Adam H. Buchanan, MS, MPH, LCGC
Curriculum Vitae

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Education: Bachelor of Science, 1998 – Biology (With High Honors)
Emory University, Atlanta, GA

Master of Public Health, 2000 – Health Behavior and Health Education
The University of North Carolina at Chapel Hill, NC

Master of Science, 2004 – Genetic Counseling
The University of North Carolina at Greensboro, NC

Certification: American Board of Genetic Counseling, 2005; recertified in 2015

License: Pennsylvania Medical Board (Genetic Counseling), 2014-present

Honoraries: Phi Beta Kappa and Phi Sigma, Emory University

Awards: PerkinElmer Signature Genomic Laboratories Travel Award – American College of Medical Genetics Annual Clinical Meeting, 2011

Outstanding Clinical Supervisor, UNC-Greensboro Genetic Counseling Program Class of 2013

Professional Experience:

11/14 – present	Assistant Professor, Genomic Medicine Institute, Geisinger Health System, Danville, PA
9/13 – 10/14	Member, Duke Cancer Institute, Cancer Control and Population Sciences, Durham, NC
3/10 – 10/14	Research Scientist, Duke Cancer Prevention, Detection, and Control Research Program, Duke Cancer Institute, Durham, NC
10/04 – 2/10	Genetic Counselor/Clinical Research Coordinator III, Duke Cancer Prevention, Detection, and Control Research Program, Duke Cancer Institute, Durham, NC
5/00 – 9/04	Project Manager/Health Educator, Duke Cancer Prevention, Detection, and Control Research Program, Duke Cancer Institute, Durham, NC
8/99 – 5/00	Teaching Assistant, *Community Diagnosis*, graduate course, Department of Health Behavior and Health Education, The University of North Carolina School of Public Health, Chapel Hill, NC
5/99 – 4/00	Research Assistant, Duke Cancer Prevention, Detection, and Control Research Program, Durham, NC

Consulting Relationships:

5/08, 9/08	"Facilitating Risk-Appropriate Colorectal Cancer Testing" (R01 CA122330-01A1, PI: Celette Sugg Skinner, PhD), UT-Southwestern Medical Center, Dallas, TX
7/07	High Risk Clinic at Derrick L. Davis Forsyth Regional Cancer Center, Forsyth Medical Center, Winston-Salem, NC

Research Support:

1. National Human Genome Research Institute, U01-HG007282-01, 2013-2017, $2,952,000 (PI: G Ginsburg).
   Site Principal Investigator, *Implementation, adoption and utility of family history in diverse care settings.*
2. Marcus Foundation, 2017-2021, $1,747,000 (PI: DH Ledbetter)
   Co-Investigator, *Earlier Detection of Cancers*
3. National Human Genome Research Institute, U01-GH008679, 2015-2019, $577,000 (PIs: MS Williams, M Ritchie)
   Co-Investigator, *EMR-Linked biobank for translational genomics (eMERGE III)*
4. National Cancer Institute, R01-CA211723-01, 2017-2022, $3,380,000 (PI: AK Rahm)
   Co-Investigator, *Implementing universal syndrome screening across multiple healthcare systems: Identifying strategies to facilitate and maintain programs in different organizational contexts*
5. National Human Genome Research Institute, U01-HG007437-01, 2017-2021, $261,000 (PI: M Williams)
   Co-Investigator, *The Clinical Genome Resource – Expert curation and EHR integration*
6. National Human Genome Research Institute, U41-HG006834-01, 2013-2018, $105,000 (PIs: DH Ledbetter, CL Martin)
   Co-Investigator, *Clinically relevant genetic variants resource: A unified approach for identifying genetic variants for clinical use*

Clinical Support:

1. Geisinger Health System
   Genetic Counselor, Clinical Genomics Department

Peer-Reviewed Publications:

(http://www.ncbi.nlm.nih.gov/sites/myncbi/1xe3zg7uy6jQz/bibliography/50685533/public/?sort=date&direction=ascending)

1. Skinner CS, **Buchanan A,** Kreuter MW, Holt CL, Bucholtz, D, & Strigo, TS. Adapting tailored intervention message libraries for new populations. *Health Education.* 2003;103:221-229.
2. **Buchanan AH**, Skinner CS, Rawl SM, Moser B, Champion VL, Scott LL, Strigo TS, Bastian L. Patients' interest in discussing cancer risk and risk management with primary care physicians. *Patient Education and Counseling.* 2005;57:77-87. PMID: 15797155
3. Skinner CS, Rawl SM, Moser B, **Buchanan AH**, Scott LL, Champion VL, Schildkraut JS, Parmigiani G, Epps SC, Lobach D, Bastian L. Impact of the Cancer Risk Intake System on patient-clinician discussions of tamoxifen, genetic counseling, and colonoscopy. *Journal of General Internal Medicine.* 2005;20:360-365. PMID: 15857495
4. **Buchanan AH,** Skinner CS, Calingaert B, Schildkraut JS, King RH, Marcom, PK. Cancer genetic counseling in rural North Carolina oncology clinics: program establishment and patient characteristics. *Commun Oncol.* 2009;6:70–77.
5. Datta SK, **Buchanan AH**, Rogers B, Folsom L, Marcom PK, Freeland T, Hollowell GP, Adams MB. Telemedicine vs. face-to-face cancer genetic counseling in rural oncology clinics: Design and methodology. *J Comparative Effectiveness Research*. 2011;1:43-50.
6. Orlando LA, Hauser ER, Christianson C, Powell KP, **Buchanan AH**, Agbaje AB, Henrich VC, Ginsburg G. Protocol for implementation of family health history collection and decision support into primary care using a computerized family health history system. *BMC Health Services Research.* 2011;11:264. PMID: 21989281
7. **Buchanan AH**, Stopfer JE. Genetic counseling in oncology. *JAMA*. 2011;306(13):1442-1443. PMID: 21972303

