UNIVERSITY OF PENNSYLVANIA - PERELMAN SCHOOL OF MEDICINE
Curriculum Vitae

Date: 07/30/2019

Sharon J. Diskin, 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:
none (U.S. citizen)

Education:

1992	B.S.	Villanova University (Computer Science)
2002	M.S.	University of Pennsylvania (Computer Science)
2008	Ph.D.	University of Pennsylvania (Genomics and Computational Biology)

Postgraduate Training and Fellowship Appointments:

2008-2012	Post-Doctoral Research Scientist, Cancer Genomics and Genetics, Children's Hospital of Philadelphia

Military Service:
[none]

Faculty Appointments:

2012-present	Assistant Professor of Pediatrics, University of Pennsylvania School of Medicine

Hospital and/or Administrative Appointments:
[none]

Other Appointments:

2012-Present	Faculty, Abramson Cancer Center (ACC), University of Pennsylvania
2012-Present	Faculty, Genomics and Computational Biology (GCB) Graduate Group, University of Pennsylvania
2012-Present	Faculty, Center for Childhood Cancer Research (CCCR), Children's Hospital of Philadelphia
2016-Present	Faculty, Department of Biomedical and Health Informatics, Children's Hospital of Philadelphia
2017-Present	Faculty, Cell and Molecular Biology (CAMB) Graduate Group, University of Pennsylvania

Specialty Certification:

[none]

Licensure:

[none]

Awards, Honors and Membership in Honorary Societies:

2005	Scholar-In-Training Award, American Association for Cancer Research (AACR)
2008	Scholar-In-Training Award, American Association for Cancer Research (AACR)
2008	Saul Winegrad, MD Award for Outstanding Dissertation, University of Pennsylvania
2009	Scholar-In-Training Award, American Association for Cancer Research (AACR)
2009	Trainee Award, American Society of Human Genetics (ASHG)
2010	Best Basic Science Paper, Advances in Neuroblastoma Research (ANR)
2010	Scholar-in-Training Award, American Association for Cancer Research (AACR)
2010	Distinguished Research Trainee Award, Children's Hospital of Philadelphia
2010	William Guy Forbeck Research Foundation Scholar
2010-2015	NIH Pathway to Independence Award (K99/R00), National Cancer Institute (NCI)

Memberships in Professional and Scientific Societies and Other Professional Activities:

International:

2000-Present	Association for Computing Machinery (ACM)
2014-Present	Advances in Neuroblastoma Research (ANR)

National:

2004-Present	American Association for Cancer Research (AACR)
2009-Present	American Society of Human Genetics (ASHG)
2015-Present	Children's Oncology Group (COG) (Member, ALTE15N2 LEARN Committee)
2018-Present	Alex's Lemonade Stand Foundation (ALSF) (Grant Reviewer)
2018-Present	Department of Defense, Defense Health System (Grant Reviewer, Peer Reviewed Cancer Research Program)
2019-Present	United States Human Proteome Organization (US HUPO)

Editorial Positions:

2008-Present	Reviewer, Bioinformatics
2008-Present	Reviewer, Cancer Research
2008-Present	Reviewer, Genome Research
2010-Present	Reviewer, BMC Bioinformatics
2010-Present	Reviewer, Nucleic Acids Research
2010-Present	Reviewer, Human Mutation
2013-Present	Reviewer, Nature Genetics
2014-2015	Guest Editor, BioMed Research International, Special Issue: Translational Genomics in Pediatric Cancer
2014-Present	Reviewer, Clinical Genetics
2016-Present	Editor, Journal of Cancer and Clinical Research
2017-Present	Reviewer, The Journal of the American Medical Association
2017-Present	Reviewer, Cell Reports
2017-Present	Reviewer, PLOS Genetics
2018-Present	Reviewer, Cold Spring Harbor (CSH) Medical Case Reports
2018-Present	Reviewer, European Journal of Pharmacology

Academic and Institutional Committees:

2004-2008	Student Representative, Executive Committee for Genomics and Computational Biology (GCB) Graduate Group, University of Pennsylvania
2006-2008	Student Representative, Preliminary Exam Committee, Genomics and Computational Biology (GCB) Graduate Group, University of Pennsylvania
2012-2013	Member, Admissions Committee for Genomics and Computational Biology (GCB) Graduate Group, University of Pennsylvania
2013-Present	Member, Executive Committee, Genomics and Computational Biology (GCB) Graduate Group, University of Pennsylvania
2013-Present	Member, Scientific Review Committee, Center for Childhood Cancer (CCCR) Biobank, Children's Hospital of Philadelphia
2013-2016	Member, Hearing Panel for the Student Disciplinary System, University of Pennsylvania
2013-2014	Member, Department of Biomedical and Health Informatics (DBHi) Planning Committee, Children's Hospital of Philadelphia
2014-Present	Member, Curriculum Advising Committee, Genomics and Computational Biology (GCB) Graduate Group, University of Pennsylvania
2015-2016	Member, Preliminary Examination Committee, Genomics and Computational Biology (GCB) Graduate Group, University of Pennsylvania
2016-Present	Member, Research Information Services Advisory Committee (RISAC), Children's Hospital of Philadelphia
2018-Present	Member, Clinical and Medical Bioinformatics Working Group, Abramson Cancer Center, University of Pennsylvania

Major Academic and Clinical Teaching Responsibilities:

