

**Shana M. Coley, MD PhD**  
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*I am a physician-scientist, trained as a cellular immunologist with a focus on T cell biology and tissue responses in the setting of transplantation. My clinical sub-specialty training and diagnostic expertise is in renal transplant pathology and medical renal pathology, with fellowship training and practice in the highest volume academic center for renal pathology in the United States, having also practiced in the largest renal pathology service in Scotland and most recently in the highest volume diagnostic renal pathology practice in the world. In my research, I have developed novel approaches using cutting-edge technologies to interrogate archival human kidney allograft biopsies with a focus on predicting outcomes of therapy in T-cell mediated rejection, in tandem with generating rich data sets to study mechanisms of human T cell behavior within peripheral tissues.*

## Work Experience

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10/2023 – present	<b>Arkana Laboratories</b> <i>Director, Research &amp; Development</i> <i>Nephropathologist</i>	Little Rock, AR
05/2022 – present	<b>University of Arkansas for Medical Sciences</b> <b>Department of Internal Medicine (Nephrology)</b> <i>Adjunct Faculty Appointment</i>	Little Rock, AR
07/2021 – 11/2023	<b>Arkana Laboratories</b> <i>Director, Transplant Translational Research</i> <i>Director, Multiplex Imaging Center</i> <i>Nephropathologist</i>	Little Rock, AR
09/2017 – 07/2021	<b>Columbia University</b> <b>Columbia University Irving Medical Center</b> <b>Department of Pathology &amp; Cell Biology</b> <i>Assistant Professor &amp; Attending Renal Pathologist</i>	New York, NY
08/2014 – 08/2017	<b>National Health Service Scotland</b> <b>Queen Elizabeth University Hospital (GG&amp;C)</b> <i>Honorary Consultant Renal Pathologist</i>	Glasgow, Scotland
08/2014 – 08/2017	<b>University of Glasgow</b> <b>Research Institute of Infection, Immunity &amp; Inflammation</b> <i>Senior Lecturer</i>	Glasgow, Scotland
06/2013 – 07/2013	<b>Universite Bordeaux 2, Hopital Pellegrin</b> <i>Visiting Renal Pathology Fellow</i>	Bordeaux, France
02/2001 – 06/2002	<b>Emory University, School of Medicine</b> <b>Division of Pediatric Hematology, Oncology &amp; Bone Marrow Transplant</b> <i>Research Assistant</i>	Atlanta, GA
10/1997 – 08/1998	<b>Auburn University, College of Veterinary Medicine</b> <b>Scott-Ritchey Veterinary Research Center</b> <i>Microbiologist</i>	Auburn, AL

## Post-Doctoral Training

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07/2013 – 06/2014	<b>Division of Renal Pathology, Columbia University</b> <i>Fellow, Renal Transplant and Medical Renal Pathology</i>	New York, NY
07/2010 – 06/2013	<b>Department of Pathology, Columbia University</b> <i>Resident, Anatomic Pathology</i> <b>Co-Chief Resident, 2012-13</b>	New York, NY

## Education

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06/2002 – 05/2010	<b>Emory University School of Medicine</b> <i>MD, May 2010</i>	Atlanta, GA
06/2002 – 05/2010	<b>Emory University</b> <b>Graduate Division of Biological &amp; Biomedical Sciences</b> <i>PhD, Immunology, December 2008 (conferred with MD 05/2010)</i> <i>Advisor: Christian P. Larsen, MD DPhil</i>	Atlanta, GA
08/1998 – 08/1999	<b>Harvard University</b> <b>Graduate School of Arts &amp; Sciences</b> <i>PhD candidate, Immunology</i>	Boston, MA
08/1995 – 03/1998	<b>Auburn University, College of Science &amp; Math</b> <i>BS, <b>summa cum laude</b>, Microbiology, March 1998</i>	Auburn, AL
06/1996 – 08/1996	<b>Institute for American Universities</b> <i>Art History &amp; French</i>	Aix-en-Provence, France
09/1994 – 12/1994	<b>London Guildhall University</b> <i>Geography</i>	London, England
08/1993 – 06/1995	<b>Auburn University at Montgomery</b> <i>Mathematics</i>	Montgomery, AL

