomas AG†, Shaffer AA, Haugen CE, Ying H, Warsame F, Chu N, Carlson MC, Gross AL, Norman SP, Segev DL, McAdams-DeMarco MA Cognitive Impairment and Graft Loss in Kidney Transplant Recipients. In: *Academic Surgical Congress*, Jacksonville, FL, USA, January 30 February 1, 2018.
- [1] Henderson ML†, **Thomas AG**†, Massie A, Luo X, Shaffer A, Holscher C, Segev DL. The Unfunded OPTN/UNOS Mandate of Living Kidney Donor Follow-up: Fewer than 50% of Centers in Compliance. In: *American Transplant Congress*, Chicago, IL, USA, April 29 May 3, 2017.

# SELECT CONFERENCE POSTERS

- AG Thomas in bold; † Indicated Equal Effort; Presentor(s) underlined; Sorted by Presentation Date (Last in/First Out)
- [17] <u>Thomas AG</u>, Kucharska-Newton A, Wei J, Palta P, Burgard S, Meyer M, Stoner L, Tanaka H, Nadruz W, Windham BG, Wagenknecht L, Heiss G. Longitudinal Association Between Frailty and Arterial Stiffness in Community-dwelling Older Adults: The Atherosclerosis Risk in Communities Study. In: *American Heart Association Epi/Lifestyles*, Phoenix, AR, USA, March 3-6, 2020.
- [16] Thomas AG, Shaffer AA, Segev DL. Kidney Paired Donation Outcomes among High PRA Kidney Recipients. In: American Society of Transplant Surgeons, Miami, FL, USA, January 9-12, 2020.
- [15] <u>Thomas AG</u>, Ruck J, Chu N, Agoons D, Shaffer A, Haugen C, Ying H, B. Swensor S, Garonzik Wang J, Segev D, McAdams-DeMarco M. Kidney Transplant Outcomes In Recipients With Physical Impairments. In: *American Transplant Congress*, Boston, MA, USA, June 1-5, 2019.
- [14] Shaffer AA, <u>Thomas AG</u>, Segev DL. Patterns Of Anti-retroviral Use Among US Liver Transplant Candidates With HIV. In: *American Transplant Congress*, Boston, MA, USA, June 1-5, 2019.
- [13] <u>Thomas AG</u>, Holscher CM, Haugen C, Jackson K, Massie AB, Segev DL, Henderson ML, Al Ammary F, Brennan D, Garonzik Wang J. Benefits of Preemptive Living Donor Kidney Transplant Vary by Cause of Kidney Disease. In: *American Heart Association Epi/Lifestyle*, Houston, TX, USA, March 5-8, 2019.
- [12] <u>Thomas AG</u>, Ruck J, Haugen C, Shaffer A, Ying H, Norman S, Garonzik-Wang J, Segev D, McAdams-DeMarco M. Outcomes for Kidney Transplant Recipients with Hearing, Visual, Physical, and Walking Disabilities. In: *American Society of Transplant Surgeons*, Miami, FL, USA, January 10-13, 2019.
- [11] <u>Thomas AG</u>, Koons B, Shaffer A, Al Ammary F, Lentine K, McAdams-DeMarco M, Segev D, Henderson M. US-Listed Transplant Candidates that Travel Abroad for Transplant: A National Registry Study. In: *American Society of Nephrology Kidney Week*, San Diego, CA, USA, October 25-28, 2018.
- [10] Thomas AG, Ruck J, Shaffer AA, Haugen C, Ying H, Warsame F, Chu N, Carlson M, Gross A, Norman S, Segev DL, McAdams-DeMarco M. Kidney Transplant Outcomes in Recipients with Cognitive Impairment: A National Registry and Prospective Cohort Study. In: Society of Epidemiologic Research, Baltimore, MD, USA, June 19-22, 2018.
- [9] <u>Thomas AG</u>, Shaffer AA, Ying H, Norman S, Segev DL. McAdams-DeMarco M. Prevalence of Frailty among Kidney Transplant Recipients in the United States. In: *Society of Epidemiologic Research*, Baltimore, MD, USA, June 19-22, 2018.

