

Nikolaus Schultz

Attending, Computational Oncology, Department of Epidemiology and Biostatistics

Director, Cancer Data Science Initiative

Head, Knowledge Systems, Kravis Center for Molecular Oncology

Member, Memorial Sloan Kettering Cancer Center (MSK)

321 East 61th St, 226

New York, NY 10065

schultzn@mskcc.org

<http://bit.ly/schultz-publications>

Professional Positions

2022 – present	Director, Cancer Data Science Initiative, MSK
2020 – present	Attending, Computational Oncology, Dept. of Biostatistics & Epidemiology Member, MSK
2014 – present	Head, Knowledge Systems, Center for Molecular Oncology, MSK
2020 – present	Professor, Weill Cornell Graduate School of Medical Sciences
2020 – present	Faculty, Gerstner Sloan Kettering Graduate School of Biomedical Sciences
2013 – present	Affiliate Member, Human Oncology and Pathogenesis Program
2018 – present	Affiliate Member, New York Genome Center
2014 – 2020	Associate Attending, MSK
2018 – 2020	Associate Professor, Weill Cornell Graduate School of Medical Sciences
2013 – 2014	Associate Laboratory Member, Computational Biology Center, MSK
2008 – 2013	Manager of Biocomputing and Cancer Genomics, Computational Biology Center, MSK
2004 – 2008	Postdoctoral Fellow, Computational Biology Center, MSK, laboratory of Chris Sander
2001 – 2003	Teaching faculty of the Physiology Summer Course at the Marine Biological Laboratory in Woods Hole, MA

Education

2000 – 2004	<i>Dr. rer. nat.</i> (Ph.D.) in Biochemistry, Freie Universität Berlin Research conducted in the laboratory of David L. Garbers The University of Texas Southwestern Medical Center in Dallas, TX
1994 – 2000	<i>Diplom</i> (M.S.) in Biochemistry, Freie Universität Berlin

Awards

2022	Memorial Hospital Award for Excellence in Mentoring
2020	AACR Team Science Award
2019	Geoffrey Beene Junior Faculty Chair
2015	Stupski Prize in Prostate Cancer Computational Oncology
2014	The Columbia Hospital Research Foundation Annual Award for Excellence in Obstetrical and Gynecologic Research
2014	Young Investigator Award, Prostate Cancer Foundation
2013	Josie Robertson Investigator Award, Robertson Foundation
2013	MSKCC SPORE in Prostate Cancer Career Development Award

Publications (<https://www.ncbi.nlm.nih.gov/myncbi/1vCsckvjRQh5S/bibliography/public/>)

262. Jiagge E, Jin DX, Newberg JY, Perea-Chamblee T, Pekala KR, Fong C, Waters M, Ma D, Dei-Adomakoh Y, Erb G, Arora KS, Maund SL, Njiraini N, Ntekim A, Kim S, Bai X, Thomas M, van Eeden R, Hegde P, Jee J, Chakravarty D, **Schultz N**, Berger MF, Frampton GM, Sokol ES, Carrot-Zhang J. **Tumor sequencing of African ancestry reveals differences in clinically relevant alterations across common cancers.** Cancer Cell. 2023 Oct 23:S1535-6108(23)00359-8.
261. Suehnholz SP, Nissan MH, Zhang H, Kundra R, Nandakumar S, Lu C, Carrero S, Dhaneshwar A, Fernandez N, Xu BW, Arcila ME, Zehir A, Syed A, Brannon AR, Rudolph JE, Paraiso E, Sabbatini PJ, Levine RL, Dogan A, Gao J, Ladanyi M, Drilon A, Berger MF, Solit DB, **Schultz N**, Chakravarty D. **Quantifying the Expanding Landscape of Clinical Actionability for Patients with Cancer.** Cancer Discov. 2023 Oct 18.
260. Lumish MA, Walch H, Maron SB, Chatila W, Kemel Y, Maio A, Ku GY, Ilson DH, Won E, Li J, Joshi SS, Gu P, Schattner MA, Laszkowska M, Gerdes H, Jones DR, Sihag S, Coit DG, Tang LH, Strong VE, Molena D, Stadler ZK, **Schultz N**, Janjigian YY, Cersek A. **Clinical and Molecular Characteristics of Early-Onset versus Average-Onset Esophagogastric Cancer.** J Natl Cancer Inst. 2023 Sep 12:djad186.
259. de Brujin I, Kundra R, Mastrogiacomo B, Tran TN, Sikina L, Mazor T, Li X, Ochoa A, Zhao G, Lai B, Abeshouse A, Baiceanu D, Ciftci E, Dogrusoz U, Dufilie A, Erkoc Z, Garcia Lara E, Fu Z, Gross BE, Haynes CD, Heath A, Higgins DM, Jagannathan P, Kalletla K, Kumari P, Lindsay JR, Lisman A, Leenknecht B, Lukasse P, Madala D, Madupuri R, van Nierop P, Plantalech O, Quach J, Resnick A, Rodenburg SYA, Satravada BA, Schaeffer F, Sheridan R, Singh J, Sirohi R, Sumer SO, van Hagen S, Wang A, Wilson M, Zhang H, Zhu K, Rusk N, Brown S, Lavery JA, Panageas KS, Rudolph JE, LeNoue-Newton ML, Warner JL, Guo X, Hunter-Zinck H, Yu TV, Pillai S, Nichols C, Gardos SM, Philip J, Bpc Core Team G, Project Genie Consortium A, Kehl KL, Riely GJ, Schrag D, Lee J, Fiandalo MV, Sweeney SM, Pugh TJ, Sander C, Cerami E, Gao J, **Schultz N**. **Analysis and Visualization of Longitudinal Genomic and Clinical Data from the AACR Project GENIE Biopharma Collaborative in cBioPortal.** Clin Cancer Res. 2023 Sep 1;29(17):3418-3428.
258. Skakodub A, Walch H, Tringale KR, Eichholz J, Imber BS, Vasudevan HN, Li BT, Moss NS, Hei Yu KK, Mueller BA, Powell S, Razavi P, Yu HA, Reis-Filho JS, Gomez D, **Schultz N**, Pike LRG. **Genomic analysis and clinical correlations of non-small cell lung cancer brain metastasis.** Nat Commun. 2023 Aug 17;14(1):4980.
257. Maron SB, Chatila W, Walch H, Chou JF, Ceglia N, Ptashkin R, Do RKG, Paroder V, Pandit-Taskar N, Lewis JS, Biachi De Castria T, Sabwa S, Socolow F, Feder L, Thomas J, Schulze I, Kim K, Elzein A, Bojilova V, Zatzman M, Bhanot U, Nagy RJ, Lee J, Simmons M, Segal M, Ku GY, Ilson DH, Capanu M, Hechtman JF, Merghoub T, Shah S, **Schultz N**, Solit DB, Janjigian YY. **Determinants of survival in HER2+ metastatic esophagogastric cancer.** Clin Cancer Res. 2023 Jul 5:CCR-22-3769.
256. Abate M, Walch H, Arora K, Vanderbilt CM, Fei T, Drebin H, Shimada S, Maio A, Kemel Y, Stadler ZK, Schmeltz J, Sihag S, Ku GY, Gu P, Tang L, Vardhana S, Berger MF, Brennan MF,

Schultz ND, Strong VE. Unique Genomic Alterations and Microbial Profiles Identified in Gastric Cancer Patients of African, European, and Asian Ancestry: A Novel Path for Precision Oncology. Ann Surg. 2023 Jun 29.

255. Tang C, Xie AX, Liu EM, Kuo F, Kim M, DiNatale RG, Golkaram M, Chen YB, Gupta S, Motzer RJ, Russo P, Coleman J, Carlo MI, Voss MH, Kotecha RR, Lee CH, Tansey W, **Schultz N**, Hakimi AA, Reznik E. **Immunometabolic coevolution defines unique microenvironmental niches in ccRCC.** Cell Metab. 2023 Jun 28:S1550-4131(23)00215-2.

254. Li Z, Jiao X, Robertson AG, Di Sante G, Ashton AW, DiRocco A, Wang M, Zhao J, Addya S, Wang C, McCue PA, South AP, Cordon-Cardo C, Liu R, Patel K, Hamid R, Parmar J, DuHadaway JB, Jones SJM, Casimiro MC, **Schultz N**, Kossenkov A, Phoon LY, Chen H, Lan L, Sun Y, Iczkowski KA, Rui H, Pestell RG. **The DACH1 gene is frequently deleted in prostate cancer, restrains prostatic intraepithelial neoplasia, decreases DNA damage repair, and predicts therapy responses.** Oncogene. 2023 Jun;42(22):1857-1873.

253. Choudhury NJ, Lavery JA, Brown S, de Brujin I, Jee J, Tran TN, Rizvi H, Arbour KC, Whiting K, Shen R, Hellmann M, Bedard PL, Yu C, Leighl N, LeNoue-Newton M, Micheel C, Warner JL, Ginsberg MS, Plodkowski A, Girshman J, Sawan P, Pillai S, Sweeney SM, Kehl KL, Panageas KS, **Schultz N**, Schrag D, Riely GJ. **The GENIE BPC NSCLC cohort: a real-world repository integrating standardized clinical and genomic data for 1,846 patients with non-small cell lung cancer.** Clin Cancer Res. 2023 May 24:CCR-23-0580.

252. Foote MB, Walch H, Kemel Y, Vakiani E, Johannet P, Sheehan M, Chatila W, Chung S, Nash GM, Maio A, Shia J, Mandelker D, Berger M, **Schultz N**, Diaz LA, Cerck A, Stadler ZK. **The Impact of Germline Alterations in Appendiceal Adenocarcinoma.** Clin Cancer Res. 2023 Jun 8:OF1-OF7.

251. Lengel HB, Mastrogiacomo B, Connolly JG, Tan KS, Liu Y, Fick CN, Dunne EG, He D, Lankadasari MB, Satravada BA, Sun Y, Kundra R, Fong C, Smith S, Riely GJ, Rudin CM, Gomez DR, Solit DB, Berger MF, Li BT, Mayo MW, Matei I, Lyden DC, Adusumilli PS, **Schultz N**, Sanchez-Vega F, Jones DR. **Genomic mapping of metastatic organotropism in lung adenocarcinoma.** Cancer Cell. 2023 May 8;41(5):970-985.e3.

250. Johnson WT, Ganesan N, Epstein-Peterson ZD, Moskowitz AJ, Stuver RN, Maccaro CR, Galasso N, Chang T, Khan N, Aypar U, Lewis NE, Zelenetz AD, Palomba ML, Matasar MJ, Noy A, Hamilton AM, Hamlin PA, Caron PC, Straus DJ, Intlekofer AM, Batlevi CL, Kumar A, Owens CN, Sauter CS, Falchi L, Lue JK, Vardhana SA, Salles GA, Dogan A, **Schultz ND**, Arcila ME, Horwitz SM. **TP53 mutations identify high-risk events for peripheral T-cell lymphoma treated with CHOP-based chemotherapy.** Blood Adv. 2023 Apr 20:bloodadvances.2023009953.

249. Miao E, Eichholz JE, Lebow ES, Flynn J, Zhang Z, Walch H, Hubbeling H, Beal K, Moss NS, Yu KK, Meng A, Kelly DW, Gomez DR, Li BT, Rimner A, **Schultz N**, Drilon A, Imber BS, Pike LRG. **Characterization of Central Nervous System Clinico-Genomic Outcomes in ALK-Positive Non-Small Cell Lung Cancer Patients with Brain Metastases Treated with Alectinib.** Lung Cancer. 2023 Apr;178:57-65.

248. Kasago IS, Chatila WK, Lezcano CM, Febres-Aldana CA, **Schultz N**, Vanderbilt C, Dogan S, Bartlett EK, D'Angelo SP, Tap WD, Singer S, Ladanyi M, Shoushtari AN, Busam KJ, Hameed M. **Undifferentiated and Dedifferentiated Metastatic Melanomas Masquerading as Soft Tissue Sarcomas: Mutational Signature Analysis and Immunotherapy Response.** Mod Pathol. 2023 Mar 27;36(8):100165.

247. Foote MB, Walch H, Chatila W, Vakiani E, Chandler C, Steinruecke F, Nash GM, Stadler Z, Chung S, Yaeger R, Braghrioli MI, Shia J, Kemel Y, Maio A, Sheehan M, Rousseau B, Argilés G, Berger M, Solit D, **Schultz N**, Diaz LA Jr, Cerce A. **Molecular Classification of Appendiceal Adenocarcinoma.** J Clin Oncol. 2023 Mar 10;41(8):1553-1564.

246. Chatila WK, Walch H, Hechtman JF, Moyer SM, Sgambati V, Faleck DM, Srivastava A, Tang L, Benhamida J, Ismailgeci D, Campos C, Wu F, Chang Q, Vakiani E, de Stanchina E, Weiser MR, Widmar M, Yantiss RK, Shah MA, Bass AJ, Stadler ZK, Katz LH, Mellinghoff IK, Sethi NS, **Schultz N**, Ganesh K, Kelsen D, Yaeger R. **Integrated clinical and genomic analysis identifies driver events and molecular evolution of colitis-associated cancers.** Nat Commun. 2023 Jan 7;14(1):110.

245. Giraldo NA, Drill E, Satravada BA, Dika IE, Brannon AR, Dermawan J, Mohanty A, Ozcan K, Chakravarty D, Benayed R, Vakiani E, Abou-Alfa GK, Kundra R, **Schultz N**, Li BT, Berger MF, Harding JJ, Ladanyi M, O'Reilly EM, Jarnagin W, Vanderbilt C, Basturk O, Arcila ME.

Comprehensive Molecular Characterization of Gallbladder Carcinoma and Potential Targets for Intervention. Clin Cancer Res. 2022 Dec 15;28(24):5359-5367.

244. Jee J, Lebow ES, Yeh R, Das JP, Namakydoust A, Paik PK, Chaft JE, Jayakumaran G, Rose Brannon A, Benayed R, Zehir A, Donoghue M, **Schultz N**, Chakravarty D, Kundra R, Madupuri R, Murciano-Goroff YR, Tu HY, Xu CR, Martinez A, Wilhelm C, Galle J, Daly B, Yu HA, Offin M, Hellmann MD, Lito P, Arbour KC, Zauderer MG, Kris MG, Ng KK, Eng J, Preeshagul I, Victoria Lai W, Fiore JJ, Iqbal A, Molena D, Rocco G, Park BJ, Lim LP, Li M, Tong-Li C, De Silva M, Chan DL, Diakos CI, Itchins M, Clarke S, Pavlakis N, Lee A, Rekhtman N, Chang J, Travis WD, Riely GJ, Solit DB, Gonon M, Rusch VW, Rimner A, Gomez D, Drilon A, Scher HI, Shah SP, Berger MF, Arcila ME, Ladanyi M, Levine RL, Shen R, Razavi P, Reis-Filho JS, Jones DR, Rudin CM, Isbell JM, Li BT. **Overall survival with circulating tumor DNA-guided therapy in advanced non-small-cell lung cancer.** Nat Med. 2022 Nov;28(11):2353-2363.

243. Shaashua L, Ben-Shmuel A, Pevsner-Fischer M, Friedman G, Levi-Galibov O, Nandakumar S, Barki D, Nevo R, Brown LE, Zhang W, Stein Y, Lior C, Kim HS, Bojmar L, Jarnagin WR, Lecomte N, Mayer S, Stok R, Bishara H, Hamodi R, Levy-Lahad E, Golan T, Porco JA Jr, Iacobuzio-Donahue CA, **Schultz N**, Tuveson DA, Lyden D, Kelsen D, Scherz-Shouval R. **BRCA mutational status shapes the stromal microenvironment of pancreatic cancer linking clusterin expression in cancer associated fibroblasts with HSF1 signaling.** Nat Commun. 2022 Oct 31;13(1):6513.

242. Liu Y, Chudgar N, Mastrogiacomo B, He D, Lankadasari MB, Bapat S, Jones GD, Sanchez-Vega F, Tan KS, **Schultz N**, Mukherjee S, Offit K, Bao Y, Bott MJ, Rekhtman N, Adusumilli PS, Li BT, Mayo MW, Jones DR. **A germline SNP in BRMS1 predisposes patients**

with lung adenocarcinoma to metastasis and can be ameliorated by targeting c-fos. Sci Transl Med. 2022 Oct 5;14(665):eab01050.

241. Barnett ES, **Schultz N**, Stopsack KH, Lam ET, Arfe A, Lee J, Zhao JL, Schonhoff JD, Carbone EA, Keegan NM, Wibmer A, Wang Y, Solit DB, Abida W, Wenstrup R, Scher HI. **Analysis of BRCA2 Copy Number Loss and Genomic Instability in Circulating Tumor Cells from Patients with Metastatic Castration-resistant Prostate Cancer.** Eur Urol. 2022 Sep 16:S0302-2838(22)02561-1.
240. Nassar AH, Adib E, Abou Alaiwi S, El Zarif T, Groha S, Akl EW, Nuzzo PV, Mouhieddine TH, Perea-Chamblee T, Taraszka K, El-Khoury H, Labban M, Fong C, Arora KS, Labaki C, Xu W, Sonpavde G, Haddad RI, Mouw KW, Giannakis M, Hodis FS, Zaitlen N, Schoenfeld AJ, **Schultz N**, Berger MF, MacConaill LE, Ananda G, Kwiatkowski DJ, Choueiri TK, Schrag D, Carrot-Zhang J, Gusev A. **Ancestry-driven recalibration of tumor mutational burden and disparate clinical outcomes in response to immune checkpoint inhibitors.** Cancer Cell. 2022 Sep 6:S1535-6108(22)00386-5.
239. Pugh TJ, Bell JL, Bruce JP, Doherty GJ, Galvin M, Green MF, Hunter-Zinck H, Kumari P, Lenoue-Newton ML, Li MM, Lindsay J, Mazor T, Ovalle A, Sammut SJ, **Schultz N**, Yu TV, Sweeney SM, Bernard B; AACR Project GENIE Consortium, Genomics and Analysis Working Group. **AACR Project GENIE: 100,000 Cases and Beyond.** Cancer Discov. 2022 Sep 2;12(9):2044-2057.
238. Arora K, Tran TN, Kemei Y, Mehine M, Liu YL, Nandakumar S, Smith SA, Brannon AR, Ostrovnaya I, Stopsack KH, Razavi P, Safonov A, Rizvi HA, Hellmann MD, Vijai J, Reynolds TC, Fagin JA, Carrot-Zhang J, Offit K, Solit DB, Ladanyi M, **Schultz N**, Zehir A, Brown CL, Stadler ZK, Chakravarty D, Bandlamudi C, Berger MF. **Genetic Ancestry Correlates with Somatic Differences in a Real-World Clinical Cancer Sequencing Cohort.** Cancer Discov. 2022 Sep 1:CD-22-0312.
237. Abou-Alfa GK, Bibeau K, **Schultz N**, Yaqubie A, Millang B, Ren H, Félix L. **Effect of FGFR2 Alterations on Overall and Progression-Free Survival in Patients Receiving Systemic Therapy for Intrahepatic Cholangiocarcinoma.** Target Oncol. 2022 Sep;17(5):517-527.
236. Chatila WK, Kim JK, Walch H, Marco MR, Chen CT, Wu F, Omer DM, Khalil DN, Ganesh K, Qu X, Luthra A, Choi SH, Ho YJ, Kundra R, Groves KL, Chow OS, Cerck A, Weiser MR, Widmar M, Wei IH, Pappou EP, Nash GM, Paty PB, Shi Q, Vakiani E, Duygu Selcuklu S, Donoghue MTA, Solit DB, Berger MF, Shia J, Pelosof R, Romesser PB, Yaeger R, Smith JJ, **Schultz N**, Sanchez-Vega F, Garcia-Aguilar J. **Genomic and transcriptomic determinants of response to neoadjuvant therapy in rectal cancer.** Nat Med. 2022 Aug;28(8):1646-1655.
235. Klemen ND, Court CM, Fernandes MC, Walch HS, Chatila WK, Saadat LV, Maron S, Crane C, Shia J, Cerck A, Gönen M, **Schultz ND**, Garcia Aguilar J, Jarnagin WR, D'Angelica MI. **Local Therapy for Oligoprogression or Consolidation in High Mutational Burden Stage 4 Colorectal Cancer Treated With PD-1 or PD-L1 Blockade.** Ann Surg Oncol. 2022 Aug 5.

