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ADDRESS

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EDUCATION AND TRAINING

1/2005 – 12/2007	Post-Doctoral Fellow, Department of Internal Medicine, Molecular Mechanisms of Disease Program, University of Michigan Medical School, Ann Arbor, MI
9/1999 – 12/2004	Doctorate of Philosophy, Ph.D., Immunology University of Michigan Medical School, Ann Arbor, MI
6/1998 – 7/1999	Research Associate, Department of Immunology Wyeth-Lederle Vaccines and Pediatrics, West Henrietta, NY
9/1994 – 5/1998	Bachelor of Science, B.S., Microbiology and Immunology University of Rochester, Rochester, NY

PROFESSIONAL MEMBERSHIPS

American Society for Histocompatibility and Immunogenetics (ASHI)

American Society of Transplantation (AST)

Association of American Medical Laboratory Immunologists (AMLI)

PROFESSIONAL, ACADEMIC, ADMINISTRATIVE, AND CLINICAL POSITIONS

Academic Position

12/2010 – present	Associate Professor, Department of Pathology and Laboratory Medicine Oakland University William Beaumont School of Medicine, Rochester, MI

Clinical Positions

03/2018 – present	Director, Transplant Immunology Laboratory, Department of Pathology Henry Ford Hospital, Detroit, MI
4/2009 – present	Technical Director Immunology and Special Chemistry Laboratories, Department of Clinical Pathology Corewell Health William Beaumont University Hospital, Royal Oak, MI

1/2008 – present	System Technical Director, HLA Laboratory, Department of Clinical Pathology Corewell Health William Beaumont University Hospital, Royal Oak, MI

Committees

1/2019 – present	Gift of Life Michigan Advisory Board, Histocompatibility Representative
7/2017 – present	United Network for Organ Sharing Histocompatibility Committee, Region 10 Representative
7/2013 – 6/2016	Exam Validation Committee, American Board of Medical Laboratory Immunology
1/2013 – present	Chair, Molecular Best Practice Committee, Corewell Health East, Royal Oak, MI
12/2012 – present	Institutional Review Board, Corewell Health East, Royal Oak, MI
1/2008 – present	Histocompatibility Committee, Gift of Life Michigan

PUBLICATIONS

Guadiz, G, Haidaris CG, **Maine GN**, Simpson-Haidaris PJ. The carboxyl terminus of Pneumocystis carinii glycoprotein A encodes a functional glycosylphosphatidylinositol signal sequence. *Journal of Biological Chemistry*, 273:26202-26209, 1998.

Maine GN, Mulé JJ. Making room for T cells. *Journal of Clinical Investigation*, 110:157-159, 2002.

Burstein E, Hoberg JE, Wilkinson AS, Rumble JM, Csomos RA, Komarck CM, **Maine GN**, Wilkinson JC, Mayo MW, Duckett CS. COMMD proteins: A novel family of structural and functional homologs of MURR1. *Journal of Biological Chemistry*, 280:22222-22232, 2005.

Moyer J, **Maine GN**, Mulé JJ. Early vaccination with tumor lysate-pulsed dendritic cells after allogeneic bone marrow transplantation has antitumor effects. *Biology of Blood and Marrow Transplantation*, 12:1010-1019, 2006.

Maine GN, Mao X, Komarck CM, Burstein E. COMMD1 promotes the ubiquitination of NF-κB subunits through a cullin-containing ubiquitin ligase. *EMBO Journal*, 26:436-447, 2007.

Maine GN, Burstein E. COMMD proteins and the control of the NF-κB pathway. *Cell Cycle*, 6: 672-676, 2007.

Maine GN, Burstein E. COMMD proteins: COMMing to the scene. *Cellular and Molecular Life Sciences*, 64:1997-2005, 2007.

Maine GN, Mao XM, Muller PA, Komarck CM, Klomp LW, Burstein E. COMMD1 expression is controlled by critical residues that determine XIAP binding. *Biochemical Journal*, 417: 601-609, 2009.

