




Curriculum Vitae

Personal Information							
Title	Markowitz-Ingalls Professor of Cancer Genetics and Distinguished University Professor – Case Western Reserve University						
Name	Sanford David Markowitz						
Degree	MD , PhD						
Country	USA						
Affiliation	Comprehensive Cancer Center, Case Western Reserve University School of Medicine and Seidman Cancer Center, University Hospitals						
							
				Educational Background			
				INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
				Harvard College	AB (Summa Cum Laude)	07/1974	Chemistry/Physics
				Yale University	MD, PhD	09/1980, 06/1980	Medicine/Cell Biology
				University of Chicago	Residency	06/1984	Internal Medicine
National Cancer Institute	Fellowship	06/1987	Medical Oncology				
Professional Experience							
2015-	Distinguished University Professor, Case Western Reserve University						
1997-	Markowitz-Ingalls Professor of Cancer Genetics, Medicine-Hematology/Oncology, Case Western Reserve University and University Hospitals Case Medical Center, Cleveland, OH						
1998-2010	Investigator, Howard Hughes Medical Institute						
1995-2021	Co-Leader, Cancer Genetics Program, Case Comprehensive Cancer Center, Cleveland, OH						
1987-1997	Assistant/Associate Professor, Medicine-Hematology/Oncology, Case Western Reserve University and University Hospitals Case Medical Center, Cleveland, OH						
Professional Organizations							
Committees: 2011- 2016: National Cancer Institute: Board of Scientific Counselors-Clinical Sciences and Epidemiology; Selected EABs: Memorial Sloan Kettering Cancer Center-Human Oncology and Pathogenesis Program (2007-present); Dana Farber-Harvard Comprehensive Cancer Center (2006-2012); University of Wisconsin Comprehensive Cancer Center (2005-2015); National Colorectal Cancer Research Alliance (1999-2016). <u>Honorary Societies:</u> (2005) American Association Physicians; (1995) American Society Clinical Investigation.							
Main Scientific Publications							



1. S. Baker, S. Markowitz, E. Fearon, J. Willson, and B. Vogelstein. Wild-type p53 suppresses the growth of human colorectal carcinoma cells. *Science* (1990) 249: 912-915.
2. S. Markowitz, J. Wang, L. Myeroff, R. Parsons, L. Sun, J. Lutterbaugh, R. Fan, E. Zborowska, K. Kinzler, B. Vogelstein, M. Brattain, and J. K. V. Willson. Inactivation of the type II TGF- β receptor in colon cancer cells with microsatellite instability. *Science* (1995) 268: 1336-1338.
3. M. Veigl, L. Kasturi, J. Olechnowicz, A. Ma, J. Lutterbaugh, S. Periyasamy, G-M. Li, J. Drummond, P. Modrich, W. D. Sedwick, and S. Markowitz. Biallelic inactivation of hMLH1 by epigenetic gene silencing, a novel mechanism causing human MSI cancers. *Proc Natl Acad Sci (USA)* (1998) 95: 8698-8702.
4. W. Grady, J. Willis, P. Guilford, A. Dunbier, T. Toro, H. Lynch, G. Wiesner, K. Ferguson, C. Eng, J-G. Park, S-J. Kim, and S. Markowitz. Methylation of the CDH1 promoter as the second genetic hit in hereditary diffuse gastric cancer. *Nature Genet* (2000) 26: 16-17.
5. M. Yan, R. Rerko, P. Platzer, D. Dawson, J. Willis, M. Tong, E. Lawrence, J. Lutterbaugh, S. Lu, J. K. Willson, G., J. Hensold, H. H. Tai, K. Wilson, and S. D. Markowitz. 15-Hydroxyprostaglandin Dehydrogenase, a COX-2 oncogene antagonist, is a TGF- β induced suppressor of human gastrointestinal cancers. *Proc Natl Acad Sci (USA)* (2004) 101: 17468-17473.
6. W-D. Chen, Z. J. Han, J. Skoletsy, J. Olson, J. Sah, L. Myeroff, P. Platzer, S. Lu, D. Dawson, J. Willis, T. P. Pretlow, J. Lutterbaugh, L. Kasturi, J. K. Willson, J. S. Rao, A. Shuber, and S. D. Markowitz. Detection in fecal DNA of colon cancer-specific methylation of the nonexpressed vimentin gene. *J Natl Cancer Inst* (2005) 97: 1124-1132.
7. S. J. Myung, R. M. Rerko, M. Yan, P. Platzer, K. Guda, A. Dotson, E. Lawrence, A. J. Dannenberg, A. K. Lovgren, G. Luo, T. P. Pretlow, R. A. Newman, J. Willis, D. Dawson, and S. D. Markowitz. 15-Hydroxyprostaglandin dehydrogenase is an in vivo suppressor of colon tumorigenesis. *Proc Natl Acad Sci (USA)* (2006) 103: 12098-102.
8. S. P. Fink, M. Yamauchi, R. Nishihara, S. Jung, A. Kuchiba, K. Wu, E. Cho, E. Giovannucci, C. S. Fuchs, S. Ogino, S. D. Markowitz, and A. T. Chan. Aspirin and the risk of colorectal cancer in relation to the expression of 15-Hydroxyprostaglandin Dehydrogenase (HPGD). *Science translational medicine* (2014) 6(233): 233re232.
9. Y. Zhang, A. Desai, S. Y. Yang, K. B. Bae, M. I. Antczak, S. P. Fink, S. Tiwari, J. E. Willis, N. S. Williams, D. M. Dawson, D. Wald, W. D. Chen, Z. Wang, L. Kasturi, G. A. Larusch, L. He, F. Cominelli, L. Di Martino, Z. Djuric, G. L. Milne, M. Chance, J. Sanabria, C. Dealwis, D. Mikkola, J. Naidoo, S. Wei, H. H. Tai, S. L. Gerson, J. M. Ready, B. Posner, J. K. Willson, and S. D. Markowitz. Inhibition of the prostaglandin degrading enzyme 15-PGDH potentiates tissue regeneration. *Science* (2015) 348(6240): aaa2340.
10. H. R. Moinova, T. LaFramboise, J. D. Lutterbaugh, A. K. Chandar, J. Dumot, A. Faulx, W. Brock, O. De la Cruz Cabrera, K. Guda, J. S. Barnholtz-Sloan, P. G. Iyer, M. I. Canto, J. S. Wang, N. J., Shaheen, P. N. Thota, J. E. Willis, A. Chak, and S. D. Markowitz. Identifying DNA methylation biomarkers for non-endoscopic detection of Barrett's esophagus. *Science translational medicine* (2018) 10(424): eaa05848.