## Licensure and Board Certification

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### Medical Licensure

#### United States of America

New York	2013-present
Arkansas	2021-present
Florida	2021-present
Georgia	2021-present
Tennessee	2021-present
Arizona	2022-present
New Mexico	2022-present
Texas	2022-present
Oregon	2022-present
Mississippi	2022-present
Pennsylvania	2022-present
Michigan	2022-present
West Virginia	2022-present
United Kingdom	
General Medical Council, Specialist Register (Histopathology)	2015-present

## Board Certification

United States of America	
American Board of Pathology, Anatomic Pathology	2013
United Kingdom	
Certificate of Equivalency of Specialist Registration (CESR), Histopathology	2015

## Honors

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Young Investigator Award, American Transplant Congress	2007
Outstanding Student Award, College of Science & Mathematics, Auburn University	1998

## Professional Organizations, Societies and Service

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### Memberships and Positions

Executive Committee, Transplant Diagnostics COP, AST	<i>Regulatory Working Group Chair</i>	2023-present
Transplant Therapeutics Consortium, Critical Path Institute		2023-present
Banff Foundation for Allograft Pathology	<i>Electron Microscopy Working Group Co-Chair</i>	2022-present
Renal Pathology Society	<i>Research &amp; Scientific Committee Co-Chair</i>	2022-present
	<i>Communications Committee</i>	2017, 2019
	<i>Education Committee</i>	2015-2016
	<i>Member</i>	2013-present
Management Board, NHS Greater Glasgow & Clyde Biorepository, Scotland		2017-present
R&D Advisory Board, NHS Scotland Research & Development, Glasgow, Scotland		2016-2017
Expert Member, NHS Research Ethics Service, West of Scotland REC 1 (CTIMP focus)		2016-2017
Steering Committee, Scottish National Renal Biopsy Registry		2016-2017
International Society of Nephrology (ISN)		2013-present
College of American Pathologists (CAP)		2013-present
American Society of Nephrology (ASN)		2013-present
American Society for Clinical Pathology (ASCP)		2013-2018
United States & Canadian Academy of Pathology (USCAP)		2012-present
American Society of Transplantation (AST)		2007-present

### Service

NIH Study Section, ZRG1 DCAI-D (10), Small Business: Applied Immunology & Vaccines	2022-present
Rosetrees Trust, invited reviewer of research grant proposals, United Kingdom	2020
Medical Advisory Council (Research Grant Review Panel), The Cure Starts Now	2010-present

### Consultative

UK Renal Pathology Advisory Board, Alexion Pharmaceuticals	2016
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### Editorial

Reviewer for *American Journal of Transplantation*, *Journal of Innate Immunity*, *PLoS One*, *Journal of American Society of Nephrology*, *Kidney International*, *Kidney International Reports*.

## Departmental and University Committees

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Pathology Director, Human Immune Monitoring Core (Multispectral Imaging), Columbia Univ.	2018-2020
Review Committee, Shelanski Research Innovation Award, Columbia University	2018-2019
Scientific Advisory Committee, 3I's Tissue Bioresource, University of Glasgow	2016-2017
Operations Committee, Medical Research Council Molecular Pathology Node, Glasgow	2015-2017
Deputy Course Director, Molecular Pathology MSc, University of Glasgow	2015-2017
Deputy Course Director, Immunity in Health & Disease BScMedSci, University of Glasgow	2015-2017