234. Chakraborty G, Nandakumar S, Hirani R, Nguyen B, Stopsack KH, Kreitzer C, Rajanala SH, Ghale R, Mazzu YZ, Pillarsetty NVK, Lee GM, Scher HI, Morris MJ, Traina T, Razavi P, Abida W, Durack JC, Solomon SB, Vander Heiden MG, Mucci LA, Wibmer AG, **Schultz N**, Kantoff PW. **The Impact of PIK3R1 Mutations and Insulin-PI3K-Glycolytic Pathway Regulation in Prostate Cancer.** Clin Cancer Res. 2022 Aug 15;28(16):3603-3617.
233. Tsai C, Nguyen B, Luthra A, Chou JF, Feder L, Tang LH, Strong VE, Molena D, Jones DR, Coit DG, Ilson DH, Ku GY, Cowzer D, Cadley J, Capanu M, **Schultz N**, Beal K, Moss NS, Janjigian YY, Maron SB. **Outcomes and Molecular Features of Brain Metastasis in Gastroesophageal Adenocarcinoma.** JAMA Netw Open. 2022 Aug 1;5(8):e2228083.
232. Yao S, Campbell PT, Ugai T, Gierach G, Abubakar M, Adalsteinsson V, Almeida J, Brennan P, Chanock S, Golub T, Hanash S, Harris C, Hathaway CA, Kelsey K, Landi MT, Mahmood F, Newton C, Quackenbush J, Rodig S, **Schultz N**, Tearney G, Tworoger SS, Wang M, Zhang X, Garcia-Closas M, Rebbeck TR, Ambrosone CB, Ogino S. **Proceedings of the fifth international Molecular Pathological Epidemiology (MPE) meeting.** Cancer Causes Control. 2022 Aug;33(8):1107-1120.
231. Narayan RR, Datta J, Goldman DA, Aveson VG, Walch HS, Sanchez-Vega F, Gönen M, Balachandran VP, Drebin JA, Jarnagin WR, Kingham TP, Wei AC, **Schultz N**, Kemeny NE, D'Angelica MI. **Genomic Predictors of Recurrence Patterns After Complete Resection of Colorectal Liver Metastases and Adjuvant Hepatic Artery Infusion Chemotherapy.** Ann Surg Oncol. 2022 Dec;29(13):8373-8382.
230. Vos EL, Maron SB, Krell RW, Nakauchi M, Fiasconaro M, Capanu M, Walch HS, Chatila WK, **Schultz N**, Ilson DH, Janjigian YY, Ku GY, Yoon SS, Coit DG, Vanderbilt CM, Tang LH, Strong VE. **Survival of Locally Advanced MSI-high Gastric Cancer Patients Treated with Perioperative Chemotherapy: A Retrospective Cohort Study.** Ann Surg. 2022 Jun 29.
229. Sinha R, Luna A, **Schultz N**, Sander C. **A pan-cancer survey of cell line tumor similarity by feature-weighted molecular profiles.** Cell Rep Methods. 2021 Jun 21;1(2):100039.
228. Nacev BA, Sanchez-Vega F, Smith SA, Antonescu CR, Rosenbaum E, Shi H, Tang C, Socci ND, Rana S, Gualarte-Mérida R, Zehir A, Gounder MM, Bowler TG, Luthra A, Jadeja B, Okada A, Strong JA, Stoller J, Chan JE, Chi P, D'Angelo SP, Dickson MA, Kelly CM, Keohan ML, Movva S, Thornton K, Meyers PA, Wexler LH, Slotkin EK, Glade Bender JL, Shukla NN, Hensley ML, Healey JH, La Quaglia MP, Alektiar KM, Crago AM, Yoon SS, Untch BR, Chiang S, Agaram NP, Hameed MR, Berger MF, Solit DB, **Schultz N**, Ladanyi M, Singer S, Tap WD. **Clinical sequencing of soft tissue and bone sarcomas delineates diverse genomic landscapes and potential therapeutic targets.** Nat Commun. 2022 Jun 15;13(1):3405.
227. Luthra A, Mastrogiacomo B, Smith SA, Chakravarty D, **Schultz N**, Sanchez-Vega F. **Computational methods and translational applications for targeted next-generation sequencing platforms.** Genes Chromosomes Cancer. 2022 Jun;61(6):322-331.
226. Sihag S, Nussenzweig SC, Walch HS, Hsu M, Tan KS, De La Torre S, Janjigian YY, Maron SB, Ku GY, Tang LH, Shah PM, Wu A, Jones DR, Solit DB, **Schultz N**, Ganesh K, Berger MF, Molena

D. The Role of the TP53 Pathway in Predicting Response to Neoadjuvant Therapy in Esophageal Adenocarcinoma. Clin Cancer Res. 2022 Jun 13;28(12):2669-2678.

225. Mathur D, Taylor BP, Chatila WK, Scher HI, **Schultz N**, Razavi P, Xavier JB. **Optimal Strategy and Benefit of Pulsed Therapy Depend On Tumor Heterogeneity and Aggressiveness at Time of Treatment Initiation.** Mol Cancer Ther. 2022 May 4;21(5):831-843.

224. Schapiro D, Yapp C, Sokolov A, Reynolds SM, Chen YA, Sudar D, Xie Y, Muhlich J, Arias-Camison R, Arena S, Taylor AJ, Nikolov M, Tyler M, Lin JR, Burlingame EA; Human Tumor Atlas Network, Chang YH, Farhi SL, Thorsson V, Venkatamohan N, Drewes JL, Pe'er D, Gutman DA, Herrmann MD, Gehlenborg N, Bankhead P, Roland JT, Herndon JM, Snyder MP, Angelo M, Nolan G, Swedlow JR, **Schultz N**, Merrick DT, Mazzili SA, Cerami E, Rodig SJ, Santagata S, Sorger PK. **MITI minimum information guidelines for highly multiplexed tissue images.** Nat Methods. 2022 Mar;19(3):262-267.

223. Narayan RR, Aveson VG, Chou JF, Walch HS, Sanchez-Vega F, Santos Fernandes GD, Balachandran VP, D'Angelica MI, Drebin JA, Jarnagin WR, Wei AC, Cerck A, Gönen M, **Schultz N**, Kingham TP. **Association of genomic profiles and survival in early onset and screening-age colorectal cancer patients with liver metastases resected over 15 years.** J Surg Oncol. 2022 Apr;125(5):880-888.

222. Yoo A, Tang C, Zucker M, Fitzgerald K, DiNatale RG, Rappold PM, Weiss K, Freeman B, Lee CH, **Schultz N**, Motzer R, Russo P, Coleman J, Reuter VE, Chen YB, Carlo MI, Gill AJ, Kotecha RR, Ari Hakimi A, Reznik E. **Genomic and Metabolic Hallmarks of SDH- and FH-deficient Renal Cell Carcinomas.** Eur Urol Focus. 2022 Mar 11:S2405-4569(21)00312-6.

221. Nguyen B, Fong C, Luthra A, Smith SA, DiNatale RG, Nandakumar S, Walch H, Chatila WK, Madupuri R, Kundra R, Bielski CM, Mastrogiacomo B, Donoghue MTA, Boire A, Chandarlapat S, Ganesh K, Harding JJ, Iacobuzio-Donahue CA, Razavi P, Reznik E, Rudin CM, Zamarin D, Abida W, Abou-Alfa GK, Aghajanian C, Cerck A, Chi P, Feldman D, Ho AL, Iyer G, Janjigian YY, Morris M, Motzer RJ, O'Reilly EM, Postow MA, Raj NP, Riely GJ, Robson ME, Rosenberg JE, Safonov A, Shoushtari AN, Tap W, Teo MY, Varghese AM, Voss M, Yaeger R, Zauderer MG, Abu-Rustum N, Garcia-Aguilar J, Bochner B, Hakimi A, Jarnagin WR, Jones DR, Molena D, Morris L, Rios-Doria E, Russo P, Singer S, Strong VE, Chakravarty D, Ellenson LH, Gopalan A, Reis-Filho JS, Weigelt B, Ladanyi M, Gonen M, Shah SP, Massague J, Gao J, Zehir A, Berger MF, Solit DB, Bakhour SF, Sanchez-Vega F, **Schultz N.** **Genomic characterization of metastatic patterns from prospective clinical sequencing of 25,000 patients.** Cell. 2022 Feb 3;185(3):563-575.e11.

220. Jones GD, Brandt WS, Shen R, Sanchez-Vega F, Tan KS, Martin A, Zhou J, Berger M, Solit DB, **Schultz N**, Rizvi H, Liu Y, Adamski A, Chaft JE, Riely GJ, Rocco G, Bott MJ, Molena D, Ladanyi M, Travis WD, Rekhtman N, Park BJ, Adusumilli PS, Lyden D, Imielinski M, Mayo MW, Li BT, Jones DR. **A Genomic-Pathologic Annotated Risk Model to Predict Recurrence in Early-Stage Lung Adenocarcinoma.** JAMA Surg. 2021 Feb 1;156(2):e205601.

219. Choi J, Holowatyj AN, Du M, Chen Z, Wen W, **Schultz N**, Lipworth L, Guo X. **Distinct Genomic Landscapes in Early-Onset and Late-Onset Endometrial Cancer.** JCO Precis Oncol. 2022 Feb;6:e2100401.

218. de Bruijn I, Li X, Sumer SO, Gross B, Sheridan R, Ochoa A, Wilson M, Wang A, Zhang H, Lisman A, Abeshouse A, Zhang E, Thum A, Sadagopan A, Heins Z, Kandoth C, Rodenburg S, Tan S, Lukasse P, van Hagen S, Fijneman RJA, Meijer GA, **Schultz N**, Gao J. **Genome Nexus: A Comprehensive Resource for the Annotation and Interpretation of Genomic Variants in Cancer.** JCO Clin Cancer Inform. 2022 Feb;6:e2100144.
217. Moy RH, Walch HS, Mattar M, Chatila WK, Molena D, Strong VE, Tang LH, Maron SB, Coit DG, Jones DR, Hechtman JF, Solit DB, **Schultz N**, de Stanchina E, Janjigian YY. **Defining and Targeting Esophagogastric Cancer Genomic Subsets With Patient-Derived Xenografts.** JCO Precis Oncol. 2022 Feb;6:e2100242.
216. Chi P, Qin LX, Nguyen B, Kelly CM, D'Angelo SP, Dickson MA, Gounder MM, Keohan ML, Movva S, Nacev BA, Rosenbaum E, Thornton KA, Crago AM, Yoon S, Ulaner G, Yeh R, Martindale M, Phelan HT, Biniakewitz MD, Warda S, Lee CJ, Berger MF, **Schultz ND**, Singer S, Hwang S, Chen Y, Antonescu CR, Tap WD. **Phase II Trial of Imatinib Plus Binimetinib in Patients With Treatment-Naive Advanced Gastrointestinal Stromal Tumor.** J Clin Oncol. 2022 Mar 20;40(9):997-1008. doi: 10.1200/JCO.21.02029. Epub 2022 Jan 18.
215. Alatise OI, Knapp GC, Sharma A, Chatila WK, Arowolo OA, Olasehinde O, Famurewa OC, Omisore AD, Komolafe AO, Olaofe OO, Katung AI, Ibikunle DE, Egberongbe AA, Olatoke SA, Agodirin SO, Adesiyun OA, Adeyeye A, Kolawole OA, Olakanmi AO, Arora K, Constable J, Shah R, Basunia A, Sylvester B, Wu C, Weiser MR, Seier K, Gonen M, Stadler ZK, Kemel Y, Vakiani E, Berger MF, Chan TA, Solit DB, Shia J, Sanchez-Vega F, **Schultz N**, Brennan M, Smith JJ, Kingham TP. **Molecular and phenotypic profiling of colorectal cancer patients in West Africa reveals biological insights.** Nat Commun. 2021 Nov 24;12(1):6821.
214. Srinivasan P, Bandlamudi C, Jonsson P, Kemel Y, Chavan SS, Richards AL, Penson AV, Bielski CM, Fong C, Syed A, Jayakumaran G, Prasad M, Hwee J, Sumer SO, de Bruijn I, Li X, Gao J, **Schultz N**, Cambria R, Galle J, Mukherjee S, Vijai J, Cadoo KA, Carlo MI, Walsh MF, Mandelker D, Ceyhan-Birsoy O, Shia J, Zehir A, Ladanyi M, Hyman DM, Zhang L, Offit K, Robson ME, Solit DB, Stadler ZK, Berger MF, Taylor BS. **The context-specific role of germline pathogenicity in tumorigenesis.** Nat Genet. 2021 Nov;53(11):1577-1585.
213. Brown S, Lavery JA, Shen R, Martin AS, Kehl KL, Sweeney SM, Lepisto EM, Rizvi H, McCarthy CG, **Schultz N**, Warner JL, Park BH, Bedard PL, Riely GJ, Schrag D, Panageas KS; AACR Project GENIE Consortium. **Implications of Selection Bias Due to Delayed Study Entry in Clinical Genomic Studies.** JAMA Oncol. 2021 Nov 4.
212. Stopsack KH, Nandakumar S, Arora K, Nguyen B, Vasselman SE, Nweji B, McBride SM, Morris MJ, Rathkopf DE, Slovin SF, Danila DC, Autio KA, Scher HI, Mucci LA, Solit DB, Gonen M, Chen Y, Berger MF, **Schultz N**, Abida W, Kantoff PW. **Differences in prostate cancer genomes by self-reported race: Contributions of genetic ancestry, modifiable cancer risk factors, and clinical factors.** Clin Cancer Res. 2021 Oct 19:clincanres.2577.2021.
211. Attalla K, DiNatale RG, Rappold PM, Fong CJ, Sanchez-Vega F, Silagy AW, Weng S, Coleman J, Lee CH, Carlo MI, Durack JC, Solomon SB, Reuter VE, Russo P, Chan TA, Motzer RJ, **Schultz**

ND, Reznik E, Voss MH, Hakimi AA. Prevalence and Landscape of Actionable Genomic Alterations in Renal Cell Carcinoma. Clin Cancer Res. 2021 Oct 15;27(20):5595-5606.

210. Stadler ZK, Maio A, Chakravarty D, Kemei Y, Sheehan M, Salo-Mullen E, Tkachuk K, Fong CJ, Nguyen B, Erakky A, Cadoo K, Liu Y, Carlo MI, Latham A, Zhang H, Kundra R, Smith S, Galle J, Aghajanian C, Abu-Rustum N, Varghese A, O'Reilly EM, Morris M, Abida W, Walsh M, Drilon A, Jayakumaran G, Zehir A, Ladanyi M, Ceyhan-Birsoy O, Solit DB, **Schultz N**, Berger MF, Mandelker D, Diaz LA Jr, Offit K, Robson ME. **Therapeutic Implications of Germline Testing in Patients With Advanced Cancers.** J Clin Oncol. 2021 Aug 20;39(24):2698-2709.

209. Cerck A, Chatila WK, Yaeger R, Walch H, Fernandes GDS, Krishnan A, Palmaira L, Maio A, Kemei Y, Srinivasan P, Bandlamudi C, Salo-Mullen E, Tejada PR, Belanfanti K, Galle J, Joseph V, Segal N, Varghese A, Reidy-Lagunes D, Shia J, Vakiani E, Mondaca S, Mendelsohn R, Lumish MA, Steinruecke F, Kemeny N, Connell L, Ganesh K, Markowitz A, Nash G, Guillem J, Smith JJ, Paty PB, Zhang L, Mandelker D, Birsoy O, Robson M, Offit K, Taylor B, Berger M, Solit D, Weiser M, Saltz LB, Aguilar JG, **Schultz N**, Diaz LA, Stadler ZK. **A Comprehensive Comparison of Early-Onset and Average-Onset Colorectal Cancers.** J Natl Cancer Inst. 2021 Aug 18:djab124.

208. Do RKG, Lupton K, Causa Andrieu PI, Luthra A, Taya M, Batch K, Nguyen H, Rahurkar P, Gazit L, Nicholas K, Fong CJ, Gangai N, **Schultz N**, Zulkernine F, Sevilimedu V, Juluru K, Simpson A, Hricak H. **Patterns of Metastatic Disease in Patients with Cancer Derived from Natural Language Processing of Structured CT Radiology Reports over a 10-year Period.** Radiology. 2021 Aug 3:210043.

207. Ku GY, Kemei Y, Maron SB, Chou JF, Ravichandran V, Shameer Z, Maio A, Won ES, Kelsen DP, Ilson DH, Capanu M, Strong VE, Molena D, Sihag S, Jones DR, Coit DG, Tuvy Y, Cowie K, Solit DB, **Schultz N**, Hechtman JF, Offit K, Joseph V, Mandelker D, Janjigian YY, Stadler ZK.