- [8] Thomas AG, Ruck J, Shaffer AA, Haugen C, Ying H, Warsame F, Chu N, Carlson M, Gross A, Norman S, Segev DL, McAdams-DeMarco M. Cognitive Impairment and Graft Loss in Kidney Transplant Recipients. In: American Transplant Congress, Seattle, WA, USA, June 2-6, 2018.
- [7] **Thomas AG**, Shaffer AA, Ying H, Walston J, Norman SP, Segev DL, <u>McAdams-DeMarco MA</u>. National Estimates of Frailty Prevalence among Kidney Transplant Recipients in the United States. In: *International Conference on Frailty & Sarcopenia Research*, Miami Beach, FL, USA, March 1 3, 2018.
- [6] <u>Thomas AG</u>, Ruck J, Shaffer AA, Haugen C, Ying H, Warsame F, Chu N, Calson M, Gross A, Norman S, Segev DL, McAdams-Demarco M. Cognitive Impairment and Graft Loss in Kidney Transplant Recipients. In: *American Society of Transplant Surgeons*, Miami, FL, USA, January 11-14, 2018.
- [5] <u>Thomas AG</u>, Henderson ML, Shaffer AA, Massie AB, Segev DL, Al Ammary F. Landscape of Living Donor Kidney Transplantation with International Donors in the United States. In: *American Society of Transplant Surgeons*, Miami, FL, USA, January 11-14, 2018.
- [4] <u>Thomas AG</u>, Shaffer A, Massie A, Segev DL. Use of Pulsatile Perfusion Modifies the Effect of Delayed Graft Function on Graft Failure. In: *American Transplant Congress*, Chicago, IL, USA, April 29 May 3, 2017.
- [3] <u>Thomas AG</u>, Massie A, Garonzik-Wang J, Lentine K, Henderson M, Segev DL. Landscape of Multiple Donations from a Living Donor in the US. In: *American Transplant Congress*, Chicago, IL, USA, April 29 May 3, 2017.
- [2] Thomas AG, Henderson ML, Massie AB, Shaffer A, Luo X, Holscher CM, Segev DL. Fewer than 50% of Transplant Centers Fully Comply with OPTN Living Donor Followup Policy. In: American Society of Transplant Surgeons, Miami, FL, USA, January 26-29, 2017.
- [1] Erickson JE†, **Thomas AG**†, Strickland K, Barnes A. Iterative Gaussian mixture model splitting of multimodal PSTH for studying activity dependent changes in cultured network connectivity. In: *Society for Neuroscience*, San Deigo, CA, USA, November 9-13, 2013.

## INVITED TALKS

- [1] The National Landscape of Living Kidney Donor Follow-up in the United States. In: American Society of Transplantation and American Journal of Transplantation Journal Club, Online, December 7, 2017.
- [2] Utilizing Digital Tools for Living Kidney Donor Follow-up. In: *Texas Transplant Institute* at *Methodist Hospital*, San Antonio, TX, USA, March 5, 2018.
- [3] Scientific Insights from Nine Years of the National Kidney Registry. In: Johns Hopkins University Division of Immunogentics and Transplantation Immunology, Baltimore, MD, USA, June 12, 2018.
- [4] Liberal Arts Training and a Career in Public Health. In: Washington and Lee University Johnson Week, Lexington, VA, USA, March 11, 2019.

## Inventions and Patents

- [1] mKidney. Henderson ML, **Thomas AG**, Segev DL. Johns Hopkins University Invention ID: D15296.
  - mKidney is a mobile health platform for the post-donation follow-up care management of living kidney donors. The platform includes a patient facing mobile application and a hospital facing web portal.

## TEACHING EXPERIENCE

Johns Hopkins University Bloomberg School of Public Health, Baltimore, MD

Guest Lecturer May 2017

- 340.600.01: Stata Programming
  - Graduate course in intermediate Stata programming
  - Main instructors: Dorry L. Segev, Allan B. Massie
  - Lecture: "From a Dirty Dataset to Table 1"
  - Enrollment: 281

RESEARCH EXPERIENCE

## Graduate Research Assistant | University of North Carolina | 2018-Present

• Responsible for data analysis and manuscript prepartion for research projects in the Atherosclerosis Risk in Communities (ARIC) study. Advisor: Gerardo M. Heiss, MD PhD

