CURRICULUM VITAE- Carrie Blout Brigham and Women's Hospital

April 2018

Carrie L. Blout

Demographic and Personal Information

Current Position:

Director of Research Development Senior Genetic Counselor/ Project Manager Genomes2People Translational Research Group Department of Medicine/ Division of Genetics Brigham and Women's Hospital and Harvard Medical School Boston, MA

Adjunct Assistant Professor, Genetic Counseling MGH Institute of Health Professionals

Business Address:

41 Avenue Louis Pasteur, Suite 301

Boston, MA 02115 Phone: 617-264-5837

Email: cblout@bwh.harvard.edu

Education and Training:

2004-2006 University of Pittsburgh- Masters of Science, Genetic Counseling,

Pittsburgh, PA

Thesis- "Single Nucleotide polymorphisms in ICA1 and their association with Insulin

Dependent Diabetes Mellitus"

Dickinson College- Bachelor of Science in Biology, Carlisle, PA 2000-2004

Graduated Cum Laude

2003 University of Queensland, Brisbane, Australia

Nov 9-11, 2011 Johns Hopkins Medicine- Roles and Responsibilities: Fundamentals for

the Research Coordinator

Board Certification:

2007- Present American Board of Genetic Counseling

Professional Experience:

2015-Present

Genomes 2 People, Brigham and Women's Hospital and Harvard Medical School, Boston, MA

- Senior Genetic Counselor Partners HealthCare Biobank and eMERGE Consortium Return of Result Project- Provide genetic counseling to Partners HealthCare Biobank participants who receive unanticipated findings.
- Senior Project Manager and Genetic Counselor- The MedSeq Project: a randomized controlled trial of Whole Genome Sequencing. Point person for over 50 scientists, research staff and collaborators; Present scientific findings at national and international meetings; Write and update IRB protocols, consents and recruitment documents; Plan and run weekly project meetings; Coordinate and contribute to scholarly articles generated by the MedSeq Project; Assist with design and workflow among sub-projects and spin-off projects; In conjunction with other G2P members write and edit grant proposals; Actively participate in the Clinical Sequencing Exploratory Research Consortium; Manage and mentor junior G2P staff.
- Senior Project Manager and Genetic Counselor Advisor- Enabling Personalized Medicine through Exome Sequencing in the U.S. Air Force-Provide mentoring to a junior genetic counselor for tasks listed above and advise on the project.
- Senior Project Manager and Genetic Counselor- Precision Medicine and Treatment (PreEMT). Genetics knowledge expert advisor.
- **Study team member** for *The BabySeq Project*: Consent new families to the study, Collect family and medical histories, Conduct whole exome sequencing and family history disclosure sessions in conjunction with medical geneticists.

2011-2015

Johns Hopkins University School of Medicine, Institute of Genetic Medicine Greenberg Center for Skeletal Dysplasias, Baltimore, MD

• Lead Study Coordinator- Managed several complex research studies including: Clinical trials for Down syndrome and Achondroplasia. Tasks included but are not limited to: Prepared IRB submissions; Prepared ICTR (GCRC) submissions; Facilitated communication between PI and study team members; Extensive verbal and written communication with study sponsor(s) regarding study design, feasibility, logistics, goals, and results; Management of Greenberg center research budgets, totaling more than a half of a million dollars, in conjunction with JHU service analysts; Managed regulatory compliance and audit readiness; Education training and mentorship of other study staff; Recruitment; Scheduling; Informed consent; Facilitated research activities

2012-2015

Johns Hopkins University Multidisciplinary Cleft Clinic, Baltimore, MD

• **Genetic Counselor-** Provided comprehensive pediatric clinical genetic counseling; Assisted with the development and maintenance of the cleft clinic database for research use; Consented patients for Mendel Genome Wide Sequencing research project- as needed.