## Fellowship & Grant Support

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- 2020-2024 Predictive Biomarkers of Treatment Response in Kidney Transplant Rejection. NIH (NIAID), 7R21AI151491-01A1; PI: Coley.
- 2020-2021 Collaborative and Multidisciplinary Pilot Research (CaMPR) Award. Implementing a Deep Learning Approach to Improve the Assessment of Deceased Donor Kidney Histology. Columbia University Irving Center for Clinical and Translational Research. Multiple PI: Coley, Perotte, Mohan.
- 2019-2021 Multiplex Immunofluorescence Imaging of Tissue Resident Memory T cells in Kidney Transplantation; Research Collaboration with Ultivue, Inc. PI: Coley.
- 2019-2020 Columbia University-University of Glasgow Research Exchange Grant. Facilitating research collaborations between strategic university partners. PI: Coley.
- 2018-2019 Significance of Intrarenal T cells in Systemic Lupus Erythematosus Nephritis; NIH R01 DK106436-03; PI: Robert Winchester; Role: Co-I, 10% effort.
- 2018 Collaborative and Multidisciplinary Pilot Research (CaMPR) Phase 1 Award. Comprehending the Immune Microenvironment: Spatio-phenotypic profiling of molecular and cellular correlates of disease in transplantation and cancer; Columbia University Irving Center for Clinical and Translational Research. Multiple PI: Coley & Saenger.
- 2016-2017 Wellcome Trust, ISSF Innovation Catalyst Award. Toward universally feasible molecular testing in kidney transplantation. PI: Coley.
- 2016-2017 Medical Research Council, Proximity to Discovery Grant. Spatio-phenotypic profiling of tissue-resident T cell subsets in kidney transplantation using multispectral imaging. PI: Coley.
- 2004-2009 NIH / NIAID, R37 AI40519-11. Activation, Apathy, Anergy and Apoptosis in Transplantation; Investigating mechanisms of resistance to costimulation blockade-induced tolerance. PI: Christian P. Larsen; Role: PhD studentship.
- 2002-2010 Robert W. Woodruff Fellowship, Emory University School of Medicine; Merit-based, assessed based on “demonstrated qualities of forceful and unselfish character, intellectual and personal vigor, outstanding academic achievement, motivation for medicine, impressive communication skills, leadership, and creativity.” Full tuition & stipend for Medical Scientist Training Program.

## Teaching Experience & Responsibilities

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### Specific Courses

#### *Post-Graduate & Professional Courses*

Renal Biopsy Course, Royal College of Physicians & Surgeons of Edinburgh, UK	2015-2017
Renal Biopsy from Needle to Diagnosis, Seminar for Nurse Practitioners, Glasgow, UK	2015
Updates to Banff Criteria for Kidney Transplant Rejection, CME Course, Glasgow, UK	2015

#### *Masters Course Lectures and Seminars*

Transplantation Immunology (MSc Immunology), University of Glasgow, UK	2015-2017
Mechanisms of Chronic Inflammation (MSc Immunology), University of Glasgow, UK	2015-2017

Autoimmunity & Kidney Disease (MSc Immunology), University of Glasgow, UK	2015-2017
Tissue Anatomy Primer (MSc Immunology), University of Glasgow, UK	2015-2017
Animal Models of Human Disease, PBL Seminar (MSc Immunology), Glasgow, UK	2015-2017
Theragnostics, Hybrid Multimedia Tutorial (MSc Molecular Pathology), Glasgow, UK	2016-2017
<i>Undergraduate Lectures and Seminars</i>	
Transplantation Immunology (Sophomore, BSc Immunology), University of Glasgow, UK	2015-2017
Transplantation Immunology Seminar (Senior Honors, BSc Immunology), Glasgow, UK	2015-2017
Transplantation Immunology (BScMedSci, Immunity in Health & Disease), Glasgow, UK	2015-2017
Autoimmunity & kidney disease (BScMedSci, Immunity in Health & Disease), Glasgow, UK	2015-2017
Immunology Journal Club Leader (BScMedSci, combined curriculum), Glasgow, UK	2015-2017
Human Physiology, Graduate Teaching Assistant, Emory University, Atlanta, Georgia	2004

### General Teaching Activities

Renal Medicine Specialist Registrars, Renal Pathology, NHS GG&C, Glasgow, UK	2015-2017
Pathology Specialist Registrars, Renal Pathology, NHS GG&C, Glasgow, UK	2015-2017