8. Skinner CS, **Buchanan AH**, Champion V, Monahan P, Rawl S, Springston J, Qianqian Z, Bourff S. Process outcomes from a randomized controlled trial comparing tailored mammography interventions delivered via telephone vs. DVD. *Patient Educ Couns.* 2011;85(2):308-312. PMID: 21112173
9. Orlando LA, **Buchanan AH**, Hahn SE, Christianson CA, Powell KP, Skinner CS, Chestnut B, Blach C, Due B, Ginsburg GS, Henrich VC. Development and Validation of a Primary Care-Based Family Health History and Decision Support Program (MeTree©). *NC Med J.* 2013;74(4):287-296. PMID: 24044145.
10. Wu RR, Orlando LA, Himmel TL, **Buchanan AH**, Powell KP, Hauser ER, Agbaje AB, Henrich VC, Ginsburg GS. Patient and primary care provider experience using a family health history collection, risk stratification, and clinical decision support tool: A Type 2 hybrid controlled implementation-effectiveness trial. *BMC Family Practice.* 2013;14:111. PMID: 23915256
11. Wolf AI, **Buchanan AH**, Farkas L. Historical review of Lynch syndrome. *J Coloproctol*. 2013;33(2):95-110.
12. Greenup R, **Buchanan A**, Lorizio W, Rhoads K, Chan S, Leedom T, King R, McLennan J, Crawford K, Marcom PK, Hwang ES. Prevalence of BRCA mutations among women with triple negative breast cancer (TNBC) in a genetic counseling cohort. *Ann Surg Oncol*. 2013;20(10):3254-8. PMID: 23975317
13. Wu RR, Himmel T, **Buchanan AH**, Powell K, Hauser E, Agbaje A, Ginsburg GS, Henrich VC. Quality of family history collection with use of a patient facing family history collection tool. *BMC Family Practice*. 2014;15:31. PMID: 24520818
14. Orlando LA, Wu RR, Himmel T, **Buchanan AH**, Powell KP, Hauser E, Henrich VC, Ginsburg GS. Implementing family health history risk stratification in primary care: Impact of guideline criteria on populations and resource demand. *Am J Med Genet Part C Semin Med Genet*. 2014;166C(1):24-33. PMID: 24616329
15. Daniels MS, Babb S, King R, Urbauer D, Amos CI, Brandt AC, **Buchanan AH**, Mutch DG, Lu KH. Underestimation of risk of a *BRCA1* or *BRCA2* mutation in women with high-grade serous ovarian cancer by BRCAPRO: A multi-institution study. *J Clin Oncol*. 2014;32(12):1249-55. PMID: 24638001
16. Beadles C, Wu RR, Himmel T, **Buchanan AH**, Powell KP, Hauser E, Henrich VC, Ginsburg GS, Orlando LA. Providing patient education: Impact on quantity and quality of family health history collection. *Familial Cancer*. 2014;13(2):325-32. PMID: 24515581
17. Sanka A, Wu RR, Beadles C, Himmel T, **Buchanan AH**, Powell KP, Hauser ER, Ginsburg GS, Orlando LA. Identifying Patients at Increased Disease Risk: Comparing clinical judgment and a clinical risk assessment tool. *J Family Med Community Health.* 2014;1(2):1010.
18. Champion VL, Rawl SM, Monahan PO, Smith LG, **Buchanan AH**, Bourff SA, Skinner CS. Randomized trial of DVD, telephone and usual care for increasing mammography adherence. *J Health Psychol.* 2016;21(6):916-26. PMID: 25070967
19. Schully SD, Dotson WD, Lam TK, Chang CQ, Aronson N, Birkeland ML, Brewster SJ, Boccia S, **Buchanan AH**, Calonge N, Calzone K, Clyne M, Djulbegovic B, Goodard KAB, Klein RD, Klein TE, Lau J, Long R, Lyman GH, Morgan RL , Palmer CGS, Relling MV, Rubinstein W, Terry SF, Williams MS and Khoury MJ. Evidence Synthesis and Guideline Development in Genomic Medicine: Current Status and Future Prospects. *Genet Med.* 2015;17(1):63-7. PMID: 24946156
20. **Buchanan AH**, Christianson CA, Himmel T, Powell KP, Agbaje A, Ginsburg GS, Henrich VC, Orlando LA. Use of a Patient-entered Family Health History Tool with Decision Support in Primary Care: Impact of Identification of Increased Risk Patients on Genetic Counseling Attendance. *J Genet Couns*. 2015;24(1):179-88. PMID: 25120038
21. Haga SB, Mills R, Pollak KI, Rehder C, **Buchanan A**, Lipkus I, Crow J, Datto M. Promoting Patient Engagement and Understanding through a Patient-friendly Laboratory Report. *Genome Medicine*. 2014;6(7):58. PMID: 25473429

