UNIVERSITY OF PENNSYLVANIA - PERELMAN SCHOOL OF MEDICINE
Curriculum Vitae

Date: 10/13/2019

Stephan Kadauke, M.D., Ph.D.

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If you are not a U.S. citizen or holder of a permanent visa, please indicate the type of visa you have:
RES

Education:

2005	BA	Columbia University (Biochemistry, summa cum laude)
2012	Ph.D.	Perelman School of Medicine at the University of Pennsylvania (Cell and Molecular Biology)
2014	M.D.	Perelman School of Medicine at the University of Pennsylvania

Postgraduate Training and Fellowship Appointments:

2014-2018	Residency in Clinical Pathology, Massachusetts General Hospital
2015	Chief Resident, Massachusetts General Hospital
2016-2017	Transfusion Medicine Fellowship, Harvard Medical School

Military Service:

[none]

Faculty Appointments:

2018-present	Assistant Professor of Clinical Pathology and Laboratory Medicine, University of Pennsylvania School of Medicine

Hospital and/or Administrative Appointments:

2018-present	Assistant Director, Cell and Gene Therapy Laboratory, Children's Hospital of Philadelphia
2018-present	Attending Physician, Division of Transfusion Medicine, Children's Hospital of Philadelphia
2018-present	Attending Physician, Division of Pathology Informatics, Children's Hospital of Philadelphia

Other Appointments:

2019-present	Faculty Member, Department of Biomedical Health Informatics

Specialty Certification:

2018	American Board of Pathology - Clinical Pathology
2018	American Board of Pathology - Transfusion Medicine
2018	American Society for Apheresis - Qualification in Apheresis
2019	RStudio - Certified Tidyverse Instructor

Licensure:

2017	Unrestricted Medical License, Massachusetts
2018	Unrestricted Medical License, Pennsylvania

Awards, Honors and Membership in Honorary Societies:

2004	Phi Beta Kappa - Early Induction for Top 2% of Graduating Class (Columbia University)
2005-2009	Benjamin and Mary Siddons Measey Foundation Fellowship (University of Pennsylvania)
2005	Summa cum laude (Columbia University)
2013	Roy G. Williams Award for Meritorious Research in Basic Medical Sciences (University of Pennsylvania)
2013	Saul Winegrad Award for Outstanding Dissertation (University of Pennsylvania)

Memberships in Professional and Scientific Societies and Other Professional Activities:

International:

2017-Present	AABB
2019-Present	International Society for Cellular Therapy (ISCT)

National:

2014-2018	The Sumaira Foundation for Neuromyelitis Optica (Member of the Medical Advisory Board)
2018-Present	American Society of Apheresis (ASFA)
2019-Present	Association for Pathology Informatics (API)

Editorial Positions:

2017-present	Peer Reviewer, Transfusion Medicine Reviews
2019-Present	Peer Reviewer, Transfusion

Academic and Institutional Committees:

2018-present	CHOP Transfusion Committee
2018-present	CHOP Continuous Quality Improvement (CQI) Committee
2018-present	Penn Pathology Informatics Working Group
2018-present	CHOP R User Group. Co-Founder and Member of the Steering Committee
2019-present	CHOP Epic Beaker Assessment Team

Major Academic and Clinical Teaching Responsibilities:

2014	Lecture: Next-Generation Sequencing of Cancer Mutations: Do We Still Need Single-Gene Tests? (Department of Pathology, Massachusetts General Hospital)
2014	Lecture: The Current Status of Hemophilia Gene Therapy. (Department of Pathology, Massachusetts General Hospital)
2015	Grand Rounds: BET Protein Inhibitor Therapy for NUT Midline Carcinoma. (Department of Pathology, Massachusetts General Hospital)
2015	Grand Rounds: Reactivation of Fetal Hemoglobin by Manipulating Chromatin Structure. (Department of Pathology, Massachusetts General Hospital)
2015	Lecture: Drugging the Epigenome: Bromodomain Inhibitor Therapy for Solid and Hematologic Malignancies. (Department of Pathology, Massachusetts General Hospital)
2015	Laboratory Medicine Conference: Molecular Therapies for Beta-Hemoglobinopathies. (Department of Pathology, Massachusetts General Hospital)
2015	Lecture: Utilization Management in the Blood Transfusion Service. (Department of Pathology, Massachusetts General Hospital)
2015	Lecture: Towards a Universal Influenza Vaccine. (Department of Pathology, Massachusetts General Hospital)
2016	Lecture: Chimeric Antigen Receptor T-Cell Therapy for Autoimmune Disease. (Department of Pathology, Brigham and Women's Hospital)
2016	Lecture: Platelet Refractoriness: Is There a Role for Prospective Testing? (Department of Pathology, Brigham and Women's Hospital)
2017	Grand Rounds: A 30-Year-Old Man with Subacute Fatigue and Weakness, Found to Have Fever, Anemia, and Thrombocytopenia. (Department of Medicine, Massachusetts General Hospital)
2017	Grand Rounds: Pigs without PERVs: Overcoming Obstacles to Pig-to-Human Xenotransplantation. (Department of Pathology, Massachusetts General Hospital)
2017	Lecture: AB or not AB: Emergency Use of Group A Plasma. (Department of Pathology, Brigham and Women's Hospital)
2017-2018	Course: Reproducible Clinical Data Analysis with R/RStudio. A short course in reproducible data analysis using the R statistical programming language tailored for physicians. (Department of Pathology, Massachusetts General Hospital)
2017	Grand Rounds: Advances in the diagnosis and management of thrombotic thrombocytopenic purpura. (Department of Pathology and Laboratory Medicine, Children's Hospital of Philadelphia)
2018-present	Course: Reproducible Clinical Data Analysis with R/RStudio. A short course in reproducible data analysis using the R statistical