### Academic Advising

#### *Masters Students*

Fraser Bell, MSc Stratified Medicine & Pharmacology ( <i>honors</i> ), University of Glasgow, UK	2015-2016
Masters Thesis Mentor: Second Harmonic Imaging for Donor Kidney Quality (PI: Coley)	
Elima Kalagbor, MSc Immunology, University of Glasgow, UK	2015-2016
Masters Thesis Mentor: Rapid, Stain-free Imaging for Donor Kidney Quality (PI: Coley)	

#### *Medical Students*

Davis Campbell, University Arkansas Medical Sciences	2022-present
Honors Research Thesis Mentor: AI for Reproducible Analysis of Human Kidney Allografts	
<i>** Award for Overall Best Honors Thesis Project (02/2023) **</i>	
Ingold Huang, Columbia University College of Physicians & Surgeons	2018-2019
Scholarly Project Mentor: Spatial Analysis of infiltrating T cells in Kidney Transplant Rejection	
Johanna Weselius, University of Helsinki – Columbia University	2019
Anatomy International Exchange Program, Summer Research Internship, Renal Immunology	
Sara Ksiecek, University of Vienna – Columbia University	2019
Anatomy International Exchange Program, Summer Research Internship, Renal Immunology	

#### *Undergraduate Students*

Arielle Leeman, Brandeis University	2019
<i>** World of Work Grant, Brandeis University, for her research internship in my lab **</i>	

### PhD Examination Committees, Advisory Committees, Defense Committees

PhD Thesis Committee, Columbia University, Kripa Patel (Advisor: Elizabeth Hillman)
PhD Viva, Internal Examiner, University of Glasgow, Tamsin Zangerle (Advisor: Allan Mowat)
PhD Advisory Committee, University of Glasgow, Lindsay Crowe (Advisor: Neal Millar)
PhD Advisory Committee, University of Glasgow, Lyn Ferguson (Advisor: Stefan Siebert)

### Other Trainee Advisory Roles [postdocs, visiting scientists, student trainees]

Jenny Jin	Undergraduate Student, Columbia University	2020-2021
	Research mentorship: Renal Transplant Immunology	
Jacob Valk	Pathology Resident, Columbia University	2019-2021
	Research mentorship: Renal Transplant Immunology & Digital Pathology	
Lanny DiFranza	Pathology Resident, Columbia University	2019-2021
	Research mentorship: Renal Transplant Immunology & Digital Pathology	
Pascale Khairallah	Transplant Nephrology Fellow, Columbia University	2019-2020
	Research mentorship: Renal Transplant Immunology	
Fatih Ozay	Medical Graduate Researcher, Columbia University	2019-2020
	Research mentorship: Renal Transplant Immunology	

Satoru Kudose	Renal Pathology Fellow, Columbia University Clinical mentorship: Medical Renal & Transplant Pathology	2018-2019
Grace Choung	Renal Pathology Fellow, Columbia University Clinical mentorship: Medical Renal & Transplant Pathology	2017-2018
Neil Kernohan	Visiting Consultant Hematopathologist, Dundee, Scotland Clinical mentorship: Medical Renal & Transplant Pathology	2016-2017
Jana Crosby	Pathology Trainee, Glasgow, Scotland Research & clinical mentorship: Renal Transplant Immunology	2016-2017
Hayley Morris	Pathology Trainee, Glasgow, Scotland Research & clinical mentorship: Renal Transplant Immunology	2016

## Publications

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### Original, Peer Reviewed Articles