22. Hampel H, Bennett RL, **Buchanan AH**, Pearlman R, Wiesner G. NSGC and ACMG Joint Practice Guidelines: Referral Indications for Cancer Genetic Consultation. *Genet Med*. 2015;17(1):70-87. PMID: 25394175
23. **Buchanan AH,** Datta SK, Skinner CS, Hollowell GP, Beresford HF, Freeland T, Rogers B, Boling J, Marcom PK, Adams MB. Randomized trial of cancer genetic counseling via telemedicine vs. in-person: cost, patient satisfaction and attendance. *J Genet Couns*. 2015;24(6):961-70. PMID: 25833335
24. Kim J, Johnson L, Skrzynia C, **Buchanan A**, Gracia C, Mersereau JE. Prospective multicenter cohort study of estrogen and insulin-like growth factor system in BRCA mutation carriers. *Cancer Causes Control*. 2015;26(8):1087-92. PMID: 26006218
25. Orlando LA, Wu RR, Myers RA, **Buchanan AH**, Henrich VC, Hauser ER, Ginsburg GS. Clinical utility of a web-enabled risk assessment and clinical decision support program. *Genet Med*. 2016;18(10):1020-8. PMID: 26938783
26. Hunter JE, Irving SA, Biesecker LG, **Buchanan AH**, Martin CL, Milko L, Muessig K, Niehaus AD, O'Daniel J, Piper MA, Ramos EM, Slavotinek A, Sobeira N, Schully S, Scott AF, Weaver M, Strande N, Webber EM, Williams MS, Berg JS, Evans JP, Goddard KAB. A standardized, evidence-based protocol to assess clinical actionability of genetic disorders associated with genomic variation. *Genetics in Medicine.* 2016;18(12):1258-68. PMID 27124788
27. **Buchanan AH**, Rahm AK, Williams J. Alternate service delivery models in cancer genetic counseling: a mini-review. *Frontiers in Oncology, Women's Cancer.* 2016 May 13;6:120. eCollection 2016. PMID 27242960
28. **Buchanan AH**, Schildkraut JM, Voils CI, Fine C, Horick N, Marcom PK, Wiggins K, Sugg Skinner C. Adherence to recommended risk management among unaffected women with a *BRCA* mutation. *Journal of Genetic Counseling*. 2017;26(1):79-92. PMID 27265406
29. Foote JR, Lopez-Acevedo M, **Buchanan AH**, Alvarez Secord A, Lee PS, Fountain C, Myers ER, Cohn DE, Reed SD, Havrilesky LJ. Cost comparison of genetic testing strategies in women with epithelial ovarian cancer. *Journal of Oncology Practice.* 2017;13(2):e120-e129. PMID 28045615
30. Hooker GW, Clemens KR, Vogel Postula KJ, Quillin J, Summerour P, Nagy R, **Buchanan AH**. Cancer genetic counseling and testing in an era of rapid change. *Journal of Genetic Counseling*, 2017 Apr 22 [Epub ahead of print]. PMID 28434142
31. Strande NT, Riggs ER, **Buchanan AH**, Dwight SS, Ghosh R, Sneddon TP, Birsoy O, Milko L, Azzariti DM, Giovanni M, Murray MF, O'Daniel J, Ramos EM, Santani A, Scott A, Plon SE, Rehm HL, Martin CL, Berg JS. Evaluating the clinical validity of gene-disease associations: An evidence-based framework developed by the Clinical Genome Resource. *American Journal of Human Genetics*, 2017;100(6):895-906. PMID 28552198
32. Randall LM, Pothuri B, Swisher EM, Diaz J, **Buchanan AH**, Witkop C, Powell B, Blair Smith E, Boyd J, Coleman RL, Lu K. Multi-disciplinary summit on genetics services for women with gynecologic cancers: A Society of Gynecologic Oncology White Paper. *Gynecologic Oncology*. 2017;146(2):217-224. PMID 28596016.
33. **Buchanan AH**, Manickam K, Meyer MN, Wagner JK, Hallquist M, Williams JL, Rahm AK, Williams MS, Chen ZME, Shah CK, Garg TK, Lazzeri AL, Schwartz ML, Lindbuchler DM, Fan AL, Leeming R, Servano III PO, Vogel VG, Abul-Husn NS, Dewey FE, Lebo MS, Mason-Suares HM, Ritchie MD, Davis FD, Carey DJ, Feinberg DT, Faucett WA, Ledbetter DH, Murray MF. Early cancer diagnoses through *BRCA1/2* screening of unselected adult biobank participants. *Genetics in Medicine,* 2017 Oct 26 [Epub ahead of print]. PMID pending.
34. Rahm AK, Bailey L, Fultz K, Fan A, Williams JL, **Buchanan AH**, David FD, Murray MF, Williams MS. Parental attitudes and expectations towards receiving genomic test results in healthy children. *Translational Behavioral Medicine*, In press.

Manuscripts under Review:

1. Schwartz MLB, McCormick CZ, Lazzeri A, Lindbuchler D, Hallquist M, Manickam K, Flansburg C, Davis FD, Sturm AC, **Buchanan AH**, Nicastro C, Giovanni MA, Lebo MS, Mason-Suares H, Mahanta LM, Rahm AK, Williams JL, Williams MS, Ledbetter DH, Faucett WA, Murray MF. A model for genome-first care: Returning secondary genomic findings to participants and their healthcare providers in a large research cohort. Submitted to *BMC Medical Genomics*.

Manuscripts in Process:

1. Manickam K, **Buchanan AH**, Schwartz MLB, Hallquist M, Williams J, Rahm AK, Rocha H, Savatt J, Evans A, Butry L, Lazzeri A, Lindbuchler D, Flansburg C, Leeming R, Vogel V, Lebo M, Mason-Suares H, Hoskinson D, Abul-Husn N, Dewey F, Overton J, Reid J, Baras A, Williard H, McCormick C, Krishnamurthy S, Hartzel D, Kost K, Lavage D, Sturm A, Frisbie L, Person T, Metpally R, Giovanni M, Lowry L, Leader J, Ritchie M, Carey D, Kirchner L, Faucett WA, Williams MS, Ledbetter DH, Murray MF. Cases of *BRCA1/2* associated cancer risk in 50,726 exome sequenced adults.
2. Ghosh R, **Buchanan AH**, Strande NS, Riggs ER, Dwight SS, Sneddon TP, Martin C, Berg J, Ferber M, Offit K, Nathanson KL, Plon SE. Clinical validity of genes implicated in pheochromocytoma/paraganglioma.
3. **Buchanan AH**, Rahm AK, Bailey L, Goehringer J, Evans A, McCormick CZ, Davis FD, Murray MF. Assessing patients' experience with receiving a result through a genomic screening program.

