

Loren Gragert, Ph.D., A(ACHI)

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Tulane Cancer Center
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Education

2014 Ph.D., Biomedical Informatics and Computational Biology, University of Minnesota, Minneapolis, MN
2001 B.S., Biochemistry, University of St. Thomas, Saint Paul, MN
B.A., Quantitative Methods / Computer Science, University of St. Thomas, Saint Paul, MN

Academic Appointments

2023 Assistant Professor, Department of Medicine, Division of Biomedical Informatics and Genomics
Tulane University School of Medicine, New Orleans, LA
2015-2023 Assistant Professor, Department of Pathology and Laboratory Medicine
Tulane University School of Medicine, New Orleans, LA

Clinical Appointments

2020- Associate Director, Histocompatibility and Immunogenetics Laboratory, A(ACHI) Board Certification
Department of Medicine, Section of Clinical Immunology, Allergy, and Rheumatology,
Tulane University School of Medicine, New Orleans, LA

Professional Experience

2003-15 Senior Bioinformatics Scientist, National Marrow Donor Program / Be The Match, Minneapolis, MN
2001-03 Software Engineer, Lockheed Martin Tactical Systems, Eagan, MN

Professional Organizations

2004- American Society for Histocompatibility and Immunogenetics (ASHI)
2007- European Federation of Immunogenetics (EFI)
2018- American Society of Transplantation (AST)
2008-15 World Marrow Donor Association (WMDA)
2006-12 American Society of Human Genetics (ASHG)

Professional Activities

Teaching

2020-2023 Tulane SOM GBCH 7240, Advanced Bioinformatics | Graphics and Deep Learning units
2018-2023 Tulane SOM MCPB 6070, Molecular and Cellular Pathobiology | Bioinformatics unit
2018-2023 Tulane SOM GBCH 7230, Intro to Bioinformatics | Python and Sequence Alignment units
2016-2020 Tulane SOM Pathology Resident Training Program | Pathology Informatics unit

Current Trainees

2020- D. Giovanni Biagini, PhD candidate in Biomedical Sciences program
2020- Grace Williams, PhD candidate in Biomedical Sciences program
2023- Alyssa Paynter, PhD student in Biomedical Informatics program
2023- Shakhaowat Hossain, PhD student in Biomedical Sciences program

Trainee Alumni

2020-23 Marian Little, (PhD in Biomedical Sciences | Research Analyst, Emergency Care Research Inst.)
2016-19 Navchetan Kaur (Postdoctoral Fellow | Postdoctoral Fellow, Atul Butte Lab, UCSF | Natera)

2016-17 Richard Davis (MD/MPH Practicum and Culminating Experience | Clinical Informatics Fellow, Duke)

Institutional Service

2023- Associate Director of Educational Programs, Division of Biomedical Informatics and Genomics
2018-2020 Faculty Advisor, Computational Biology at Tulane student organization

Extramural Services

2023- AST Transplant Diagnostics Community of Practice (COP) Executive Committee, Early Career
2023- ASHI Quality Assurance and Standards (QAS) Committee, NGS Working Group
2022- International HLA and Immunogenetics Workshop (IHIW) Councilor
2021-2022 Virtual Crossmatch Advisory Committee, National Marrow Donor Program / Be The Match
2021- ASHI Education Committee, Director-In-Training Career Development Working Group
2021- Instructor, Basic & Population Genetics; Bioinformatics, AFDT Histocompatibility Specialist Course
2021- Louisiana Organ Procurement Agency (LOPA) HLA Subcommittee
2020- Editorial Board, *Human Immunology*
2019 Local Organizer, 2nd Immune Polymorphism and Population Dynamics Workshop, New Orleans, LA
2019- Immunobiology Working Committee, Center for International Blood and Marrow Transplant Research
2019- Project Leader, HLA Dictionary, 18th International HLA and Immunogenetics Workshop
2018 Co-Organizer, 1st Immune Polymorphism and Population Dynamics Workshop, Ramat Gan, Israel
2015- Editorial Board, *HLA: Immune Response Genetics* (formerly *Tissue Antigens*)
2013-2015 Information Technology Committee, American Society for Histocompatibility and Immunogenetics