2009	Mentor: Penn Genomics Frontiers Institute (PGFI) Internship Program, University of Pennsylvania
2013-2015	Mentor: Derek Oldridge, MD/PhD Candidate, Genomics and Computational Biology (GCB), University of Pennsylvania
2013	Mentor: Yuchao Zhang, PhD Student, Genomics and Computational Biology (GCB), University of Pennsylvania (Rotation Student)
2013	Mentor: Marion Pedrero, Masters Student, Ecole Centrale de Lille, Paris, France (Visiting Scholar)
2013-2014	Thesis Committee Member: Joseph Glessner, PhD Candidate, Genomics and Computational Biology (GCB), University of Pennsylvania
2014	Co-Director: GCB/CAMB 752 Seminar in Genomics, University of Pennsylvania
2014	Mentor: Amber Weiner, PhD Student, Genomics and Computational Biology (GCB), University of Pennsylvania (Rotation)
2014	Mentor: Millicent Horn, Undergraduate Student, Children's Hospital Research Institute Summer Scholars Program (CRISSP)
2014	Mentor: Neil Menghani, High School Student, Hutchin's Scholar, Lawrenceville Academy, NJ
2014-2015	Mentor: Malwina Dymek, High School Student, Science Leadership Academy (SLA)
2014	Mentor: Michael Barbato, Medical Student, Thomas Jefferson University
2014-2015	Mentor: Nicole Ferraro, Undergraduate Student, Drexel University
2014-2019	Mentor: Lee D. McDaniel, Medical Student, St. Baldrick's Summer Research Fellowship, Continued Research
2015-Present	Director: GCB/CAMB 752 Seminar in Genomics, University of Pennsylvania
2015-Present	Mentor: Amber K. Weiner, PhD Candidate, Genomics and Computational Biology (GCB), University of Pennsylvania
2015-2016	Mentor: Miriam Doepner, Undergraduate Student, CHOP Research Institute Summer Scholar's Program (CRISSP)
2015	Mentor: Eric Hyson, High School Student, Hutchin's Scholar, Lawrenceville Academy, NJ
2015-2017	Mentor: Lance Farra, High School Student, Extended Summer Internship
2015-2016	Mentor: Robert Schnepp, MD, PhD, K08 Advisory Committee
2015-Present	Mentor: Zalman Vaksman, Ph.D., Postdoctoral Researcher (Bioinformatics), Department of Biomedical and Health Informatics (DBHi), Children's Hospital of Philadelphia
2016	Mentor: Apexa Modi, PhD Student, Genomics and Computational Biology (GCB), University of Pennsylvania PhD (Rotation)
2016-Present	Mentor: Apexa Modi, PhD Candidate, Genomics and Computational Biology (GCB), University of Pennsylvania

2016	Mentor: Monika Chung, Undergraduate Student, CHOP Research Institute Summer Scholar's Program (CRISSP)
2016-2017	Mentor: Maiah Dent, Undergraduate Student, Extended Summer Internship
2016-2019	Mentor: Gonzalo Lopez, Ph.D., Postdoctoral Research Scientist (Bioinformatics), Children's Hospital of Philadelphia
2017-Present	Mentor: Laura Egolf (Ritenour), PhD Candidate, Cell and Molecular Biology (CAMB), University of Pennsylvania
2017	Mentor: Sathvik Ramanan, Undergraduate Student, University of Pennsylvania
2017-Present	Thesis Committee Member: Matt Paul, PhD Candidate, Genomics and Computational Biology (GCB), University of Pennsylvania
2017-2019	Mentor: Daphne Cheung, Undergraduate Student, University of Pennsylvania
2017	Mentor: Priya Kumar, High School Student, Hutchin's Scholar, Lawrenceville Academy, NJ
2018	Mentor: Alexandra Lee, PhD Student, Genomics and Computational Biology (GCB) University of Pennsylvania (Rotation)
2018-Present	Mentor: Lobin "Alex" Lee, PhD Candidate, Genomics and Computational Biology (GCB), University of Pennsylvania
2018	Mentor: Tsz Ching "Melody " Leung, High School Student, Hutchin's Scholar, Lawrenceville Academy, NJ
2018-Present	Mentor: Emily Blauel, M.D., Clinical Fellow, Children's Hospital of Philadelphia, University of Pennsylvania
2018-Present	Thesis Committee Member: Suzanne MacFarland, M.D., Masters in Translational Research (MTR) Fellow, Children's Hospital of Philadelphia
2018-2019	Mentor: Moataz Noureddine, Undergraduate Student, The Philadelphia Center, Philadelphia, PA
2018-2019	Mentor: Jessica Wong, Masters Student (Biomedical Informatics), Temple University
2019-Present	Mentor, Rebecca Kaufman, Masters Student (Biomedical Informatics), Temple University
2019-Present	Thesis Committee Member: Heather Wachtel, M.D., Masters in Translational Research (MTR) Fellow, University of Pennsylvania

Lectures by Invitation (Last 5 years):

May, 2014	"Germline Variants that Influence Neuroblastoma Susceptibility and Phenotype", Advances in Neuroblastoma Research, Cologne, Germany
Jun, 2014	"Identification of Recurrent Germline and Somatic Structural Variations (SVs) Influencing Tumorigenesis", Advances in Neuroblastoma Research, Cologne, Germany
Sep, 2014	"Genetics and Genomics of Neuroblastoma", William Guy Forbeck Scholar Retreat, Lake Geneva, Wisconsin, USA

Jun, 2016	"Common germline variants at MLF1 and CPZ loci associated with neuroblastoma", Advances in Neuroblastoma Research, Cairns, Australia
Jun, 2016	"Identification of germline mutations in 776 children with neuroblastoma", Advances in Neuroblastoma Research, Cairns, Australia
Jun, 2016	"Overview of neuroblastoma epidemiology and genetic predisposition", Neuroblastoma Update Course, Advances in Neuroblastoma Research, Cairns, Australia
Jun, 2016	"Can GWAS and/or sequencing help identify ultra-high-risk neuroblastoma and predict patient outcomes?", Next Generation Risk Stratification: New Ways to Identify Ultra-high risk patients, Advances in Neuroblastoma Research, Cairns, Australia
Sep, 2018	"The genetic basis of neuroblastoma predisposition", 20th World Conference in Pediatric Oncology and Nursing, Philadelphia, Pennsylvania, USA (Keynote)
Nov, 2018	"Identification of optimal targets for immunotherapy in childhood cancers using a proteogenomic approach", 2nd Global Summit and Expo on Proteomics, Dallas, Texas, USA (Keynote)
Mar, 2019	"Genetic Predisposition to Neuroblastoma: From Discovery to Translational Opportunities", Pediatric Oncology Branch Seminar Series, Center for Cancer Research, National Cancer Institute, National Institutes of Health, Bethesda, MD, USA
Apr, 2019	"Multi-omic surfaceome study identifies DLK1 as a candidate oncoprotein and immunotherapeutic target in neuroblastoma", 5th Neuroblastoma Research Symposium, Cambridge, United Kingdom
Apr, 2019	"Unraveling the genetic basis of neuroblastoma: from basic discovery to clinical implications", Helen Diller Family Comprehensive Cancer Center Seminar Series. University of California San Fransisco (UCSF), San Fransisco, CA, USA
May, 2019	"Insights into neuroblastoma revealed through integrative multi-omic approaches", Seminars in Oncology Lecture Series, Dana-Farber Cancer Institute and the Dana-Farber/Harvard Cancer Center, Harvard University, Boston, MA, USA
Sep, 2019	"De novo 16p11.2 deletion predisposes to neuroblastoma", National Institutes of Health (NIH) Kids First Fall Webinar, Bethesda, MD, USA (Scheduled)
May, 2020	"Inherited and Acquired Genetic Drivers of Neuroblastoma", American Society of Pediatric Hematology and Oncology (ASPHO), Fort Worth, TX, USA (Scheduled)