Peer-Reviewed Presentations:

1. **Buchanan AH**, Skinner CS, King RH, Marcom PK. Establishment of an outreach cancer genetic counseling program in rural North Carolina cancer clinics: Feasibility, patient characteristics and satisfaction. *24th Annual Education Conference of the National Society of Genetic Counselors*, November 2005, Los Angeles, CA.
2. Rawl, SM, Champion, VL, Scott, L, Monahan, P, Cotton, T, Weaver, L, Overgaard, A, **Buchanan, A**, Skinner, CS. Testing of an interactive computer program to encourage colorectal cancer testing among African Americans. *Oncology Nursing Society,* February 2005, Ft. Lauderdale, FL.
3. Steele S, Champion V, Skinner CS, Rawl S, Springston JK, **Buchanan AH**. Development and testing of an interactice DVD. *18th International Nursing Research Congress Focusing on Evidence-Based Practice,* July 2007, Vienna, Austria.
4. **Buchanan AH,** Adams MA, Datta S, Hollowell GP, Beresford HF, Boling J, Freeland T, Rogers B, Marcom PK. Patient satisfaction with telemedicine vs. in-person cancer genetic counseling: a randomized controlled trial. *29th Annual Education Conference of the National Society of Genetic Counselors*, October 2010, Dallas, TX. Available from: http://www.nsgc.org/conferences/aec.cfm
5. **Buchanan AH,** Datta SK, Adams MB, Hollowell GP, Beresford H, Boling J, Freeland T, Rogers B, Marcom PK. Telemedicine vs. in-person cancer genetic counseling in rural oncology clinics: a randomized controlled trial of cost and patient satisfaction. *American College of Medical Genetics Annual Clinical Genetics Meeting,* March 2011, Vancouver, BC. Available from: http://submissions.miracd.com/acmg/default.aspx
6. **Buchanan AH**. Skinner CS, Voils CI, Horick N, Fine C, Murray S, Baker T, Marcom PK, Schildkraut JS. Adherence to Cancer Risk Management among Unaffected *BRCA1/2* Mutation Carriers. *31st Annual Education Conference of the National Society of Genetic Counselors*, October 2012, Boston, MA.
7. Hooker GW, **Buchanan AH,** Rhoads K, Vogel Postula K, Quillin J, Summerour P, Nagy R. Cancer Genetic Counseling and Testing in an Era of Rapid Change. *33rd Annual Education Conference of the National Society of Genetic Counselors,* September 2014, New Orleans, LA.
8. Ghosh R, **Buchanan AH**, Strande NS, Riggs ER, Dwight SS, Sneddon TP, Martin CL, Berg J, Ferber M, Offit K, Nathanson KL, Plon SE. Clinical validity of genes implicated in pheochromocytoma/paraganglioma and pancreatic cancer. *American Society of Human Genetics Annual Meeting*, October 2015, Baltimore, MD.

9. Murray MF, Manickam K, **Buchanan AH**, Lindbuchler DM, Barr M, Lazzeri AL, Gorgol LM, McCormick CZ, Flansburg CN, Hallquist M, Rahm AK, Fan A, Faucett WA, Giovanni MA, Hartzel DN, Leader JB, Kirchner HL, Abul-Husn NS, Dewey FE, Metpally RPR, Carey DJ, Person TN, Ritchie MD, Ledbetter DH. Return of incidental results for *BRCA1/BRCA2* to a 50,726 person cohort within a single healthcare provider organization. *American Society of Human Genetics Annual Meeting*, October 2016, Vancouver, BC.
10. Fultz K, Rahm AK, **Buchanan AH**, Davis FD, Fan A, Bailey L, Williams JL, Murray MF. A parent's perspective: Receiving genomic results for adult-onset conditions in healthy children. *American Public Health Association Annual Meeting*, October 2016, Denver, CO.
11. Schwartz MLB, Lebo M, Rehm H, Mehra V, Manickam K, Lindbuchler DM, **Buchanan AH**, Hallquist M, Austin-Tse CA, Mason-Suares H, Murray MF. High incidence of cardiac phenotypes amongst adult biorepository participants with hypertrophic cardiomyopathy risk identified through genomic screening. *American College of Medical Genetics and Genomics Annual Clinical Genetics Meeting*, March 2017, Phoenix, AZ.
12. **Buchanan AH**, Wagner J, Meyer M, Davis FD. Returning genomic results to adult and pediatric biobank participants. *The 4th ELSI Congress*, June 2017, Farmington, CT.
13. Tricou EP, Savatt JM, Rocha H, Hallquist MLG, Rahm AK, Williams JL, Schmidlen T, Evans A, Deckard N, Fan AL, Faucett WA, Williams MS, **Buchanan AH**. Impact of a genetic counseling assistant on genetic counseling time utilization and patient accessibility. *36th Annual Meeting of the National Society of Genetic Counselors*, September 2017, Columbus, OH.
14. Hunter JE, Webber EM, Lee K, Muessig KR, Biesecker LG, **Buchanan AH**, Lindor N, Martin CL, O'Daniel JM, Ramos ER, Slavotinek, Sobreira N, Weaver MA, Williams MS, Evans J, Goddard KAB, on behalf of the ClinGen Resource. Evidence-based assessments of clinical actionability in the context of secondary findings: Updates from ClinGen's Actionability Working Group. *American Society of Human Genetics Annual Meeting*, October 2017, Orlando, FL.