Journal Reviewing

Human Immunology (Editorial Board) | HLA: Immune Response Genetics (Editorial Board) | American Journal of Transplantation | Transplantation | Cancer Research | Bioinformatics | Cell Genomics | Journal of Clinical Investigation | Journal of the American Society of Nephrology | Clinical Journal of the American Society for Nephrology | Communications Biology | PLoS ONE | PLoS Neglected Tropical Diseases | Cytotherapy | BMC Bioinformatics | International Journal of Immunogenetics | Frontiers in Genetics | Exploration of Immunology | Health Policy and Technology

Grant Reviewing

NIH PBKD Study Section (ECR Program) | UK MRC Fellowship

Invited Talks

National & International

11/2023 Georgetown University, Current Topics in Histocompatibility and Transplantation Teleconference
06/2023 American Transplant Congress - In-Depth Session and two IMPACT sessions
04/2023 ASHI International Committee - ASHI Speaks Your Language - National Webinar
03/2023 Saudi Kidney Paired Donation (KPD) Workshop
12/2022 Georgetown University, Current Topics in Histocompatibility and Transplantation Teleconference
12/2022 Canadian Blood Services - HLA Webinar Series
06/2022 American Transplant Congress - IMPACT Session Speaker
12/2021 Georgetown University, Current Topics in Histocompatibility and Transplantation Teleconference
04/2021 European Federation for Immunogenetics Virtual Conference, Educational Session
10/2020 Georgetown University, Current Topics in Histocompatibility and Transplantation Teleconference
10/2020 American Society for Histocompatibility and Immunogenetics (ASHI) Virtual Conference
03/2020 One Lambda Technical Workshop, Rancho Mirage, CA
09/2019 American Society for Histocompatibility and Immunogenetics (ASHI) Conference, Pittsburgh
09/2019 Georgetown University, Current Topics in Histocompatibility and Transplantation Teleconference
05/2019 Georgetown University, Current Topics in Histocompatibility and Transplantation Teleconference
07/2018 University of Pennsylvania, Dept. of Pathology, Histocompatibility Laboratory
01/2015 American Association of Blood Bankers (AABB) Audioconference
09/2014 Georgetown University, Current Topics in Histocompatibility and Transplantation Teleconference
09/2012 Georgetown University, Current Topics in Histocompatibility and Transplantation Teleconference

10/2011 American Association of Blood Bankers (AABB) Conference, San Diego
06/2011 Cord Blood Symposium, Plenary Session, San Francisco

Regional & Institutional

09/2023 East Jefferson General Hospital Medical Staff Grand Rounds
03/2023 Tulane University School of Medicine, Department of Medicine Grand Rounds
03/2022 Tulane University School of Medicine, Biomedical Informatics and Genomics seminar series
12/2018 Tulane University, Primate Research Center seminar series
10/2018 Tulane University, Computer Science Department seminar series
07/2018 University of Alabama-Birmingham, Informatics Institute seminar series
01/2018 Tulane University School of Medicine, Biochemistry and Molecular Biology Department seminar series
04/2017 LSU Health Sciences Center, Epidemiology Department seminar series
03/2017 Tulane University School of Medicine, Structural and Cellular Biology Department seminar series
11/2014 National Marrow Donor Program Council Meeting

Research Support

Pending

2023 NIDDK Parent R01 - (Multi-PI), Submitted June 2023
“Increasing Equity and Utility in Deceased Donor Kidney Allocation with HLA Molecular Matching”
Contact PI: Michal Mankowski, NYU
2023 NHBLI Parent R01 - (Co-I; 10% effort), Submitted June 2023
“Human Leukocyte Antigen (HLA) Eplet Mismatch Analysis as a Marker for Immunologic Risk in Liver Transplant Recipients”
Contact PI: Bonnie Lonze, NYU

Ongoing

2022-2027 NIAID Parent R01 AI173095 - (Co-I; 18% effort)
“HLA Immunogenetics and Kidney Allograft Outcomes”
Contact PI: Malek Kamoun, University of Pennsylvania
2020-2025 NIAID HLA/KIR Region Genomics U01 AI152960 - (Co-I; 22.5% effort)
“MHC and KIR Sequencing and Association Analyses in the iGeneTRAIN Studies”
Contact PI: Brendan Keating, NYU
2020-2023 United Network for Organ Sharing Sponsored Project - (PI)
“Update Calculated Panel Reactive Antibody (CPRA) Calculator”
2015- National Marrow Donor Program (NMDP) Sponsored Project - (PI)
“HLA Bioinformatics Research”