Prevalence of Germline Alterations on Targeted Tumor-Normal Sequencing of Esophagogastric Cancer. JAMA Netw Open. 2021 Jul 1;4(7):e2114753.

206. Nguyen B, Sanchez-Vega F, Fong CJ, Chatila WK, Boroujeni AM, Pareja F, Weigelt B, Sotiriou C, Larsimont D, Reis-Filho JS, Desmedt C, **Schultz N**. **The genomic landscape of carcinomas with mucinous differentiation.** Sci Rep. 2021 May 4;11(1):9478.

205. Shoushtari AN, Chatila WK, Arora A, Sanchez-Vega F, Kantheti HS, Rojas Zamalloa JA, Krieger P, Callahan MK, Betof Warner A, Postow MA, Momtaz P, Nair S, Ariyan CE, Barker CA, Brady MS, Coit DG, Rosen N, Chapman PB, Busam KJ, Solit DB, Panageas KS, Wolchok JD, **Schultz N**. **Therapeutic Implications of Detecting MAPK-Activating Alterations in Cutaneous and Unknown Primary Melanomas.** Clin Cancer Res. 2021 Apr 15;27(8):2226-2235.

204. Sihag S, Nussenzweig SC, Walch H, Hsu M, Tan KS, Sanchez-Vega F, Chatila WK, De La Torre SA, Patel A, Janjigian YY, Maron SB, Ku GY, Tang LH, Hechtman JF, Shah PM, Wu AJ, Jones DR, Molena D, Solit DB, **Schultz N**, Berger MF. **Next-Generation Sequencing of 487 Esophageal Adenocarcinomas Reveals Independently Prognostic Genomic Driver Alterations and Pathways.** Clin Cancer Res. 2021 Apr 1.

203. Boerner T, Drill E, Pak LM, Nguyen B, Sigel CS, Doussot A, Shin P, Goldman DA, Gonen M, Allen PJ, Balachandran VP, Cerck A, Harding J, Solit DB, **Schultz N**, Kundra R, Walch H, D'Angelica MI, DeMatteo RP, Drebin J, Kemeny NE, Kingham TP, Simpson AL, Hechtman JF, Vakiani E, Lowery MA, Ijzermans JNM, Buettner S, Koerkamp BG, Doukas M, Chandwani R, Jarnagin WR. **Genetic Determinants of Outcome in Intrahepatic Cholangiocarcinoma.** Hepatology. 2021 Mar 25. doi: 10.1002/hep.31829.
204. Fiala EM, Jayakumaran G, Mauguen A, Kennedy JA, Bouvier N, Kemel Y, Fleischut MH, Maio A, Salo-Mullen EE, Sheehan M, Arnold AG, Latham A, Carlo MI, Cadoo K, Murkherjee S, Slotkin EK, Trippett T, Bender JG, Meyers PA, Wexler L, Dela Cruz FS, Cheung NK, Basu E, Kentsis A, Ortiz M, Francis JH, Dunkel IJ, Khakoo Y, Gilheeney S, Sait SF, Forlenza CJ, Sulis M, Karajannis M, Modak S, Gerstle JT, Heaton TE, Roberts S, Yang C, Jairam S, Vijai J, Topka S, Friedman DN, Stadler ZK, Robson M, Berger MF, **Schultz N**, Ladanyi M, O'Reilly RJ, Abramson DH, Ceyhan-Birsoy O, Zhang L, Mandelker D, Shukla NN, Kung AL, Offit K, Zehir A, Walsh MF. **Prospective pan-cancer germline testing using MSK-IMPACT informs clinical translation in 751 patients with pediatric solid tumors.** Nat Cancer. 2021 Mar;2:357-365.
203. Kundra R, Zhang H, Sheridan R, Sirintrapun SJ, Wang A, Ochoa A, Wilson M, Gross B, Sun Y, Madupuri R, Satravada BA, Reales D, Vakiani E, Al-Ahmadie HA, Dogan A, Arcila M, Zehir A, Maron S, Berger MF, Viaplana C, Janeway K, Ducar M, Sholl L, Dogan S, Bedard P, Surrey LF, Sanchez IH, Syed A, Rema AB, Chakravarty D, Suehnholz S, Nissan M, Iyer GV, Murali R, Bouvier N, Soslow RA, Hyman D, Younes A, Intlekofer A, Harding JJ, Carvajal RD, Sabbatini PJ, Abou-Alfa GK, Morris L, Janjigian YY, Gallagher MM, Soumerai TA, Mellinghoff IK, Hakimi AA, Fury M, Huse JT, Bagrodia A, Hameed M, Thomas S, Gardos S, Cerami E, Mazor T, Kumari P, Raman P, Shivedasani P, MacFarland S, Newman S, Waanders A, Gao J, Solit D, **Schultz N.** **OncoTree: A Cancer Classification System for Precision Oncology.** JCO Clin Cancer Inform. 2021 Feb;5:221-230.
202. Bielska AA, Chatila WK, Walch H, **Schultz N**, Stadler ZK, Shia J, Reidy-Lagunes D, Yaeger R. **Tumor Mutational Burden and Mismatch Repair Deficiency Discordance as a Mechanism of Immunotherapy Resistance.** J Natl Compr Canc Netw. 2021 Feb 2;19(2):130-133.
201. Jones GD, Brandt WS, Shen R, Sanchez-Vega F, Tan KS, Martin A, Zhou J, Berger M, Solit DB, **Schultz N**, Rizvi H, Liu Y, Adamski A, Chaft JE, Riely GJ, Rocco G, Bott MJ, Molena D, Ladanyi M, Travis WD, Rekhtman N, Park BJ, Adusumilli PS, Lyden D, Imielinski M, Mayo MW, Li BT, Jones DR. **A Genomic-Pathologic Annotated Risk Model to Predict Recurrence in Early-Stage Lung Adenocarcinoma.** JAMA Surg. 2021 Feb 1;156(2):e205601.
200. Boerner T, Walch HS, Nguyen B, Iasonos A, Zhou QC, **Schultz N**, Chui MH, Grisham RN, Tew WP, O'Cearbhaill RE, Aghajanian C, Zivanovic O, Abu-Rustum NR, Gardner GJ, Sonoda Y, Chi DS, Long Roche K. **Exploring the clinical significance of serous tubal intraepithelial carcinoma associated with advanced high-grade serous ovarian cancer: A Memorial Sloan Kettering Team Ovary Study.** Gynecol Oncol. 2020 Dec 29:S0090-8258(20)34225-6.
199. Yaeger R, Paroder V, Bates DDB, Capanu M, Chou J, Tang L, Chatila W, **Schultz N**, Hersch J, Kelsen D. **Systemic Chemotherapy for Metastatic Colitis-Associated Cancer Has a Worse**

Outcome Than Sporadic Colorectal Cancer: Matched Case Cohort Analysis. Clin Colorectal Cancer. 2020 Dec;19(4):e151-e156.

198. Caso R, Sanchez-Vega F, Tan KS, Mastrogiacomo B, Zhou J, Jones GD, Nguyen B, **Schultz N**, Connolly JG, Brandt WS, Bott MJ, Rocco G, Molena D, Isbell JM, Liu Y, Mayo MW, Adusumilli PS, Travis WD, Jones DR. **The Underlying Tumor Genomics of Predominant Histologic Subtypes in Lung Adenocarcinoma.** J Thorac Oncol. 2020 Dec;15(12):1844-1856.
197. Datta J, Narayan RR, Goldman DA, Chatila WK, Gonen M, Strong J, Balachandran VP, Drebin JA, Kingham TP, Jarnagin WR, **Schultz N**, Kemeny NE, D'Angelica MI. **Distinct Genomic Profiles are Associated With Conversion to Resection and Survival in Patients With Initially Unresectable Colorectal Liver Metastases Treated With Systemic and Hepatic Artery Chemotherapy.** Ann Surg. 2020 Nov 17.
196. Mateo J, McKay R, Abida W, Aggarwal R, Alumkal J, Alva A, Feng F, Gao X, Graff J, Hussain M, Karzai F, Montgomery B, Oh W, Patel V, Rathkopf D, Rettig M, **Schultz N**, Smith M, Solit D, Sternberg C, Van Allen E, VanderWeele D, Vinson J, Soule HR, Chinnaiyan A, Small E, Simons JW, Dahut W, Miyahira AK, Beltran H. **Accelerating precision medicine in metastatic prostate cancer.** Nat Cancer. 2020 Nov;1(11):1041-1053.
195. Wise DR, Schneider JA, Armenia J, Febles VA, McLaughlin B, Brennan R, Thoren KL, Abida W, Sfanos KS, De Marzo AM, Yegnasubramanian S, Fox JJ, Haas M, Heath H, Kagey MH, Newman W, Sirard CA, Fleisher M, Morris MJ, Chen Y, Larson SM, Haffner MC, Nelson PS, **Schultz N**, Garabedian MJ, Scher HI, Logan SK, Sawyers CL; International SU2C/PCF Prostate Cancer Dream Team. **Dickkopf-1 Can Lead to Immune Evasion in Metastatic Castration-Resistant Prostate Cancer.** JCO Precis Oncol. 2020 Sep 29;4:PO.20.00097.
194. Adileh M, Yuval JB, Walch HS, Chatila WK, Yaeger R, Garcia-Aguilar J, **Schultz N**, Paty PB, Cercek A, Nash GM. **Primary Tumor Location and Outcomes After Cytoreductive Surgery and Intraperitoneal Chemotherapy for Peritoneal Metastases of Colorectal Origin.** Ann Surg Oncol. 2020 Aug 25.
193. Mazzu YZ, Armenia J, Nandakumar S, Chakraborty G, Yoshikawa Y, Jehane LE, Lee GM, Atiq M, Khan N, **Schultz N**, Kantoff PW. **Ribonucleotide reductase small subunit M2 is a master driver of aggressive prostate cancer.** Mol Oncol. 2020 Aug;14(8):1881-1897.
192. Thomas S, Lichtenberg T, Dang K, Fitzsimons M, Grossman RL, Kundra R, Lavery JA, Lenoue-Newton ML, Panageas KS, Sawyers C, **Schultz ND**, Sirintrapun SJ, Topaloglu U, Welch A, Yu T, Zehir A, Gardos S. **Linked Entity Attribute Pair (LEAP): A Harmonization Framework for Data Pooling.** JCO Clin Cancer Inform. 2020 Aug;4:691-699.
191. Mondaca S, Walch H, Nandakumar S, Chatila WK, **Schultz N**, Yaeger R. **Specific Mutations in APC, but Not Alterations in DNA Damage Response, Associate With Outcomes of Patients With Metastatic Colorectal Cancer.** Gastroenterology. 2020 Jul 27:S0016-5085(20)35004-6.
190. Ochoa A, **Schultz N**. **Data Portals and Analysis.** In: Roychowdhury, S., Van Allen, E., ed. Precision Cancer Medicine. Springer. 2020: 169-196.

189. Park W, Chen J, Chou JF, Varghese AM, Yu KH, Wong W, Capanu M, Balachandran V, McIntyre CA, El Dika I, Khalil DN, Harding JJ, Ghalehsari N, McKinnell Z, Chalasani SB, Makarov V, Selenica P, Pei X, Lecomte N, Kelsen DP, Abou-Alfa GK, Robson ME, Zhang L, Berger MF, **Schultz N**, Chan TA, Powell SN, Reis-Filho JS, Iacobuzio-Donahue CA, Riaz N, O'Reilly EM. **Genomic Methods Identify Homologous Recombination Deficiency in Pancreas Adenocarcinoma and Optimize Treatment Selection.** Clin Cancer Res. 2020 Jul 1;26(13):3239-3247.
188. Stopsack KH, Nandakumar S, Wibmer AG, Haywood S, Weg ES, Barnett ES, Kim CJ, Carbone EA, Vasselman SE, Nguyen B, Hullings MA, Scher HI, Morris MJ, Solit DB, **Schultz N**, Kantoff PW, Abida W. **Oncogenic genomic alterations, clinical phenotypes, and outcomes in metastatic castration-sensitive prostate cancer.** Clin Cancer Res. 2020 Jul 1;26(13):3230-3238.
187. Cerck A, Dos Santos Fernandes G, Roxburgh CS, Ganesh K, Ng S, Sanchez-Vega F, Yaeger R, Segal NH, Reidy-Lagunes DL, Varghese AM, Markowitz A, Wu C, Szeglin B, Sauvé CG, Salo-Mullen E, Tran C, Patel Z, Krishnan A, Tkachuk K, Nash GM, Guillen J, Paty PB, Shia J, **Schultz N**, Garcia-Aguilar J, Diaz LA, Goodman K, Saltz LB, Weiser MR, Smith JJ, Stadler ZK. **Mismatch Repair Deficient Rectal Cancer and Resistance to Neoadjuvant Chemotherapy.** Clin Cancer Res. 2020 Jul 1;26(13):3271-3279.
186. Gorelick AN, Sánchez-Rivera FJ, Cai Y, Bielski CM, Biederstedt E, Jonsson P, Richards AL, Vasan N, Penson AV, Friedman ND, Ho YJ, Baslan T, Bandlamudi C, Scaltriti M, **Schultz N**, Lowe SW, Reznik E, Taylor BS. **Phase and context shape the function of composite oncogenic mutations.** Nature. 2020 Jun;582(7810):100-103.
185. Janjigian YY, Maron SB, Chatila WK, Millang B, Chavan SS, Alterman C, Chou JF, Segal MF, Simmons MZ, Momtaz P, Shcherba M, Ku GY, Zervoudakis A, Won ES, Kelsen DP, Ilson DH, Nagy RJ, Lanman RB, Ptashkin RN, Donoghue MTA, Capanu M, Taylor BS, Solit DB, **Schultz N**, Hechtman JF. **First-line pembrolizumab and trastuzumab in HER2-positive oesophageal, gastric, or gastro-oesophageal junction cancer: an open-label, single-arm, phase 2 trial.** Lancet Oncol. 2020 May 18:S1470-2045(20)30169-8.
184. Mota JM, Barnett E, Nauseef JT, Nguyen B, Stopsack KH, Wibmer A, Flynn JR, Heller G, Danila DC, Rathkopf D, Slovin S, Kantoff PW, Scher HI, Morris MJ, **Schultz N**, Solit DB, Abida W. **Platinum-Based Chemotherapy in Metastatic Prostate Cancer With DNA Repair Gene Alterations.** JCO Precis Oncol. 2020;4:355-366.
183. Nguyen B, Mota JM, Nandakumar S, Stopsack KH, Weg E, Rathkopf D, Morris MJ, Scher HI, Kantoff PW, Gopalan A, Zamaran D, Solit DB, **Schultz N**, Abida W. **Pan-cancer Analysis of CDK12 Alterations Identifies a Subset of Prostate Cancers with Distinct Genomic and Clinical Characteristics.** Eur Urol. 2020 Apr 19:S0302-2838(20)30199-8.
182. Smyth LM, Zhou Q, Nguyen B, Yu C, Lepisto EM, Arnedos M, Hassett MJ, Lenoue-Newton ML, Blauvelt N, Dogan S, Micheel CM, Wathoo C, Horlings H, Hudecek J, Gross BE, Kundra R, Sweeney SM, Gao J, **Schultz N**, Zarski A, Gardos SM, Lee J, Sheffler-Collins S, Park BH, Sawyers CL, Andre F, Levy M, Meric-Bernstam F, Bedard PL, Iasonos A, Schrag D, Hyman DM, Genie Consortium AP. **Characteristics and outcome of AKT1 E17K-mutant breast cancer**

defined through AACR GENIE, a clinicogenomic registry. Cancer Discov. 2020 Apr;10(4):526-535.

181. Wagner AH, Walsh B, Mayfield G, Tamborero D, Sonkin D, Krysiak K, Deu-Pons J, Duren RP, Gao J, McMurry J, Patterson S, Del Vecchio Fitz C, Pitel BA, Sezerman OU, Ellrott K, Warner JL, Rieke DT, Aittokallio T, Cerami E, Ritter DI, Schriml LM, Freimuth RR, Haendel M, Raca G, Madhavan S, Baudis M, Beckmann JS, Dienstmann R, Chakravarty D, Li XS, Mockus S, Elemento O, **Schultz N**, Lopez-Bigas N, Lawler M, Goecks J, Griffith M, Griffith OL, Margolin AA; Variant Interpretation for Cancer Consortium. **A harmonized meta-knowledgebase of clinical interpretations of somatic genomic variants in cancer.** Nat Genet. 2020 Apr;52(4):448-457.

180. Datta J, Smith JJ, Chatila WK, McAuliffe JC, Kandoth C, Vakiani E, Frankel TL, Ganesh K, Wasserman I, Lipsyc-Sharf M, Guillem J, Nash GM, Paty PB, Weiser MR, Saltz LB, Berger MF, Jarnagin WR, Balachandran V, Kingham TP, Kemeny NE, Cersek A, Garcia-Aguilar J, Taylor BS, Viale A, Yaeger R, Solit DB, **Schultz N**, D'Angelica MI. **Co-Altered Ras/B-raf and TP53 is Associated with Extremes of Survivorship and Distinct Patterns of Metastasis in Metastatic Colorectal Cancer Patients.** Clin Cancer Res. 2020 Mar 1;26(5):1077-1085.

179. Kurnat-Thoma E, Baranova A, Baird P, Brodsky E, Butte AJ, Cheema AK, Cheng F, Dutta S, Grant C, Giordano J, Maitland-van der Zee AH, Fridsma DB, Jarrin R, Kann MG, Keeney J, Loscalzo J, Madhavan G, Maron BA, McBride DK, McKean M, Mun SK, Palmer JC, Patel B, Parakh K, Pariser AR, Pristipino C, Radstake TRDJ, Rajasimha HK, Rouse WB, Rozman D, Saleh A, Schmidt HHHW, **Schultz N**, Sethi T, Silverman EK, Skopac J, Svab I, Trujillo S, Valentine JE, Verma D, West BJ, Vasudevan S. **Recent Advances in Systems and Network Medicine: Meeting Report from the First International Conference in Systems and Network Medicine.** Syst Med (New Rochelle). 2020 Feb 26;3(1):22-35.

178. ICGC/TCGA Consortium. **Pan-Cancer Analysis of Whole Genomes.** Nature. 2020 Feb;578(7793):82-93.

177. Moy RH, Dos Santos Fernandes G, Jonsson P, Chou JF, Basunia A, Ku GY, Chalasani SB, Boyar MS, Goldberg Z, Desai AM, Gabler A, Berger MF, Tang LH, Hechtman JF, Kelsen DP, Schattner M, Ilson DH, Solit DB, Taylor BS, **Schultz N**, Capanu M, Janjigian YY. **Regorafenib in Combination with First-Line Chemotherapy for Metastatic Esophagogastric Cancer.** Oncologist. 2020 Jan;25(1):e68-e74.