Peer-Reviewed Posters:

1. **Buchanan AH**, Clark S, Skinner CS, Sarratt WE, McLamb C & DeVellis BM. Cancer Genetics Network educational tools: Development of an Internet-based resource for health professionals. *19th Annual Education Meeting of the National Society of Genetic Counselors*, November 2000, Savannah, GA.
2. **Buchanan AH**, Sorenson JR, Griffith JM. Patient-provider discussions of prenatal screening and testing. *23rd Annual Education Meeting of the National Society of Genetic Counselors*, October 2004, Washington, DC.
3. **Buchanan AH**, Skinner CS, King RH, Marcom PK. Outreach cancer genetic counseling in rural NC clinics: Feasibility, patients characteristics and satisfaction. *Duke Comprehensive Cancer Center Annual Meeting*, April 2006, Durham, NC.
4. Skinner CS, **Buchanan AH**, Champion VL, Monahan P, Bourff S, Rawl SM, Springston J. Exposure and reaction to tailored mammography intervention via telephone vs. DVD. *American Society of Preventive Oncology Annual Meeting*, March 2009, Tampa, FL.
5. Hahn SE, Blanton SH, **Buchanan AH**, Christianson CA, Powell KP, Henrich VC, Vance JM, Pericak-Vance MA. Collection and use of family history in the primary care setting. *American College of Medical Genetics Annual Clinical Genetics Meeting*, March 2009, Tampa, FL.
6. Booker F, Adams MB, Beresford H, **Buchanan AH**, Datta SK, Freeland T, Marcom PK, Hollowell GP. The acceptibility of cancer genetic counseling via telemedicine in rural oncology clinics. *North Carolina Central University Undergraduate Research Day*, April 2010, Durham, NC.
7. Orlando LA, Hauser RE, Christenson C, Powell KP, **Buchanan AH**, Agbaje AB, Henrich VC, Ginsburg GS. Integrating electronic family history taking into primary care: Patient and provider perceptions. *4th National Conference on Genomics and Public Health*, December 2010, Bethesda, MD.

8. Orlando LA , Hauser RE, Christenson C, Powell KP, **Buchanan AH**, Agbaje AB, Henrich VC, Ginsburg GS. What's the Impact? Clinical validity and utility of MeTree, an Electronic Family History Collection and Decision Support Tool for Primary Care. *34th Annual Meeting of the Society of General Internal Medicine*, May 2011, Phoenix, AZ.
9. Booker F, Adams MB, Beresford H, **Buchanan AH**, Datta SK, Freeland T, Marcom PK, Hollowell GP. The cost-effectiveness of telemedicine vs. in-person genetic counseling in rural oncology clinics. *North Carolina Central University Undergraduate Research Day*, April 2011, Durham, NC.
10. Orlando LA, Hauser ER, Christianson C, Powell KP, **Buchanan AH**, Agbaje AB, Henrich VC, Ginsburg G. What the impact? Clinical validity and utility of Metree, an electronic family history collection and decision support tool for primary care. *34th Annual Meeting of the Society of General Internal Medicine*, April 2011, Phoenix, AZ.
11. Henrich VC, Hauser E, Orlando L, Christianson C, **Buchanan AH**, Powell K, Agbaje A, Ginsburg G & Genomedical Connection. A primary care model for assessing patient disease risk based on family health history: Description and preliminary analysis. *61st Annual Meeting of the American Society of Human Genetics,* October 2011, Montreal, QC.
12. **Buchanan AH**, Schildkraut JM, Voils CI, Fine C, Horick N, Murray S, Marcom PK, Skinner CS. Adherence to cancer risk management among unaffected *BRCA1/2* mutation carriers. *Duke Cancer Control Research Science Fair*, May 2012, Durham, NC.
13. Daniels MS, Babb S, King R, Urbauer D, Amos CI, Brandt AC, **Buchanan A**, Mutch DG, Lu KH. A multi-institution study of the accuracy of BRCAPRO in predicting BRCA1/BRCA2 mutations in women with ovarian cancer. *2012 American Society of Clinical Oncology Annual Meeting*, June 2012, Chicago, IL.
14. Wu RR, Himmel T, **Buchanan A**, Powell K, Hauser E, Agbaje AB, Ginsburg GS, Henrich VC, Orlando LA. Impact of a family history collection tool, MeTree, in identifying individuals at high-risk for cancer and thrombosis. *36th Annual Meeting of the Societuy of General Internal Medicine*, April 2013, Denver, CO.
15. **Buchanan AH**, Schildkraut JM, Voils CI, Fine C, Horick N, Murray S, Marcom PK, Skinner CS. Adherence to cancer risk management recommendations among unaffected *BRCA* mutation carriers. *1st Annual Duke Cancer Institute Scientific Retreat*, May 2013, Durham, NC.
16. **Buchanan AH**, Schildkraut JM, Voils CI, Fine C, Horick N, Murray S, Marcom PK, Skinner CS. Adherence to cancer risk management recommendations among unaffected *BRCA* mutation carriers. *32st Annual Education Conference of the National Society of Genetic Counselors*, October 2013, Anaheim, CA.
17. Joseph K, **Buchanan AH**, King R, Leedom T, Callanan N. Application of the NSGC Practice Guidelines for Hereditary Breast and Ovarian Cancer Genetic Counseling to male patients. *32st Annual Education Conference of the National Society of Genetic Counselors*, October 2013, Anaheim, CA.
18. Hooker G, Nagy R, **Buchanan A**, Quillin J, Rhoads K, Summerour P, Knapke S, Vogel K. Cancer Genetic Counseling and Testing in an Era of Rapid Change. *American College of Medical Genetics Annual Clinical Genetics Meeting*, March 2014, Nashville, TN.
19. **Buchanan AH**, Fine C, Skinner CS, Schildkraut JM, Horick N, Marcom PK, Voils CI. Perceived benefits of and barriers to risk management among unaffected *BRCA* mutation carriers. *BRCA: Twenty Years of Advances - The Fifth International Symposium on Hereditary Breast and Ovarian Cancer*, April 2014, Montreal, QC.
20. Ghosh R, **Buchanan A**, Strande NS, Riggs ER, Dwight SS, Sneddon TP, Martin C, Berg J, Ferber M, Offit K, Nathanson KL, Plon SE. Clinical validity of genes implicated in pheochromocytoma/ paraganglioma. *2015 ClinGen DECIPHER Meeting,* May 2015, Washington, DC.
21. Dwight S, Sneddon TP, Liu K, Dalton K, Tanaka F, Hitz B, Riggs E, Birsoy O, **Buchanan A**, Ghosh R, Strande N, Plon S, Rehm H, Martin C, Berg J, Cherry JM, ClinGen Resource. The ClinGen interface for curating the clinical validity of gene-disease associations: Specifications and