Muller PAJ, van de Sluis B, Groot A, Verbeek D, Vonk WIM, **Maine GN**, Burstein E, Wijmenga C, Vooijs M, Reits E, Klomp LW. Nuclear-cytosolic transport of COMMD1 regulates NF-κB and HIF-1 activity. *Traffic*, 10: 514-527, 2009.

Mao X, Gluck N, Li D, **Maine GN**, Li H, Zaidi IW, Repaka A, Mayo MW, Burstein E. GCN5 is a required cofactor for a ubiquitin ligase that targets NF-κB/RelA. *Genes & Development*, 23: 849-861, 2009.

Maine GN, Phelan DL, Mohanakumar T. Solid-phase anti-HLA screening for transplantation: The pros and cons of available methods. *ASHI Quarterly*, 33: 14-16, 2009.

Basha HI, Saini D, **Maine GN**, Mohanakumar T. Alloimmune responses leading to autoimmunity: Role in chronic rejection. *ASHI Quarterly*, 33: 50-55, 2009.

Maine GN, Gluck N, Zaidi IW, Burstein E. Bimolecular affinity purification (BAP): Tandem affinity purification using two protein baits. *Cold Spring Harbor Protocols*, DOI: 10.1101/pdb.prot5318, 2009.

Maine GN, Li H, Zaidi IW, Basrur V, Elenitoba-Johnson K, Burstein E. A bimolecular affinity purification method under denaturing conditions for rapid isolation of a ubiquitinated protein for mass spectrometry analysis. *Nature Protocols*, 5: 1447-1459, 2010.

Maine GN, Subramanian V, Mohanakumar T. ABO-incompatible renal transplantation. ASHI Quarterly, 35: 8-12, 2011.

Mao X, Gluck N, Chen B, Starokadomskyy P, Li H, **Maine GN**, Burstein E. Copper metabolism MURR1 domain containing 1 (COMMD1) regulates cullin-ring ligases by preventing cullin-associated NEDD8-dissociated (CAND1) binding. *Journal of Biological Chemistry*, 286: 32355-32365, 2011.

Li H, Wittwer T, Weber A, Schneider H, Moreno R, **Maine GN**, Kracht M, Schmitz ML, Burstein E. Regulation of NF-κB activity by competition between RelA acetylation and ubiquitination. *Oncogene*, 31: 611-623, 2012

Zimmerman MK, Kumar V, **Maine GN**, Sykes E. Discrepant intact parathyroid hormone result by immunoassay. *Clinica Chimica Acta*, 413: 344-345, 2012.

Starokadomskyy P, Gluck N, Li H, Chen B, Wallis M, **Maine GN**, Mao X, Zaidi IW, Hein MY, McDonald FJ, Lenzner S, Zecha A, Ropers H, Kuss AW, McGaughran J, Gecz J, Burstein E. CCDC22 deficiency in humans blunts activation of pro-inflammatory NF-κB signaling. *Journal of Clinical Investigation*, 123: 2244-2256, 2013.

Johnson RK, Samarapungavan D, Parasuraman RK, **Maine GN**, Rooney MT, Wolforth CW, Reddy G, Cohn SR, Dumler F, Rocher LL, Li W, Zhang PL. Acute tubular injury is an important component in type I acute antibody mediated rejection. *Transplantation Proceedings*, 45: 3262-3268, 2013.

Thombare AS, **Maine GN**, Sykes E. Nausea, vomiting, fatigue and hyponatremia in a 7-year-old boy. *Clinical Chemistry*, In press, 2020.

Abstracts

Maine GN and Mulé JJ. Comparing Tumor Antigen Specificity of Lysate versus Peptide-Pulsed Dendritic Cell-Based Vaccines. American Association of Immunologists Annual Meeting. 2002 (Selected for an Oral Presentation).

Maine GN, Rochford R, Lutzke M, Mulé JJ 2003. Tumor Lysates do not Promote Maturation of Murine Bone-Marrow Derived Dendritic Cells. American Association of Immunologists Annual Meeting. 2003.