2009-2011

The Maryland Department of Health and Mental Hygiene, Baltimore, MD

• Genetic Counselor, Newborn Screening Follow-up- Reported abnormal NBS results to providers and parents; Updated the state and national NBS database; Assisted in establishing and revising newborn screening and hereditary and congenital disorder policy; Assisted with data collection and critical analysis for genetic counseling students newborn screening research projects; Provided NBS education to providers; Developed NBS educational material including design of the Maryland Newborn Screening website; Participated and frequently present at the Maryland State Advisory Council on Hereditary and Congenital Disorders

2009-2011

University of Maryland Medical Center, Department of Pediatrics, Baltimore, MD

• **Genetic Counselor-** Provided comprehensive clinical pediatric genetic counseling services

2006-2009

Nationwide Children's Hospital, Department of Pediatrics, Columbus, OH

• **Genetic Counselor-** Provided comprehensive pediatric, adult, and high risk prenatal clinical genetic counseling services in general genetics, Down syndrome and Spina Bifida clinic

Consulting:

2017- Present

The Framingham Heart Study (FHS) Return of Results Project

- Develop best practices to guide the return of actionable genomic results
- Provide actionable results to FHS participants

2014

New York-Mid-Atlantic Consortium for Genetics and Newborn Screening Services- Consultant

 Develop guidelines for a standardized genetic component in integrated delivery systems.

2011

National Coalition for Health Professional Education in Genetics-Writer/Consultant

- Family history project algorithm-Consultant/Reviewer
- "Genetics for the Child Neurologist"- Writer

Research Projects:

2015-Present

Genomes 2 People, Brigham and Women's Hospital and Harvard Medical School, Boston MA

• Senior Project Manager and Genetic Counselor- Integration of Whole Genome Sequencing into Clinical Medicine (MedSeq). PI: Dr. Robert Green

- Senior Project Manager and Genetic Counselor Advisor- Enabling Personalized Medicine through Exome Sequencing in the U.S. Air Force PI: Dr. Robert Green
- Senior Genetic Counselor Partners HealthCare Biobank Return of Result Project- PI: Dr. Scott Weiss
- Senior Genetic Counselor Partners HealthCare eMERGE- PI: Dr. Scott Weiss
- Senior Genetic Counselor Precision Medicine and Treatment (PreEMT)
 Model PI: Ann Wu, MD
- Study Team Member- Genome Sequence-Based Screening for Childhood Risk and Newborn Illness. PI: Dr. Robert Green

2011-2015

Johns Hopkins University School of Medicine, Baltimore, MD.

- Lead Study Coordinator- A multi-center, randomized, double-blind, placebocontrolled, multiple dose study to investigate safety and tolerability of RO5186582 in individuals with Down syndrome: PI- Dr. Julie Hoover-Fong
- Lead Study Coordinator- Achondroplasia Retrospective Data Collection Via Chart Review: 2012. PI- Dr. Julie Hoover-Fong
- Lead Study Coordinator- A Screening Protocol to Assess Adult and Adolescent Individuals with Down Syndrome for Eligibility to Participate in an Upcoming Study to Evaluate the Efficacy, Safety and Tolerability of RO5186582: PI- Dr. Julie Hoover-Fong
- Lead Study Coordinator- A multi-center, randomized, double-blind, placebocontrolled phase 2 study of the efficacy, safety and tolerability of RO5186582 in adults and adolescents with Down syndrome (Clematis: PI- Dr. Julie Hoover-Fong
- Lead Study Coordinator- A Multicenter, Multinational Clinical Assessment Study for Pediatric Patients with Achondroplasia: PI- Dr. Julie Hoover-Fong
- Lead Study Coordinator- A Phase 2, Open-label, Sequential Cohort Doseescalation Study of BMN 111 in Children with Achondroplasia: PI- Dr. Julie Hoover-Fong
- **Study Team Member-** Expectations and Motivations of Participants Consented for Genome-Wide Sequencing Research: PI. Dr. David Valle, MD
- **Study Team Member-** Genome-wide Sequencing to Identify the Genes Responsible for Mendelian Disorders. Amanda Bergner, MS, CGC