Organizing Roles in Scientific Meetings:

2016	Organizing Committee Member, CHOP/IBI Bioinformatics Conference Philadelphia, PA, USA

Bibliography:

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

1. Bahl A, Brunk B, Coppel RL, Crabtree J, Diskin SJ, Fraunholz MJ, Grant GR, Gupta D, Huestis RL, Kissinger JC, Labo P, Li L, McWeeney SK, Milgram AJ, Roos DS, Schug J, Stoeckert CJ: PlasmoDB: The Plasmodium Genome Resource. An integrated database providing tools for accessing, analyzing and mapping expression and sequence data (both finished and unfinished). Nucleic Acids Res 30(1): 87-90, Jan 2002.

2. Schug J, Diskin S, Mazzarelli J, Brunk BP, Stoeckert CJ: Predicting gene ontology functions from ProDom and CDD protein domains. Genome Res 12(4): 648-55, Apr 2002.

3. Kissinger JC, Brunk BP, Crabtree J, Fraunholz MJ, Gajria B, Milgram AJ, Pearson DS, Schug J, Bahl A, Diskin SJ, Ginsburg H, Grant GR, Gupta D, Labo P, Li L, Mailman MD, McWeeney SK, Whetzel P, Stoeckert CJ, Roos DS: The Plasmodium genome database. Nature 419(6906): 490-2, Oct 2002.

4. Greshock J, Naylor TL, Margolin A, Diskin S, Cleaver SH, Futreal PA, deJong PJ, Zhao S, Liebman M, Weber BL: 1-Mb resolution array-based comparative genomic hybridization using a BAC clone set optimized for cancer gene analysis. Genome Res 14(1): 179-87, Jan 2004.

5. Wang Q, Diskin S, Rappaport E, Attiyeh E, Mosse Y, Shue D, Seiser E, Jagannathan J, Shusterman S, Bansal M, Khazi D, Winter C, Okawa E, Grant G, Cnaan A, Zhao H, Cheung N, Gerald W, London W, Matthay KK, Brodeur GM, Maris JM: Integrative genomics identifies distinct molecular classes of neuroblastoma and shows that multiple genes are targeted by regional alterations in DNA copy number. Cancer Res 66(12): 6050-62, Jun 2006.

6. Diskin SJ, Eck T, Greshock J, Mosse YP, Naylor T, Stoeckert CJ, Weber BL, Maris JM, Grant GR: STAC: A method for testing the significance of DNA copy number aberrations across multiple array-CGH experiments. Genome Res 16(9): 1149-58, Sep 2006.

7. Guttman M, Mies C, Dudycz-Sulicz K, Diskin SJ, Baldwin DA, Stoeckert CJ, Grant GR: Assessing the significance of conserved genomic aberrations using high resolution genomic microarrays. PLoS Genet 3(8): e143, Aug 2007.

8. Mosse YP, Diskin SJ, Wasserman N, Rinaldi K, Attiyeh EF, Cole K, Jagannathan J, Bhambhani K, Winter C, Maris JM: Neuroblastomas have distinct genomic DNA profiles that predict clinical phenotype and regional gene expression. Genes Chromosomes Cancer 46(10): 936-49, Oct 2007.

9. Cole KA, Attiyeh EF, Mosse YP, Laquaglia MJ, Diskin SJ, Brodeur GM, Maris JM: A functional screen identifies miR-34a as a candidate neuroblastoma tumor suppressor gene. Mol Cancer Res 6(5): 735-42, May 2008.

10. Maris JM, Mosse YP, Bradfield JP, Hou C, Monni S, Scott RH, Asgharzadeh S, Attiyeh EF, Diskin SJ, Laudenslager M, Winter C, Cole KA, Glessner JT, Kim C, Frackelton EC, Casalunovo T, Eckert AW, Capasso M, Rappaport EF, McConville C, London WB, Seeger RC, Rahman N, Devoto M, Grant SFA, Li H, Hakonarson H: Chromosome 6p22 locus associated with clinically aggressive neuroblastoma. N Engl J Med 358(24): 2585-93, Jun 2008.

11. Diskin SJ, Li M, Hou C, Yang S, Glessner J, Hakonarson H, Bucan M, Maris JM, Wang K: Adjustment of genomic waves in signal intensities from whole-genome SNP genotyping platforms. Nucleic Acids Res 36(19): e126, Nov 2008.

12. Carvalho B, Postma C, Mongera S, Hopmans E, Diskin S, van de Wiel MA, van Criekinge W, Thas O, Matthäi A, Cuesta MA, Terhaar Sive Droste JS, Craanen M, Schröck E, Ylstra B, Meijer GA: Multiple putative oncogenes at the chromosome 20q amplicon contribute to colorectal adenoma to carcinoma progression. Gut 58(1): 79-89, Jan 2009.

13. Attiyeh EF, Diskin SJ, Attiyeh MA, Mossé YP, Hou C, Jackson EM, Kim C, Glessner J, Hakonarson H, Biegel JA, Maris JM: Genomic copy number determination in cancer cells from single nucleotide polymorphism microarrays based on quantitative genotyping corrected for aneuploidy. Genome Res 19(2): 276-83, Feb 2009.

14. Capasso M, Devoto M, Hou C, Asgharzadeh S, Glessner JT, Attiyeh EF, Mosse YP, Kim C, Diskin SJ, Cole KA, Bosse K, Diamond M, Laudenslager M, Winter C, Bradfield JP, Scott RH, Jagannathan J, Garris M, McConville C, London WB, Seeger RC, Grant SFA, Li H, Rahman N, Rappaport E, Hakonarson H, Maris JM: Common variations in BARD1 influence susceptibility to high-risk neuroblastoma. Nature Genet 41(6): 718-23, Jun 2009.

