

David M Kurtz, M.D.
Stanford Cancer Center
875 Blake Wilbur Drive
Stanford, CA 94305
Cell: (208) 403-3952
Work: (650) 723-4000
dkurtz@stanford.edu

Present Academic Position

Postdoctoral Fellow, Divisions of Oncology & Hematology, PGY-7
Laboratory of Arash Ash Alizadeh, MD/PhD
Stanford University, Stanford, CA

Education & Training

2001 – 2005 B.S. in Chemistry with Honors, California Institute of Technology, Pasadena, CA
2005 – 2009 M.D., Mayo Medical School, Rochester, MD
2009 – 2010 Intern in Medicine, Stanford University Medical Center, Stanford, CA
2010 – 2011 Resident in Medicine, Stanford University Medical Center, Stanford, CA
2011 – Fellow in Hematology & Oncology, Stanford University Medical Center, Stanford, CA
2012 – PhD Candidate, Department of Bioengineering, Stanford University, Stanford, CA

Other Experience and Professional Memberships

2011 – Member, American Society of Hematology
2011 – Member in Training, American Society of Clinical Oncology

Board Certification

2012 – Pres Board Certified in Internal Medicine, American Board of Internal Medicine
2010 – Pres California State Medical License

Board Eligibility

2015 Board Eligible in Hematology & Oncology, American Board of Internal Medicine

Honors and Awards

2000 International Chemistry Olympiad, Top Gold Medal
2001 – 2005 Axline & Lingle Scholarships, California Institute of Technology
2005 Graduation with Honors, California Institute of Technology
2005 – 2007 Ponce de Leon Medical School Scholarship, Mayo Clinic College of Medicine
2007 – 2009 Clara Schonlau Medical School Scholarship, Mayo Clinic College of Medicine
2012 – Pres Advanced Residency Training at Stanford Award
2014 Conquer Cancer Foundation Travel Award, ASCO Annual Meeting
2014 Lymphoma Clinical Research Mentoring Program Scholar, Lymphoma Research Foundation
2015 ASH Abstract Achievement Award
2016 – Pres Physician-Scientist Training Award, Damon Runyon Cancer Research Foundation
2016 Åke Bertil Eriksson Endowed Young Investigator Award, ASCO Conquer Cancer Foundation

Previous Professional Positions

2012 – Pres **Division of Oncology, Department of Medicine. Mentor: Arash A. Alizadeh, MD/PhD.** I am currently the lead investigator developing circulating tumor DNA (ctDNA) detection methods in non-Hodgkin lymphoma. I also am applying of mathematical modeling to tumor dynamics. My current work utilizes methods in molecular biology, genomics, bioinformatics, and computation.

2007 – 2009 **Division of Gastroenterology, Mayo Clinic College of Medicine. Mentor: Jayant A. Talwalkar, MD.** I served as a co-lead author on a meta-analysis and systematic review of the prognostic role of vascular endothelial growth factor (VEGF) in hepatocellular carcinoma. Here, I gained experience in statistical and epidemiology methods.

2006 – 2007 **Division of Hematology, Mayo Clinic College of Medicine.** *Mentor: Thomas E. Witzig, MD.* I served as the lead investigator on a phase II clinical trial of subcutaneous interleukin-4 for non-Hodgkin lymphoma. Here, I gained experience in translational research and clinical trials.

Educational Activities

Teaching Activities

- 2016 Lecturer, Multimodal Molecular Imaging, BioE 224, Stanford University. Department of Bioengineering.
- 2014 Teaching Assistant, Physiology and Tissue Engineering, BioE 300B, Stanford University. Prof. Markus Covert, PhD, Department of Bioengineering.
- 2013 – 2014 Teaching Assistant, Multimodal Molecular Imaging, BioE 222B, Stanford University. Prof. Michael Moseley, Department of Radiology
- 2007 – 2008 Teaching Assistant, Pathology & Cell Biology, Mayo Medical School. Prof. Joseph P. Grande, MD PhD, Department of Pathology.

Review Series Authorship

- 2013 – 2014 Author, NEJM Knowledge+. Authored questions in Hematology for comprehensive lifelong learning product from NEJM Group.

Invited Lectures

- 5/18/2016 Speaker, 2016 SystemX Conference, Stanford University. “Pushing the limits of detection in circulating tumor DNA: lessons from non-Hodgkin lymphoma”.
- 5/4/2016 Speaker, 2016 Canary Summit of the Canary Center. “Pushing the limits of detection in circulating tumor DNA: lessons from non-Hodgkin lymphoma”.
- 1/26/2016 Speaker, Cancer Education Seminar Series, Stanford University. Lymphoma Updates, ASH 2015 Annual Meeting.
- 9/2/2014 Speaker, Cancer Education Seminar Series, Stanford University. Lymphoma Updates, ASCO 2014 Annual Meeting.