176. Zhou J, Sanchez-Vega F, Caso R, Tan KS, Brandt WS, Jones GD, Yan S, Adusumilli PS, Bott M, Huang J, Isbell JM, Sihag S, Molena D, Rusch VW, Chatila WK, Rekhtman N, Yang F, Ladanyi M, Solit DB, Berger MF, **Schultz N**, Jones DR. **Analysis of Tumor Genomic Pathway Alterations Using Broad-Panel Next Generation Sequencing in Surgically Resected Lung Adenocarcinoma.** Clin Cancer Res. 2019 Dec 15;25(24):7475-7484.

175. Penson A, Camacho N, Zheng Y, Varghese AM, Al-Ahmadie H, Razavi P, Chandarlapaty S, Vallejo CE, Vakiani E, Gilewski T, Rosenberg JE, Shady M, Tsui DWY, Reales DN, Abeshouse A, Syed A, Zehir A, **Schultz N**, Ladanyi M, Solit DB, Klimstra DS, Hyman DM, Taylor BS, Berger MF. **Development of Genome-Derived Tumor Type Prediction to Inform Clinical Cancer Care.** JAMA Oncol. 2019 Nov 14;6(1):84-91.

174. Vokes NI, Liu D, Ricciuti B, Jimenez-Aguilar E, Rizvi H, Dietlein F, He MX, Margolis CA, Elmarakeby HA, Girshman J, Adeni A, Sanchez-Vega F, **Schultz N**, Dahlberg S, Zehir A, Jänne PA, Nishino M, Umeton R, Sholl LM, Van Allen EM, Hellmann MD, Awad MM. **Harmonization of Tumor Mutational Burden Quantification and Association With Response to Immune Checkpoint Blockade in Non-Small-Cell Lung Cancer.** JCO Precis Oncol. 2019;3:PO.19.00171. Epub 2019 Nov 12.
173. Smith JJ, Chatila WK, Sanchez-Vega F, Datta J, Connell LC, Szeglin BC, Basunia A, Boucher TM, Hauser H, Wasserman I, Wu C, Cerck A, Hechtman JF, Madden C, Jarnagin WR, Garcia-Aguilar J, D'Angelica MI, Yaeger R, **Schultz N**, Kemeny NE. **Genomic stratification beyond Ras/B-Raf in colorectal liver metastasis patients treated with hepatic arterial infusion.** Cancer Med. 2019 Nov;8(15):6538-6548.
172. Cerck A, Boerner T, Tan BR, Chou JF, Gönen M, Boucher TM, Hauser HF, Do RKG, Lowery MA, Harding JJ, Varghese AM, Reidy-Lagunes D, Saltz L, **Schultz N**, Kingham TP, D'Angelica MI, DeMatteo RP, Drebin JA, Allen PJ, Balachandran VP, Lim KH, Sanchez-Vega F, Vachharajani N, Majella Doyle MB, Fields RC, Hawkins WG, Strasberg SM, Chapman WC, Diaz LA Jr, Kemeny NE, Jarnagin WR. **Assessment of Hepatic Arterial Infusion of Flouxuridine in Combination With Systemic Gemcitabine and Oxaliplatin in Patients With Unresectable Intrahepatic Cholangiocarcinoma: A Phase 2 Clinical Trial.** JAMA Oncol. 2019 Oct 31;6(1):60-67.
171. Greally M, Chou JF, Chatila WK, Margolis M, Capanu M, Hechtman JF, Tuvy Y, Kundra R, Daian F, Ladanyi M, Kelsen DP, Ilson DH, Berger MF, Tang LH, Solit DB, Diaz LA, **Schultz N**, Janjigian YY, Ku GY. **Clinical and molecular predictors of response to immune checkpoint inhibitors in patients with advanced esophagogastric cancer.** Clin Cancer Res. 2019 Oct 15;25(20):6160-6169.
170. Ho AS, Ochoa A, Jayakumaran G, Zehir A, Valero Mayor C, Tepe J, Makarov V, Dalin MG, He J, Bailey M, Montesion M, Ross JS, Miller VA, Chan L, Ganly I, Dogan S, Katai N, Tsipouras P, Ha P, Agrawal N, Solit DB, Futreal PA, El Naggar AK, Reis-Filho JS, Weigelt B, Ho AL, **Schultz N**, Chan TA, Morris LG. **Genetic hallmarks of recurrent/metastatic adenoid cystic carcinoma.** J Clin Invest. 2019 Oct 1;129(10):4276-4289.
169. Wu P, Heins ZJ, Muller JT, Katsnelson L, de Brujin I, Abeshouse AA, **Schultz N**, Fenyö D, Gao J. Integration and Analysis of CPTAC Proteomics Data in the Context of Cancer Genomics in the cBioPortal. **Mol Cell Proteomics.** 2019 Sep;18(9):1893-1898.
168. Vedanayagam J, Chatila WK, Aksoy BA, Majumdar S, Skanderup AJ, Demir E, **Schultz N**, Sander C, Lai EC. Cancer-associated mutations in DICER1 RNase IIIa and IIIb domains exert similar effects on miRNA biogenesis. **Nat Commun.** 2019 Aug 15;10(1):3682.
167. Hastings K, Yu H, Wei W, Sanchez-Vega F, DeVeaux M, Choi J, Rizvi H, Lisberg A, Truini A, Lydon CA, Liu Z, Henick BS, Wurtz A, Cai G, Plodkowski AJ, Long NM, Halpenny DF, Killam J, Oliva I, **Schultz N**, Riely GJ, Arcila ME, Ladanyi M, Zelterman D, Herbst RS, Goldberg SB, Awad MM, Garon EB, Gettinger S, Hellmann MD, Politi K. **EGFR mutation subtypes and response to immune checkpoint blockade treatment in non-small cell lung cancer.** Ann Oncol. 2019 Aug 1;30(8):1311-1320.

166. Tao JJ, Eubank MH, Schram AM, Cangemi N, Pamer E, Rosen EY, Schultz N, Chakravarty D, Philip J, Hechtman JF, Harding JJ, Smyth LM, Jhaveri KL, Drilon A, Ladanyi M, Solit DB, Zehir A, Berger MF, Stetson PD, Gardos SM, Hyman DM. Real-World Outcomes of an Automated Physician Support System for Genome-Driven Oncology. *JCO Precis Oncol*. 2019 Jul 24;3:PO.19.00066.
165. Jonsson P, Bandlamudi C, Cheng ML, Srinivasan P, Chavan SS, Friedman ND, Rosen EY, Richards AL, Bouvier N, Selcuklu SD, Bielski CM, Abida W, Mandelker D, Birsoy O, Zhang L, Zehir A, Donoghue MTA, Baselga J, Offit K, Scher HI, O'Reilly EM, Stadler ZK, **Schultz N**, Socci ND, Viale A, Ladanyi M, Robson ME, Hyman DM, Berger MF, Solit DB, Taylor BS. **Tumour lineage shapes BRCA-mediated phenotypes**. *Nature*. 2019 Jul;571(7766):576-579.
164. Won E, Basunia A, Chatila WK, Hechtman JF, Chou JF, Ku GY, Chalasani SB, Boyar MS, Goldberg Z, Desai AM, Tuvy Y, Berger MF, Tang LH, Kelsen DP, Schattner M, Ilson DH, Capanu M, Solit DB, **Schultz N**, Janjigian YY. **Efficacy of combined VEGFR1-3, PDGF α/β , and FGFR1-3 blockade using nintedanib for esophagogastric cancer**. *Clin Cancer Res*. 2019 Jul 1;25(13):3811-3817.
163. Abida W, Cyrtà J, Heller G, Prandi D, Armenia J, Coleman I, Cieslik M, Benelli M, Robinson D, Van Allen EM, Sboner A, Fedrizzi T, Mosquera JM, Robinson BD, De Sarkar N, Kunju LP, Tomlins S, Wu YM, Nava Rodrigues D, Loda M, Gopalan A, Reuter VE, Pritchard CC, Mateo J, Bianchini D, Miranda S, Carreira S, Rescigno P, Filipenko J, Vinson J, Montgomery RB, Beltran H, Heath EI, Scher HI, Kantoff PW, Taplin ME, **Schultz N**, deBono JS, Demichelis F, Nelson PS, Rubin MA, Chinnaiyan AM, Sawyers CL. **Genomic correlates of clinical outcome in advanced prostate cancer**. *Proc Natl Acad Sci U S A*. 2019 Jun 4;116(23):11428-11436.
162. Abida W, Cheng ML, Armenia J, Middha S, Autio KA, Vargas HA, Rathkopf D, Morris MJ, Danila DC, Slovin SF, Carbone E, Barnett ES, Hullings M, Hechtman JF, Zehir A, Shia J, Jonsson P, Stadler ZK, Srinivasan P, Laudone VP, Reuter V, Wolchok JD, Socci ND, Taylor BS, Berger MF, Kantoff PW, Sawyers CL, **Schultz N**, Solit DB, Gopalan A, Scher HI. **Analysis of the Prevalence of Microsatellite Instability in Prostate Cancer and Response to Immune Checkpoint Blockade**. *JAMA Oncol*. 2019 Apr 1;5(4):471-478.
161. Harding JJ, Nandakumar S, Armenia J, Khalil DN, Albano M, Ly M, Shia J, Hechtman JF, Kundra R, El Dika I, Do RK, Sun Y, Kingham TP, D'Angelica MI, Berger MF, Hyman DM, Jarnagin WR, Klimstra DS, Janjigian YY, Solit DB, **Schultz N***, Abou-Alfa GK*. **Prospective Genotyping of Hepatocellular Carcinoma: Clinical Implications of Next Generation Sequencing for Matching Patients to Targeted and Immune Therapies**. *Clin Cancer Res*. 2019 Apr 1;25(7):2116-2126.
160. Xu J, Reznik E, Lee HJ, Gundem G, Jonsson P, Sarungbam J, Bialik A, Sanchez-Vega F, Creighton CJ, Hoekstra J, Zhang L, Sajjakulnukit P, Kremer D, Tolstyka Z, Casuscelli J, Stirdvant S, Tang J, **Schultz N**, Jeng P, Dong Y, Su W, Cheng EH, Russo P, Coleman JA, Papaemmanuil E, Chen YB, Reuter VE, Sander C, Kennedy SR, Hsieh JJ, Lyssiotis CA, Tickoo SK, Hakimi AA. **Abnormal oxidative metabolism in a quiet genomic background underlies clear cell papillary renal cell carcinoma**. *Elife*. 2019 Apr 1;8:e38986.

159. Nacev BA, Feng L, Bagert JD, Lemiesz AE, Gao J, Soshnev AA, Kundra R, **Schultz N**, Muir TW, Allis CD. **The expanding landscape of 'oncohistone' mutations in human cancers.** Nature. 2019 Mar;567(7749):473-478.
158. Mondaca S, Chatila WK, Bates D, Hechtman JF, Cercek A, Segal NH, Stadler ZK, Varghese AM, Kundra R, Capanu M, Shia J, **Schultz N**, Saltz L, Yaeger R. **FOLFCIS Treatment and Genomic Correlates of Response in Advanced Anal Squamous Cell Cancer.** Clin Colorectal Cancer. 2019 Mar;18(1):e39-e52.
157. Offin M, Rizvi H, Tenet M, Ni A, Sanchez-Vega F, Li BT, Drilon A, Kris MG, Rudin CM, **Schultz N**, Arcila ME, Ladanyi M, Riely GJ, Yu H, Hellmann MD. **Tumor Mutation Burden and Efficacy of EGFR-Tyrosine Kinase Inhibitors in Patients with EGFR-Mutant Lung Cancers.** Clin Cancer Res. 2019 Feb 1;25(3):1063-1069.
156. Sanchez-Vega F, Hechtman JF, Castel P, Ku GY, Tuvy Y, Won H, Fong CJ, Bouvier N, Nanjangud GJ, Soong J, Vakiani E, Schattner M, Kelsen DP, Lefkowitz RA, Brown K, Lacouture ME, Capanu M, Mattar M, Qeriqi B, Cecchi F, Tian Y, Hembrough T, Nagy RJ, Lanman RB, Larson SM, Pandit-Taskar N, Schoder H, Iacobuzio-Donahue CA, Ilson DH, Weber WA, Berger MF, de Stanchina E, Taylor BS, Lewis JS, Solit DB, Carrasquillo JA, Scaltriti M, **Schultz N**, Janjigian YY. **EGFR and MET Amplifications Determine Response to HER2 Inhibition in ERBB2-Amplified Esophagogastric Cancer.** Cancer Discov. 2019 Feb;9(2):199-209.
155. Pietzak EJ, Zabor EC, Bagrodia A, Armenia J, Hu W, Zehir A, Funt S, Audenet F, Barron D, Maamouri N, Li Q, Teo MY, Arcila ME, Berger MF, **Schultz N**, Dalbagni G, Herr HW, Bajorin DF, Rosenberg JE, Al-Ahmadie H, Bochner BH, Solit DB, Iyer G. **Genomic Differences Between "Primary" and "Secondary" Muscle-invasive Bladder Cancer as a Basis for Disparate Outcomes to Cisplatin-based Neoadjuvant Chemotherapy.** Eur Urol. 2019 Feb;75(2):231-239.
154. Elfandy H, Armenia J, Pederzoli F, Pullman E, Pértega-Gomes N, **Schultz N**, Viswanathan K, Vosoughi A, Blattner M, Stopsack KH, Zadra G, Penney KL, Mosquera JM, Tyekucheva S, Mucci LA, Barbieri C, Loda M. **Genetic and Epigenetic Determinants of Aggressiveness in Cribriform Carcinoma of the Prostate.** Mol Cancer Res. 2019 Feb;17(2):446-456.
153. Cho SJ, Yoon C, Lee JH, Chang KK, Lin JX, Kim YH, Kook MC, Aksoy BA, Park DJ, Ashktorab H, Smoot DT, **Schultz N**, Yoon SS. **KMT2C Mutations in Diffuse-Type Gastric Adenocarcinoma Promote Epithelial-to-Mesenchymal Transition.** Clin Cancer Res. 2018 Dec 15;24(24):6556-6569.
152. Li Z, Razavi P, Li Q, Toy W, Liu B, Ping C, Hsieh W, Sanchez-Vega F, Brown DN, Da Cruz Paula AF, Morris L, Selenica P, Eichenberger E, Shen R, **Schultz N**, Rosen N, Scaltriti M, Brogi E, Baselga J, Reis-Filho JS, Chandarlapat S. **Loss of the FAT1 Tumor Suppressor Promotes Resistance to CDK4/6 Inhibitors via the Hippo Pathway.** Cancer Cell. 2018 Dec 10;34(6):893-905.e8.
151. Micheel CM, Sweeney SM, LeNoue-Newton ML, André F, Bedard PL, Guinney J, Meijer GA, Rollins BJ, Sawyers CL, **Schultz N**, Shaw KRM, Velculescu VE, Levy MA; AACR Project GENIE Consortium. **American Association for Cancer Research Project Genomics Evidence Neoplasia Information Exchange: From Inception to First Data Release and**

Beyond-Lessons Learned and Member Institutions' Perspectives. JCO Clin Cancer Inform. 2018 Dec;2:1-14.

150. Rodrigues DN, Rescigno P, Liu D, Yuan W, Carreira S, Lambros MB, Seed G, Mateo J, Riisnaes R, Mullane S, Margolis C, Miao D, Miranda S, Dolling D, Clarke M, Bertan C, Crespo M, Boysen G, Ferreira A, Sharp A, Figueiredo I, Keliher D, Aldubayan S, Burke KP, Sumanasuriya S, Fontes MS, Bianchini D, Zafeiriou Z, Teixeira Mendes LS, Mouw K, Schweizer MT, Pritchard CC, Salipante S, Taplin ME, Beltran H, Rubin MA, Cieslik M, Robinson D, Heath E, **Schultz N**, Armenia J, Abida W, Scher H, Lord C, D'Andrea A, Sawyers CL, Chinnaiyan AM, Alimonti A, Nelson PS, Drake CG, Van Allen EM, de Bono JS. **Immunogenomic analyses associate immunological alterations with mismatch repair defects in prostate cancer.** J Clin Invest. 2018 Oct 1;128(10):4441-4453.
149. Razavi P, Chang MT, Xu G, Bandlamudi C, Ross DS, Vasan N, Cai Y, Bielski CM, Donoghue MTA, Jonsson P, Penson A, Shen R, Pareja F, Kundra R, Middha S, Cheng ML, Zehir A, Kandoth C, Patel R, Huberman K, Smyth LM, Jhaveri K, Modi S, Traina TA, Dang C, Zhang W, Weigelt B, Li BT, Ladanyi M, Hyman DM, **Schultz N**, Robson ME, Hudis C, Brogi E, Viale A, Norton L, Dickler MN, Berger MF, Iacobuzio-Donahue CA, Chandarlapaty S, Scaltriti M, Reis-Filho JS, Solit DB, Taylor BS, Baselga J. **The Genomic Landscape of Endocrine-Resistant Advanced Breast Cancers.** Cancer Cell. 2018 Sep 10;34(3):427-438.e6.
148. Hieronymus H, Murali R, Tin A, Yadav K, Abida W, Moller H, Berney D, Scher H, Carver B, Scardino P, **Schultz N**, Taylor B, Vickers A, Cuzick J, Sawyers CL. **Tumor copy number alteration burden is a pan-cancer prognostic factor associated with recurrence and death.** Elife. 2018 Sep 4;7.
147. Mateo J, Chakravarty D, Dienstmann R, Jezdic S, Gonzalez-Perez A, Lopez-Bigas N, Ng CKY, Bedard PL, Tortora G, Douillard JY, Van Allen EM, **Schultz N**, Swanton C, André F, Pusztai L. **A framework to rank genomic alterations as targets for cancer precision medicine: the ESMO Scale for Clinical Actionability of molecular Targets (ESCAT).** Ann Oncol. 2018 Sep 1;29(9):1895-1902.
146. Lowery MA, Ptashkin RN, Jordan EJ, Berger MF, Zehir A, Capanu M, Kemeny NE, O'Reilly EM, El Dika I, Jarnagin WR, Harding JJ, D'Angelica MI, Cercek A, Hechtman JF, Solit DB, **Schultz N**, Hyman DM, Klimstra DS, Saltz L, Abou-Alfa GK. **Comprehensive molecular profiling of intra- and extrahepatic cholangiocarcinomas: potential targets for intervention.** Clin Cancer Res. 2018 Sep 1;24(17):4154-4161.
145. Gala K, Li Q, Sinha A, Razavi P, Dorso M, Sanchez-Vega F, Chung YR, Hendrickson R, Hsieh J, Berger M, **Schultz N**, Pastore A, Abdel-Wahab O, Chandarlapaty S. **KMT2C mediates the estrogen dependence of breast cancer through regulation of ERα enhancer function.** Oncogene. 2018 Aug;37(34):4692-4710.
144. Bielski CM, Zehir A, Penson AV, Donoghue MTA, Chatila W, Armenia J, Chang MT, Schram AM, Jonsson P, Bandlamudi C, Razavi P, Iyer G, Robson ME, Stadler ZK, **Schultz N**, Baselga J, Solit DB, Hyman DM, Berger MF, Taylor BS. **Genome doubling shapes the evolution and prognosis of advanced cancers.** Nat Genet. 2018 Aug;50(8):1189-1195.