- 1 Zhang H, Haun RS, Collin F, Cassol C, Napier JO, Wilson J, Hassen S, Ararat K, Boils C, Messias N, Caza TN, Cossey LN, Sharma S, Ambruzs JM, Agrawal N, Shekhtman G, Tian W, Srinivas T, Qu K, Woodward RN, Larsen CP, Stone S, **Coley SM**. Development and Validation of a Multi-Class Model Defining Molecular Archetypes of Kidney Transplant Rejection: A Large Cohort Study of the Banff Human Organ Transplant Gene Expression Panel. *Laboratory Investigation*. 11 Dec 2023. Online ahead of print. <https://doi.org/10.1016/j.labinv.2023.100304>
- 2 Roufousse C, Naesens M, Haas M, Lefaucheur C, Mannon RB, Afrouzian M, Alachkar N, Aubert O, Bagnasco SM, Batal I, Bellamy COC, Broecker V, Budde K, Clahsen-Van Groningen M, **Coley SM**, Cornell LD, Dadhania D, Demetris AJ, Einecke G, Farris AB, Fogo AB, Friedewald J, Gibson IW, Horsfield C, Huang E, Husain SA, Jackson AM, Kers J, Kikić Ž, Klein A, Kozakowski N, Liapis H, Mangiola M, Montgomery RA, Nankinveel B, Neil DAH, Nickerson P, Rabant M, Randhawa P, Riella LV, Rosales I, Royal V, Sapir-Pichhadze R, Sarder P, Sarwal M, Schinstock C, Stegall M, Solez K, van der Laak J, Wiebe C, Colvin RB, Loupy A, Mengel M. The Banff 2022 Kidney Meeting Work Plan: Data-driven Refinement of the Banff Classification for Renal Allografts. *Am J Transplant*. 2023 Nov 4:S1600-6135(23)00855-9. doi: 10.1016/j.ajt.2023.10.031. Online ahead of print. PMID: 37931753
- 3 Maniar R, Wang PH, Washburn RS, Kratchmarov R, **Coley SM**, Saqi A, Pan SS, Hu J, Shu CA, Rizvi NA, Henick BS, Reiner SL. Self-Renewing CD8+ T-cell Abundance in Blood Associates with Response to Immunotherapy. *Cancer Immunol Res*. 2023 Feb 3;11(2):164-170. doi: 10.1158/2326-6066.CIR-22-0524. PMID: 36512052
- 4 Patel KB, Liang W, Casper MJ, Voleti V, Li W, Yagielski AJ, Zhao HT, Perez Campos C, Lee GS, Liu JM, Philipone E, Yoon AJ, Olive KP, **Coley SM**, Hillman EMC. High-speed light-sheet microscopy for the in-situ acquisition of volumetric histological images of living tissue. *Nature Biomedical Engineering*. 2022 May;6(5):569-583. doi: 10.1038/s41551-022-00849-7. PMID: 35347275.
- 5 Batal I, Serban G, Mohan S, Husain SA, Vasilescu ER, Crew RJ, Dube G, Sandoval PR, **Coley SM**, Santoriello D, Stokes MB, D'Agati VD, Cohen DJ, Markowitz G, Hardy MA, Ratner LE. The clinical significance of receiving a kidney allograft from deceased donor with chronic histologic changes. *Mod Pathol*. 2021 Sep;34(9):1795-1805. doi: 10.1038/s41379-021-00815-9. PMID: 33986461
- 6 Husain SA, King KL, **Coley S**, Natarajan K, Perotte A, Mohan S. Association between procurement biopsy findings and deceased donor kidney outcomes: a paired kidney analysis. *Transpl Int*. 2021 Jul;34(7):1239-1250. doi: 10.1111/tri.13899. Epub 2021 Jun 4. PMID: 33964036
- 7 Kunnath-Velayudhan S, Larsen BT, **Coley SM**, De Michele S, Santoriello D, Colby TV, Bhagat G, Saqi A. Masson Trichrome and Sulfated Alcian Blue Stains Distinguish Light Chain Deposition Disease from

Amyloidosis in the Lung. *Am J Surg Pathol*. 2020 Sep 29. doi: 10.1097/PAS.0000000000001593. PMID: 33002919