	programming language tailored for physicians. (Department of Pathology and Laboratory Medicine, Hospital of the University of Pennsylvania)
2019	Lecture: Improving Collaboration Between Clinicians and Analysts. (CHOP R Users Group Meeting)
2019-present	Leadership role: Associate Director, PENN/CHOP Cellular Therapy Fellowship (Department of Pathology and Lab Medicine, Perelman School of Medicine and Children's Hospital of Philadelphia)
2019	Lecture: "Best Practices in Data Analysis." Applied Laboratory Informatics Course (Department of Pathology and Lab Medicine, Perelman School of Medicine and Children's Hospital of Philadelphia)
2019-Present	Course: Reproducible Clinical Data Analysis with R/RStudio for MSTP students. (Perelman School of Medicine, University of Pennsylvania)
2019	Lecture: "Reproducible Clinical and Research Data Analysis in Pathology and Laboratory Medicine." Penn Pathology Faculty Lunch.

Lectures by Invitation (Last 5 years):

Nov, 2017	Grand Rounds: "Advances in the diagnosis and management of thrombotic thrombocytopenic purpura", University of Maryland Medical Center, Baltimore, MD
Dec, 2017	Grand Rounds: "Advances in the diagnosis and management of thrombotic thrombocytopenic purpura", Stanford Blood Center, Palo Alto, CA
Dec, 2017	Grand Rounds: "Advances in the diagnosis and management of thrombotic thrombocytopenic purpura", Memorial Sloan Kettering Cancer Center, New York, NY
Jan, 2018	Grand Rounds: "Advances in the diagnosis and management of thrombotic thrombocytopenic purpura", Weill-Cornell Medicine, New York, NY
Jan, 2018	Course Instructor: "Breaking up with Excel: a newbie's introduction to the R statistical programming language", Mass Spectrometry: Applications to the Clinical Lab 10th Annual Conference, Palm Springs, CA
Sep, 2018	Platform Presentation: "Teaching reproducible clinical data analysis to medical doctors." R/Medicine Conference 2018. New Haven, CT
Feb, 2019	Invited Speaker: "R at the Children's Hospital: Improving Clinician/Analyst Collaboration", PhillyR User Group, Philadelphia, PA
May, 2019	Invited Speaker: "Non-Conforming Cell Therapy Products at the Children's Hospital of Philadelphia", 2019 International Society for Cell Therapy Meeting, Melbourne, Australia
May, 2019	Course Instructor: "Introduction to R Workshop", 2019 Pathology Informatics Summit, Pittsburgh, PA

Jun, 2019	Platform Presentation: "Mind the Gap: Improving Collaboration Between Clinicians and Analysts", Advancing Analytics in Children's Hospital Conference, Chicago, IL
Jun, 2019	Platform Presentation: "The Role of R in Analytics at Children's Hospital of Philadelphia", Advancing Analytics in Children's Hospital Conference, Chicago, IL
Jun, 2019	Platform Presentation: "Early Administration of Tocilizumab (Toci) for the Prevention of Grade 4 Cytokine Release Syndrome (CRS) after CD19-directed CAR T-cell Therapy (CTL019)" 2019 International Society for Cell Therapy Meeting, Melbourne, Australia
Sep, 2019	Invited Speaker: "The Art of Pathology Data Science", 2019 American Society for Clinical Pathology Annual Meeting, Phoenix, AZ

Organizing Roles in Scientific Meetings:

[none]

Bibliography:

Research Publications, peer reviewed (print or other media):

1. Blobel GA, Kadauke S, Wang E, Lau AW, Zuber J, Chou MM, Vakoc CR: A reconfigured pattern of MLL occupancy with mitotic chromatin promotes rapid transcriptional reactivation following mitotic exit. Molecular Cell 36(6): 970-983, December 2009 Notes: Featured in Dressler GR (2010). Turning the page on epigenetic bookmarks. Developmental Cell 18(1):4-5.

2. Lamonica JM, Kadauke S, Deng W, Campbell AE, Gamsjaeger R, Wang H, Cheng Y, Billin AN, Hardison RC, Mackay JP, Blobel GA: Bromodomain protein Brd3 associates with acetylated GATA1 to promote its chromatin occupancy at erythroid target genes. Proceedings of the National Academy of Sciences of the United States of America 108(22): E159-E168, May 2011 Notes: Elected by the Faculty of 1000 into top 2% of articles in biology and medicine (2011). SK and WD contributed equally.