2009-2010

University of Maryland/Maryland State Health Department, Baltimore, MD

• **Study Team Member-** Screening for Heritable Disorders in Children: Efficacy from a Family/Consumer Perspective. PI: Carol Greene, MD

2007-2009

Nationwide Children's Hospital/ Ohio Department of Health Collaboration, Columbus, OH

• Site Coordinator- Myelomeningocele Survey Project

2004-2006

University of Pittsburgh, UPMC Rangos Research Center, Pittsburgh PA

• **Graduate Student Researcher** -Thesis Project: The association of single nucleotide polymorphisms in intronic regions of islet cell autoantigen 1 and type 1 diabetes mellitus. PI: Massimo Pietropaolo M.D.

2002/2003 Undergraduate Student Researcher, National Cancer Institute, Frederick, MD

• Study cellular proteins Smad 4, Cited 1, Coup TF1 proteins to determine localization, binding and transcription ability. May- Aug. 2002 & Jan.- Feb. 2003. PI: Alan Perantoni, PhD.

Education and Teaching:

Teaching for Harvard University

2017 Harvard Medical School joint guest lecturer: Genetics session 10, Interpreting

your genome

2016-2017 Harvard Medical School HMX- Instructor for online Genetics Course aimed to

train current and future healthcare providers.

https://onlinelearning.hms.harvard.edu/hmx/courses/?utm_source=twitter&utm_m

edium=social&utm campaign=hmxsocialtw#genbio

Teaching for University of Maryland

| 2009-2014, 2016 | Co-lecture- Non-classical genetic counseling careers |
|-----------------|---|
| 2012- 2014 | Lecture- Genetic counseling licensure |
| 2011 | Co- instructor- Research methods for genetic counseling |
| 2009-2011 | Weekly group facilitation- Psychosocial genetic counseling |
| 2010 & 2011 | Lecture- Genetic counseling and deaf culture |
| 2010 & 2011 | Lecture- Newborn screening follow-up and policy |
| 2010 | Lecture- GC professional issues- Licensure and telemedicine |
| 2009 & 2010 | Medical student small group facilitator- Cystic Fibrosis |

Teaching for Johns Hopkins/ National Institutes of Health GC Program

2012 Lecture- Genetic counseling licensure- JH/NIH GC program

2011 Lecture- Newborn screening follow-up and policy- JH/NIH GC program

Management/Mentorship/Supervision

| BWH- Manage- Research assistants |
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| BWH- Mentor- G2P and BWH junior genetic counselors |
| BWH- Supervise & Mentor- Rotating fellows, medical students, genetic |
| counseling interns and rotating high school students |
| JHU- Mentor- Genetics Fellow: Leah Fleming- Down syndrome clinical drug trial |
| work |
| JHU-Supervise- Genetics fellows in cleft clinic |
| |