- 8 Zheng Y, Nicolas CF, Corvi JJ, Kurtzman JS, Park KH, **Coley SM**, Marboe CC, Akelina Y, Strauch RJ. Large and Uneven Bites in End-to-End Anastomosis of the Rat Femoral Artery. *J Reconstr Microsurg*. 2020 Sep;36(7):486-493. doi: 10.1055/s-0040-1709453. PMID: 32303103
- 9 Husain SA, Shah V, Verduzco HA, King KL, Brennan C, Batal I, **Coley SM**, Hall IE, Stokes MB, Dube GK, Crew RJ, Perotte A, Natarajan K, Carpenter D, Santoriello D, D'Agati V, Cohen DJ, Ratner L, Markowitz G, Mohan S. Impact of Deceased Donor Kidney Procurement Biopsy Technique on Histologic Accuracy. *Kidney Int Rep*. 2020 Aug 14;5(11):1906-1913. doi: 10.1016/j.ekir.2020.08.004. PMID: 33163711
- 10 Trager M, **Coley SM**, Dube G, Khan S, Ingham M, Samie F, Geskin L, McDonnell D, Brouder D, Saenger Y, Carvajal R. Combination Checkpoint Blockade for Cutaneous Metastatic Malignancies in Kidney Transplant Recipients. *J Immunother Cancer*. 2020 Jun;8(1):e000908. doi: 10.1136/jitc-2020-000908. PMID: 32503950
- 11 Husain SA, King KL, Batal I, Dube GK, Hall IE, Brennan C, Stokes MB, Crew RJ, Carpenter D, Alvarado Verduzco H, Rosen R, **Coley S**, Campenot E, Santoriello D, Perotte A, Natarajan K, D'Agati VD, Cohen DJ, Ratner LE, Markowitz G, Mohan S. Reproducibility of Deceased Donor Kidney Procurement Biopsies. *Clin J Am Soc Nephrol*. 2020 Feb 7;15(2):257-264. doi: 10.2215/CJN.09170819. PMID: 31974289
- 12 McGuinness D, Mohammed S, Monaghan L, Wilson PA, Kingsmore DB, Shapter O, Stevenson KS, **Coley SM**, Devey L, Kirkpatrick RB, Shiels PG. A molecular signature for delayed graft function. *Aging Cell*. 2018 Oct;17(5):e12825. doi: 10.1111/accel.12825. PMID: 30094915
- 13 Tecklenborg J, Clayton D, Siebert S, **Coley SM**. The role of the immune system in kidney disease. *Clin Exp Immunol*. 2018 May;192(2):142-150. doi: 10.1111/cei.13119. PMID: 29453850
- 14 Zuber J, Shonts B, Lau S, Obradovic A, Fu J, Yang S, Lambert M, **Coley S**, Weiner J, Thome J, DeWolf S, Farber D, Shen Y, Caillat-Zucman S, Bhagat G, Griesemer A, Martinez M, Kato T, Sykes M. Bidirectional intra-graft alloreactivity drives the repopulation of human intestinal allografts and correlates with clinical outcome. *Sci Immunol*. 2016 Oct;1(4):eaah3732. doi: 10.1126/sciimmunol.aah3732. PMID: 28239678
- 15 **Coley SM**, Crapanzano JP, Saqi A. FNA, core biopsy, or both for the diagnosis of lung carcinoma: Obtaining sufficient tissue for a specific diagnosis and molecular testing. *Cancer Cytopathol*. 2015 May;123(5):318-26. doi: 10.1002/cncy.21527. PMID: 25711901
- 16 Saqi A, **Coley SM**, and Crapanzano JP. Granulomatous inflammation and organizing pneumonia: Role of computed tomography-guided lung fine needle aspirations, touch preparations and core biopsies in the evaluation of common non-neoplastic diagnoses. *Cytojournal*. 2014 Jan 31;11:2. doi: 10.4103/1742-6413.126223. PMID: 24678338
- 17 Floyd TL, Orr SB, **Coley SM**, Hanna SS, Wagener ME, Kirk AD, Larsen CP and Ford ML. High frequency alloreactive T cell populations augment effector activity but not accumulation of low frequency CD8+ donor-reactive T Cell responses following CD28/CD154 blockade. *Transplantation*. 2010 May 27;89(10):1208-17. doi: 10.1097/TP.0b013e3181df53dc. PMID: 20407401
- 18 **Coley SM**, Ford ML, Hanna SC, Wagener ME, Kirk AD, and Larsen CP. Interferon-gamma dictates allograft fate via opposing effects on the graft and on recipient CD8 T-cell responses. *J Immunol*. 2009 Jan 1;182(1):225-33. doi: 10.4049/jimmunol.182.1.225. PMID: 19109153
- 19 Kean LS, Hamby K, Koehn B, Lee E, **Coley S**, Stempora L, Adams AB, Heiss E, Pearson TC, and Larsen CP. NK cells mediate costimulation blockade-resistant rejection of allogeneic stem cells during