3. Kadauke S, Udugama MI, Pawlicki JM, Achtman JC, Jain DP, Cheng Y, Hardison RC, Blobel GA: Tissue-specific mitotic bookmarking by hematopoietic transcription factor GATA1. Cell 150(4): 725-737, August 2012 Notes: Featured in Niemitz E (2012). Transcription programs and cell division. Nature Genetics (10)44:1079.

4. Stonestrom AJ, Hsu SC, Jahn KS, Huang P, Keller CA, Giardine BM, Kadauke S, Campbell AE, Evans P, Hardison RC, Blobel GA: Functions of BET proteins in erythroid gene expression. Blood 125(18): 2825-2834, October 2015.

5. Kadauke S, Hiemenz MC, Lieberman DB, Roth DB, Zhao J, Watt CD, Daber RD, Morrissette JJ: Building a robust tumor profiling program: synergy between next-generation sequencing and targeted single-gene testing. PLOS One 11(4):

e:0152851, April 2016 Notes: SK and MCH contributed equally.

6. Roger Belizaire, Johnathan Mack, Stephan Kadauke, Yeowon Kim, Susan Saidman, and Robert S. Makar: Red blood cell alloantibodies are associated with increased alloimmunization against human leukocyte antigens. Transfusion April 2019.

7. ML Zhang, AX Guo, S Kadauke, AS Dighe, JM Baron, AR Sohani: Machine Learning Models Improve the Diagnostic Yield of Peripheral Blood Flow Cytometry. American Journal of Clinical Pathology 2019.

Research Publications, peer-reviewed reviews:

1. Kadauke S, Blobel GA: Chromatin loops in gene regulation. Biochimica et Biophysica Acta 1789(1): 17-25, January 2009.

2. Kadauke S, Blobel GA: "Remembering" tissue-specific transcription patterns through mitosis. Cell Cycle 11(21): 3911-3912, November 2012.

3. Kadauke S, Blobel GA: Mitotic bookmarking by transcription factors. Epigenetics & Chromatin 6(1): 6, April 2013 Notes: "Highly accessed" - among top 100 all-time most accessed articles in Epigenetics & Chromatin.

4. Kadauke S, Khor B, Van Cott EM: Activated protein C resistance testing for factor V Leiden. American Journal of Hematology 89(12): 1147-1150, November 2014.

Contributions to peer-reviewed research publications, participation cited but not by authorship:

[none]

Research Publications, non-peer reviewed:

1. Kadauke S, Picarelli A, Di Tola M, Parikh RK, Naylor P, Zhou WL, Bowman J, Bullock D, Tobi M: Adnab-9 as a potential non-invasive biomarker for prediction of malignancy in coeliac disease. Alimentary Pharmacology & Therapeutics 37(7): 761-762, April 2013.

Abstracts (Last 3 years):

1. Kadauke S: Teaching reproducible data analysis to medical doctors. RStudio Conference 2018, San Diego, CA February 2018 Notes: Electronic Poster Presentation.

2. Hawkins J, O'Doherty U, Kadauke S: A proposal to evaluate the effect of gamma irradiation on the survival of transfused red cells in sickle cell disease patients. American Society for Apheresis 2018 Annual Meeting, Chicago, IL April 2018 Notes: Poster Presentation.

3. Payton J, Minich C, Wasey J, Kadauke S: The CHOP R User Group_: a decentralized, interdepartmental, interprofessional approach to data analytics education. 2nd

Annual Interprofessional Education Symposium of the Children's Hospital of Philadelphia, Philadelphia, PA January 2019.

4. Kadauke S, Johnson BD, Harrison L, O'Donnell LC, Wang Y, Ayello J, Talano JM, Lee D, Bunin NJ, Wang Y, Cairo MS: Rapid manufacture and isolation of highly viable interferon-γ expressing virus-specific T cells: validation results for the Virus-Specific Cytotoxic T Lymphocyte Consortium for Refractory EBV, CMV, and Adenovirus Infections. Transplantation and Cellular Therapy Meetings of ASBMT and CIBMTR, Houston, TX February 2019.

5. Zhang ML, Guo AX, Kadauke S, Dighe A, Baron JM, Sohani AR: Machine learning models improve the diagnostic yield of peripheral blood flow cytometry. 107th Annual Meeting of the United States and Canadian Academy of Pathology. National Harbor, MD March 2019.

Editorials, Reviews, Chapters, including participation in committee reports (print or other media):

1. Dhaliwal G, Mojtahed A, Fogerty AE, Kadauke S, Mack JP: A 30-year old man with fatigue, rash, anemia and thrombocytopenia. New England Journal of Medicine 377(21): 2074-2083, November 2017.

2. Kadauke S: Utilization management of blood derivatives. Utilization management in the clinical laboratory and other ancillary services. Lewandroski L, Sluss PM (eds.). Springer International Publishing, Cham, Switzerland, Page: 135-140, December 2017.

Books:

[none]

Alternative Media:

[none]

Patents:

Finkel TH, Wang J, Blobel GA, Kadauke S: Compositions and Methods for the Treatment of HIV. Patent Number 9,387,231, 2014.