implementation. *American Society of Human Genetics Annual Meeting*, October 2015, Baltimore, MD.

22. Martin SA, Giovanni M, **Buchanan AH**, Barr M, Murray MF. Geisinger GenomeFIRST™ and targeted family history collection. *American Society of Human Genetics Annual Meeting*, October 2015, Baltimore, MD.
23. Barr ML, Giovanni MA, Lindbuchler DM, **Buchanan AH**, Murray MF. Redefining phenotypic assessments for a GenomeFIRST™ future. *American College of Medical Genetics and Genomics Annual Clinical Genetics Meeting*, March 2016, Tampa, FL.
24. Flansburg CN, Faucett WA, **Buchanan AH**, Barr ML, Giovanni MA, Murray MF. Patient & provider notification of secondary genomic findings in Geisinger's GenomeFIRST™ program. *American College of Medical Genetics and Genomics Annual Clinical Genetics Meeting*, March 2016, Tampa, FL.
25. Lindbuchler DM, Giovanni MA, Barr ML, **Buchanan AH**, Murray MF. Condition-specific GenomeFIRST™ evaluation for individuals with secondary genomic findings. *American College of Medical Genetics and Genomics Annual Clinical Genetics Meeting*, March 2016, Tampa, FL.
26. Rahm AK, **Buchanan AH**, Davis FD, Bailey L, Fan A, Fultz K, Williams J, Murray MF. Parental attitudes toward receiving genomic results for adult-onset conditions in healthy children. *American College of Medical Genetics and Genomics Annual Clinical Genetics Meeting*, March 2016, Tampa, FL.
27. **Buchanan AH**, Giovanni MA, Lindbuchler DM, Martin SA, Barr ML, Murray MF. Genotype-specific family history collection for Geisinger's GenomeFIRST™ program. *American College of Medical Genetics and Genomics Annual Clinical Genetics Meeting*, March 2016, Tampa, FL.
28. Orlando LA, Myers R, Wu RR, **Buchanan AH**, Ginsburg G, Hauser E. Disease co-inheritance from family health history obtained in primary care. *13th International Congress of Human Genetics,* April 2016, Kyoto, JP.
29. **Buchanan AH**, Faucett WA, Hallquist M, Cho M, Brothers K, Coughlin II CR, Hercher L, Hudgins L, Jamal S, Levy H, Peay H, Roche M, Stosic M, Smith M, Uhlmann W, Wain K, Ormond KE. Genetic testing for hereditary cancer predisposition: when can a targeted discussion with a non-genetics clinician provide adequate consent? *35th Annual Education Conference of the National Society of Genetic Counselors*, September 2016, Seattle, WA.
30. Hallquist MLG, **Buchanan AH**, Faucett WA, Cho M, Brothers K, Coughlin II CR, Hercher L, Hudgins L, Jamal S, Levy H, Peay H, Roche M, Stosic M, Smith M, Uhlmann W, Wain K, Ormond KE. Development of tools to determine communication strategies for actionable genes from ClinGen's CADRe Working Group. *35th Annual Education Conference of the National Society of Genetic Counselors*, September 2016, Seattle, WA.
31. Schwartz ML, **Buchanan AH**, Hallquist MLG, Manickam K, Murray MF. Genotype-first genetic counseling - How general population genome screening has the potential to turn traditional genetics service models upside-down. *35th Annual Education Conference of the National Society of Genetic Counselors*, September 2016, Seattle, WA.
32. Myers RA, Orlando LA, Wu RR, **Buchanan AH**, Ginsburg GS, Hauser ER. Pleiotropy in complex diseases estimated from family health history collected in primary care. *American Society of Human Genetics Annual Meeting*, October 2016, Vancouver, BC.
33. Dwight S, Wright M, Dalton K, Liu K, Choi M, Tanaka F, Zhen J, Azzariti D, Babb L, Bizon C, Distefano M, Harrison S, Patel R, Pawliczek P, Rooney Riggs E, Strande N, **Buchanan A**, Ghosh R, Berg J, Bustamante C, Martin C, Milosavljevic A, Plon S, Rehm H, Cherry JM, the ClinGen Consortium. ClinGen's gene and variant curation interface suite: Centralized and consistent evaluation of the clinical relevance of genes and variants. *American Society of Human Genetics Annual Meeting*, October 2016, Vancouver, BC.
34. Manickam K, Hartzel D, Abul-Husn N, Dewey F, Lindbuchler D, Barr M, Lazzeri A, Hallquist M, **Buchanan A**, Faucett WA, Murray M. Penetrance in the EHR record of 76 DiscovEHR Cohort

participants with two recurrent pathogenic variants. *American Society of Human Genetics Annual Meeting*, October 2016, Vancouver, BC.