143. van Beek EJAH, Hernandez JM, Goldman DA, Davis JL, McLaughlin K, Ripley RT, Kim TS, Tang LH, Hechtman JF, Zheng J, Capanu M, **Schultz N**, Hyman DM, Ladanyi M, Berger MF, Solit DB, Janjigian YY, Strong VE. **Rates of TP53 Mutation are Significantly Elevated in African American Patients with Gastric Cancer.** Ann Surg Oncol. 2018 Jul;25(7):2027-2033.
142. Shen H, Shih J, Hollern DP, Wang L, Bowlby R, Tickoo SK, Thorsson V, Mungall AJ, Newton Y, Hegde AM, Armenia J, Sánchez-Vega F, Pluta J, Pyle LC, Mehra R, Reuter VE, Godoy G, Jones J, Shelley CS, Feldman DR, Vidal DO, Lessel D, Kulis T, Cárcano FM, Leraas KM, Lichtenberg TM, Brooks D, Cherniack AD, Cho J, Heiman DI, Kasaian K, Liu M, Noble MS, Xi L, Zhang H, Zhou W, Zenklusen JC, Hutter CM, Felau I, Zhang J, **Schultz N**, Getz G, Meyerson M, Stuart JM; Cancer Genome Atlas Research Network, Akbani R, Wheeler DA, Laird PW, Nathanson KL, Cortessis VK, Hoadley KA. **Integrated Molecular Characterization of Testicular Germ Cell Tumors.** Cell Rep. 2018 Jun 12;23(11):3392-3406.
141. Wang J, Sheridan R, Sumer SO, **Schultz N**, Xu D, Gao J. **G2S: A web-service for annotating genomic variants on 3D protein structures.** Bioinformatics. 2018 Jun 1;34(11):1949-1950.
140. Armenia J, Mullane SA, Liu D, Gao J, Kundra R, Reznik E, Chatila WK, Chakravarty D, Han GC, Coleman I, Montgomery B, Pritchard C, Morrissey C, Barbieri CE, Beltran H, Sboner A, Zafeiriou Z, Miranda S, Bielski CM, Penson AV, Huang FW, Robinson D, Wu YM, Lonigro R, Garraway LA, Demichelis F, Kantoff PW, Taplin ME, Abida W, Taylor BS, Scher HI, Nelson PS, de Bono JS, Rubin MA, Sawyers CL, Chinnaiyan AM, PCF/SUC International Prostate Cancer Dream Team, **Schultz N***, Van Allen EM*. **The long tail of oncogenic drivers in prostate cancer.** Nat Genet. 2018 May;50(5):645-651.
139. Wang Q, Armenia J, Zhang C, Penson AV, Reznik E, Zhang L, Minet T, Ochoa A, Gross BE, Iacobuzio-Donahue CA, Betel D, Taylor BS, Gao J, **Schultz N. Unifying cancer and normal RNA sequencing data from different sources.** Sci Data. 2018 Apr 17;5:180061.
138. Chang MT, Penson AV, Desai NB, Socci ND, Shen R, Seshan V, Kundra R, Abeshouse AA, Viale A, Cha EK, Hao X, Reuter V, Rudin CM, Bochner BH, Rosenberg JE, Bajorin DF, **Schultz N**, Berger MF, Iyer G, Solit DB, Al-Ahmadie HA, Taylor BS. **Small-cell carcinomas of the bladder and lung are characterized by a convergent but distinct pathogenesis.** Clin Cancer Res. 2018 Apr 15;24(8):1965-1973.
137. Sanchez-Vega F, Mina M, Armenia J, Chatila WK, Luna A, La KC, Dimitriadov S, Liu DL, Kantheti HS, Saghafinia S, Chakravarty D, Daian F, Gao Q, Bailey MH, Liang WW, Foltz SM, Shmulevich I, Ding L, Heins Z, Ochoa A, Gross B, Gao J, Zhang H, Kundra R, Kandoth C, Bahcecici I, Dervishi L, Dogrusoz U, Zhou W, Shen H, Laird PW, Way GP, Greene CS, Liang H, Xiao Y, Wang C, Iavarone A, Berger AH, Bivona TG, Lazar AJ, Hammer GD, Giordano T, Kwong LN, McArthur G, Huang C, Tward AD, Frederick MJ, McCormick F, Meyerson M; Cancer Genome Atlas Research Network, Van Allen EM, Cherniack AD, Ciriello G, Sander C, **Schultz N. Oncogenic Signaling Pathways in The Cancer Genome Atlas.** Cell. 2018 Apr 5;173(2):321-337.e10.
136. Way GP, Sanchez-Vega F, La K, Armenia J, Chatila WK, Luna A, Sander C, Cherniack AD, Mina M, Ciriello G, **Schultz N**, Cancer Genome Atlas Research Network, Sanchez Y, Greene CS.

Machine Learning Detects Pan-cancer Ras Pathway Activation in The Cancer Genome Atlas.
Cell Rep. 2018 Apr 3;23(1):172-180.e3.

135. Mondaca S, Margolis M, Sanchez-Vega F, Jonsson P, Riches JC, Ku GY, Hechtman JF, Tuvy Y, Berger MF, Shah MA, Kelsen DP, Ilson DH, Yu K, Goldberg Z, Epstein AS, Desai A, Chung V, Chou JF, Capanu M, Solit DB, **Schultz N**, Janjigian YY. **Phase II study of trastuzumab with modified docetaxel, cisplatin, and 5 fluorouracil in metastatic HER2-positive gastric cancer.** Gastric Cancer. 2019 Mar;22(2):355-362.
134. Banito A, Li X, Laporte AN, Roe JS, Sanchez-Vega F, Huang CH, Dancsok AR, Hatzi K, Chen CC, Tschaharganeh DF, Chandwani R, Tasdemir N, Jones KB, Capecchi MR, Vakoc CR, **Schultz N**, Ladanyi M, Nielsen TO, Lowe SW. **The SS18-SSX Oncoprotein Hijacks KDM2B-PRC1.1 to Drive Synovial Sarcoma.** Cancer Cell. 2018 Mar 12;33(3):527-541.e8.
133. Ng PK, Li J, Jeong KJ, Shao S, Chen H, Tsang YH, Sengupta S, Wang Z, Bhavana VH, Tran R, Soewito S, Minussi DC, Moreno D, Kong K, Dogruluk T, Lu H, Gao J, Tokheim C, Zhou DC, Johnson AM, Zeng J, Ip CKM, Ju Z, Wester M, Yu S, Li Y, Vellano CP, **Schultz N**, Karchin R, Ding L, Lu Y, Cheung LWT, Chen K, Shaw KR, Meric-Bernstam F, Scott KL, Yi S, Sahni N, Liang H, Mills GB. **Systematic Functional Annotation of Somatic Mutations in Cancer.** Cancer Cell. 2018 Mar 12;33(3):450-462.e10.
132. Rizvi H, Sanchez-Vega F, La K, Chatila W, Jonsson P, Halpenny D, Plodkowski A, Long N, Sauter JL, Rekhtman N, Hollmann T, Schalper KA, Gainor JF, Shen R, Ni A, Arbour KC, Merghoub T, Wolchok J, Snyder A, Chaft JE, Kris MG, Rudin CM, Socci ND, Berger MF, Taylor BS, Zehir A, Solit DB, Arcila ME, Ladanyi M, Riely GJ, **Schultz N**, Hellmann MD. **Molecular Determinants of Response to Anti-Programmed Cell Death (PD)-1 and Anti-Programmed Death-Ligand (PD-L)-Ligand 1 Blockade in Patients With Non-Small-Cell Lung Cancer Profiled With Targeted Next-Generation Sequencing.** J Clin Oncol. 2018 Mar 1;36(7):633-641.
131. Chang MT, Bhattarai ST, Schram AM, Bielski CM, Donoghue MTA, Jonsson P, Chakravarty D, Phillips S, Kandoth C, Penson A, Gorelick A, Shamu T, Patel S, Harris C, Gao J, Sumer SO, Kundra R, Razavi P, Li BT, Reales DN, Socci ND, Jayakumaran G, Zehir A, Benayed R, Arcila ME, Chandarlapaty S, Ladanyi M, **Schultz N**, Baselga J, Berger MF, Rosen N, Solit DB, Hyman DM, Taylor BS. **Accelerating discovery of functional mutant alleles in cancer.** Cancer Discov. 2018 Feb;8(2):174-183.
130. Yaeger R, Chatila WK, Lipsyc MD, Hechtman JF, Cerck A, Sanchez-Vega F, Jayakumaran G, Middha S, Zehir A, Donoghue MTA, You D, Viale A, Kemeny N, Segal NH, Stadler ZK, Varghese AM, Kundra R, Gao J, Syed A, Hyman D, Vakiani E, Rosen N, Taylor BS, Ladanyi M, Berger MF, Solit DB, Shia J, Saltz L, **Schultz N**. **Clinical sequencing defines the genomic landscape of metastatic colorectal cancer.** Cancer Cell. 2018 Jan 8;33(1):125-136.e3.
129. Janjigian YY, Sanchez-Vega F, Jonsson P, Chatila WK, Hechtman JF, Ku GY, Riches JC, Tuvy Y, Kundra R, Bouvier N, Vakiani E, Gao J, Heins ZJ, Gross BE, Kelsen DP, Zhang L, Strong VE, Schattner M, Gerdes H, Coit DG, Bains M, Stadler ZK, Rusch VW, Jones DR, Molena D, Shia J, Robson ME, Capanu M, Middha S, Zehir A, Hyman DM, Scaltriti M, Ladanyi M, Rosen N, Ilson DH, Berger MF, Tang L, Taylor BS, Solit DB, **Schultz N**. **Genetic predictors of response to systemic therapy in esophagogastric cancer.** Cancer Discov. 2018 Jan;8(1):49-58.

128. Pietzak EJ, Bagrodia A, Cha EK, Drill EN, Iyer G, Isharwal S, Ostrovnaya I, Baez P, Li Q, Berger MF, Zehir A, **Schultz N**, Rosenberg JE, Bajorin DF, Dalbagni G, Al-Ahmadie H, Solit DB, Bochner BH. **Next-generation Sequencing of Nonmuscle Invasive Bladder Cancer Reveals Potential Biomarkers and Rational Therapeutic Targets.** Eur Urol. 2017 Dec;72(6):952-959.
127. Varghese AM, Arora A, Capanu M, Camacho N, Won HH, Zehir A, Gao J, Chakravarty D, **Schultz N**, Klimstra DS, Ladanyi M, Hyman DM, Solit DB, Berger MF, Saltz LB. **Clinical and molecular characterization of patients with cancer of unknown primary in the modern era.** Ann Oncol. 2017 Dec 1;28(12):3015-3021.
126. Robertson AG, Kim J, Al-Ahmadie H, Bellmunt J, Guo G, Cherniack AD, Hinoue T, Laird PW, Hoadley KA, Akbani R, Castro MAA, Gibb EA, Kanchi RS, Gordenin DA, Shukla SA, Sanchez-Vega F, Hansel DE, Czerniak BA, Reuter VE, Su X, de Sa Carvalho B, Chagas VS, Mungall KL, Sadeghi S, Pedamallu CS, Lu Y, Klimczak LJ, Zhang J, Choo C, Ojesina AI, Bullman S, Leraas KM, Lichtenberg TM, Wu CJ, **Schultz N**, Getz G, Meyerson M, Mills GB, McConkey DJ; TCGA Research Network, Weinstein JN, Kwiatkowski DJ, Lerner SP. **Comprehensive Molecular Characterization of Muscle-Invasive Bladder Cancer.** Cell. 2017 Oct 19;171(3):540-556.e25.
125. Lowery MA, Jordan EJ, Basturk O, Ptashkin RN, **Schultz N**, Klimstra DS, Zehir A, Abou-Alfa GK, Allen PJ, Harding JJ, Hechtman JF, Jarnagin WR, Varghese AM, Yu KH, Schattner M, Hyman DM, Glassman D, Covington C, Maynard H, Leach T, Askan G, Herbst B, Berger MF, Iacobuzio-Donahue CA, Saltz L, Solit DB, Balachandran VP, Leach SD, O'Reilly E. **Real Time Genomic Profiling of Pancreatic Ductal Adenocarcinoma: Potential Actionability and Correlation with Clinical Phenotype.** Clin Cancer Res. 2017 Oct 15;23(20):6094-6100.
124. Thomas AA, Abrey LE, Terziev R, Raizer J, Martinez NL, Forsyth P, Paleologos N, Matasar M, Sauter CS, Moskowitz C, Nimer SD, DeAngelis LM, Kaley T, Grimm S, Louis DN, Cairncross JG, Panageas KS, Briggs S, Faivre G, Mohile NA, Mehta J, Jonsson P, Chakravarty D, Gao J, **Schultz N**, Brennan CW, Huse JT, Omuro A. **Multicenter Phase II Study of Temozolomide and Myeloablative Chemotherapy with Autologous Stem Cell Transplant for Newly Diagnosed Anaplastic Oligodendroglioma.** Neuro Oncol. 2017 Oct 1;19(10):1380-1390.
123. Amin EM, Liu Y, Deng S, Tan KS, Chudgar N, Mayo MW, Sanchez-Vega F, Adusumilli PS, **Schultz N**, Jones DR. **The RNA-editing enzyme ADAR promotes lung adenocarcinoma migration and invasion by stabilizing FAK.** Sci Signal. 2017 Sep 19;10(497).
122. Schram AM, Reales D, Galle J, Cambria R, Durany R, Feldman D, Sherman E, Rosenberg J, D'Andrea G, Baxi S, Janjigian Y, Tap W, Dickler M, Baselga J, Taylor BS, Chakravarty D, Gao J, **Schultz N**, Solit DB, Berger MF, Hyman DM. **Oncologist use and perception of large panel next-generation tumor sequencing.** Ann Oncol. 2017 Sep 1;28(9):2298-2304.
121. Grommes C, Pastore A, Palaskas N, Tang SS, Campos C, Schartz D, Codega P, Nichol D, Clark O, Hsieh WY, Rohle D, Rosenblum MK, Viale A, Tabar V, Brennan CW, Gavrilovic IT, Kaley TJ, Nolan C, Omuro AMP, Pentsova E, Thomas AA, Tsvykin E, Noy A, Palomba ML, Hamlin PA, Sauter C, Moskowitz CH, Wolfe J, Dogan A, Won M, Glass J, Peak S, Lallana EC, Hatzoglou V, Reiner AS, Gutin P, Huse JT, Panageas K, Graeber TG, **Schultz N**, DeAngelis LM, Mellinghoff IK.

Ibrutinib Unmasks Critical Role of Bruton Tyrosine Kinase in Primary CNS Lymphoma.

Cancer Discov. 2017 Sep;7(9):1018-1029.

120. Mina M, Raynaud F, Tavernari D, Battistello E, Sungalee S, Saghafinia S, Laessle T, Sanchez-Vega F, **Schultz N**, Oricchio E, Ciriello G. **Conditional Selection of Genomic Alterations Dictates Cancer Evolution and Oncogenic Dependencies.** Cancer Cell. 2017 Aug 14;32(2):155-168.e6.

119. The AACR Project GENIE Consortium. **AACR Project GENIE: Powering Precision Medicine Through An International Consortium.** Cancer Discov. 2017 Aug;7(8):818-831.

118. Chakravarty D, Gao J, Phillips SM, Kundra R, Zhang H, Wang J, Rudolph JE, Yaeger R, Soumerai T, Nissan MH, Chang MT, Chandarlapaty S, Traina TA, Paik P, Ho AL, Hantash FM, Grupe A, Baxi SS, Callahan MK, Snyder A, Chi P, Danila DC, Gounder M, Harding JJ, Hellmann MD, Iyer G, Janjigian YY, Kaley T, Levine DA, Lowery M, Omuro A, Postow MA, Rathkopf D, Shoushtari AN, Shukla N, Voss MH, Paraiso E, Zehir A, Berger MF, Taylor BS, Saltz LB, Riely GJ, Ladanyi M, Hyman DB, Baselga J, Sabbatini P, Solit DB, **Schultz N. OncoKB: A Precision Oncology Knowledge Base.** JCO Precis Oncol. 2017 Jul;2017. doi: 10.1200/PO.17.00011.

117. Abida W, Armenia J, Gopalan A, Brennan R, Walsh M, Barron B, Danila D, Rathkopf D, Morris M, Slovin S, McLaughlin B, Curtis K, Hyman DM, Durack JC, Solomon SB, Arcila ME, Zehir A, Syed A, Gao J, Chakravarty D, Vargas HE, Robson ME, Joseph V, Offit K, Donoghue MTA, Abeshouse AA, Kundra R, Heins ZJ, Penson AV, Harris C, Taylor BS, Ladanyi M, Mandelker D, Zhang L, Reuter VE, Kantoff PW, Solit DB, Berger MF, Sawyers CL, **Schultz N**, Scher HI. **Prospective genomic profiling of prostate cancer across disease states reveals germline and somatic alterations that may impact clinical decision-making.** JCO Precis Oncol. 2017 Jul;2017. doi: 10.1200/PO.17.00029.

116. Bahcecı I, Dogrusoz U, La KC, Babur Ö, Gao J, **Schultz N. PathwayMapper: a collaborative visual web editor for cancer pathways and genomic data.** Bioinformatics. 2017 Jul 15;33(14):2238-2240.