Presentations

Oral Presentations

1. **Kurtz DM**, Scherer F, Newman AM, Craig AM, Khodadoust M, Lovejoy AF, Klass DM, Chabon JJ, Glover C, Zhou L, Liu CL, Gupta NK, Maeda LS, Advani RH, Levy R, Diehn M, Alizadeh AA. Prediction of therapeutic outcomes in DLBCL from circulating tumor DNA dynamics. Presented at: American Society of Clinical Oncology Annual Meeting. Chicago IL, June 3-7, 2016.
2. **Kurtz DM**, Scherer F, Newman AM, Lovejoy AF, Klass DM, Chabon JJ, Gambhir SS, Diehn M, Arash AA. Dynamic noninvasive genomic monitoring for outcome prediction in diffuse large B cell lymphoma. Presented at: American Society of Hematology Annual Meeting. Orlando, FL, Dec 5-8, 2015.
3. **Kurtz DM**, Green MR, Bratman SV, Liu CL, Glover C, Keane C, Kong K, Faham M, Miklos DB, Advani RH, Levy R, Hertzberg MS, Gandhi MK, Diehn M, Alizadeh AA. Noninvasive monitoring of cellular versus acellular tumor DNA from immunoglobulin genes for DLBCL. Presented at: American Society of Clinical Oncology Annual Meeting. Chicago, IL, May 29-June 2, 2014.
4. Ahuja, N., Gavi, B., **Kurtz, DM.**, Medical Education: the next generation. AAMC/Western Group on Educational Affairs (WGEA) Annual Conference. Pacific Grove, CA, April 2010.

Poster Presentations

1. **Kurtz DM**, Scherer F, Green MR, Khodadoust MS, Klass DM, Zhou L, Glover C, Liu CL, Kong KA, Faham M, Levy R, Diehn M, Alizadeh AA. Distinct early response dynamics of circulating tumor DNA and circulating tumor cells during therapy of B-cell NHL. Presented at: American Society of Clinical Oncology Annual Meeting. Chicago, IL, May 29-June 2, 2015.
2. **Kurtz DM**, Tschetter LK, Allred JB, Geyer SM, Kurtin PJ, Putnam WD, Rowland KM Jr, Wiesenfeld M, Soori GS, Tenglin RC, Bernath AM, Witzig TE. Subcutaneous interleukin-4 (IL-4) for relapsed and resistant non-Hodgkin lymphoma: a phase II trial in the North Central Cancer Treatment Group, NCCTG 91-78-51. Presented at: The Central Society for Clinical Research Combined Annual Meeting. Chicago, IL, April 12-13, 2007.

Publications

Selected Peer Reviewed Articles

1. Newman AM, Lovejoy AF, Klass DM, **Kurtz DM**, Chabon JJ, Scherer F, Stehr H, Liu CL, Bratman SV, Say C, Zhou L, Carter JN, West RB, Sledge GW Jr, Shrager JB, Loo BW, Neal JW, Wakelee HA, Diehn M, Alizadeh AA. Integrated digital error suppression for improved detection of circulating tumor DNA. *Nature Biotechnology*. 2016; 34(5):547-55.
 2. Karmakar S, Harcourt EM, Hewings DS, Lovejoy AF, **Kurtz DM**, Ehrenschwender T, Barandun LJ, Roost C, Arash AA, Kool ET. Organocatalytic removal of formaldehyde adducts from RNA and DNA bases. *Nature Chemistry*. 2015; 7(9):752-8.
 3. **Kurtz DM**, Green MR, Bratman SV, Scherer F, Liu CL, Kunder CA, Takahashi K, Glover C, Keane C, Kihira S, Visser B, Callahan J, Kong KA, Faham M, Corbelli KS, Miklos D, Advani RH, Levy R, Hicks RJ, Hertzberg M, Ohgami RS, Gandhi MK, Diehn M, Alizadeh AA. Non-invasive monitoring of diffuse large B-cell lymphoma by immunoglobulin high-throughput sequencing. *Blood*. 2015; 125(24):3679-87.
 4. Schoenleber SJ, **Kurtz DM**, Talwalkar JA. Prognostic role of vascular endothelial growth factor (VEGF) in hepatocellular carcinoma: systematic review and meta-analysis. *British Journal of Cancer*. 2009; 100(9):1385-92.
 5. **Kurtz DM**, Kruse JL, Schoenleber SJ, Grande JP. Students as teachers and course designers: renovation of an introductory pathology course. *Journal of the International Associate of Medical Science Educators*. 2009; 19(1):8-14.
 6. Cady FM, O'Neill BP, Law ME, Decker PA, **Kurtz DM**, Giannini C, Porter AB, Kurtin PJ, Johnston PB, Dogan A, Remstein ED. Del(6)(q22) and BCL6 rearrangements in primary central nervous system lymphoma (PCNSL) are indicators of an aggressive clinical course. *Journal of Clinical Oncology*. 2008; 26(29):4814-9.
 7. Talwalkar JA, **Kurtz DM**, Schoenleber SJ, West CP, Montori VM. Ultrasound-based transient elastography for the detection of hepatic fibrosis: systematic review and meta-analysis. *Clinical Gastroenterology and Hepatology*. 2007; 5(10):1214-20.
 8. **Kurtz DM**, Tschetter LK, Allred JB, Geyer SM, Kurtin PJ, Putnam WD, Rowland KM Jr, Wiesenfeld M, Soori GS, Tenglin RC, Bernath AM, Witzig TE. Subcutaneous interleukin-4 (IL-4) for relapsed and resistant non-Hodgkin lymphoma: a phase II trial in the North Central Cancer Treatment Group, NCCTG 91-78-51. *Leukemia & Lymphoma*. 2007; 48(7):1290-8.
 9. Bahmanyar S, Borer BC, Kim YM, **Kurtz DM**, Yu S. Proximity effects in the palladium-catalyzed substitution of aryl fluorides. *Organic Letters*. 2005; 7(6):1011-1014.
 10. Ackerman LJ, Sadighi JP, **Kurtz DM**, Labinger JA, Bercaw JE. Arene C-H bond activation and arene oxidative coupling by cationic palladium(II) complexes. *Organometallics*. 2003; 22(19):3884-90.
- * - these authors contributed equally.