| 2009-2011 2009-2011 2006-2009 | UMD-Supervise/Mentor- Genetic counseling students, medical students, and medical residents in pediatrics clinic UMD-Selection Committee- Interview genetic counseling student applicants Nationwide Children's- Supervise & mentor: Genetic counseling students, medical students, medical residents, and genetics laboratory fellows in general genetics clinic. Arrange for shadowing student experiences | | | |
|--|---|--|--|--|
| Genetic Counseling Masters Thesis Advisor- Augustana-Sanford Genetic Counseling Graduate Program | | | | |
| 2017-Present | Liana Dayhoff- An Investigation on the Clinical Integration of Whole Genome Sequencing by Physicians for the Ostensibly Healthy Patient | | | |
| Genetic Counseling Masters Thesis Advisor- University of Maryland Genetic Counseling Graduate Program | | | | |
| 2013- 2014 | Katharine Bisordi- An investigation into the factors that influence parental decision to disclose carrier status to daughters in families with Hemophilia | | | |
| 2012-2013 | Jennifer Herrera-Mullar- Prenatal report study assessing music exposure in children with Down syndrome | | | |
| 2011-2012 | Chloe Farkas- Newborn screening online educational resources: An Attitude and knowledge assessment of certified nurse midwives in Maryland | | | |
| 2010-2011 | Vaish Subramani- A survey of newborn screening lab directors and follow-up directors regarding the Cystic Fibrosis Newborn Screen | | | |
| 2010- 2011 | Jessica Stransky- Determining the efficacy of educating consumers about Lysosomal Storage Disorders using a power point presentation | | | |
| 2009- 2010 | Laura Hutchins- Developing pre-operation support materials for children and adolescents with Loeys-Dietz Syndrome undergoing invasive cardiovascular surgery: a pilot study | | | |
| Professional Service | = | | | |
| 2016-Present | National Society of Genetic Counselor (NSGC) Education Committee Annual Conference Planning Committee | | | |
| 2015-2016 | NSGC- Board of Directors, Director at Large Liaison- The Marketing and Communications Workgroup (2016) Liaison- Practice Guideline Committee (2015) Special Projects: FDA regulation of genetic testing (2014-2015) | | | |
| 2017, 2016, 2013 | NSGC Research SIG member | | | |
| 2017, 2016, 2011 | NSGC Personalized Medicine SIG member | | | |

Johns Hopkins Genetic Counseling Consortium

2012-2015

| 2013-2014 | NSGC Education Committee Webinar Subcommittee Committee Chair (2011-2012) |
|------------|---|
| 2010-2014 | NSGC Public Policy Committee Committee Chair (2014) Committee Vice-Chair (2013) Task Force (TF) Chair: Newborn Screening (2010-2013) Genetic Testing and Adoption (2014) Family History in the Electronic Medical Record (2013) Non-discrimination (2010) Chair Maryland Genetic Counselor Licensure Efforts |
| 2010- 2014 | Chan Maryland Genetic Counselor Electisure Efforts |
| 2012-2013 | NSGC Pediatric and Clinical Genetics SIG o Chair (2012) o Vice Chair (2011) |
| 2011-2012 | NSGC Education Committee Member |
| 2010-2011 | NSGC Public Health SIG member |
| 2010-2011 | Preserving the future of NBS Coalition- Advisor/Member |
| 2007-2009 | Chair- Ohio Genetic Counselor Meeting |
| 2007-2009 | Ohio Licensure Committee Member |
| 2007-2009 | Nationwide Children's Hospital/Region IV liaison to the Ohio Department of Health |
| 2007-2009 | Nationwide Children's Hospital pediatric liaison to bi-weekly OSU prenatal meeting |
| 2007-2009 | Committee Member: "Working with Children with Birth Defects"- Goal education of early intervention specialists |
| 2007-2009 | Coordinator and speaker for the Ohio Birth Defects lecture series |
| 2007-2009 | Genetics education coordinator and presenter Athens County Health Department |
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Professional Memberships

| National Society of Genetic Counselors | 2004- Present |
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| American Board of Genetic Counselors | 2007- Present |
| American Society of Human Genetics | 2007- 2011; |
| · | 2016; 2017 |
| American Cleft Palate-Craniofacial Association | 2013-2015 |

