

Deanna Cross, PhD
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Area of Expertise

My research interests focus on translating genetic and genomic advances into patient care. My projects include the implementation of family health history tools for improvement of patient care and the creation of tools that explain genetic and genomic advances to diverse patient populations. I work to identify and eliminate barriers to the implementation of genetic and genomic medicine in populations that have been traditionally underrepresented in genomic research and medical testing. With rapidly growing fields such as epigenetics and genomic sequencing there is a need to determine the clinical utility of burgeoning tests. In order to achieve this goal, I utilize large patient populations to interrogate real world applications for genetics in healthcare. I focus on the application of genetic testing throughout a patient's life, from pre-conception through healthy aging.

Qualifications

BS in Bioenvironmental Sciences, Texas A & M University
PhD in Plant Pathology, Texas A & M University

Recent Publications

Differentiation of Hispanic biogeographic ancestry with 80 ancestry informative markers

Setser, C. H., Planz, J. V., Barber, R. C., Phillips, N. R., Chakraborty, R. & Cross, D. S., 1 Dec 2020, In: Scientific Reports. 10, 1, 7745.

Affordable Care Act and cancer stage at diagnosis in an underserved population

Lu, Y., Jackson, B. E., Gehr, A. W., Cross, D., Neerukonda, L., Tanna, B., Ghabach, B. & Ojha, R. P., Sep 2019, In: Preventive Medicine. 126, 105748.

Implementation, adoption, and utility of family health history risk assessment in diverse care settings: evaluating implementation processes and impact with an implementation framework

Wu, R. R., Myers, R. A., Sperber, N., Voils, C. I., Neuner, J., McCarty, C. A., Haller, I. V., Harry, M., Fulda, K. G., Cross, D., Dimmock, D., Rakhra-Burris, T., Buchanan, A. H., Ginsburg, G. S. & Orlando, L. A., 1 Feb 2019, In: Genetics in Medicine. 21, 2, p. 331-338 8 p.

Diversity in the era of precision medicine - From bench to bedside implementation

Mamun, A., Nsiah, N. Y., Srinivasan, M., Chaturvedula, A., Basha, R., Cross, D., Jones, H. P., Nandy, K. & Vishwanatha, J. K., 2019, In: Ethnicity and Disease. 29, 3, p. 517-524 8 p.

A SMAD4 mutation indicative of juvenile polyposis syndrome in a family previously diagnosed with Menetrier's disease

Burmester, J. K., Bell, L. N., Cross, D., Meyer, P. & Yale, S. H., 1 Oct 2016, In: Digestive and Liver Disease. 48, 10, p. 1255-1259 5 p.

Protocol for the "Implementation, adoption, and utility of family history in diverse care settings" study

for the Family Health History Network, 24 Nov 2015, In: Implementation Science. 10, 1, 163.

Long-term recall of elements of informed consent: A pilot study comparing traditional and computer-based consenting

McCarty, C. A., Berg, R., Waudby, C., Foth, W., Kitchner, T. & Cross, D., 1 Jan 2015, In: IRB Ethics and Human Research. 37, 1, p. 1-5 5 p.

Development of reusable logic for determination of statin exposure-time from electronic health records

Miller, A. W., McCarty, C. A., Broeckel, U., Hytopoulos, V. & Cross, D. S., Jun 2014, In: Journal of Biomedical Informatics. 49, p. 206-212 7 p.

Does KRAS testing in metastatic colorectal cancer impact overall survival? A comparative effectiveness study in a population-based sample

Feigelson, H. S., Zeng, C., Pawloski, P. A., Onitilo, A. A., Richards, C. S., Johnson, M. A., Kauffman, T. L., Webster, J., Nyirenda, C., Alexander, G. L., Hwang, C., Cross, D., McCarty, C. A., Davis, R. L., Schwarzkopf, D., Williams, A. E., Honda, S., Daida, Y., Kushi, L. H., Delate, T., & 1 othersGoddard, K. A. B., 1 May 2014, In: PLoS ONE. 9, 5, e94977.

Benefits of accurate imputations in GWAS

Verma, S. S., Peissig, P., Cross, D. S., Waudby, C., Brilliant, M., McCarty, C. A. & Ritchie, M. D., 1 Jan 2014, *Applications of Evolutionary Computation - 17th European Conference, EvoApplications 2014, Revised Selected Papers*. Esparcia-Alcázar, A. I. (ed.). Springer Verlag, p. 877-889 13 p. (Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics); vol. 8602).

Sponsored Projects

Pharmacogenomics in pediatric populations (For: Pruthali Kulkarni)

Cross, D.

Intramural Research(UNTHSC)

5/06/17 → 31/05/18

Stakeholder Perspectives for the Consent into a Multiuse, Multi-Institution Biobank

Cross, D. & Fulda, K.

Intramural Research(UNTHSC)

1/09/14 → 31/12/15