115. Bose R, Karthaus WR, Armenia J, Abida W, Iaquinta PJ, Zhang Z, Wongvipat J, Wasmuth EV, Shah N, Sullivan PS, Doran MG, Wang P, Patruno A, Zhao Y; International SU2C/PCF Prostate Cancer Dream Team, Zheng D, **Schultz N**, Sawyers CL. **ERF mutations reveal a balance of ETS factors controlling prostate oncogenesis.** Nature. 2017 Jun 29;546(7660):671-675.

114. Zehir A, Benayed R, Shah RH, Syed A, Middha S, Kim HR, Srinivasan P, Gao J, Chakravarty D, Devlin SM, Hellmann MD, Barron DA, Schram AM, Hameed M, Dogan S, Ross DS, Hechtman JF, DeLair DF, Yao J, Mandelker DL, Cheng DT, Chandramohan R, Mohanty AS, Ptashkin RN, Jayakumaran G, Prasad M, Syed MH, Rema AB, Liu ZY, Nafa K, Borsu L, Sadowska J, Casanova J, Bacares R, Kiecka IJ, Razumova A, Son JB, Stewart L, Baldi T, Mullaney KA, Al-Ahmadi H, Vakiani E, Abeshouse AA, Penson AV, Jonsson P, Camacho N, Chang MT, Won HH, Gross BE, Kundra R, Heins ZJ, Chen HW, Phillips S, Zhang H, Wang J, Ochoa A, Wills J, Eubank M, Thomas SB, Gardos SM, Reales DN, Galle J, Durany R, Cambria R, Abida W, Cersek A, Feldman DR, Gounder MM, Hakimi AA, Harding JJ, Iyer G, Janjigian YY, Jordan EJ, Kelly CM, Lowery MA, Morris LGT, Omuro AM, Raj N, Razavi P, Shoushtari AN, Shukla N, Soumerai TE, Varghese AM, Yaeger R, Coleman J, Bochner B, Riely GJ, Saltz LB, Scher HI, Sabbatini PJ, Robson ME,

Klimstra DS, Taylor BS, Baselga J, **Schultz N**, Hyman DM, Arcila ME, Solit DB, Ladanyi M, Berger MF. **Mutational landscape of metastatic cancer revealed from prospective clinical sequencing of 10,000 patients.** Nat Med. 2017 Jun;23(6):703-713.

113. The Cancer Genome Atlas Research Network. **Comprehensive and Integrative Genomic Characterization of Hepatocellular Carcinoma.** Cell. 2017 Jun 15;169(7):1327-1341.e23.

112. Jordan EJ, Kim HR, Arcila ME, Barron DA, Chakravarty D, Gao J, Chang MT, Ni A, Kundra R, Jonsson P, Jayakumaran G, Gao SP, Johnsen HC, Hanrahan AJ, Zehir A, Rekhtman N, Ginsberg MS, Li BT, Yu H, Paik PK, Drilon A, Hellmann MD, Reales DN, Benayed R, Rusch VW, Kris MG, Chaft JE, Baselga J, Taylor BS, **Schultz N**, Rudin CM, Hyman DM, Berger MF, Solit DB, Ladanyi M, Riely GJ. **Prospective Comprehensive Molecular Characterization of Lung Adenocarcinomas for Efficient Patient Matching to Approved and Emerging Therapies.** Cancer Discov. 2017 Jun;7(6):596-609.

111. The Cancer Genome Atlas Research Network. **Integrated genomic and molecular characterization of cervical cancer.** Nature. 2017 Mar 16;543(7645):378-384.

110. Graham NA, Minasyan A, Lomova A, Cass A, Balanis NG, Friedman M, Chan S, Zhao S, Delgado A, Go J, Beck L, Hurtz C, Ng C, Qiao R, Ten Hoeve J, Palaskas N, Wu H, Müschen M, Multani AS, Port E, Larson SM, **Schultz N**, Braas D, Christofk HR, Mellinghoff IK, Graeber TG. **Recurrent patterns of DNA copy number alterations in tumors reflect metabolic selection pressures.** Mol Syst Biol. 2017 Feb 15;13(2):914.

109. Owczarek TB, Kobayashi T, Ramirez R, Rong L, Puzio-Kuter AM, Iyer G, Teo MY, Sanchez-Vega F, Wang J, **Schultz N**, Zheng T, Solit DB, Al-Ahmadie HA, Abate-Shen C. **ARF confers a context-dependent response to chemotherapy in muscle invasive bladder cancer.** Cancer Res. 2017 Feb 15;77(4):1035-1046.

108. Gao J, Chang MT, Johnsen HC, Gao SP, Sylvester BE, Sumer SO, Zhang H, Solit DB, Taylor BS, **Schultz N***, Sander C*. **3D clusters of somatic mutations in cancer reveal numerous rare mutations as functional targets.** Genome Med. 2017 Jan 23;9(1):4.

107. Reznik E, Wang Q, La K, **Schultz N**, Sander C. **Mitochondrial respiratory gene expression is suppressed in many cancers.** Elife. 2017 Jan 18;6. pii: e21592.

106. The Cancer Genome Atlas Research Network. **Integrated genomic characterization of oesophageal carcinoma.** Nature. 2017 Jan 12;541(7636):169-175.

105. Bagrodia A, Lee BH, Lee W, Cha EK, Sfakianos JP, Iyer G, Pietzak EJ, Gao SP, Zabor EC, Ostrovnaya I, Kaffenberger SD, Syed A, Arcila ME, Chaganti RS, Kundra R, Eng J, Hreiki J, Vacic V, Arora K, Oschwald DM, Berger MF, Bajorin DF, Bains MS, **Schultz N**, Reuter VE, Sheinfeld J, Bosl GJ, Al-Ahmadie HA, Solit DB, Feldman DR. **Genetic Determinants of Cisplatin Resistance in Patients With Advanced Germ Cell Tumors.** J Clin Oncol. 2016 Nov 20;34(33):4000-4007.

104. Chen YB, Xu J, Skanderup AJ, Dong Y, Brannon AR, Wang L, Won HH, Wang PI, Nanjangud GJ, Jungbluth AA, Li W, Ojeda V, Hakimi AA, Voss MH, **Schultz N**, Motzer RJ, Russo P, Cheng EH, Giancotti FG, Lee W, Berger MF, Tickoo SK, Reuter VE, Hsieh JJ. **Molecular analysis of**

aggressive renal cell carcinoma with unclassified histology reveals distinct subsets. Nat Commun. 2016 Oct 7;7:13131.

103. Dalin MG, Desrichard A, Katabi N, Makarov V, Walsh LA, Lee KW, Wang Q, Armenia J, West L, Dogan S, Wang L, Ramaswami D, Ho AL, Ganly I, Solit D, Berger MF, **Schultz N**, Reis-Filho JS, Chan TA, Morris LG. **Comprehensive molecular characterization of salivary duct carcinoma reveals actionable targets and similarity to apocrine breast cancer.** Clin Cancer Res. 2016 Sep 15;22(18):4623-33.

102. Pritchard CC, Mateo J, Walsh MF, De Sarkar N, Abida W, Beltran H, Garofalo A, Gulati R, Carreira S, Eeles R, Elemento O, Rubin MA, Robinson D, Lonigro R, Hussain M, Chinnaian A, Vinson J, Filipenko J, Garraway L, Taplin ME, AlDubayan S, Han GC, Beightol M, Morrissey C, Nghiem B, Cheng HH, Montgomery B, Walsh T, Casadei S, Berger M, Zhang L, Zehir A, Vijai J, Scher HI, Sawyers C, **Schultz N**, Kantoff PW, Solit D, Robson M, Van Allen EM, Offit K, de Bono J, Nelson PS. **Inherited DNA-Repair Gene Mutations in Men with Metastatic Prostate Cancer.** N Engl J Med. 2016 Aug 4;375(5):443-53.

101. Yaeger R, Shah MA, Miller VA, Kelsen JR, Wang K, Heins ZJ, Ross JS, He Y, Sanford E, Yantiss RK, Balasubramanian S, Stephens PJ, **Schultz N**, Oren M, Tang L, Kelsen D. **Genomic Alterations Observed in Colitis-associated Cancers are Distinct from Those Found in Sporadic Colorectal Cancers and Vary by Type of Inflammatory Bowel Disease.** Gastroenterology. 2016 Aug;151(2):278-287.e6.

100. Torrano V, Valcarcel-Jimenez L, Cortazar AR, Liu X, Urosevic J, Castillo-Martin M, Fernández-Ruiz S, Morciano G, Caro-Maldonado A, Guiu M, Zúñiga-García P, Graupera M, Bellmunt A, Pandya P, Lorente M, Martín-Martín N, David Sutherland J, Sanchez-Mosquera P, Bozal-Basterra L, Zabala-Letona A, Arruabarrena-Aristorena A, Berenguer A, Embade N, Ugalde-Olano A, Lacasa-Viscasillas I, Loizaga-Iriarte A, Unda-Urzaiz M, **Schultz N**, Aransay AM, Sanz-Moreno V, Barrio R, Velasco G, Pinton P, Cordon-Cardo C, Locasale JW, Gomis RR, Carracedo A. **The metabolic co-regulator PGC1α suppresses prostate cancer metastasis.** Nat Cell Biol. 2016 Jun;18(6):645-56.

99. Sood A, Miller AM, Brogi E, Sui Y, Armenia J, McDonough E, Santamaria-Pang A, Carlin S, Stamper A, Campos C, Pang Z, Li Q, Port E, Graeber TG, **Schultz N**, Ginty F, Larson SM, Mellinghoff IK. **Multiplexed immunofluorescence delineates proteomic cancer cell states associated with metabolism.** JCI Insight. 2016 May 5;1(6).

98. Shia J, **Schultz N**, Kuk D, Vakiani E, Middha S, Segal NH, Hechtman JF, Berger MF, Stadler ZK, Weiser MR, Wolchok JD, Boland CR, Gönen M, Klimstra DS. **Morphological characterization of colorectal cancers in The Cancer Genome Atlas reveals distinct morphology-molecular associations: clinical and biological implications.** Mod Pathol. 2017 Apr;30(4):599-609.

97. Kumar A, Coleman I, Morrissey C, Zhang X, True LD, Gulati R, Etzioni R, Bolouri H, Montgomery B, White T, Lucas JM, Brown LG, Dumpit RF, DeSarkar N, Higano C, Yu EY, Coleman R, **Schultz N**, Fang M, Lange PH, Shendure J, Vessella RL, Nelson PS. **Substantial interindividual and limited intraindividual genomic diversity among tumors from men with metastatic prostate cancer.** Nat Med. 2016 Apr;22(4):369-78.

96. Luna A, Rajapakse VN, Sousa FG, Gao J, **Schultz N**, Varma S, Reinhold W, Sander C, Pommier Y. **rCellMiner: exploring molecular profiles and drug response of the NCI-60 cell lines in R.** Bioinformatics. 2016 Apr 15;32(8):1272-4.
95. Liu Y, Chen C, Xu Z, Scuoppo C, Rillahan CD, Gao J, Spitzer B, Bosbach B, Kastenhuber ER, Baslan T, Ackermann S, Cheng L, Wang Q, Niu T, **Schultz N**, Levine RL, Mills AA, Lowe SW. **Deletions linked to TP53 loss drive cancer through p53-independent mechanisms.** Nature. 2016 Mar 24;531(7595):471-5.
94. Landa I, Ibrahimovic T, Boucail L, Sinha R, Knauf JA, Shah RH, Dogan S, Ricarte-Filho JC, Krishnamoorthy GP, Xu B, **Schultz N**, Berger MF, Sander C, Taylor BS, Ghossein R, Ganly I, Fagin JA. **Genomic and transcriptomic hallmarks of poorly differentiated and anaplastic thyroid cancers.** J Clin Invest. 2016 Mar 1;126(3):1052-66.
93. Şenbabaoğlu Y, Sümer SO, Sánchez-Vega F, Bemis D, Ciriello G, **Schultz N**, Sander C. **A Multi-Method Approach for Proteomic Network Inference in 11 Human Cancers.** PLoS Comput Biol. 2016 Feb 29;12(2):e1004765.
92. Yoon C, Cho SJ, Aksoy BA, Park DJ, **Schultz N**, Ryeom S, Yoon SS. **Chemotherapy resistance in diffuse type gastric adenocarcinoma is mediated by RhoA activation in cancer stem-like cells.** Clin Cancer Res. 2016 Feb 15;22(4):971-83.
91. Chang MT, Asthana S, Gao SP, Lee BH, Chapman JS, Kandoth C, Gao J, Soccia ND, Solit DB, Olshen AB, **Schultz N**, Taylor BS. **Identifying recurrent mutations in cancer reveals widespread lineage diversity and mutational specificity.** Nat Biotechnol. 2016 Feb;34(2):155-63.
90. Gauthier NP, Reznik E, Gao J, Sumer SO, **Schultz N**, Sander C, Miller ML. **MutationAligner: a resource of recurrent mutation hotspots in protein domains in cancer.** Nucleic Acids Res. 2016 Jan 4;44(D1):D986-91.
89. Zhang C, Cleveland K, Schnoll-Sussman F, McClure B, Bigg M, Thakkar P, **Schultz N**, Shah MA, Betel D. **Identification of low abundance microbiome in clinical samples using whole genome sequencing.** Genome Biol. 2015 Nov 27;16:265.
88. The Cancer Genome Atlas Research Network*. **The Molecular Taxonomy of Primary Prostate Cancer.** Cell. 2015 Nov 5;163(4):1011-25. *Corresponding Author.
87. Miller ML, Reznik E, Gauthier NP, Aksoy BA, Korkut A, Gao J, Ciriello G, **Schultz N**, Sander C. **Pan-Cancer Analysis of Mutation Hotspots in Protein Domains.** Cell Syst. 2015 Sep 23;1(3):197-209.
86. Sfakianos JP, Cha EK, Iyer G, Scott SN, Zabor EC, Shah RH, Ren Q, Bagrodia A, Kim PH, Hakimi AA, Ostrovskaya I, Ramirez R, Hanrahan AJ, Desai NB, Sun A, Pincioli P, Rosenberg JE, Dalbagni G, **Schultz N**, Bajorin DF, Reuter VE, Berger MF, Bochner BH, Al-Ahmadie HA, Solit DB, Coleman JA. **Genomic Characterization of Upper Tract Urothelial Carcinoma.** Eur Urol. 2015 Dec;68(6):970-7.
85. The Cancer Genome Atlas Research Network. **Comprehensive, Integrative Genomic Analysis of Diffuse Lower-Grade Gliomas.** N Engl J Med. 2015 Jun 25;372(26):2481-98.

84. The Cancer Genome Atlas Research Network. **Genomic Classification of Cutaneous Melanoma.** Cell. 2015 Jun 18;161(7):1681-96.
83. Sirintrapun SJ, Zehir A, Syed A, Gao J, **Schultz N**, Cheng DT. **Translational Bioinformatics and Clinical Research (Biomedical) Informatics.** Surg Pathol Clin. 2015 Jun;8(2):269-88.
82. Robinson D, Van Allen EM, Wu YM, **Schultz N**, Lonigro RJ, Mosquera JM, Montgomery B, Taplin ME, Pritchard CC, Attard G, Beltran H, Abida W, Bradley RK, Vinson J, Cao X, Vats P, Kunju LP, Hussain M, Feng FY, Tomlins SA, Cooney KA, Smith DC, Brennan C, Siddiqui J, Mehra R, Chen Y, Rathkopf DE, Morris MJ, Solomon SB, Durack JC, Reuter VE, Gopalan A, Gao J, Loda M, Lis RT, Bowden M, Balk SP, Gaviola G, Sougnez C, Gupta M, Yu EY, Mostaghel EA, Cheng HH, Mulcahy H, True LD, Plymate SR, Dvinge H, Ferraldeschi R, Flohr P, Miranda S, Zafeiriou Z, Tunariu N, Mateo J, Perez-Lopez R, Demichelis F, Robinson BD, Schiffman M, Nanus DM, Tagawa ST, Sigaras A, Eng KW, Elemento O, Sboner A, Heath EI, Scher HI, Pienta KJ, Kantoff P, de Bono JS, Rubin MA, Nelson PS, Garraway LA, Sawyers CL, Chinnaiyan AM. **Integrative clinical genomics of advanced prostate cancer.** Cell. 2015 May 21;161(5):1215-28.
81. Paik PK, Drilon A, Yu H, Rekhtman N, Ginsberg MS, Borsu L, **Schultz N**, Berger MF, Rudin CM, Ladanyi M. **Response to MET inhibitors in patients with stage IV lung adenocarcinomas harboring MET mutations causing exon 14 skipping.** Cancer Discov. 2015 Aug;5(8):842-9.
80. Rao TD, Tian H, Ma X, Yan X, Thapi S, **Schultz N**, Rosales N, Monette S, Wang A, Hyman DM, Levine DA, Solit D, Spriggs DR. **Expression of the Carboxy-Terminal Portion of MUC16/CA125 Induces Transformation and Tumor Invasion.** PLoS One. 2015 May 12;10(5):e0126633.
79. Babur Ö, Gönen M, Aksoy BA, **Schultz N**, Ciriello G, Sander C, Demir E. **Systematic identification of cancer driving signaling pathways based on mutual exclusivity of genomic alterations.** Genome Biol. 2015 Feb 26;16:45.
78. Ramkissoon SH, Bi WL, Schumacher SE, Ramkissoon LA, Haidar S, Knoff D, Dubuc A, Brown L, Burns M, Cryan JB, Abedalthagafi M, Kang YJ, **Schultz N**, Reardon DA, Lee EQ, Rinne ML, Norden AD, Nayak L, Ruland S, Doherty LM, LaFrankie DC, Horvath M, Aizer AA, Russo A, Arvold ND, Claus EB, Al-Mefty O, Johnson MD, Golby AJ, Dunn IF, Chiocca EA, Trippa L, Santagata S, Folkerth RD, Kantoff P, Rollins BJ, Lindeman NI, Wen PY, Ligon AH, Beroukhim R, Alexander BM, Ligon KL. **Clinical implementation of integrated whole-genome copy number and mutation profiling for glioblastoma.** Neuro Oncol. 2015 Oct;17(10):1344-55.
77. Erson-Omay EZ, Çağlayan AO, **Schultz N**, Weinhold N, Omay SB, Özduuman K, Köksal Y, Li J, Serin Harmancı A, Clark V, Carrión-Grant G, Baranoski J, Çağlar C, Barak T, Coşkun S, Baran B, Köse D, Sun J, Bakırçioğlu M, Moliterno Günel J, Pamir MN, Mishra-Gorur K, Bilguvar K, Yasuno K, Vortmeyer A, Huttner AJ, Sander C, Günel M. **Somatic POLE mutations cause an ultramutated giant cell high-grade glioma subtype with better prognosis.** Neuro Oncol. 2015 Oct;17(10):1356-64.
76. Lehmann KV, Kahles A, Kandoth C, Lee W, **Schultz N**, Stegle O, Rätsch G. **Integrative genome-wide analysis of the determinants of RNA splicing in kidney renal clear cell carcinoma.** Pac Symp Biocomput. 2015:44-55.