35. Hallquist MLG, **Buchanan AH**, Faucett WA, Cho M, Brothers K, Coughlin II CR, Hercher L, Hudgins L, Jamal S, Levy H, Peay H, Roche M, Stosic M, Smith M, Uhlmann W, Wain K, Ormond KE. Determining critical communication issues for the genetic testing process. *American Society of Human Genetics Annual Meeting*, October 2016, Vancouver, BC.
36. **Buchanan AH**, Rahm AK, Bailey L, Goehringer J, Davis FD, Murray MF. Assessing patients' experience with receiving a result through a genomic screening program. *American College of Medical Genetics and Genomics Annual Clinical Genetics Meeting*, March 2017, Phoenix, AZ.
37. Lazzeri A, Manickam K, Lindbuchler D, Schwartz MLB, Evans A, **Buchanan AH**, Hallquist M, Nicastro C, Murray MF. Reasons for declining follow-up for 44 patients with incidental genomic findings associated with cancer and cardiovascular risk. *American College of Medical Genetics and Genomics Annual Clinical Genetics Meeting*, March 2017, Phoenix, AZ.
38. Manickam K, **Buchanan AH**, Lindbuchler D, Schwartz MLB, Lazzeri A, Gorgol L, McCormick CZ, Flansburg C, Hallquist M, Rahm AK, Lowry L, Faucett WA, Giovanni MA, Hartzell D, Kost K, Leader J, Kirchner HL, Abul-Husn N, Dewey F, Austin-Tse C, Mason-Suares H,Metpally R, Carey D, Person T, Ritchie M, Ledbetter D, Murray MF. Characterization of BRCA1 and BRCA2 pathogenic variants from exome sequencing of 50,726 individuals from a single healthcare provider system. *American College of Medical Genetics and Genomics Annual Clinical Genetics Meeting*, March 2017, Phoenix, AZ.
39. Dwight SD, Wright M, Dalton K, Choi M, Tanaka F, Zhen J, Azzariti D, Babb L, Bizon C, **Buchanan AH**, DiStefano M, Ghosh R, Harrison S, Patel R, Pawliczek, Riggs E, Seifert B, Strande N, Berg J, Bustamante C, Martin C, Milosavljevic A, Plon S, Rehm H, Cherry J. ClinGen's gene and variant curation interface suite: Centralized and consistent evaluation of the clinical relevance of genes and variants. *American College of Medical Genetics and Genomics Annual Clinical Genetics Meeting*, March 2017, Phoenix, AZ.
40. Wu RR, Myers R, **Buchanan A**, Ginsburg GS, Orlando LA for the IGNITE Implementation, Adoption, and Utility of Family Health History in Diverse Care Settings study team. Implementation and clinical effectiveness of a family history driven risk assessment tool within primary care. *Human Genetics Society of Australasia Annual Meeting*, August 2017, Brisbane, QLD.
41. Rahm AK, Bailey L, Williams JL, Davis FD, Fultz K, Fan A, **Buchanan AH**, Murray MF, Williams MS. Parental attitudes and expectations towards receiving genomic test results in healthy children. *36th Annual Meeting of the National Society of Genetic Counselors*, September 2017, Columbus, OH.
42. Hallquist MLG, Tricou EP, Savatt JM, Rocha H, Deckard N, Evans A, Fan AL, Faucett WA, Pervola J, Rahm AK, Eashkin M, Schmidlen T, Schwartz MLB, Williams JL, Williams MS, **Buchanan AH**. Genetic counseling assistants in a cancer genetics clinic: Genetic counselor utilization and impact on patient volume. *American Society of Human Genetics Annual Meeting*, October 2017, Orlando, FL.

Invited Scientific Presentations:

Topic: Genetic Counseling, Testing & Management for Hereditary Cancer Syndromes

1. *Duke Oncology Network Annual Education Retreat,* September 2005, Cary, NC.
2. *North Carolina Medical Genetics Association,* October 2005, Durham, NC.
3. *North Carolina Medical Genetics Association,* October 2009, Winston-Salem, NC.
4. *Duke Oncology Network Annual Retreat*, August 2010, Durham, NC.
5. *2nd Annual Scotland Cancer Treatment Center Cancer Symposia,* November 2010, Laurinburg, NC.
6. *Duke Oncology Symposium,* May 2011, Raleigh, NC.
7. *Area L AHEC 7th Annual Cancer Symposium*, October 2011, Wilson, NC.
8. *Beaufort Memorial Hospital Oncology Symposium*, November 2011, Beaufort, SC.

9. *3rd Annual Scotland Cancer Treatment Center Symposia*, November 2011, Laurinburg, NC.
10. *Augusta Health Nursing In-Service*, March 2012, Fishersville, VA.
11. *Augusta Health Surgical In-Service*, March 2012, Fishersville, VA.
12. *Indian River Medical Center CME Program*, April 2013, Vero Beach, FL.
13. *Duke Raleigh Nursing CME Program*, December 2013, Raleigh, NC.
14. *Duke Cancer Network Webinar*, January 2014, Durham, NC.
15. *Managing Hereditary Cancer in Community Practice*, May 2014, Cary, NC.
16. *Indian River Medical Center CME Program*, August 2014, Vero Beach, FL.
17. *Duke Oncology Nursing CME Program*, October 2014, Durham, NC.
18. *Memorial Hospital of Martinsville & Henry County CME Program*, October 2014, Martinsville, VA.
19. *Danville Memorial Hospital CME Program*, January 2015, Danville, VA.
20. *Geisinger Health System GenomeFIRST Hereditary Breast and Ovarian Cancer Syndrome Symposium*, September 2015, Forty Fort, PA.