Awards

2022 American Transplant Congress, Young Investigator Award
2021 ASHI Conference, Most Clinically Relevant Poster Abstract Award
2010 World Marrow Donor Association (WMDA) International Donor Registries Conference (IDRC), Best Abstract
2009 British Society of Histocompatibility and Immunogenetics (BSHI) Meeting, Best Abstract
2009 European Federation of Immunogenetics (EFI) Conference, Best Abstract

Publications

Original Investigations

1. Mack SJ, Schefzyk D, Milius RP, Maiers M, Hollenbach JA, Pollack J, Heuer ML, **Gragert L**, Spellman SR, Guethlein LA, Schneider J, Bochtler W, Eberhard HP, Robinson J, Marsh SGE, Schmidt AH, Hofmann JA, Sauter J (2023) Genotype List String 1.1: Extending the Genotype List String Grammar for Describing HLA and Killer-cell Immunoglobulin-like Receptor Genotypes. HLA: Immune Response Genetics DOI: 10.1111/tan.15126
2. Dasariraju S, **Gragert L**, Wager G, McCullough K, Brown NK, Kamoun M, Urbanowicz R. (2023) HLA Amino Acid Mismatch-

Based Risk Stratification of Kidney Allograft Failure Using a Novel Machine Learning Algorithm. Journal of Biomedical Informatics Available online 27 April 2023, 104374. DOI: 10.1016/j.jbi.2023.104374.