15. Diskin SJ, Hou C, Glessner JT, Attiyeh EF, Laudenslager M, Bosse K, Cole K, Mossé YP, Wood A, Lynch JE, Pecor K, Diamond M, Winter C, Wang K, Kim C, Geiger EA, McGrady PW, Blakemore AIF, London WB, Shaikh TH, Bradfield J, Grant SFA, Li H, Devoto M, Rappaport ER, Hakonarson H, Maris JM: Copy number variation at 1q21.1 associated with neuroblastoma. Nature 459(7249): 987-91, Jun 2009.

16. Wang K*, Diskin SJ*, Zhang H, Attiyeh EF, Winter C, Hou C, Schnepp RW, Diamond M, Bosse K, Mayes PA, Glessner J, Kim C, Frackelton E, Garris M, Wang Q, Glaberson W, Chiavacci R, Nguyen L, Jagannathan J, Saeki N, Sasaki H, Grant SFA, Iolascon A, Mosse YP, Cole KA, Li H, Devoto M, McGrady PW, London WB, Capasso M, Rahman N, Hakonarson H, Maris JM: Integrative genomics identifies LMO1 as a neuroblastoma oncogene. Nature 469(7329): 216-20, Jan 2011 Notes: *equal contribution.

17. Cole KA, Huggins J, Laquaglia M, Hulderman CE, Russell MR, Bosse K, Diskin SJ, Attiyeh EF, Sennett R, Norris G, Laudenslager M, Wood AC, Mayes PA, Jagannathan J, Winter C, Mosse YP, Maris JM: RNAi screen of the protein kinome identifies checkpoint kinase 1 (CHK1) as a therapeutic target in neuroblastoma. Proc Natl Acad Sci U S A 108(8): 3336-41, Feb 2011.

18. Nguyen LB, Diskin SJ, Capasso M, Wang K, Diamond MA, Glessner J, Kim C, Attiyeh EF, Mosse YP, Cole K, Iolascon A, Devoto M, Hakonarson H, Li HK, Maris JM: Phenotype restricted genome-wide association study using a gene-centric approach identifies three low-risk neuroblastoma susceptibility loci. PLoS Genet 7(3): e1002026, Mar 2011.

19. Bosse KR, Diskin SJ, Cole KA, Wood AC, Schnepp RW, Norris G, Nguyen LB, Jagannathan J, Laquaglia M, Winter C, Diamond M, Hou C, Attiyeh EF, Mosse YP, Pineros V, Dizin E, Zhang Y, Asgharzadeh S, Seeger RC, Capasso M, Pawel BR, Devoto M, Hakonarson H, Rappaport EF, Irminger-Finger I, Maris JM: Common variation at BARD1 results in the expression of an oncogenic isoform that influences neuroblastoma susceptibility and oncogenicity. Cancer Res 72(8): 2068-78, Apr 2012.

20. Latorre V, Diskin SJ, Diamond MA, Zhang H, Hakonarson H, Maris JM, Devoto M: Replication of neuroblastoma SNP association at the BARD1 locus in African-Americans. Cancer Epidemiol Biomarkers Prev 21(4): 658-63, Apr 2012.

21. Diskin SJ, Capasso M, Schnepp RW, Cole KA, Attiyeh EF, Hou C, Diamond M, Carpenter EL, Winter C, Lee H, Jagannathan J, Latorre V, Iolascon A, Hakonarson H, Devoto M, Maris JM: Common variation at 6q16 within HACE1 and LIN28B influences susceptibility to neuroblastoma. Nat Genet 44(10): 1126-30, Oct 2012.

22. Mayes PA, Degenhardt YY, Wood A, Toporovskya Y, Diskin SJ, Haglund E, Moy C, Wooster R, Maris JM: Mitogen-activated protein kinase (MEK/ERK) inhibition sensitizes cancer cells to centromere-associated protein E inhibition. Int J Cancer 132(3): E149-57, Feb 2013.

23. Capasso M, Diskin SJ, Totaro F, Longo L, De Mariano M, Russo R, Cimmino F, Hakonarson H, Tonini GP, Devoto M, Maris JM, Iolascon A: Replication of GWAS-identified neuroblastoma risk loci strengthens the role of BARD1 and affirms the cumulative effect of genetic variations on disease susceptibility. Carcinogenesis 34(4): 605-11, Mar 2013.

24. Pugh TJ, Morozova O, Attiyeh EF, Asgharzadeh S, Wei JS, Auclair D, Carter SL, Cibulskis K, Hanna M, Kiezun A, Kim J, Lawrence MS, Lichenstein L, McKenna A, Pedamallu CS, Ramos AH, Shefler E, Sivachenko A, Sougnez C, Stewart C, Ally A, Birol I, Chiu R, Corbett RD, Hirst M, Jackman SD, Kamoh B, Khodabakshi AH, Krzywinski M, Lo A, Moore RA, Mungall KL, Qian J, Tam A, Thiessen N, Zhao Y, Cole KA, Diamond M, Diskin SJ, Mosse YP, Wood AC, Ji L, Sposto R, Badgett T, London WB, Moyer Y, Gastier-Foster JM, Smith MA, Auvil JM, Gerhard DS, Hogarty MD, Jones SJ, Lander ES, Gabriel SB, Getz G, Seeger RC, Khan J, Marra MA, Meyerson M, Maris JM.: The genetic landscape of high-risk neuroblastoma. Nat Genet 45(3): 279-84, Mar 2013.

25. Rader J, Russell MR, Hart LS, Nakazawa MS, Belcastro LT, Martinez D, Li Y, Carpenter EL, Attiyeh EF, Diskin SJ, Kim S, Parasuraman S, Caponigro G, Schnepp RW, Wood AC, Pawel B, Cole KA, Maris JM: Dual CDK4/CDK6 inhibition induces cell-cycle arrest and senescence in neuroblastoma Clin Cancer Res 19(22): 6173-82, Nov 2013.

26. Diskin SJ, Capasso M, Diamond M, Oldridge DA, Conkrite K, Bosse KR, Russell MR, Iolascon A, Hakonarson H, Devoto M, Maris JM: Rare variants in TP53 and susceptibility to neuroblastoma. J Natl Cancer Inst 106(4): dju047, Apr 2014.