Topic: Genomic Medicine - Return of Medically Actionable Genomic Results

1. *Frontline Genomics Festival of Genomics*, November 2015, San Francisco, CA.
2. *Duke University School of Medicine Genomics Forum,* December 2016, Durham, NC.
3. *The National Academies of Science, Engineering and Medicine, Return of Individual-Specific Research Results Generated in Research Laboratories*, September 2017, Washington, DC.

Topic: Patient Engagement in Research and Clinical Care

1. *Symposium on enhancing patient- and family-centered care through learning, engagement and discovery*, June 2016, Danville, PA.

Academic Lectures:

Topic: Genetic Counseling, Testing & Management for Hereditary Cancer Syndromes

1. *International Genetics Training Program,* Duke University Medical Center, 2004-2007 (annually)
2. *Oncology/ HIV AIDS Nursing I: Epidemiology and Pathophysiology class,* Duke University School of Nursing, Graduate School, 2005-2013 (annually)
3. *Board Review Course,* Duke University Medical Center, 2007, 2009, 2011, 2013
4. *Cancer Biology class,* North Carolina Central University, Department of Biology, 2006
5. *Introduction to Health Psychology class,* Duke University, 2007
6. *Clinical Medicine class*, Duke University Physician Assistant Program, 2014
7. *OB-GYN Residency Program*, Duke School of Medicine, 2014

Topic: Genomic Medicine - Return of Medically Actionable Genomic Results

1. *Genome Sciences & Policy* course, Duke University, 2015
2. *Genetic Counseling Graduate Program,* University of North Carolina – Greensboro, 2016
3. *Physician Assistant Program,* Misericordia University, 2016

Community Presentations:

Topic: Genetic Counseling, Testing & Management for Hereditary Cancer Syndromes

1. *Scotland County Cancer Support Group,* Laurinburg, NC, 2004
2. *Person Memorial Hospital's "Health Night Out",* Henderson, NC, 2005
3. *Southeastern Regional Medical Center,* Lumberton, NC, 2005
4. *Southeastern Regional Medical Center's Monthly Educational Series*, Lumberton, NC, 2007
5. *Maria Parham Medical Center's Lunch & Learn Series,* Henderson, NC, 2008
6. *Morehead Memorial Hospital's Medical Staff Series*, Eden, NC, 2009.
7. *Augusta Health's Lunch & Learn Series*, Fishersville, VA, 2012
8. *Indian River Medical Center*, Vero Beach, FL, 2013.

Training Roles:

1. Supervisor – *Clinical Cancer Genetics Rotation, Duke Cancer Institute*
   Graduate Genetic Counseling Program, The University of North Carolina – Greensboro, 2006-2014
   Graduate Genetic Counseling Program, The University of South Carolina, 2007
   Graduate Genetic Counseling Program, Northwestern University, 2009
2. Coordinator – *Independent Study in Clinical Cancer Genetics*
   Nurse Practitioner Program, Duke University School of Nursing, 2007
3. Master's Thesis Committee Member – *UNCG Graduate Genetic Counseling Program*
   "Patient perceptions of usefulness of cancer genetic counseling summary letters", Emily Rettner, 2007-2008 (Chair)
   "*Genetics professionals' attitudes regarding licensure of genetic counselors*", Michelle Burch, 2011-2012
   "*Application of the NSGC Practice Guidelines for Hereditary Breast and Ovarian Cancer Genetic Counseling to Male Patients*", Kati Joseph, 2012-2013
   "*How Much Information is Captured on Cancer Pedigrees of Hispanic Americans As Compared to Caucasian Americans: A Genetic Counseling Pedigree Analysis Study*", Katie Sanders, 2017-2018

Reviewer for:

Journal of Health Care for the Poor & Underserved, 2003
Cancer Epidemiology Biomarkers & Prevention, 2003, 2004, 2006
American Journal of Preventive Medicine, 2005-2008
Journal of Genetic Counseling, 2006, 2011, 2015-2017
Genetics in Medicine, 2008-2011, 2016, 2017
Genetic Testing, 2009
JAMA, 2012
BMC Cancer, 2015
JAMA Oncology, 2016

Professional Memberships & Activities:

National Society of Genetic Counselors, 2002-present
- Member*, Familial Cancer Risk Counseling Special Interest Group (SIG),* 2004-present
- Reviewer, *Annual Education Conference Abstract Committee,* 2007-2009
- Co-Chair*, Research Subcommittee, Familial Cancer Risk Counseling SIG,* 2008-2011
- At-Large Member*, Award Subcommittee,* 2009, 2010
- Member, *Service Delivery Task Force*, *Access and Service Delivery Committee,* 2010-2012
- Treasurer, *Familial Cancer Risk Counseling SIG,* 2011-2013
- Vice Chair, Chair & Past Chair, *Practice Guidelines Committee*, 2012-2014
- Member, *Personalized Medicine SIG*, 2013-present
- Member, *Research SIG*, 2013-present
- Member, *Cardiovascular Genetics SIG*, 2015-present
- Member, *Outcomes Task Force*, 2016-present
- Mentor, *Mentor Program*, 2017-present

Member, Editorial Board, *Journal of Genetic Counseling*, 2014-present
- Member, Editor Search Committee, 2016-2017
- Section Editor, 2018-present

Diplomate*, American Board of Genetic Counseling,* 2005-present
- Item Writer – Certification Examination, 2014-2015
- Board of Directors, 2017-2020

American College of Medical Genetics & Genomics, 2011-present

Member, *Geisinger Health System Patient Engagement Working Group*, 2015-present