nonmyeloablative transplantation. *Am J Transplant*. 2006 Feb;6(2):292-304. doi: 10.1111/j.1600-6143.2005.01172.x. PMID: 16426313

- 20 Becker TC, **Coley SM**, Wherry EJ, and Ahmed R. Bone marrow is a preferred site for homeostatic proliferation of memory CD8 T cells. *J Immunol*. 2005 Feb 1;174(3):1269-73. doi: 10.4049/jimmunol.174.3.1269. PMID: 15661882
- 21 Kean LS, Mancini EA, Perry J, Balkan C, **Coley S**, Holtzclaw D, Adams AB, Larsen CP, Hsu LL, and Archer DR. Chimerism and cure: hematologic and pathologic correction of murine sickle cell disease. *Blood*. 2003 Dec 15;102(13):4582-93. doi: 10.1182/blood-2003-03-0712. PMID: 12933586

### Book Chapters

- 1 van der Wel N, **Coley SM**, Larsen PW, van den Bergh-Weerman MA. "Chapter 7: Lysosomes." *Ultrastructural Pathology of the Cell and Matrix, 5<sup>th</sup> edition*, edited by John Stirling, Bart Wagner, Lucy Collinson, & Alana Burrell, Taylor & Francis, In preparation (chapter submitted Jan 2023), pages 619-802.

### Case Reports

- 1 Qaisar H, Hossain MA, Akula M, Cheng J, Patel M, Min Z, Kuzyshyn H, Levitt M, **Coley SM**, Asif A. Methimazole-Induced Pauci-Immune Glomerulonephritis and Anti-Phospholipid Syndrome: An Important Association. *J Clin Med Res*. 2018 Oct;10(10):786-790. doi: 10.14740/jocmr3530w. PMID: 30214651
- 2 **Coley SM**, Shirazian S, Radhakrishnan J, and D'Agati V. Monoclonal IgG1k anti-glomerular basement membrane disease: a case report. *Am J Kidney Dis*. 2015 Feb;65(2):322-6. doi: 10.1053/j.ajkd.2014.08.022. PMID: 25446021

### Audiovisual/Media

- 1 **Coley SM**. Collapsing Glomerulopathy. *ASCP Case Reports 2015*. Online Renal Pathology Continuing Medical Education (CME) series. Published online 17 July 2015.

### Thesis

- 1 Oposing Roles of Interferon Gamma in Transplantation Under Costimulation Blockade, 2008. **Coley SM**. Emory University, Graduate Program in Immunology & Molecular Pathogenesis. PhD Advisor: Dr Christian P Larsen, MD DPhil. Atlanta, GA.

### Non-authored Publications

- 1 Zuber J, Rosen S, Shonts B, Sprangers B, Savage TM, Richman S, Yang S, Lau SP, DeWof S, Farber D, Vlad G, Zorn E, Wong W, Emond J, Levin B, Martinex M, Kato T, Sykes M. Macrochimerism in Intestinal Transplantation: Association with Lower Rejection Rates and Multivisceral Transplants, without GvHD. *American Journal of Transplantation*. 2015; 15:2691-2703.

### Invention Reports filed with Columbia University

- 1 CU20270: "Determining heterogeneity of T cell populations in human tissue sections based on T cell dynamical states and functional capacity." Following filing of this invention report, a non-disclosure agreement was mediated by Columbia Technology Ventures with Ultivue, LLC, for the purpose of developing collaborative NIH grant proposals to support my research.
- 2 CU20111: "Molecular test predictive of treatment response in kidney transplant rejection using surplus diagnostic tissue."