27. Pinto N, Gamazon ER, Antao N, Myers J, Stark AL, Konkashbaev A, Kyung Im H, Diskin SJ, London WB, Ludeman SM, Maris JM, Cox NJ, Cohn SL, Dolan ME: Integrating Cell-Based and Clinical Genome-Wide Studies to Identify Genetic Variants Contributing to Treatment Failure in Neuroblastoma Patients. Clin Pharmacol Ther 95(6): 644-52, June 2014.

28. Capasso M, Diskin S, Cimmino F, Acierno G, Totaro F, Petrosino G, Pezone L, Diamond M, McDaniel L, Hakonarson H, Iolascon A, Devoto M, Maris JM: Common genetic variants in NEFL influence gene expression and neuroblastoma risk. Cancer Res 74(23): 6913-24, Dec 2014.

29. Jiang Y, Oldridge DA, Diskin SJ, Zhang NR: CODEX: a normalization and copy number variation detection method for whole exome sequencing. Nucleic Acids Res 43(6): e39, Mar 2015.

30. Eleveld TF, Oldridge DA, Bernard V, Koster J, Colmet DL, Diskin SJ, Schild L, Bentahar NB, Bellini A, Chicard M, Lapouble E, Combaret V, Legoix-Né P, Michon J, Pugh TJ, Hart LS, Rader J, Attiyeh EF, Wei JS, Zhang S, Naranjo A, Gastier-Foster JM, Hogarty MD, Asgharzadeh S, Smith MA, Guidry Auvil JM, Watkins TBK, Zwijnenburg DA, Ebus ME, van Sluis P, Hakkert A, van Wezel E, van der Schoot CE, Westerhout EM, Schulte JH, Tytgat GA, Dolman EM, Janoueix-Lerosey I, Gerhard DS, Caron HN, Delattre O, Khan J, Versteeg R, Schleiermacher G, Molenaar JJ, Maris JM: Relapsed neuroblastomas show frequent RAS-MAPK pathway mutations. Nat Genet 47(8): 864-71, Aug 2015.

31. Russell MR, Penikis A, Oldridge DA, Alvarez-Dominguez JR, Mcdaniel L, Diamond M, Padovan O, Raman P, Li Y, Wei JS, Zhang S, Gnanchandran J, Seeger R, Asgharzadeh S, Khan J, Diskin SJ, Maris JM, Cole KA: CASC15-S Is a Tumor Suppressor lncRNA at the 6p22 Neuroblastoma Susceptibility Locus. Cancer Res 75(15): 3155-66, Aug 2015.

32. Schnepp RW, Khurana P, Attiyeh EF, Raman P, Chodosh SE, Oldridge DA, Gagliardi ME, Conkrite KL, Asgharzadeh S, Seeger RC, Madison BB, Rustgi AK, Maris JM, Diskin SJ: A LIN28B-RAN-AURKA Signaling Network Promotes Neuroblastoma Tumorigenesis. Cancer Cell 28(5): 599-609, Nov 2015.

33. Altman BJ, Hsieh AL, Sengupta A, Krishnanaiah SY, Stine ZE, Walton ZE, Gouw AM, Venkataraman A, Li B, Goraksha-Hicks P, Diskin SJ, Bellovin DI, Simon MC, Rathmell JC, Lazar MA, Maris JM, Felsher DW, Hogenesch JB, Weljie AM, Dang CV: MYC Disrupts the Circadian Clock and Metabolism in Cancer Cells. Cell Metab 22(6): 1009-19, Dec 2015.

34. Oldridge DA, Wood AC, Weichert-Leahey N, Crimmins I, Sussman R, Winter C, McDaniel LD, Diamond M, Hart LS, Zhu S, Durbin AD, Abraham BJ, Anders L, Tian L, Zhang S, Wei JS, Khan J, Bramlett K, Rahman N, Capasso M, Iolascon A, Gerhard DS, Guidry Auvil JM, Young RA, Hakonarson H, Diskin SJ, Look AT, Maris JM: Genetic predisposition to neuroblastoma mediated by a LMO1 super-enhancer polymorphism. Nature 528(7582): 418-21, Dec 2015.

35. Mazul AL, Siega-Riz AM, Weinberg CR, Engel SM, Zou F, Carrier KS, Basta PV, Vaksman Z, Maris JM, Diskin SJ, Maxen C, Naranjo A, Olshan AF: A family-based study of gene variants and maternal folate and choline in neuroblastoma: a report from the Children's Oncology Group. Cancer Causes Control 27(10): 1209-18, Oct 2016.

36. Applebaum MA, Vaksman Z, Lee SM, Hungate EA, Henderson TO, London WB, Pinto N, Volchenboum SL, Park JR, Naranjo A, Hero B, Pearson AD, Stranger BE, Cohn SL, Diskin SJ: Neuroblastoma survivors are at increased risk for second malignancies: A report from the International Neuroblastoma Risk Group Project. Eur J Cancer 72(1): 177-185, Feb 2017.

37. McDaniel LD, Conkrite KL, Chang X, Capasso M, Vaksman Z, Oldridge DA, Zachariou A, Horn M, Diamond M, Hou C, Iolascon A, Hakonarson H, Rahman N, Devoto M, Diskin SJ: Common variants upstream of MLF1 at 3q25 and within CPZ at 4p16 associated with neuroblastoma. PLoS Genet 13 (5): e1006787, May 2017.

38. Chang X, Zhao Y, Hou C, Glessner J, McDaniel L, Diamond MA, Thomas K, Li J, Wei Z, Liu Y, Guo Y, Mentch FD, Qiu H, Kim C, Evans P, Vaksman Z, Diskin SJ, Attiyeh EF, Sleiman P, Maris JM, Hakonarson H: Common variants in MMP20 at 11q22.2 predispose to 11q deletion and neuroblastoma risk. Nat Commun 8(1): 569, Sept 2017.

39. Hungate EA, Applebaum MA, Skol AD, Vaksman Z, Diamond M, McDaniel L, Volchenboum SL, Stranger BE, Maris JM, Diskin SJ, Onel K, Cohn SL: Evaluation of Genetic Predisposition for MYCN-Amplified Neuroblastoma. J Natl Cancer Inst 109(10), Oct 2017.