PUBLICATIONS

- **2018- Short-term costs of integrating whole-genome sequencing into primary care and cardiology settings: a pilot randomized trial.** Christensen KD, Vassy JL, Phillips KA, Blout CL, Azzariti DR, Lu CY, Robinson JO, Lee K, Douglas MP, Yeh JM, Machini K, Stout NK, Rehm HL, McGuire AL, Green RC, Dukhovny D. **Genet Med**.
- **2018- Why Patients Decline Genomic Sequencing Studies: Experiences from the CSER Consortium.** *Amendola LM, Robinson JO, Hart R, Biswas S, Lee K, Bernhardt BA, East K, Gilmore MJ, Kauffman TL, Lewis KL, Roche M, Scollon S, Wynn J, Blout C. J Genet Couns.* EPub ahead of print.
- **2017- A** Comparison of Whole Genome Sequencing to Multigene Panel Testing in Hypertrophic Cardiomyopathy Patients. A. Cirino, N. Lakdawala, L. McDonough B, Conner, D. Adler, M. Weinfeld, P. O'Gara, H. Rehm, K. Machini, M. Lebo, C. Blout, RC Green, CA MacRae, CE Seidman, VY Ho; for the MedSeq Project. Circ Cardiovasc Genet. 10(5).
- **2017- The Impact of Whole Genome Sequencing on Primary Care and Outcomes of Healthy Adult Patients: A Pilot Randomized Trial.** Vassy JL, Christensen KD, Schonman EF, **Blout CL**, Robinson JO, Krier JB, Diamond PM, Lebo M, Machini K, Azzariti DR, Dukhovny D, Bates DW, MacRae CA, Murray MF, McGuire AL, Green RC, for the MedSeq Project. **Annals Intern Med**. EPub ahead of print.
- **2016- Clinical Sequencing Exploratory Research Consortium: Accelerating Evidence- Based Practice of Genomic Medicine.** Green RC, Goddard KA, Jarvik GP, Amendola LM, Appelbaum PS, Berg JS, Bernhardt BA, Biesecker LG, Biswas S, **Blout CL**, Bowling KM, Brothers KB, Burke W, Caga-Anan CF, Chinnaiyan AM, Chung WK, Clayton EW, Cooper GM, East K, Evans JP, Fullerton SM, Garraway LA, Garrett JR, Gray SW, Henderson GE, Hindorff LA, Holm IA, Lewis MH, Hutter CM, Janne PA, Joffe S, Kaufman D, Knoppers BM, Koenig BA, Krantz ID, Manolio TA, McCullough L, McEwen J, McGuire A, Muzny D, Myers RM, Nickerson DA, Ou J, Parsons DW, Petersen GM, Plon SE, Rehm HL, Roberts JS, Robinson D, Salama JS, Scollon S, Sharp RR, Shirts B, Spinner NB, Tabor HK, Tarczy-Hornoch P, Veenstra DL, Wagle N, Weck K, Wilfond BS, Wilhelmsen K, Wolf SM, Wynn J, Yu JH; CSER Consortium. **American Journal of Human Genetics.** 98(6):1051-66.
- **2014-** Informed consent for exome sequencing research in families with genetic disease: The emerging issue of incidental findings. (2014) Bergner A, Bollinger J, Raraigh K, Tichnell C, Murray B, Blout C, Telegrafi A, James C. American Journal of Medical Genetics. 164(11):2745-52.
- **2014- Mutations in PCYT1A, Encoding a Key Regulator of Phosphatidylcholine Metabolism,** Cause Spondylometaphyseal Dysplasia with Cone-Rod Dystrophy. (2014) Hoover-Fong J, Sobreira N, Jurgens J, Modaff P, Blout C, Moser A, Kim OH, Cho TJ, Cho SY, Kim SJ, Jin DK, Kitoh H, Park WY, Ling H, Hetrick KN, Doheny KF, Valle D, Pauli RM. American Journal of Human Genetics. 94(1):105-12.
- **2013-** Newborn Screening: Education Consent, and the Residual Blood Spot. The Position of the National Society of Genetic Counselors. (2013) *C. Blout*, *C. Walsh Vockley*, *A Gaviglio*, *M. Fox*, *L Williamson Dean*, *The Newborn screening task for on behalf of the NSGC Public Policy Committee*. **<u>J Genet Couns.</u>** 23(1):16-19.