3. Ansbacher-Feldman Z, Israeli S, Maier M, **Gragert L**, De Santis D, Israeli M, Louzoun Y. (2023) GRAMM - a new method for analysis of HLA in families. HLA: Immune Response Genetics DOI: 10.1111/tan.15075
4. Nilsson J, Kaabinejadian S, Yari H, Peters B, Barra C, **Gragert L**, Hildebrand W, Nielsen M. (2023) Machine learning reveals limited contribution of trans-only encoded variants to the HLA-DQ immunopeptidome by accurate and comprehensive HLA-DQ antigen presentation prediction. Communications Biology 6(1) 442.
5. Narayan R, Niroula A, Wang T, Kuxhausen M, He M, Meyer E, Chen YB, Bhatt VR, Beitinjaneh A, Nishihori T, Sharma A, Brown VI, Kamoun M, Diaz MA, Abid MB, Askar M, Kanakry CG, **Gragert L**, Bolon YT, Marsh SGE, Gadalla SM, Paczesny S, Spellman S, Lee SJ (2023) HLA Class I genotype is associated with relapse risk after allogeneic stem cell transplantation for NPM1-mutated AML. Transplantation and Cellular Therapy DOI: 10.1016/j.jtct.2023.03.027.
6. Kim JJ, Fichtner A, Copley HC, **Gragert L**, Süsal C, Strologo LD, Oh J, Pape L, Weber LT, Weitz M, König JC, Krupka K, T Burkhard, Kosmoliaptsis V (2023) Molecular HLA mismatching for prediction of primary humoral alloimmunity and graft function deterioration in paediatric kidney transplantation. Frontiers in Immunology 14:1092335.
7. **Gragert L**, Spellman S, Shaw B, Maier M. (2023) Unrelated Stem Cell Donor HLA Match Likelihoods in the US Registry Incorporating HLA-DPB1 Permissible Mismatching. Transplantation and Cellular Therapy 29(4) 244-252.
8. Stahl M, Li Q, Lynch K, Koletzko S, Mehta P, **Gragert L**, Norris J, Aronsson C, Lindfors K, Kurppa K, Ilonen J, Krischer J, Alkolkar B, She J, Ziegler A, Toppari J, Rewers M, Agardh D, Hagopian, W, Liu E, and the TEDDY Study Group. (2022) Incidence of Pediatric Celiac Disease Varies by Region. American Journal of Gastroenterology 118(3):539-545.
9. Olson T, Frost BF, Duke JL, Dribus M, Xie HM, Prudowsky ZD, Furutani E, Gudera J, Shah Y, Ferriola D, Xu E, He M, Zheng S, Nijim S, Lin P, Xu C, Nakano T, Oved JH, Carreno BM, Lee SJ, Monos DS, Shimamura A, Bertuch AA, **Gragert L**, Spellman SR, Babushok D (2022) Pathogenicity and impact of HLA class I alleles in aplastic anemia patients of different ethnicities. JCI Insight e163040.
10. **Gragert L**, Kadatz M, Alcorn J, Stewart D, Gill J, Liwski R, Gebel H, Gill J, Lan J. (2022) ABO-Adjusted Calculated Panel Reactive Antibody (cPRA): A Unified Metric for Immunologic Compatibility in Kidney Transplantation. American Journal of Transplantation 22(12): 3093-3100.
11. Rushakoff J, **Gragert L**, Pando MJ, Huang E, Stewart D, Lindblad K, Zhang X, Patel JK, Kobashigawa J, Kransdorf EP. (2022) HLA Homozygosity and Sensitization in Kidney Transplant Candidates. Transplantation Direct 8, e1312.
12. Schindler E, Dribus M, Duffy BF, Hock K, Farnsworth CW, **Gragert L**, Liu C. (2021) Human leukocyte antigen genetic polymorphism in patients with Coronavirus Disease 2019 in Midwestern United States. HLA: Immune Response Genetics 98(4): 370-379.
13. Copley H, **Gragert L**, Leach A, Kosmoliaptsis, V. (2021) Influence of HLA class II polymorphism on predicted cellular immunity against SARS-CoV-2 at the population and individual level. Frontiers in Immunology 12:6-8.
14. Israeli S, **Gragert L**, Maier M, Louzoun Y. (2021) HLA Haplotype Frequency Estimation for Heterogeneous Populations Using a Graph-Based Imputation Algorithm. Human Immunology 82(10) 746-757.
15. Sajulga R, Madbouly A, Fingerson S, **Gragert L**, Bashyal P, Bolon YT, Maier M. (2021) Predicting HLA-DPB1 Permissible Probabilities through a DPB1 Prediction Service towards the Optimization of HCT Donor Selection. Human Immunology 82(21) 903-911.
16. Mayor N, Wang T, Lee SJ, Kuxhausen M, Vierra-Green C, Barker DJ, Auletta J, Bhatt VR, Gadalla SM, **Gragert L**, Inamoto Y, Morris GP, Paczesny S, Reshef R, Ringden O, Shaw BE, Shaw P, Spellman S, Marsh SGE. (2021) Impact of Previously Unrecognized HLA Mismatches Using Ultrahigh Resolution Typing in Unrelated Donor Hematopoietic Cell Transplantation. Journal of Clinical Oncology 39:21 2397-2409.
17. Story, MS, Wang T, Bhatt VR, Battiwalla M, Badawy SM, Kamoun M, **Gragert L**, Brown V, Baxter-Lowe LA, Marsh SGE, Gadalla SM, Schetelig J, Mytilineos J, Miklos D, Waller E, Kuxhausen M, Spellman S, Lee S, Armistead PM (2021) Genetics of HLA peptide presentation, and impact on outcomes in HLA-matched allo-HCT. Transplantation and Cellular Therapy 27:7 591-599.
18. Kransdorf E, Pando M, Stewart D, Lindblad K, Patel J, Kim I, Zhang X, Maier M, Kobashigawa J, **Gragert L**. (2021) Stem Cell Donor HLA Typing Improves CPRA in Kidney Allocation. American Journal of Transplantation 21(1) 138-147.
19. Sullivan, H, **Gragert L**, Smith G, Lindblad K, Gebel H, Bray R. (2020) A simple electronic tool for comparing amino acid sequences of HLA-DPB1 alleles. Human Immunology 81(8): 430-436.
20. Kaur N, Pinelli D, Kransdorf E, Pando M, Smith G, Murphey C, Kamoun M, Bray R, Tambur A, **Gragert L**. (2020) A blueprint for electronic utilization of ambiguous molecular HLA typing data in organ allocation systems and virtual crossmatch.

Human Immunology 81(2-3) 65-72.