40. DuBois SG, Mody R, Naranjo A, Van Ryn C, Russ D, Oldridge D, Kreissman S, Baker DL, Parisi M, Shulkin BL, Bai H, Diskin SJ, Batra V, Maris JM, Park JR, Matthay KK, Yanik G: MIBG avidity correlates with clinical features, tumor biology, and outcomes in neuroblastoma: A report from the Children's Oncology Group. Pediatr Blood Cancer 64(11), Nov 2017.

41. Capasso M, McDaniel LD, Cimmino F, Cirino A, Formicola D, Russell MR, Raman P, Cole KA, Diskin SJ: The functional variant rs34330 of CDKN1B is associated with risk of neuroblastoma. J Cell Mol Med 21(12): 3224-3230, Dec 2017.

42. Ma X, Liu Y, Liu Y, Alexandrov LB, Edmonson MN, Gawad C, Zhou X, Li Y, Rusch MC, Easton J, Huether R, Gonzalez-Pena V, Wilkinson MR, Hermida LC, Davis S, Sioson E, Pounds S, Cao X, Ries RE, Wang Z, Chen X, Dong L, Diskin SJ, Smith MA, Guidry Auvil JM, Meltzer PS, Lau CC, Perlman EJ, Maris JM, Meshinchi S, Hunger SP, Gerhard DS, Zhang J: Pan-cancer genome and transcriptome analyses of 1,699 paediatric leukaemias and solid tumours. Nature 555(7696): 371-376, Mar 2018.

43. Weiner AK, Sidoli S, Diskin SJ, Garcia BA: Graphical Interpretation and Analysis of Proteins and their Ontologies (GiaPronto): A One-Click Graph Visualization Software for Proteomics Data Sets. Mol Cell Proteomics 17(7): 1426-1431, Jul 2018.

44. Cimmino F, Avitabile M, Diskin SJ, Vaksman Z, Pignataro P, Formicola D, Cardinale A, Testori A, Koster J, de Torres C, Devoto M, Maris JM, Iolascon A, Capasso M.: Fine mapping of 2q35 high-risk neuroblastoma locus reveals independent functional risk variants and suggests full-length BARD1 as tumor-suppressor. Int J Cancer 143(11): 2828-2837, Dec 2018.

45. Oldridge DA, Truong B, Russ D, DuBois SG, Vaksman Z, Mosse YP, Diskin SJ, Maris JM, Matthay KK.: Differences in Genomic Profiles and Outcomes between Thoracic and Adrenal Neuroblastoma J Natl Cancer Inst Page: doi: 10.1093, Feb 2019 Notes: epub ahead of print.

46. Mazul AL, Weinberg CR, Engel SM, Siega-Riz AM, Zou F, Carrier KS, Basta PV, Vaksman Z, Maris JM, Diskin SJ, Maxen C, Naranjo A, Olshan AF: Neuroblastoma in relation to joint effects of vitamin A and maternal and offspring variants in vitamin A-related genes: A report of the Children's Oncology Group. Cancer Epidemiol 61(1): 165-171, Aug 2019.

47. Egolf LE, Vaksman Z, Lopez G, Rokita JL, Modi A, Basta PV, Hakonarson H, Olshan AF, Diskin SJ: Germline 16p11.2 microdeletion predisposes to neuroblastoma. Am J Hum Genet in press 2019.

Research Publications, peer-reviewed reviews:

1. Bai HX, Lee AM, Yang L, Zhang P, Davatzikos C, Maris JM, Diskin SJ: Imaging genomics in cancer research: limitations and promises. Br J Radiol 89(1061): 20151030, 2016.

2. Ritenour LE, Randall MP, Bosse KR, Diskin SJ: Genetic susceptibility to neuroblastoma: current knowledge and future directions. Cell Tissue Res 372(2): 287-307, May 2018.

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

[none]

Research Publications, non-peer reviewed:

1. Ijaz H, Koptyra M, Gaonkar KS, Rokita JL, Baubet VP, Tauhid L, Zhu Y, Brown M, Lopez G, Zhang B, Diskin SJ, Vaksman Z, Children's Brain Tumor Tissue Consortium, Mason JL, Appert E, Lilly J, Lulla R, De Raedt T, Heath AP, Felmeister A, Raman P, Nazarian J, Santi MR, Storm PB, Resnick A, Waanders AJ, Cole KA: Pediatric High Grade Glioma Resources From the Children's Brain Tumor Tissue Consortium (CBTTC) and Pediatric Brain Tumor Atlas (PBTA). BioRxiv(https://doi.org/10.1101/656587), Preprint: Under Review, 2019.

2. Lopez G, Conkrite KL, Doepner M, Rathi KS, Modi A, Vaksman Z, Farra LM, Hyson E, Noureddine M, Wei JS, Smith MA, Asgharzadeh S, Seeger RC, Khan J, Guidry Auvil J, Gerhard DS, Maris JM, Diskin SJ: Structural variation targets neurodevelopmental genes and identifies SHANK2 as a tumor suppressor in neuroblastoma. BioRxiv(https://doi.org/10.1101/572248), Preprint: Under Review, 2019.

Abstracts (Last 3 years):

1. Applebaum MA, Vaksman Z, Hungate E, Henderson T, London W, Pinto N, Volchenbaum S, Park J, Naranjo A, Pearson A, Hero B, Cohn S, Diskin SJ: Second Malignancies in Patients with Neuroblastoma: A report from the International Neuroblastoma Risk Group Project (Podium). Advances in Neuroblastoma Research 2016, Cairns, Queensland, Australia June 2016.

2. Hungate EA, Applebaum MA, Skol AD, Diamond M, McDaniel L, Vaksman Z, Diskin SJ, Maris JM, Onel K, Cohn SL: Genetic variants in BARD1 and KIF15 associated with MYCN amplification in neuroblastoma (Podium). Advances in Neuroblastoma Research 2016, Cairns, Queensland, Australia June 2016.

3. McDaniel LD, Conkrite K, Vaksman Z, Oldridge DA, Capasso M, Zachariou A, Horn M, Diamond M, Hakonarson H, Rahman N, Devoto M, Diskin SJ: Common germline variants at MLF1 and CPZ loci associated with neuroblastoma (Podium). Advances in Neuroblastoma Research 2016, Cairns, Queensland, Australia June 2016.