2010- Maryland Newborn Screening Website- Primary design coordinator/contributor

2010- <u>Salem Health: Genetics and Inherited Conditions</u>- Chapter: 'Noonan Syndrome'. *Jeffrey A Knight Editor, Mount Holyoke College*

2006- Masters Thesis, University of Pittsburgh. The association of single nucleotide polymorphisms in intronic regions of islet cell autoantigen 1 and type 1 diabetes mellitus. *C.L.* Blout http://d-scholarship.pitt.edu/6945/1/bloutc etd2006.pdf

Invited Lectures

2017- RGA Session Series: Innovations in Medicine and Their Impact on Our Industry (Genomics). *C. Blout*, D. Rengachary. The Society of Actuaries Annual Meeting

2017- Unlocking the acronyms: Research genetic counselors and the NIH partnering together to improve patient care. *L. Hindorff, J. Rutter, C. Blout, S. Scollon, S. Fayer, J. O'Daniel, T. Pollin, L. Orlando, M. Smith, Ch. Hoell, D. Azzariti, J. Savatt*. The National Society of Genetic Counselors Annual Conference0 Educational Breakout Session.

2016- Genetics and Primary Care: Preparing Primary Care Physicians for the Future of Genomic Medicine. *J. Vassy, C Blout, M Dougherty.* National Society of Genetic Counselor Annual Conference-Educational Breakout Session

2016- Ethical Questions in the Genomics Era. Harvard Clinical Bioethics Course

2016- Genomic Sequencing in Healthy Individuals: Research Outcomes, Healthcare Impact and Role for Genetic Counselors. *C. Blout*, *S. Kalia*. The New England Genetics Group 5th Genetic Counselor's Conference- Whole Exome Sequencing: Opportunities and Challenges

2016- Genetic Counseling Professional Development. *C. Blout, M. Flynn, E. Ramos.* The Festival of Genomics

2015- The MedSeq Project: Exploring the Integration of Whole Genome Sequencing into the Practice of Medicine. US Military Presentation at Ft. Detrick.

2015- FDA Public Workshop- Framework for Regulatory Oversight of Laboratory Develop Tests (LDTs)- Notification and Adverse Event Reporting- Panelist- on behalf of that National Society of Genetic Counselors

2014- Adoption of Children with Genetic Disorders: Essential Knowledge for Genetic Counselors. *C. Blout, M. Osborne, C. Gioffreda, S. Dib.* National Society of Genetic Counselors AEC- Educational Breakout Session

- **2013- Newborn Screening Ethics and Policy-** Beyond the Blood Spot- Public vs Individual Interests, Genetics Alliance
- **2013- Genetic Medicine in Multidisciplinary Clinics: Uncharted Frontiers & Stories form Cleft Clinic.** *M. Jones, R. Redett, C. Blout.* National Society of Genetic Counselors AEC- Educational Breakout Session
- **2010-Efficacy and Advances in the Utilization of a SNP Array for Clinical Diagnosis.** *P. Paperhusen, R. Pasion, S. Schwartz, Clinical Panel (C. Blout clinical panel member)*. National Society of Genetic Counselor AEC- Educational Breakout Session

National Meeting Accepted Platform Presentations

- **2017-** Educating, Supporting, and Monitoring Non-Geneticist Physicians Disclosing Genomic Sequencing and Family History Reports in the MedSeq Project *J. Krier, C. Blout, J Vassy, J. Robinson, M Murray, RC Green, for the MedSeq Project.* The American Society of Human Genetics. Annual Meeting
- **2015- Incorporation of Whole Genome Sequencing Results into the Electronic Medical Record: Attitudes of MedSeq Project Participants-** *C. Blout J. Robinson, A. McGuire, P. Diamond, K. Christensen, L. Jamal, R. Green for the MedSeq Project.* The American Society of Human Genetics. Annual Meeting
- **2015-** Communication of Genomic Sequencing Results by Non-Geneticist Physicians- *J. Krier, C. Blout, D. Lautenbach, J Vassy, J. Robinson, M Helm, K Lee, M Murray, RC Green, for the MedSeq Project.* The American Society of Human Genetics. Annual Meeting
- **2015- Impact of genome sequencing on the medical care of healthy adults-** J. Vassy, K. Christensen, D. Dukhovny, *C. Blout,* J. Robinson, J Krier, M Murray, A McGuire, RC Green, for the MedSeq Project. The American Society of Human Genetics. Annual Meeting
- **2012-** Retrospective Study of Little People (LP) Pregnancy: Experiences, Opinions and Utilization of Genetic Counseling Services. *C. Blout*, *D Krakow*, *Y. Alade*, *J. Rossiter*, *I. Berkowitz*, *T. Martino*, *D. Penning*, *J. Hoover-Fong*. National Society of Genetic Counselor AEC
- **2007- Connective Tissue Conundrum: The EDS IV Clinical Spectrum.** *B.D. Rink, C.L. Blout, M.E. Nunes.* American Society of Human Genetics.