75. Majewski IJ, Nuciforo P, Mittempergher L, Bosma AJ, Eidtmann H, Holmes E, Sotiriou C, Fumagalli D, Jimenez J, Aura C, Prudkin L, Delgado MCD, de la Pena L, Loi S, Ellis C, **Schultz N**, de Azambuja E, Harbeck N, Piccart-Gebhart M, Bernards R, Baselga J. **PIK3CA mutations are associated with decreased benefit to neoadjuvant HER2-targeted therapies in breast cancer.** J Clin Oncol. 2015 Jan 5. pii: JCO.2014.55.2158.
74. Barlin JN, Zhou Q, Leitao MM, Bisogna M, Olvera N, Shih KK, Jacobsen A, **Schultz N**, Tap WD, Hensley ML, Schwartz GK, Boyd J, Qin LX, Levine DA. **Molecular subtypes of uterine leiomyosarcoma and correlation with clinical outcome.** Neoplasia. 2015 Feb;17(2):183-9.
73. The Cancer Genome Atlas Research Network. **Comprehensive genomic characterization of head and neck squamous cell carcinomas.** Nature. 2015 Jan 29;517(7536):576-82.
72. Wanjala J, Taylor BS, Chapinski C, Hieronymus H, Wongvipat J, Chen Y, Nanjangud GJ, **Schultz N**, Xie Y, Liu S, Lu W, Yang Q, Sander C, Chen Z, Sawyers CL, Carver BS. **Identifying actionable targets through integrative analyses of GEM model and human prostate cancer genomic profiling.** Mol Cancer Ther. 2015 Jan;14(1):278-88.
71. The Cancer Genome Atlas Research Network. **Integrated Genomic Characterization of Papillary Thyroid Carcinoma.** Cell. 2014 Oct 23;159(3):676-90.
70. Weinhold N, Jacobsen A, **Schultz N**, Sander C, Lee W. **Genome-wide analysis of non-coding regulatory mutations in cancer.** Nat Genet. 2014 Nov;46(11):1160-5.
69. Meisel JL, Hyman DM, Garg K, Zhou Q, Dao F, Gao J, **Schultz N**, Phillips M, Iasonos A, Kauff N, Levine DA, Soslow RA, Spriggs D. **The Performance of BRCA1 Immunohistochemistry for Detecting Germline, Somatic, and Epigenetic BRCA Loss in High-Grade Serous Ovarian Cancer.** Ann Oncol. 2014 Dec;25(12):2372-8.
68. Cryan JB, Haidar S, Ramkissoon LA, Bi WL, Knoff DS, **Schultz N**, Abedalthagafi M, Brown L, Wen PY, Reardon DA, Dunn IF, Folkerth RD, Santagata S, Lindeman NI, Ligon AH, Beroukhim R, Hornick JL, Alexander BM, Ligon KL, Ramkissoon SH. **Clinical multiplexed exome sequencing distinguishes adult oligodendroglial neoplasms from astrocytic and mixed lineage gliomas.** Oncotarget. 2014 Sep 30;5(18):8083-92.
67. Shinbrot E, Henninger EE, Weinhold N, Covington KR, Göksenin AY, **Schultz N**, Chao H, Doddapaneni H, Muzny DM, Gibbs RA, Sander C, Pursell ZF, Wheeler DA. **Exonuclease Mutations In DNA Polymerase Epsilon Reveal Replication Strand Specific Mutation Patterns And Human Origins Of Replication.** Genome Res. 2014 Sep 16. pii: gr.174789.114.
66. Gao J, Zhang C, van Iersel M, Zhang L, Xu D, **Schultz N**, Pico AR. **BridgeDb app: unifying identifier mapping services for Cytoscape.** F1000Research 2014, 3:148.
65. The Cancer Genome Atlas Research Network. **Comprehensive Molecular Characterization of Gastric Adenocarcinoma.** Nature. 2014 Sep 11;513(7517):202-9.
64. Babur Ö, Dogrusoz U, Çakır M, Aksoy BA, **Schultz N**, Sander C, Demir E. **Integrating biological pathways and genomic profiles with ChiBE 2.** BMC Genomics. 2014 Aug 3;15:642.

63. Kim PH, Cha EK, Sfakianos JP, Iyer G, Zabor EC, Scott SN, Ostrovnaya I, Ramirez R, Sun A, Shah R, Yee AM, Reuter VE, Bajorin DF, Rosenberg JE, **Schultz N**, Berger MF, Al-Ahmadie HA, Solit DB, Bochner BH. **Genomic Predictors of Survival in Patients with High-grade Urothelial Carcinoma of the Bladder.** Eur Urol. 2014 Aug 1. pii: S0302-2838(14)00624-1.
62. The Cancer Genome Atlas Research Network. **Comprehensive Molecular Profiling of Lung Adenocarcinoma.** Nature. 2014 Jul 31;511(7511):543-50.
61. Hieronymus H, **Schultz N**, Gopalan A, Carver BS, Chang MT, Xiao Y, Heguy A, Huberman K, Bernstein M, Assel M, Murali R, Vickers A, Scardino PT, Sander C, Reuter V, Taylor BS, Sawyers CL. **Copy number alteration burden predicts prostate cancer relapse.** Proc Natl Acad Sci U S A. 2014 Jul 29;111(30):11139-44.
60. Aksoy BA, Demir E, Babur O, Wang W, Jing X, **Schultz N**, Sander C. **Prediction of individualized therapeutic vulnerabilities in cancer from genomic profiles.** Bioinformatics. 2014 Jul 15;30(14):2051-9.
59. Al-Ahmadie H, Iyer G, Hohl M, Asthana S, Inagaki A, **Schultz N**, Hanrahan AJ, Scott SN, Brannon AR, McDermott GC, Pirun M, Ostrovnaya I, Kim P, Socci ND, Viale A, Schwartz GK, Reuter V, Bochner BH, Rosenberg JE, Bajorin DF, Berger MF, Petrini JH, Solit DB, Taylor BS. **Synthetic lethality in ATM-deficient RAD50-mutant tumors underlie outlier response to cancer therapy.** Cancer Discov. 2014 Jun 16. pii: CD-14-0380.
58. Ortiz B, Fabius AW, Wu WH, Pedraza A, Brennan CW, **Schultz N**, Pitter KL, Bromberg JF, Huse JT, Holland EC, Chan TA. **Loss of the tyrosine phosphatase PTPRD leads to aberrant STAT3 activation and promotes gliomagenesis.** Proc Natl Acad Sci U S A. 2014 Jun 3;111(22):8149-54.
57. Chen C, Liu Y, Rappaport AR, Kitzing T, **Schultz N**, Zhao Z, Shroff AS, Dickins RA, Vakoc CR, Bradner JE, Stock W, LeBeau MM, Shannon KM, Kogan S, Zuber J, Lowe SW. **MLL3 Is a Haploinsufficient 7q Tumor Suppressor in Acute Myeloid Leukemia.** Cancer Cell. 2014 May 12;25(5):652-65.
56. Jelinec P, Mueller JJ, Olvera N, Dao F, Scott SN, Shah R, Gao J, **Schultz N**, Gonen M, Soslow RA, Berger MF, Levine DA. **Recurrent SMARCA4 mutations in small cell carcinoma of the ovary.** Nat Genet. 2014 May;46(5):424-6.
55. Nissan MH, Pratilas CA, Jones AM, Ramirez R, Won H, Liu C, Tiwari S, Kong L, Hanrahan AJ, Yao Z, Merghoub T, Ribas A, Chapman PB, Yaeger R, Taylor BS, **Schultz N**, Berger MF, Rosen N, Solit DB. **Loss of NF1 in cutaneous melanoma is associated with RAS activation and MEK dependence.** Cancer Res. 2014 Apr 15;74(8):2340-50.
54. Voss MH, Hakimi AA, Pham CG, Brannon AR, Chen YB, Cunha LF, Akin O, Liu H, Takeda S, Scott SN, Socci ND, Viale A, **Schultz N**, Sander C, Reuter VE, Russo P, Cheng EH, Motzer RJ, Berger MF, Hsieh JJ. **Tumor genetic analyses of patients with metastatic renal cell carcinoma and extended benefit from mTOR inhibitor therapy.** Clin Cancer Res. 2014 Apr 1;20(7):1955-64.

53. The Cancer Genome Atlas Research Network. **Comprehensive molecular characterization of urothelial bladder carcinoma.** Nature. 2014 Mar 20;507(7492):315-22.
52. Gao J, Ciriello G, Sander C, **Schultz N. Collection, Integration and Analysis of Cancer Genomic Profiles: From Data to Insight.** Curr Opin Genet Dev. 2014 Feb 26;24C:92-98.
51. Hakimi AA, Furberg H, Zabor EC, Jacobsen A, **Schultz N**, Ciriello G, Mikklineni N, Fiegoli B, Kim PH, Voss MH, Shen H, Laird PW, Sander C, Reuter VE, Motzer RJ, Hsieh JJ, Russo P. **An Epidemiologic and Genomic Investigation Into the Obesity Paradox in Renal Cell Carcinoma.** J Natl Cancer Inst. 2013 Dec 18;105(24):1862-70.
50. Li L, Shen C, Nakamura E, Ando K, Signoretti S, Beroukhim R, Cowley GS, Lizotte P, Liberzon E, Bair S, Root DE, Tamayo P, Tsherniak A, Cheng SC, Tabak B, Jacobsen A, Hakimi AA, **Schultz N**, Ciriello G, Sander C, Hsieh JJ, Kaelin WG Jr. **SQSTM1 Is a Pathogenic Target of 5q Copy Number Gains in Kidney Cancer.** Cancer Cell. 2013 Dec 9;24(6):738-50.
49. Akrami R, Jacobsen A, Reimers J, **Schultz N**, Sander C, Larsson E. **Comprehensive analysis of long non-coding RNAs in ovarian cancer reveals global patterns and somatic DNA-level alteration.** PLoS One. 2013 Nov 12;8(11):e80306.
48. Jacobsen A, Silber J, Harinath G, Huse JT, **Schultz N**, Sander C. **Analysis of microRNA target interactions across diverse cancer types.** Nat Struct Mol Biol. 2013 Nov;20(11):1325-32.
47. The Cancer Genome Atlas Research Network. **The somatic genomic landscape of glioblastoma.** Cell. 2013 Oct 10;155(2):462-77.
46. The Cancer Genome Atlas Research Network. **The Cancer Genome Atlas Pan-Cancer analysis project.** Nat Genet. 2013 Oct;45(10):1113-20.
45. Ciriello G, Sinha R, Hoadley KA, Jacobsen AS, Jing X, Wang WQ, Reva B, Perou CM, Sander C, **Schultz N. The molecular diversity of Luminal A breast tumors.** Breast Cancer Res Treat. 2013 Oct;141(3):409-20.
44. Ciriello G, Miller ML, Aksoy BA, Senbabaoglu Y, **Schultz N**, Sander C. **Emerging landscape of oncogenic signatures across human cancers.** Nat Genet. 2013 Sep 26;45(10):1127-1133.
43. Iyer G, Al-Ahmadie H, **Schultz N**, Hanrahan AJ, Ostrovnaya I, Balar A, Kim P, Lin O, Weinhold N, Sander C, Zabor EC, Janakiraman M, Garcia-Grossman I, Heguy A, Viale A, Bochner BI, Reuter VE, Bajorin DF, Milowsky MI, Taylor BS, Solit DB. **Prevalence and co-occurrence of actionable genomic alterations in high-grade bladder cancer.** J Clin Oncol. 2013 Sep 1;31(25):3133-3140
42. Domcke S, Sinha R, Levine DA, Sander C, **Schultz N. Evaluating cell lines as tumour models by comparison of genomic profiles.** Nat Commun. 2013 Jul 9;4:2126.
41. Danila DC, Anand A, **Schultz N**, Heller G, Wan M, Sung CC, Dai C, Khanin R, Fleisher M, Lilja H, Scher HI. **Analytic and Clinical Validation of a Prostate Cancer-Enhanced Messenger RNA Detection Assay in Whole Blood as a Prognostic Biomarker for Survival.** Eur Urol. 2013 Jul 26. pii: S0302-2838(13)00721-5.

40. The Cancer Genome Atlas Research Network. **Integrative Analysis of Genomic and Molecular Alterations in Clear Cell Renal Cell Carcinoma**. Nature. 2013 Jul 4;499(7456):43-9.
39. Ho AS, Kannan K, Morris LGT, Ganly I, Katai N, Dolgalev I, Eng S, Huberman K, Heguy A, Viale A, Drobniak M, Leversha MA, Singh B, Iyer G, Leemans CR, Bloemena E, Ferris RL, Seethala RR, Gross BE, Liang Y, Sinha R, Rice CE, Gong Y, Turcan S, Ramaswami D, **Schultz N**, Kim S, Chiosea S, Shah JP, Sander C, Lee W, Chan TA. **Mutational Landscape of Adenoid Cystic Carcinoma Reveals Driving Pathways and Therapeutic Targets**. Nat Genet. 2013 Jul;45(7):791-8.
38. Hakimi AA, Ostrovskaya I, Reva B, **Schultz N**, Chen YB, Gonen M, Liu H, Takeda S, Voss MH, Tickoo SK, Reuter VE, Sander C, Russo P, Cheng EH, Motzer RJ, Hsieh JJ. **Adverse Outcomes in Clear Cell Renal Cell Carcinoma with Mutations of 3p21 Epigenetic Regulators BAP1 and SETD2**. Clin Cancer Res. 2013 Jun 15;19(12):3259-67.
37. Duijf PH, **Schultz N**, Benezra R. **Cancer cells preferentially lose small chromosomes**. Int J Cancer. Int J Cancer. 2013 May 15;132(10):2316-26.
36. The Cancer Genome Atlas Research Network. **Integrated Genomic Characterization of Endometrial Carcinoma**. Nature. 2013 May 2;497(7447):67-73.
35. Gao J, Aksoy BA, Dogrusoz U, Dresdner G, Gross B, Sumer SO, Sun Y, Jacobsen A, Sinha R, Larsson E, Cerami E, Sander C, **Schultz N**. **Integrative analysis of complex cancer genomics and clinical profiles using the cBioPortal**. Sci Signal. 2013 Apr 2;6(269):pl1.
34. Ciriello G, Cerami E, Aksoy BA, Sander C, **Schultz N**. **Using MEMo to Discover Mutual Exclusivity Modules in Cancer**. Curr Protoc Bioinformatics. 2013 Mar;Chapter 8:Unit8.17.
33. Mo Q, Wang S, Seshan VE, Olshen AB, **Schultz N**, Sander C, Powers RS, Ladanyi M, Shen R. **Pattern discovery and cancer gene identification in integrated cancer genomic data**. Proc Natl Acad Sci U S A. 2013 Mar 12;110(11):4245-50.
32. Garg K, Levine DA, Olvera N, Dao F, Bisogna M, Secord AA, Berchuck A, Cerami E, **Schultz N**, Soslow RA. **BRCA1 Immunohistochemistry in a Molecularly Characterized Cohort of Ovarian High-Grade Serous Carcinomas**. Am J Surg Pathol. 2013 Jan;37(1):138-46.
31. Donehower LA, Creighton CJ, **Schultz N**, Shinbrot E, Chang K, Gunaratne P, Muzny D, Sander C, Hamilton SR, Gibbs RA, Wheeler D. **MLH1-Silenced and Non-Silenced Subgroups of Hypermutated Colorectal Carcinomas Have Distinct Mutational Landscapes**. J Pathol. 2013 Jan;229(1):99-110.
30. Bazzoli E, Pulvirenti T, Oberstadt MC, Perna F, Wee B, **Schultz N**, Huse JT, Fomchenko EI, Voza F, Tabar V, Brennan CW, DeAngelis LM, Nimer SD, Holland EC, Squatrito M. **MEF promotes stemness in the pathogenesis of gliomas**. Cell Stem Cell. 2012 Dec 7;11(6):836-44.
29. Mitsiadis N, Sung CC, **Schultz N**, Danila DC, He B, Eedunuri VK, Fleisher M, Sander C, Sawyers CL, Scher HI. **Distinct patterns of dysregulated expression of enzymes involved in androgen synthesis and metabolism in metastatic prostate cancer tumors**. Cancer Res. 2012 Dec 1;72(23):6142-52.