Invited Presentations at Regional, National or International Levels (noting only those since clinical fellowship)

**International**

- 05/2023 Invited Speaker, 5<sup>th</sup> International Renal Pathology Congress. "Updates from the Research & Scientific Committee of the Renal Pathology Society." Zagreb, Croatia.
- 12/2022 Invited Speaker, University of Montreal, Department of Immunology. "Transcriptional Heterogeneity in T-cell Mediated Rejection of Human Kidney Allografts." Montreal, Canada.
- 12/2020 Invited Speaker, European Society of Pathology / International Academy of Pathology Joint Congress. "Molecular Signature of Steroid-Resistant Acute T-cell Mediated Rejection." Original site: Glasgow, Scotland. Moved virtual due to COVID.
- 11/2019 Invited Speaker, McGill University, Department of Physiology Seminar Series. "Reduce, Reuse, Recycle: Getting the Most Information from Small Human Tissue Biopsies." Montreal, Canada
- 07/2019 Invited Speaker, Joint Meeting of the British Division of the International Academy of Pathology and the Pathological Society of Great Britain & Ireland, Association of Clinical Electron Microscopists Annual Meeting. "Hermansky Pudlak Syndrome: a Disorder of Lysosome-Related Organelles." Harrogate, England
- 06/2018 Invited Speaker & Moderator, Joint Workshop of Banff International Research Station & Casa Mathematica Oaxaca. Quantitative Spatial Modeling of Immune Cell Migration. Oaxaca, Mexico
- 06/2017 Invited Speaker, British Division of International Association of Pathologists, Renal Pathology Meeting. "Dual Pathologies in Monoclonal Gammopathy of Renal Significance." Belfast, Northern Ireland
- 06/2017 Poster Presentation, Joint Meeting of BDIAP and the Pathological Society. "Confidence and Agreement among Renal Transplant Pathologists in Scotland in Identifying Glomerulitis in Digital Images." Belfast, Northern Ireland.
- 04/2017 Invited Speaker, Royal Society of Physicians & Surgeons Edinburgh, Renal Medicine Annual Meeting. "Significance of Renal Biopsy Findings in IgA Nephropathy." Edinburgh, Scotland
- 04/2017 Invited Speaker, Royal Society of Physicians & Surgeons Edinburgh, Renal Medicine Annual Meeting. "Adolescent Nephrotic Syndrome in Pregnancy." Edinburgh, Scotland
- 04/2015 Keynote Speaker, Association of Clinical Pathologists Annual Meeting, Caledonian Branch. "Collapsing Glomerulopathy Associated with Hemophagocytic Syndrome." Glasgow, Scotland

**National**

- 06/2023 Stephens O, Napier J, **Coley SM**. (2023, June 4-7). *Transcriptional Strata in T-cell Mediated Rejection* [Oral Abstract Rapid Fire Presentation]. American Transplant Congress 2023, San Diego, CA, United States.  
\*\* Selected for the "What's Hot What's New" summary presentation at ATC 2023 \*\*
- 03/2023 Stephens O, **Coley SM**. (2023, March 11-16). *Potential Role for DNA-PKcs in CD8 T cells Infiltrating Renal Allografts in T-cell Mediated Rejection* [Poster Presentation]. United States & Canadian Academy of Pathology Annual Meeting 2023, New Orleans, LA, United States.

- 06/2022 **Coley SM.** (2022, June 4-8). *Development and Validation of a Molecular Diagnostic Model for Kidney Transplant Rejection: Large Cohort Study of the Banff Human Organ Transplant Gene Expression Panel* [Oral Presentation at Lunchtime Symposium, CareDx]. American Transplant Congress 2022, Boston, MA, United States.
- 06/2018 Herzyk P, McMonagle F, **Coley SM.** (2018, June 2-6). *Toward Universal Feasibility of Molecular Diagnostics in Kidney Transplantation* [Poster Presentation]. American Transplant Congress 2018, Seattle, WA, United States.

**Date of Preparation:** 3 January 2024