National Meeting Poster Presentations

- **2018- Willingness to Pay for Whole Genome Sequencing Following Testing.** *KD. Christensen, JO. Robinson, C. Lu, CL. Blout, RC. Green.* The American College of Medical Genetics and Genomics.
- **2018- Pharmacogenomics in the U.S. Air Force: Development of a Tailored Panel for the MilSeq Project.** MD. Maxwell, JO. Robinson, C. Gardner, M. De Castro, M.Lebo, C. Blout, J. Vassy, KD Christensen, J. Krier, S. Pereira, A. McGuire, MJ. Mehlman, E. Parasidis, R. Brenner, RC. Green. The American College of Medical Genetics and Genomics.

- **2017- Why Patients Decline Genomic Sequencing Studies: Experiences from the CSER Consortium-** *LM. Amendola, JO. Robinson, R. Hart, S. Biswas, K. Lee, BA. Bernhardt, K. East, M J. Gilmore, TL. Kauffman, KL. Lewis, M. Roche, S. Scollon, J. Wynn and CL Blout. American Society of Human Genetics.*
- **2017- Special Considerations for Genomic Sequencing Research in the United States Air Force: Development of the MilSeq Project.** M.Maxwell, J. Vassy, C. Gardner, *C. Blout*, S. PereiraMaxwell J. Mehlman, E. Parasidis, K. Christensen, J. Robinson, A. McGuire, M. Lebo, M. De Castro, R. Brenner, MD, B. Morgan, R.Green. American Society of Human Genetics.
- **2017- Genotype-First: Phenotying Findings from the MedSeq Project-** *T. Nguyen, J. Krier, C. Blout, J. Vassy, K. Christensen, H. Rehm, M. Lebo, K. Machini, D. Azzariti, C. MacRae, C. Seidman, C. Ho, A. Cirino, and R. C. Green.* The festival of Genomics, Boston.
- **2017- Short- Term Economic Impact of Whole Genome Sequencing in Cardiology and Primary Care: Findings from the MedSeq Project.** K. Christensen, J. Vassy, K. Phillips, C. Blout, D. Azzariti, C. Lu, JO. Robinson, K. Lee, M. Douglas, J. Yeh, K. Machini, H. Rehm, A. McGuire, RC. Green, D. Dukhovny, for the MedSeq Project. The 22nd Annual ISPOR International Meeting.
- **2016-** Incorporation of Whole Genome Sequencing Results into the Electronic Medical Record: Attitudes of MedSeq Project Participants- *C. Blout J. Robinson, A. McGuire, P. Diamond, K. Christensen, L. Jamal, RC. Green for the MedSeq Project.* The 12th Annual Broad Institute Scientific Retreat.
- **2016- Do Primary Care Physicians Manage Genome Sequencing Results Appropriately? Results of an Expert Panel Evaluation.** E. Schonman, M. Murray, J. Krier, C. Blout, D. Bates, RC. Green, J. Vassy, for the MedSeq Project. The American Society of Human Genetics.
- **2016- Healthcare Outcomes and Costs after Genome Sequencing Among Healthy Adults: Results of a Randomized Controlled Trial.** *J. Vassy, K. Christensen, E. Schonman, D. Dukhovny, P. Diamond, C. Blout, JO. Robinson, J. Krier, M. Murray, A. McGuire, RC. Green, for the MedSeq Project.* The American Society of Human Genetics.
- **2016- Patient's Perceived Utility After Whole Genome Sequencing.** JO. Robinson, K. Christensen, P. Diamond, K. Lee, H. Peoples, C. Blout, J. Vassy, RC. Green, for the MedSeq Project. The American Society of Human Genetics.
- **2016- Appropriateness of Primary Care Providers' Management of Genome Sequencing Results: Results from an Expert Panel.** *J. Vassy, E Schonman, M. Murray, J Krier, C. Blout, D. Bates, RC. Green, for the MedSeq Project.* The Society for General Internal Medicine.
- **2016- Impact of Genome Sequencing on the Medical Care of Healthy Adults: A Randomized Controlled Trial.** *J. Vassy, K. Christensen, D. Dukhovny, C. Blout, JO. Robinson, J. Krier, M. Murray, A. McGuire, RC. Green, for the MedSeq Project.* The American Society of Human Genetics.