28. Squatrito M, Vanoli F, Schultz N, Jasin M, Holland EC. **53BP1 is a haploinsufficient tumor suppressor and protects cells from radiation response in glioma.** Cancer Res. 2012 Oct 15;72(20):5250-60.
27. The Cancer Genome Atlas Research Network. **Comprehensive genomic characterization of squamous cell lung cancers.** Nature. 2012 Sep 27;489(7417):519-25.
26. The Cancer Genome Atlas Research Network. **Comprehensive Molecular Portraits of Human Breast Tumors.** Nature. 2012 Sep 23;490(7418):61-70.
25. Comerford SA, **Schultz N**, Hinnant EA, Klapproth S, Hammer RE. **Comparative analysis of SV40 17kT and LT function in vivo demonstrates that LT's C-terminus rapidly re-programs hepatic gene expression and is required for tumorigenesis in the liver.** Oncogenesis. 2012; 1, e28.
24. The Cancer Genome Atlas Research Network. **Comprehensive Molecular Characterization of Human Colon and Rectal Cancer.** Nature. 2012 Jul 18;487(7407):330-7.
23. Cerami E, Gao J, Dogrusoz U, Gross BE, Sumer SO, Aksoy BA, Jacobsen A, Byrne CJ, Heuer ML, Larsson E, Antipin Y, Reva B, Goldberg AP, Sander C, **Schultz N.** **The cBio Cancer Genomics Portal: An Open Platform for Exploring Multidimensional Cancer Genomics Data.** Cancer Discov. 2012 May;2(5):401-4.
22. Xue W, Kitzing T, Roessler S, Zuber J, Krasnitz A, **Schultz N**, Revill K, Weissmueller S, Rappaport AR, Simon J, Zhang J, Luo W, Hicks J, Zender L, Wang XW, Powers S, Wigler M, Lowe SW. **A cluster of cooperating tumor-suppressor gene candidates in chromosomal deletions.** Proc Natl Acad Sci U S A. 2012 May 22;109(21):8212-7.
21. Shen R, Mo Q, **Schultz N**, Seshan VE, Olshen AB, Huse J, Ladanyi M, Sander C. **Integrative Subtype Discovery in Glioblastoma Using iCluster.** PLoS One. 2012;7(4):e35236.
20. Creighton CJ, Hernandez-Herrera A, Jacobsen A, Levine DA, Mankoo P, **Schultz N**, Du Y, Zhang Y, Larsson E, Sheridan R, Xiao W, Spellman PT, Getz G, Wheeler DA, Perou CM, Gibbs RA, Sander C, Hayes DN, Gunaratne PH; Cancer Genome Atlas Research Network. **Integrated analyses of microRNAs demonstrate their widespread influence on gene expression in high-grade serous ovarian carcinoma.** PLoS One. 2012;7(3):e34546.
19. Ciriello G, Cerami E, Sander C, **Schultz N.** **Mutual exclusivity analysis identifies oncogenic network modules.** Genome Res. 2012;22(2):398-406.
18. Hanrahan AJ, **Schultz N**, Westfal ML, Sakr RA, Giri DD, Scarperi S, Janikariman M, Olvera N, Stevens EV, She QB, Aghajanian C, King TA, de Stanchina E, Spriggs DR, Heguy A, Taylor BS, Sander C, Rosen N, Levine DA, Solit DB. **Genomic complexity and AKT-dependence in serous ovarian cancer.** Cancer Discov. 2012;2(1):56-67.
17. Mellinghoff IK, **Schultz N**, Mischel PS, Cloughesy TF. **Will Kinase Inhibitors Make it as Glioblastoma Drugs?** Curr Top Microbiol Immunol. 2012;355:135-69.
16. Mankoo PK, Shen R, **Schultz N**, Levine DA, Sander C. **Time to Recurrence and Survival in Serous Ovarian Tumors Predicted from Integrated Genomic Profiles.** PLoS ONE. 2011; 6(11): e24709.

15. Taylor BS, DeCarolis PL, Angeles CV, Brenet F, **Schultz N**, Antonescu CR, Scandura JM, Sander C, Viale AJ, Socci ND, Singer S. **Frequent alterations and epigenetic silencing of differentiation pathway genes in structurally rearranged liposarcomas.** Cancer Discov. 2011;1(7):587-597.
14. Chen M, Pratt CP, Zeeman ME, **Schultz N**, Taylor BS, O'Neill A, Castillo-Martin M, Nowak DG, Naguib A, Grace DM, Murn J, Navin N, Atwal GS, Sander C, Gerald WL, Cordon-Cardo C, Newton AC, Carver BS, Trotman LC. **Identification of PHLPP1 as a tumor suppressor reveals the role of feedback activation in PTEN-mutant prostate cancer progression.** Cancer Cell. 2011 Aug 16;20(2):173-86.
13. Palaskas N, Larson SM, **Schultz N**, Komisopoulou E, Wong J, Rohle D, Campos C, Yannuzzi N, Osborne JR, Linkov I, Kastenhuber ER, Taschereau R., Plaisier SB, Tran C, Heguy A, Wu H, Sander C, Phelps ME, Brennan C, Port E, Huse JT, Graeber TG, Mellinghoff IK. **18F-fluorodeoxy-glucose positron emission tomography (18FDG-PET) marks basal-like human breast cancer with MYC overexpression.** Cancer Res. 2011 Aug 1;71(15):5164-74.
12. The Cancer Genome Atlas Research Network. **Integrated genomic analyses of ovarian carcinoma.** Nature. 2011 Jun 29;474(7353):609-15.
11. **Schultz N***, Marenstein DR*, De Angelis DA, Wang WQ, Nelander S, Jacobsen A, Marks DS, Massagué J, Sander C. **Off-target effects dominate a large-scale RNAi screen for modulators of the TGF β pathway and reveal microRNA regulation of TGFBR2.** Silence. 2011;2(1):3.
10. Cerami EG, Gross BE, Demir E, Rodchenkov I, Babur O, Anwar N, **Schultz N**, Bader GD, Sander C. **Pathway Commons, a web resource for biological pathway data.** Nucleic Acids Res. 2011;39(Database issue):D685-90.
9. Taylor BS*, **Schultz N***, Hieronymus H*, Gopalan A, Xiao Y, Carver BS, Arora VK, Kaushik P, Cerami E, Reva B, Antipin Y, Mitsiades N, Landers T, Dolgalev I, Major JE, Wilson M, Socci ND, Lash AE, Heguy A, Eastham JA, Scher HI, Reuter VE, Scardino PT, Sander C, Sawyers CL, Gerald WL. **Integrative genomic profiling of human prostate cancer.** Cancer Cell. 2010;18(1):11-22.
8. Cerami E, Demir E, **Schultz N**, Taylor BS, Sander C. **Automated network analysis identifies core pathways in glioblastoma.** PLoS One. 2010;5(2):e8918.
7. Veeriah S, Taylor BS, Meng S, Fang F, Yilmaz E, Vivanco I, Janakiraman M, **Schultz N**, Hanrahan AJ, Pao W, Ladanyi M, Sander C, Heguy A, Holland EC, Paty PB, Mischel PS, Liau L, Cloughesy TF, Mellinghoff IK, Solit DB, Chan TA. **Somatic mutations of the Parkinson's disease-associated gene PARK2 in glioblastoma and other human malignancies.** Nat Genet. 2010;42(1):77-82.
6. Veeriah S, Brennan C, Meng S, Singh B, Fagin JA, Solit DB, Paty PB, Rohle D, Vivanco I, Chmielecki J, Pao W, Ladanyi M, Gerald WL, Liau L, Cloughesy TC, Mischel PS, Sander C, Taylor B, **Schultz N**, Major J, Heguy A, Fang F, Mellinghoff IK, Chan TA. **The tyrosine phosphatase PTPRD is a tumor suppressor that is frequently inactivated and mutated in glioblastoma and other human cancers.** Proc Natl Acad Sci U S A. 2009;106(23):9435-40.

5. The Cancer Genome Atlas Research Network. **Comprehensive genomic characterization defines human glioblastoma genes and core pathways.** Nature 2008; 455(7216):1061-8.
4. Diederichs S, Bäumer N, **Schultz N**, Hamra FK, Schrader MG, Sandstede ML, Berdel WE, Serve H, Müller-Tidow C. **Expression patterns of mitotic and meiotic cell cycle regulators in testicular cancer and development.** Int J Cancer 2005;116(2):207-17.
3. Garbers DL, **Schultz N**, Wu Z, Hamra FK. **Spermatogonial cells in the rat and mouse.** In: Lanza, R., ed. Handbook of Stem Cells, Volume 1: Embryonic. San Diego: Academic Press, 2004:179-186.
2. Hamra FK, **Schultz N**, Chapman KM, Grellhesl DM, Cronkhite JY, Hammer RE, Garbers DL. **Defining the spermatogonial stem cell.** Dev Biol 2004;269(2):393-410.
1. **Schultz N**, Hamra FK and Garbers DL. **A multitude of genes expressed solely in meiotic or post-meiotic spermatogenic cells offers a myriad of contraceptive targets.** Proc Natl Acad Sci U S A 2003; 100:12201-6.

*indicates equal contribution

Invited Talks

- April 15, 2023. AACR Annual Meeting. Educational Session: Accessible Computational Platforms for Large-Scale Cancer Data Analyses. Orlando, FL. "Analytical tools for precision oncology: The cBioPortal for cancer genomics and OncoKB."
- October 13, 2022. Annual Genomics and Bioinformatics Symposium, Johns Hopkins University. "Towards clinical decision support in oncology: Data integration, outcome models, and intuitive software."
- September 30, 2022. Intelligent Oncology – The Potential Of AI To Cure Cancer. Freiburg, Germany. "Towards clinical decision support in oncology: Data integration, outcome models, and intuitive software."
- September 22, 2022. Cutting-Edge Implementation of Precision Medicine in Europe. Stockholm, Sweden. "Analytical Tools for Precision Oncology."
- October 20, 2021. Virtual Symposium on Precision Medicine at Seoul National University Hospital (SNUH). "Precision Oncology at MSK."
- May 24, 2021. 5th International Molecular Pathological Epidemiology (MPE) Meeting. "Interpreting Genomic Alterations and Therapeutic Implications Using OncoKB and the cBioPortal for Cancer Genomics."
- May 11, 2021. PEGS Boston Virtual Summit. "Interpreting Genomic Alterations and Therapeutic Implications Using OncoKB and the cBioPortal for Cancer Genomics."
- November 23, 2020. TRANSyS Virtual Symposium. "Towards clinical decision support in oncology: Identifying driver alterations and therapeutic options."
- July 23, 2020. Cholangiocarcinoma Foundation 2020 Annual Conference. "The cBioPortal for Cancer Genomics."
- June 3, 2020. EACR Virtual Conference on 'Bioinformatics for Cancer Research'. "Towards clinical decision support in oncology: Identifying driver alterations and therapeutic options."

- November 14, 2019. AACR-KCA Joint Workshop on Precision Medicine. Seoul, Korea. “Towards clinical decision support in oncology: Identifying driver alterations and therapeutic options.”
- September 12, 2019. First International Conference in Systems and Network Medicine: Applications of Systems Science and Thinking to Biomedicine. Washington, DC. “Towards Clinical Decision Support in Oncology: Identifying Driver Alterations and Therapeutic Options.”
- August 10, 2019. The 2019 Bladder Cancer Think Tank. Washington, DC. “Towards Clinical Decision Support in Oncology: Identifying Driver Alterations and Therapeutic Options.”
- March 29, 2019. Genome Institute of Singapore. “Towards Clinical Decision Support in Oncology: Identifying Driver Alterations and Therapeutic Options.”
- November 15, 2018. Society for NeuroOncology Annual Meeting. New Orleans, LA. “Harnessing Large-Scale Genomic Data for Cancer Gene Discovery and Therapy.”
- October 4, 2018. SWOG Fall 2018 Group Meeting. Chicago, IL. “Interpreting the Cancer Genome: Identifying Driver Alterations and Therapeutic Options.”
- September 29, 2018. Cell Symposia: TCGA Legacy: Multi-Omic Studies in Cancer. Washington, DC. “Oncogenic signaling pathways in the cancer genome atlas.”
- June 19, 2018. Personalized Health Technologies And Translational Research Conference. ETH Zurich. Zurich, Switzerland. “Towards Clinical Decision Support in Oncology.”
- November 17, 2017. Association for Molecular Pathology, 2017 Annual Meeting. Salt Lake City, UT. “Interpreting the Cancer Genome: Identifying Driver Alterations and Therapeutic Options.”
- November 9, 2017. Cold Spring Harbor Advanced Sequencing Technologies and Applications. Cold Spring Harbor, NY. “Identifying Driver Alterations and Therapeutic Options in Cancer.”
- November 3, 2017. Precision Medicine Seminar Series. University of Minnesota. Minneapolis, MN. “Making Complex Cancer Genomics Data Accessible and Interpretable”.
- October 25, 2017. AACR Translational Cancer Research for Basic Scientists Workshop. Boston, MA. “The cBioPortal for Cancer Genomics.”
- June 2, 2017. ASCO Annual Meeting, Session: Genetics and Genomics for the Practicing Clinician. Chicago, IL. Panelist.
- April 7, 2017. POET International Precision Oncology and Experimental Therapeutics Congress. Calgary, AB. “Interpreting the Cancer Genome: Identifying Driver Alterations and Therapeutic Options.”
- April 1, 2017. AACR Annual Meeting, Education Session: Interpretation of Cancer Genomic Variants. Washington, DC. “Making cancer genomics data interpretable through recurrence analysis, annotation of prior knowledge, and effective visualization.”
- March 3, 2017. 6th Annual Dana Farber Cancer Institute CCGC Symposium: Genomic Approaches towards Precision Cancer Medicine. Boston, MA. “Making complex cancer genomics data accessible and interpretable”.
- November 17, 2016. Society for NeuroOncology Annual Meeting. Scottsdale, AZ. “The use of cBioPortal for Cancer Genomics in Precision Oncology.”
- September 21, 2016. 2016 AACR Translational Cancer Research for Basic Scientists Workshop. Boston, MA. “The cBioPortal for Cancer Genomics.”
- June 23, 2016. Genentech Seminar Series. South San Francisco, CA. “Making complex cancer genomics data accessible and interpretable”.

- April 17, 2016. AACR Annual Meeting, Methods Workshop: Bioinformatics in Personalized Cancer Genomics: From Sequencing Data to Clinical Actionability. New Orleans, LA. “Making complex genomics data accessible to clinicians and researchers through the cBioPortal for Cancer Genomics and other tools“.
- March 4, 2016. Cutting Edge Concepts in Molecular Pharmacology. Berlin, Germany. “Molecular oncology and its application in personalized cancer therapy.”
- December 3, 2015. 16th Annual Meeting of the Society of Urologic Oncology. Washington, DC. “Accessing Genomic Data in Prostate Cancer and Overview of TCGA Subtypes.”
- November 11, 2015. 2015 AACR Translational Cancer Research for Basic Scientists Workshop. Boston, MA. “The cBioPortal for Cancer Genomics.”
- October 28, 2015. EMBL-EBI Industry programme workshop: Translating NGS data into clinical practice. Waltham, MA. “The cBioPortal for Cancer Genomics.”
- October 16, 2015. Molecular Oncology for the Clinical Oncologist: Defining the Actionable Genome. New York, NY. “Visualization and Annotation of Genomic Alterations in Tumor Samples.”
- October 13, 2015. PISTOIA Alliance US Conference 2015. Philadelphia, PA. “Visualization and Analysis of Cancer Genomics Data”.
- June 3, 2015. Open Source Technologies for Precision Medicine. London, UK. “The cBioPortal for genomics data visualization in a clinical setting.”
- May 29, 2015. ASCO Annual Meeting, Session: Molecular Oncology Tumor Board. Chicago, IL. “Bioinformatics: Understanding clinical reports, using portals, sharing of data.”
- April 21, 2015. AACR Annual Meeting, Session: Computational Approaches to Cancer Target and Drug Discovery. Philadelphia, PA. “Exploring The Cancer Genome Atlas for Cancer Subtypes and Targetable Alterations.”
- March 18, 2015. Tucson Symposium 2015. “The Use of cBioPortal in Precision Oncology.”
- January 16, 2015. Brigham and Women's Hospital Department of Pathology Surgical Pathology Update Series. Boston, MA. “The Molecular Landscape of Primary Prostate Cancer.”
- October 28, 2014. NCI Center for Cancer Research. Bethesda, MD. “Introduction to the cBioPortal for Cancer Genomics.”
- October 24, 2014. 21st Annual Prostate Cancer Foundation Retreat. Carlsbad, CA. “The cBioPortal for Cancer Genomics and its Use in Precision Medicine.”
- September 12, 2014. Simons Foundation Biotech Symposium. Complex Data Visualization: Approach and Application. New York, NY. “The cBioPortal for Cancer Genomics.”
- August 21, 2014. Institute for Theoretical Biology Berlin Seminar Series. Berlin, Germany. “The cBioPortal for Cancer Genomics.”
- April 7, 2014. AACR Annual Meeting, Session: New SU2C Dream Teams: Patient Benefit Through Targeted Therapeutics and Immunotherapy. San Diego, CA. “Precision Therapy of Advanced Prostate Cancer.”
- April 5, 2014. AACR Annual Meeting, Session: Using Data from the Cancer Genome Atlas. San Diego, CA. “The cBioPortal for Cancer Genomics.”
- January 27, 2014. Cedars Sinai Medical Center, Women’s Cancer Program Seminar Series. Los Angeles, CA. “Evaluating cell lines as tumor models by comparison of genomic profiles.”

- December 18, 2013. Weill Cornell Medical College, Institute for Computational Biomedicine (ICB) Seminar Series. New York, NY. “The genomic landscape of cancer: From The Cancer Genome Atlas to personalized therapy.”
- November 15, 2013. EMBL-EBI Industry programme workshop on Oncogenomics. Pearl River, NY. “The cBioPortal for Cancer Genomics.”
- September 18, 2013. Advances in Ovarian Cancer Research: From Concept to Clinic. Miami, FL. “Cell lines as ovarian cancer models: Insights from molecular profiles in TCGA and CCLE.”
- July 23, 2013. 21st Annual International Conference on Intelligent Systems for Molecular Biology (ISMB). Berlin, Germany. “The cBioPortal for Cancer Genomics.”
- May 14, 2013. Fourth Annual Ovarian Cancer Symposium: Prevention and Early Detection of Ovarian Cancer. New York, NY. “Using Ovarian Cancer Cell Lines as Genomic Models.”
- April 8, 2013. AACR Annual Meeting, Session: The Cancer Genome Atlas (TCGA) – A Rapidly Expanding Community Resource. Washington, DC. “Examples of Integrated Analysis and Tools for Interacting and Understanding TCGA Data.”
- March 14, 2013. EMBL-EBI Industry programme workshop on Oncogenomics. Cambridge UK. “The cBioPortal for Cancer Genomics.”
- March 4, 2013. NCI Center for Cancer Research. Bethesda, MD. “Introduction to the cBioPortal for Cancer Genomics.”
- November 17, 2011. The Cancer Genome Atlas First Annual Scientific Symposium. National Harbor, MD. “The cBio Cancer Genomics Portal – Hands-on workshop.”
- June 24, 2011. Keystone Symposium: Changing Landscape of the Cancer Genome. Boston, MA. “The cBio Cancer Genomics Portal.”
- April 3, 2011. AACR Annual Meeting, TCGA-sponsored session. Orlando, FL. “The cBio Cancer Genomics Portal.”
- April 2. 2011. AACR Annual Meeting, Session: Harvesting the yield from the TCGA. Orlando, FL. “TCGA Data Access and Analytical Opportunities.”
- March 8, 2011. New York Obstetrical Society. New York, NY. “Decoding the Cancer Genome: Pathway Alterations in Ovarian Cancer.”
- August 18, 2010. Institute for Medical Systems Biology at the Max-Delbrück-Center for Molecular Medicine. Berlin, Germany. “Decoding the Cancer Genome: Pathway Alterations in Brain, Ovarian, and Prostate Cancer.”
- July 9. 2007. Leibniz-Institut für Molekulare Pharmakologie (FMP). Berlin, Germany. “Prevalence of off-target effects in a high-throughput siRNA screen for components of the TGF-beta pathway.”