21. Lobkovsky A, Levi L, Wolf Y, Maiers M, **Gragert L**, Alter I, Louzoun Y, Koonin E. (2019) Multiplicative fitness, rapid haplotype discovery and fitness decay explain evolution of human MHC. Proceedings of the National Academy of Sciences 116(28): 14098-14104.
22. Zhong C, **Gragert L**, Maiers M, Hill BT, Garcia-Gomez J, Gendzekhadze K, Senitzer D, Song J, Weisenburger D, Goldstein L, Wang S. (2019) The association between HLA and non-Hodgkin lymphoma subtypes, among a transplant-indicated population. Leukemia & Lymphoma 60(12): 2899-2908.
23. Allan D, Kiernan J, **Gragert L**, Dibdin M, Bartlett D, Campbell T, Mostert K, Halpenny M, Ganz K, Maiers M, Petraszko T, Elmoazzen H. (2019) Reducing ethnic disparity in access to high quality HLA-matched cord blood units for transplantation: analysis of the Canadian Blood Services' Cord Blood Bank inventory. Transfusion 59(7): 2382-2388.
24. Maiers M, Halagan M, **Gragert L**, Bashyal P, Schneider J, Lutsker P, Louzoun Y. (2019) GRIMM : GRaph IMputation and Matching for HLA Genotypes. Bioinformatics 35(18): 3520–3523.
25. Kaur N, Kransdorf EP, Pando MJ, Maiers M, Ray B, Lee JH, Lalli P, Murphey C, Bray R, **Gragert L**. (2018) Mapping molecular HLA typing data to UNOS antigen equivalents. Human Immunology 79: 781–789.
26. Louzoun Y, Alter I, **Gragert L**, Albrecht M, Maiers M. (2018) Modeling Coverage Gaps in Haplotype Frequencies via Bayesian Inference to Improve Stem Cell Donor Selection. Immunogenetics 70: 279–292.
27. Alter I, **Gragert L**, Fingerson S, Maiers M, Louzoun Y. (2017) HLA Class I Haplotype Diversity Is Consistent with Selection for Frequent Existent Haplotypes. PLoS Computational Biology 13(8): e1005693.
28. Dehn J, Setterholm M, Buck K, Kempenich J, Beduhn B, **Gragert L**, Madbouly A, Fingerson S, Maiers M (2016) A Predictive HLA Matching Algorithm to Enhance Rapid Identification of the Optimal Unrelated Hematopoietic Stem Cell Sources for Transplant. Biology of Blood and Marrow Transplantation 22(11): 2038-2046.
29. Bochtler W, **Gragert L**, Patel ZI, Robinson J, Steiner D, Hofmann JA, Pingel J, Baouz A, Melis A, Schneider J, Eberhard HP, Oudshoorn M, Marsh SGE, Maiers M, Muller CR (2016) A comparative reference study for the validation of HLA-matching algorithms in the search for allogeneic hematopoietic stem cell donors and cord blood units. HLA: Immune Response Genetics 87(6): 439-48.
30. Beksac M*, **Gragert L***, Fingerson S, Maiers M, Zhang MJ, Albrecht M, Zhong X, Cozen W, Dispenzeiri A, Lonial S, Hari P. (2016) HLA Polymorphism and Risk of Multiple Myeloma. Leukemia 30, 2260-2264. *Equal Contributions
31. Paunić V, **Gragert L**, Schneider J, Müller C, Maiers M. (2016) Charting Improvements in US Registry HLA Typing Ambiguity Using a Typing Resolution Score. Human Immunology 77(7): 542-9.
32. Torikai H, Mi L, **Gragert L**, Maiers M, Najjar A, Ang S, Maiti S, Dai J, Switzer K, Huis H, Dulay G, Reik A, Rebar E, Holmes M, Gregory P, Champlin R, Shpall E, Cooper L.J.N. (2016) Genetic editing of HLA expression in hematopoietic stem cells to broaden their human application. Scientific Reports 6, 21757.
33. Petz LD, Burnett JC, Li H, Li S, Tonai R, Bakalinskaya M, Shpall S, Armitage S, Kurtzberg J, Regan D, Clark P, Querol S, Gutman J, Spellman S, **Gragert L**, Rossi J. (2015) Progress toward curing HIV infection with hematopoietic cell transplantation. Stem Cells Cloning 8: 109–16.
34. Slater N, Louzoun Y, **Gragert L**, Maiers M, Chatterjee A, Albrecht M. (2015) Power Laws for Heavy-Tailed Distributions: Modeling Allele and Haplotype Diversity for the National Marrow Donor Program. PLoS Computational Biology 11(4), e1004204s.
35. **Gragert L**, Eapen M, Williams E, Freeman J, Spellman S, Baitty R, Hartzman R, Rizzo JD, Horowitz M, Confer D, Maiers M. (2014) HLA Match Likelihoods for Hematopoietic Stem-Cell Grafts in the U.S. Registry. The New England Journal of Medicine 371, 339–348.
36. **Gragert L**, Fingerson S, Albrecht M, Maiers M, Kalaycio M, Hill BT. (2014) Fine-Mapping of HLA Associations with Chronic Lymphocytic Leukemia in US Populations. Blood 124(17), 2657-65.
37. Madbouly A, **Gragert L**, Freeman J, Leahy N, Gourraud PA, Hollenbach JA, Kamoun M, Fernandez-Vina M, Maiers, M. (2014) Validation of statistical imputation of allele-level multilocus phased genotypes from ambiguous HLA assignments. Tissue Antigens 84(3), 285–92.
38. **Gragert L**, Madbouly A, Freeman J, Maiers M. (2013) Six-locus high resolution HLA haplotype frequencies derived from mixed-resolution DNA typing for the entire US donor registry. Human Immunology 74, 1313–1320.
39. Eberhard HP, Madbouly AS, Gourraud PA, Balere MA, **Gragert L**, Torres HM, Pingel J, Schmidt AH, Steiner D, van der Zanden HG, Oudshoorn M, Marsh SG, Maiers M, Muller CR. (2013) Comparative validation of computer programs for haplotype frequency estimation from donor registry data. Tissue Antigens 82(2), 93-105.
40. Milius RP, Mack SJ, Hollenbach JA, Pollack J, Heuer ML, **Gragert L**, Spellman S, Guethlein LA, Cooley S, Bochtler