4. Stewart DR, Evan P, Pugh T, Liao H, Conkrite K, Patidar R, Cole KA, Menghani N, Farra L, Zhang S, Sindiri S, Song H, Wen X, Guidry-Auvil J, Gerhard DS, Maris JM, Khan J, Sei J, Diskin SJ: Identification of germline mutations in 776 children with neuroblastoma (Podium). Advances in Neuroblastoma Research 2016, Cairns, Queensland, Australia June 2016.

5. Weiner A, Sidoli S, Diskin SJ, Garcia B: Gia Pronto: A one-click visualization program for proteomics datasets (Poster). 64th American Society for Mass Spectrometry Conference, San Antonio, Texas, USA June 2016.

6. Weiner AK, Radaoui AB, Kendsersky NM, Sidoli S, Conkrite KL, Vaksman Z, Fathi KS, Raman P, Martinez D, Bhakti TR, Tsang M, Pawel B, Vaksman Z, Garcia BA, Maris JM, Diskin SJ: Integrative approach to define the cell surface landscape in neuroblastoma (Poster). Advances in Neuroblastoma Research 2016, Cairns, Queensland, Australia June 2016.

7. Weiner A, Sidoli S, Diskin SJ, Garcia B: GiaPronto: A one-click graph visualization software for proteomics datasets (Podium). United States Human Proteome Organization (US HUPO) Meeting, San Diego, CA, USA March 2017.

8. Lopez G, Conkrite KL, Hong K, Maris JM, Diskin SJ: Dissecting telomere maintenance mechanisms in neuroblastoma (Poster). American Association for Cancer Research Annual Meeting, Washington DC, USA April 2017.

9. Vaksman Z, McDaniel LD, Diamond M, Maris JM, Diskin SJ: Identifying the genetic basis of 4S neuroblastoma (Poster). American Association for Cancer Research Annual Meeting, Washington DC, USA April 2017.

10. Weiner AK, Sidoli S, Glisovic-Aplenc T, Maris JM, Garcia BA, Diskin SJ: Integrative approach to define the cell surface landscape in neuroblastoma (Poster). American Association for Cancer Research Annual Meeting, Washington DC, USA April 2017.

11. Weiner AK, Sidoli S, Diskin SJ, Garcia BA: GiaPronto: A one-click online data analysis and visualization for proteomics (Poster). American Society of Mass Spectrometry (ASMS) Annual Meeting, Indianapolis, IN, USA June 2017.

12. Ritenour LE, Vaksman Z, Lopez G, Rokita J, Modi A, Hakonarson H, Olshan AF, Diskin SJ: Rare 16p11.2 microdeletion associates with neuroblastoma (Podium). Penn Genetics Retreat, Bear Creek Mountain Resort, Macungie, PA, USA September 2017.

13. Weiner AK, Radaoui AB, Kendsersky NA, Sidoli S, Conkrite KL, Harenza J, Vaksman Z, Rathi KS, Ramen P, Martinez D, Bhatti T, Tsang M, Pawel B, Garcia BA, Diskin SJ: Integrative Mass Spectrometry Based Proteomics and Transcriptomics Identify Contactin-1 (CNTN1) as a Potential Immunotherapeutic Target in High-risk Neuroblastoma (Podium). Tissue Microarray: Quantitative Digital Proteomics in Pathology, Philadelphia, PA, USA November 2017.

14. Modi A, Conkrite KL, Ramanan S, Cheung D, Diskin SJ: Landscape of lncRNAs in neuroblastoma (Poster). RNA Keystone Symposia, Keystone, CO, USA February 2018.

15. Modi A, Conkrite K, Ramanan S, Cheung D, Vaksman Z, Harenza J, Diskin SJ: Impact of neuroblastoma-associated genetic variation on the tumor suppressor lncRNA CASC15 (Podium). NHGRI T32 Conference, Los Angeles, CA, USA March 2018.

16. Lopez G, Conkrite KL, Rathe KS, Hong KL, Vaksman Z, Smith MA, Guidry-Auvil J, Gerhard DS, Maris JM, Diskin SJ: Patterns of Structural Variation, Chromothripsis and Mutational Burden Differ Across Neuroblastoma Subtypes (Poster). Advances in Neuroblastoma Research 2018, San Francisco, CA, USA May 2018.

17. Modi A, Conkrite K, Ramanan S, Cheung D, Vaksman Z, Harenza J, Diskin SJ: Expression landscape of long non-coding RNAs in neuroblastoma (Poster). Advances in Neuroblastoma Research 2018, San Francisco, CA, USA May 2018.

18. Ritenour L, Vaksman Z, Lopez G, Modi A, Harenza J, Diskin SJ: Rare Chromosome 16p11.2 Microdeletion Associated with Neuroblastoma Susceptibility (Poster). Advances in Neuroblastoma Research 2018, San Francisco, CA, USA May 2018.

19. Vaksman Z, Lopez G, Modi A, Harenza J, Zachariou A, Capasso M, Hakonarson H, Devoto M, Rahman N, Maris JM, Diskin SJ: A Multi-Ethnic Genome-Wide Association Study (GWAS) Identifies Multiple Novel Loci Associated with Neuroblastoma (Poster). Advances in Neuroblastoma Research 2018, San Francisco, CA, USA May 2018.

20. Weiner AK, ARadaoui AB, Sidoli S, Conkrite KL, Vaksman Z, Rathi KS, Raman P Rokita J., Glisovic-Aplenc T, Martinez D, Bhatti T, Tsang M, Pawel B, Garcia BA, Maris JM, Diskin SJ : Integrative Mass Spectrometry and RNA-sequencing identifies candidate immunotherapeutic targets in neuroblastoma (Podium). Institute for Biomedical Informatics / Genomics and Computational Biology Retreat, College of Physicians, Philadelphia, PA, USA May 2018.

21. Weiner AK, Radaoui AB, Kendsersky NM, Sidoli S, Conkrite KL, Vaksman Z, Fathi KS, Raman P, Martinez D, Bhakti TR, Tsang M, Pawel B, Vaksman Z, Garcia BA, Maris JM, Diskin SJ: Integrative Mass Spectrometry and RNA-Sequencing Identifies Candidate Immunotherapeutic Targets in Neuroblastoma (Podium). Advances in Neuroblastoma Research 2018, San Francisco, CA, USA May 2018.