Review Articles and Book Chapters

1. Cohen JB, **Kurtz DM**, Staton AD, Flowers CR. Next-generation surveillance strategies for patients with lymphoma. *Future Oncology*, 2015; 11(13):1977-91.
2. **Kurtz DM**, Gambhir SS. Tracking cellular and immune therapies in cancer. *Advances in Cancer Research*. 2014; 124:257-96.

Research Support

Ongoing Research Support

Physician-Scientist Training Award

(PI: David M. Kurtz)

7/1/16 – 6/30/20

Damon Runyon Cancer Research Foundation

Title: *Response prediction and personalized therapy from mathematical modeling of circulating tumor DNA in non-Hodgkin lymphoma*

Major goals of the project: Patients with non-Hodgkin lymphoma (NHL) display striking heterogeneity in response to therapy. This project aims to utilize circulating tumor DNA in the context of mathematical modeling to predict individual outcomes and guide personalized therapeutic decisions.

Young Investigator Award (PI: David M. Kurtz) 7/1/16 – 6/30/17
 Conquer Cancer Foundation, American Society of Clinical Oncology
 Title: *Circulating tumor DNA dynamics for response forecasting and personalized therapy in diffuse large B-cell lymphoma*
 Major goals of the project: Circulating tumor DNA is an emerging biomarker in many types of cancer, including diffuse large B-cell lymphoma (DLBCL). Here, we aim to develop tools for detecting circulating tumor DNA in DLBCL and utilize this biomarker for measuring disease during and after immunochemotherapy.

Lymphoma Clinical Research Mentoring Program (PI: David M. Kurtz) 1/15/15 – 5/15/17
 Lymphoma Research Foundation
 Title: *2015 Lymphoma Clinical Research Mentoring Program*
 Major goals of the project: The 2015 Lymphoma Clinical Research Mentoring Program provides career development program for investigators pursuing translational and clinical research. This is a two-year program designed to provide mentorship, education, and guidance for physician-scientists as they pursue disease focused research. My project involves development of a clinical trial examining the utility of circulating tumor DNA dynamics for a risk-adapted treatment strategy for diffuse large B cell lymphoma.
 Role: Scholar & Principle Investigator

Advanced Residency Training at Stanford (PI: Sanjiv S. Gambhir) 9/1/12 – Present
 Stanford University Medical Center
 Title: *Advanced Residency Training at Stanford (ARTS)*
 Role: Fellow / Trainee
 Major goals of the project: Career education and career development program to foster development of physician-scientists after completion of their M.D. during residency training. Support for pursuit of doctoral training in basic science research.

Damon Runyon Cancer Research Foundation (PI: Ash A. Alizadeh) 7/1/14-6/30/17
 Role: Postdoctoral Fellow
 Targeting the Malignant Reprogramming of Early Hematopoietic Progenitors to Mature Aggressive Human B-Cell Lymphomas.

Completed Research Support
 U54 CA149145 (PI: Sylvia Plevritis) 5/1/10-2/28/16
 NIH/NCI
 Title: *Modeling the Role of Differentiation in Cancer Progression*
 Project 3: Modeling the Role of Differentiation in Follicular Lymphoma (R. Levy, Project Leader)
 The major goal of the Stanford Center for Systems Biology of Cancer (CCSB) is to discover molecular mechanisms underlying cancer progression by studying cancer as a complex biological system. My role in this project involves modeling cancer responses in non-Hodgkin lymphoma using circulating tumor DNA.

UL1TR000135 (PI: Jayant A. Talwalkar) 1/1/08 – 12/31/08
 NIH
 Role: Award Recipient / Trainee
 Title: *Center for Clinical and Translational Science Award*
 Major goals of the project: To support clinical and translational research and accelerate the translation of laboratory discoveries into improved patient care. My project focused on understanding the prognostic value of Vascular Endothelial Growth Factor in Hepatocellular Carcinoma.