W, Mueller CR, Robinson J, Marsh SG, Maiers M (2013) Genotype List String: a grammar for describing HLA and KIR genotyping results in a text string. *Tissue Antigens* 82, 106–12.

41. Petz LD, Redei I, Bryson Y, Regan D, Kurtzberg J, Shpall E, Gutman J, Querol S, Clark P, Tonai R, Santos S, Bravo A, Spellman S, **Gragert L**, Rossi J, Li S, Li H, Senitzer D, Zaia J, Rosenthal J, Forman S, Chow R. (2013) Hematopoietic Cell Transplantation with Cord Blood for Cure of HIV Infections. *Biology of Blood Marrow Transplantation* 19, 393–7.
42. Maiers M, **Gragert L**, Madbouly A, Steiner D, Marsh SGE, Gourraud PA, Oudshoorn M, Zanden H, Schmidt AH, Pingel J, Hofmann J, Muller C, Eberhard HP (2013) 16(th) IHIW: Global analysis of registry HLA haplotypes from 20 Million individuals: Report from the IHIW Registry Diversity Group. *International Journal of Immunogenetics* 40(1):66–71.
43. Hollenbach JA, Madbouly A, **Gragert L**, Vierra-Green C, Flesch S, Spellman S, Begovich A, Noreen H, Trachtenberg E, Williams T, Yu N, Shaw B, Fleischhauer K, Fernandez-Vina M, Maiers, M (2012) A combined DPA1~DPB1 amino acid epitope is the primary unit of selection on the HLA-DP heterodimer. *Immunogenetics* 64(8):559–69.
44. Paunić V*, **Gragert L***, Madbouly A, Freeman J, Maiers M. (2012) Measuring Ambiguity in HLA Typing Methods. *PLoS ONE* 7(8):e43585. *Equal Contributions
45. Klitz W, **Gragert L**, Trachtenberg E. (2012) Spectrum of HLA associations: the case of medically refractory pediatric acute lymphoblastic leukemia. *Immunogenetics* 64(6):409–19.
46. Abi-Rached L, Jobin M, Kulkarni S, McWhinnie, A, Dalva K, **Gragert L**, Babrzadeh F, Gharizadeh B, Luo M, Plummer F, Kimani J, Carrington M, Middleton D, Rajalingam R, Beksac M, Marsh SGE, Maiers M, Guethlein L, Tavoularis S, Little AM, Green RE, Norman PJ, Parham P (2011) The Shaping of Modern Human Immune Systems by Multiregional Admixture with Archaic Humans. *Science* 334(6052), 89-94.
47. Klitz W, **Gragert L**, Maiers M, Fernandez-Viña M, Ben-Naeh Y, Benedek G, Brautbar C, Israel S (2010). Genetic differentiation of Jewish populations. *Tissue Antigens* 76(6), 442-58.
48. Klitz W, **Gragert L**, Maiers M, Tu B, Lazaro A, Yang R, Xu Q, Masaberg C, Ng J, Hurley CK (2009) Four-locus high-resolution HLA typing in a sample of Mexican Americans. *Tissue Antigens* 74: 508-513.
49. Klitz W, Maiers M, **Gragert L** (2008) Re-creation of the genetic composition of a founder population. *Human Genetics* 124: 417-421.
50. Howard DH, Meltzer D, Kollman C, Maiers M, Logan B, **Gragert L**, Setterholm M, Horowitz MM (2008) Use of cost-effectiveness analysis to determine inventory size for a national cord blood bank. *Medical Decision Making* 28: 243-253.
51. Kollman C, Maiers M, **Gragert L**, Muller C, Setterholm M, Oudshoorn M, Hurley CK (2007) Estimation of HLA-A, -B, -DRB1 haplotype frequencies using mixed resolution data from a national registry with selective retyping of volunteers. *Human Immunology* 68: 950-958.
52. Maiers M, **Gragert L**, Klitz W (2007) High-resolution HLA alleles and haplotypes in the United States population. *Human Immunology* 68: 779-788.