22. Ritenour L, Vaksman Z, Lopez G, Modi A, Harenza J, Hakonarson H, Olshan A, Diskin SJ: Genome-wide analysis of rare germline copy number variants in neuroblastoma identifies enrichment for 16p11.2 microdeletion (Podium). Penn Genetics Retreat, The Franklin Institute, Philadelphia, PA, USA September 2018.

23. Weiner AK, Radaoui AB, Kendsersky NA, Sidoli S, Conkrite KL, Harenza J, Vaksman Z, Rathi KS, Ramen P, Martinez D, Bhatti T, Tsang M, Pawel B, Garcia BA, Diskin SJ: Integrative mass spectrometry and RNA-sequencing identifies candidate immunotherapeutic targets in neuroblastoma (Podium). 17th Human Proteome Organization World Congress (HUPO 2018), Orlando, FL, USA October 2018.

24. Ritenour L, Vaksman Z, Lopez G, Modi A, Harenza J, Hakonarson H, Olshan A, Diskin SJ: Discovery of rare germline 16p11.2 microdeletion associated with neuroblastoma (Podium). Cancer Biology Work in Progress Seminar Series, University of Pennsylvania, Philadelphia, PA, USA March 2019.

25. Weiner AK, Radaoui AB, Sidoli S, Conkrite KL, Vaksman Z, Rathi KS, Raman P Rokita J, Glisovic-Aplenc T, Martinez D, Bhatti T, Tsang M, Pawel B, Garcia BA, Maris JM, Diskin SJ : A multi-omic approach identifies DLK1 as a candidate oncoprotein and immunotherapeutic target in high-risk neuroblastoma (Poster). US Human Proteome Organization (US HUPO), Washington DC, USA March 2019.

26. Weiner AK, Radaoui AB, Sidoli S, Conkrite KL, Vaksman Z, Rathi KS, Raman P, Rokita J, Glisovic-Aplenc T, Martinez D, Bhatti T, Tsang M, Pawel B, Garcia BA, Maris JM, Diskin SJ : Integrative mass spectrometry and RNA-sequencing identifies DLK1 as a candidate immunotherapeutic target in neuroblastoma (Poster). American Association of Cancer Research, Atlanta, GA, USA March 2019.

27. Modi A, Conkrite K, Ramanan S, Cheung D, Vaksman Z, Harenza J, Diskin SJ: The landscape of long non-coding RNAs in neuroblastoma (Poster). NHGRI T32 Conference, St. Louis, MO, USA April 2019.

28. Ritenour L, Vaksman Z, Lopez G, Modi A, Harenza J, Hakonarson H, Olshan A, Diskin SJ: Analysis of rare germline copy number variants in 5,585 neuroblastoma patients identifies association with 16p11.2 microdeletion syndrome (Podium). Genetics Research Talks, University of Pennsylvania, Philadelphia, PA, USA April 2019.

29. Vaksman Z, Chang X, Lopez G, Modi A, Devoto M, Hakonarson H, Maris JM, Diskin SJ: A multi-ethnic genome-wide association study (GWAS) identifies eleven new neuroblastoma susceptibility loci (Poster). Society of American Gastrointestinal and Endoscopic Surgeons (SAGES) 2019 Meeting, Baltimore, MD, USA April 2019.

30. Weiner AK, Radaoui AB, Sidoli S, Conkrite KL, Vaksman Z, Rathi KS, Raman P, Rokita J, Glisovic-Aplenc T, Martinez D, Bhatti T, Tsang M, Pawel B, Garcia BA, Maris JM, Diskin SJ : Integrative mass spectrometry and RNA-sequencing identifies DLK1 as a candidate immunotherapeutic target in neuroblastoma (Podium). American Society of Mass Spectrometry (ASMS), Atlanta, GA, USA June 2019.

31. Egolf LE, Vaksman Z, Lopez G, Rokita JL, Modi A, Basta PV, Hakonarson H, Olshan AF, Diskin SJ: 16p11.2 microdeletion syndrome associates with neuroblastoma (Poster). American Society for Human Genetics (ASHG) Meeting, Houston, TX, USA October 2019.

32. Modi A, Lopez G, Ramanan S, Conkrite KL, Cheung D, Johnson ME, Manduchi E, Su C, Wells AD, Grant SFA, Diskin SJ: The landscape of long non-coding RNAs in pediatric cancers (Poster). American Society for Human Genetics (ASHG) Meeting, Houston, TX, USA October 2019.

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

1. Capasso M, Diskin SJ: Genetics and genomics of neuroblastoma. Cancer treatment and research 155: 65-84, 2010.

2. Schnepp RW, Diskin SJ: LIN28B: an orchestrator of oncogenic signaling in neuroblastoma. Cell cycle 15(6): 772-4, 2016.

3. Taylor DM, Aronow BJ, Tan K, Bernt K, Salomonis N, Greene CS, Frolova A, Henrickson SE, Wells A, Pei L, Jaiswal JK, Whitsett J, Hamilton KE, MacParland SA, Kelsen J, Heuckeroth RO, Potter SS, Vella LA, Terry NA, Ghanem LR, Kennedy BC, Helbig I, Sullivan KE, Castelo-Soccio L, Kreigstein A, Herse F, Nawijn MC, Koppelman GH, Haendel M, Harris NL, Rokita JL, Zhang Y, Regev A, Rozenblatt-Rosen O, Rood JE, Tickle TL, Vento-Tormo R, Alimohamed S, Lek M, Mar JC, Loomes KM, Barrett DM, Uapinyoying P, Beggs AH, Agrawal PB, Chen YW, Muir AB, Garmire LX, Snapper SB, Nazarian J, Seeholzer SH, Fazelinia H, Singh LN, Faryabi RB, Raman P, Dawany N, Xie HM, Devkota B, Diskin SJ, Anderson SA, Rappaport EF, Peranteau W, Wikenheiser-Brokamp KA, Teichmann S, Wallace D, Peng T, Ding YY, Kim MS, Xing Y, Kong SW, Bönnemann CG, Mandl KD, White PS.: The Pediatric Cell Atlas: Defining the Growth Phase of Human Development at Single-Cell Resolution. Dev Cell 49(1): 10-29, Apr 2019.

Books:

[none]

Alternative Media:

1. Diskin SJ: Overview of neuroblastoma epidemiology and genetic predisposition. YouTube (Advances in Neuroblastoma Research Meeting) 2016.

Patents:

[none]