Maine GN, Mao X, Komarck CM, Burstein E. COMMD1 inhibits NF-κB by promoting its ubiquitination and degradation through a Cullin E3 ligase. Third International Conference on Ubiquitin, Ubiquitin-like Proteins & Cancer. 2006 (Selected for an Oral Presentation).

Maine GN, Mao X, Komarck CM, Burstein E. COMMD Proteins Inhibit κB-Mediated Transcription by Promoting the Ubiquitination of NF-κB Subunits through a Cullin E3 Ligase. Keystone Meeting: NF-κB: 20 Years on the Road from Biochemistry to Pathology. 2006 (Selected for an Oral Presentation).

Maine GN, Mao X, Komarck CM, Burstein E. COMMD1 inhibits NF-κB by promoting its ubiquitination and degradation through a Cullin E3 ligase. University of Michigan, Department of Internal Medicine Annual Research Symposium. 2006 (Selected for an Oral Presentation).

Mao X, Gluck N, **Maine GN**, Li D, Repaka A, Komarck CM, Mayo MW, Burstein E. GCN5 links RelA phosphorylation to its ubiquitination by the COMMD1-ECS complex. Keystone Meeting: NF-κB. 2008.

Repaka A, Muller PA, Mao X, **Maine GN**, Klomp LW, Burstein E. Global gene expression analysis demonstrates that COMMD proteins control a significant proportion of NF-ΚB targets. Digestive Disease Week. 2008.

Chak-Sum H, Jackowski MA, Levis D, Fagoaga OR, Gerlach JA, Kamoun M, **Maine GN**, Rosenberg JC, Eisenbrey AB. HLA antibody identification using Luminex-based assays – Are we on the same page? The Michigan Experience. American Society for Histocompatibility and Immunogenetics Annual Meeting. 2010.

Punia JN, Meng X, Zhuang Y, Sayedian F, Crisan D, **Maine GN**. Detection of myelo-proliferative leukemia W515L/K mutation in JAK2 V617F negative myeloproliferative neoplasms. American Society for Clinical Pathology Annual Meeting. 2010 (Selected for an Oral Presentation).

Parasuraman R, Boura J, Samarapungavan D, Reddy H, Dumler F, **Maine GN**, Zhang P, Rocher L, Raofi V, Cohn S, Koffron A. The impact of steroid maintenance on long-term patient and graft outcome in expanded criteria donor (ECD) kidney transplantation. American Transplant Congress. 2012 (Selected for an Oral Presentation).

Parasuraman R, Koffron A, Mudunuri V, Cohn S, Raofi V, Rocher L, **Maine GN**, Samarapungavan D, Zhang PL. Polyclonal light chain deposition in the proximal tubules early after deceased donor renal transplantation: A contributing factor for graft dysfunction? American Transplant Congress. 2013.

Niravel B, **Maine GN**, Sykes E, Leonard K, Barden S, Bailey B, Smith MP. Comparison of three commercially available immunoassays for measurement of 25-hydroxyvitamin D with an LC-MS/MS method capable of resolving 3-epi-25-hydroxyvitamin D3. American Association for Clinical Chemistry Annual Meeting. 2013.

Kheradmand T, Ramon D, **Maine GN**, Forney S, Skorupski S, Fagoaga O, Gerlach J, Ho S. The new OPTN kidney allocation system: An early look at the transplant trend in the highly sensitized patient cohort. American Society for Histocompatibility and Immunogenetics Annual Meeting. 2015.

EXTRAMURAL INVITED PRESENTATIONS

11/2018	"An Overview of Histocompatibility Testing in Heart and Lung Transplantation." 2018 Henry Ford Hospital Transplant Symposium: Where is the future of transplant going?
3/2006	"COMMD Proteins Inhibit κB-Mediated Transcription by Promoting the Ubiquitination of NF-κB Subunits through a Cullin E3 Ligase." Keystone Symposium, NF-κB: 20 years on the road from biochemistry to pathology.
2/2006	"COMMD Proteins Inhibit κB-Mediated Transcription by Promoting the Ubiquitination of NF-κB Subunits through a Cullin E3 Ligase." Third international conference on ubiquitin, ubiquitin-like proteins & cancer.