Reviews and Commentary:

1. **Gragert L**. (2022) A Template for Multitudes: Germline immune polymorphism of the T cell receptor loci. *Cell Genomics* 2(12) 100231.
2. Yu N, Askar M, Wadsworth K, **Gragert L**, Fernandez-Vina M. (2022) Current HLA Testing recommendations to support HCT. *Human Immunology* 83(10) 665-673.
3. **Gragert L**. (2019) A New Tool for Interpreting Molecular HLA Typing Data for Entry into UNet. *ASHI Quarterly* 42(4) 30-31.
4. Kransdorf E, Pando M, **Gragert L**, Kaplan B. (2017) HLA Population Genetics in Solid Organ Transplantation. *Transplantation* 101(9):1971-1976.

Book Chapters and Government Reports:

1. Organ Procurement and Transplantation Network (OPTN) Public Comment Proposal - “Change Calculated Panel Reactive Antibody (CPRA) Calculation”. Spring 2022. <https://optn.transplant.hrsa.gov/policies-bylaws/public-comment/change-calculated-panel-reactive-antibody-cpra-calculation/>
2. Petz LD, Spellman S, **Gragert L**. *Cord Blood: Biology, Transplantation, Banking, and Regulation*. Broxmeyer H, editor. Bethesda, MD: AABB Press; 2011. Chapter 32, The Underutilization of Cord Blood Transplantation: Extent of the Problem, Causes, and Methods of Improvement; p.557-584. 714p.
3. Howard DH, Maiers M, Kollman C, Logan B, **Gragert L**, Setterholm, M. *Cord Blood - Establishing a National Hematopoietic Stem Cell Bank Program*. Meyer EA, Hanna K, Gebbie K, editors. Washington, DC: Institute of Medicine of the National Academies: The National Academies Press; 2005. Chapter Appendix E, A Cost-Benefit Analysis of Increasing Cord Blood Inventory Levels; p.221-241. 314p. <https://www.nap.edu/read/11269/chapter/14>

Preprints:

1. Schmauch E, Piening B, Xia B, Zhu C, Stern J, Zhang W, Dowdell A, Loza B-L, Mohebnasab M, **Gragert L**, Khalil K, Camellato B, Faria de Oliveira M, O'Brien D, Weldon E, Lin X, Gao H, Kagermazova L, Kim J, Loupy A, Heguy A, Taylor S, Zhu F, Gao S, Gandla D, Reddy K, Chang A, Michael B, Jiang L, Jian R, Narula N, Linna-Kuosmanen S, Kaikkonen-Määttä M, Lorber M, Kellis M, Tatapudi V, Ayares D, Griesemer A, Mangiola M, Pass H, Snyder MP, Montgomery RA, Boeke JD, Keating BJ (2023) Integrative Multi-omic Profiling of Two Human Decedents Receiving Pig Heart Xenografts Reveals Strong Perturbations in Early Immune-Cell and Cellular Metabolism Responses. [BioRxiv](https://doi.org/10.1101/2023.06.05.543406) <https://doi.org/10.1101/2023.06.05.543406>

Abstracts: (140+ conference abstracts; available upon request)