## Research Data Analyst | Johns Hopkins University | 2016-2018

• Responsible for data analysis and manuscript preparation for >40 research projects in transplantation epidemiology. Managed data for an ongoing NIH-funded prospective study of living donors. Supported the development of novel eHealth technologies for kidney donors engagement and follow-up. Developed and maintained statistical software in R and Stata. Advisor: Dorry Segev, MD PhD

## Research Assistant | Rakai Health Science Program | 2015-2016

• Trained community health workers and study staff involved in the implementation of two NIH-funded studies in Rakai, Uganda. Developed the standard operating procedures for data quality and management and contributed to the development of study questionnaires and protocols. Developed analytic R scripts to regularly generate weekly study implementation reports. Assisted in the development and testing of two mHealth applications. Advisor: Larry Chang, MD MPH.

## Data Manager | Johns Hopkins University | 2016

• Performed data management activities to ensure data quality using SAS, EpiInfo, and Stata for the NSEBA Study which aims to improve detection of pediatric HIV in Zambia. Advisor: Catherine Sutcliffe, PhD.

## Research Assistant | International Vaccine Access Center | 2014-2015

• Abstracted data from >100 journal articles for a systematic review that aimed to estimate the global burden of Haemophilus influenza type B, Streptococcus Pneumoniae, and Neisseria meningitides.

#### Student Reseracher | Shepherd Poverty Program | 2013

 Analyzed data from the CDC Health, 2011 report to present longitudinal data analysis on the relationship between socioeconomic status and health status. Funded by the University Research Scholarship. Advisor: Harlan Beckley, PhD

#### Biomedical Engineering Technician | Engineering World Health | 2013

Fully repaired 20 medical devices, took full inventories of the Rubavu hospital and its ten surrounding health clinics, and conceptualized a novel medical device to perform lab equipment calibrations in resource-scarce environments.

AMERICORPS (1895 HOURS SERVED)

## Robotics Program Founder | Lexington City Schools | 2011-2014

 Created and ran a program that uses Lego NXT robots to introduce middle school and elementary students to robotics, computer science, and engineering design utilizing a \$2500 grant from NSF.

#### Shift Leader | Campus Kitchens Project | 2011-2014

 Addressed local hunger as a ServSafe-certified manager by supervising shifts that collected, prepared, and served over 300 meals/week.

## **Trip Coordinator** | Volunteer Venture Program | 2011-2013

• Coordinated three weeklong service trips for incoming students, which involves budget management and logistical planning.

## Therapeutic Nursery Intern | Kennedy Krieger Institute | 2011

• Conducted play-therapy sessions with toddlers and families experiencing homelessness. Provided care for the children and assisted with an active study in child psychology.

## Patient Eligibility Intern | Rockbridge Area Health Center | 2010-2012

• Helped manage the medical database, helped eligible patients acquire free medication from pharmaceutical companies, and answered patient questions by phone.

# SOFTWARE SKILLS

## Statistical/Numerical Analysis:

• Stata, R, SAS, MATLAB, Maple

#### Computer Programming:

• Java, C++, C, Python, SQL

#### Data Science:

- Git (GitHub/GitLab)
- Jupyter
- Docker, Make

## Productivity and Editing Software:

- Atom, Xcode, RStudio
- TEX (LATEX, BIBTEX), RMarkdown
- Microsoft Office, LibreOffice, Google Docs, iWork, EndNote
- GIMP, Adobe Photoshop

## Operating Systems:

• Apple MacOS, Microsoft Windows, Linux (Fedora, SGE)

#### ACTIVITES

## Journal Peer Review (ad hoc)

- American Journal of Transplantation (AJT)
- Journal of Internet Medical Research (JMIR)

#### Conference Abstract Review

• Society for Epidemiologic Research, 2018-

# Committee Participation

- Standing Member, Diversity and Inclusion Committee, Society for Epidemiologic Research (SER), 2019-
- D&I Representative, Student and Postdoc Committee, Society for Epidemiologic Research (SER), 2019-

## Memberships

- Trainee Member, American Association for the Study of Liver Diseases (AASLD), 2019-
- Associate member, Association for Academic Surgery (AAS), 2019-
- Student Member, American Society of Nephrology (ASN), 2018-
- Trainee Member, Society for Epidemiologic Research (SER), 2017-
- Trainee Member, American Society of Transplant Surgeons (ASTS), 2016-
- Student Member, Society for Neuroscience (SFN), 2013