- **2016-** The Association of Monogenic Findings from Whole Genome Sequencing with Known Phenotypes: 4 Case Studies. L Hoffman- Andrews, JO. Robinson, *C. Blout*, *S. Kalia, R. Walsh, J. Krier. A. McGuire, RC. Green, for the MedSeq Project.* The American College of Medical Genetics and Genomics.
- **2015- The MedSeq Project: Exploring the Integration of Whole Genome Sequencing into the Practice of Medicine.** *C. Blout*, *H. Rehm*, *A. McGuire*, *J. Krier*, *J. Vassy*, *H. McLaughlin*, *C. Seidman*, *C. MacRae2*, *C. Ho*, *J. Robinson*, *K. Christensen*, *D. Azzariti*, *O. Ceyhan-Birsoy*, *M. Lebo*, *K. Machini*, *M. Murray*, *R. Green for the MedSeq Project*. The Festival of Genomics.
- 2015- The MedSeq Project: Exploring the Integration of Whole Genome Sequencing into the Practice of Medicine. C. Blout, H. Rehm, A. McGuire, J. Krier, J. Vassy, H. McLaughlin, C. Seidman, C. MacRae2, C. Ho, J. Robinson, K. Christensen, D. Azzariti, O. Ceyhan-Birsoy, M. Lebo, K. Machini, M. Murray, R. Green for the MedSeq Project. Discover Brigham Women's Hospital Research Day. Research Excellence Award Winner.
- **2015- A Glimpse into the Future: Disclosure of Genomic Sequencing Results by Non-Genetics Physicians.** *C. Blout,* J. Krier, J. Robinson, M. Helm, K. Lee, D. Perry, R. Green, for the MedSeq Project. The National Society of Genetic Counselors.
- **2015- The MedSeq Project: Exploring the Integration of Whole Genome Sequencing into the Practice of Medicine.** *C. Blout*, *H. Rehm*, *A. McGuire*, *J. Krier*, *J. Vassy*, *H. McLaughlin*, *C. Seidman*, *C. MacRae2*, *C. Ho*, *J. Robinson*, *K. Christensen*, *D. Azzariti*, *O. Ceyhan-Birsoy*, *M. Lebo*, *K. Machini*, *M. Murray*, *R. Green for the MedSeq Project*. The Broad Annual Retreat.
- **2014-** Undiagnosed Stickler Syndrome: The Value of Genetics in Cleft Clinic. N. Beck, *C. Blout,* C. Gioffreda, K. Seifert, R. Redett, J. Hoover-Fong. American College of Medical Genetics Annual Meeting.
- **2014- Genetic Medicine in the Multidisciplinary Cleft Clinic: Personalizing Medical Management**. J. Hoover-Fong, C. Gioffreda, *C. Blout*, N Beck. K Siefert, R. Redett. American College of Medical Genetics Annual Meeting- Poster Presentation. And American Cleft Palate Association Annual Meeting.
- **2013- Branchio-Oculo-Facial Syndrome: Migrating Out On Its Own.** *N. Beck, C. Blout, K. Seifert, R. Redett, J. Hoover-Fong.* American College of Medical Genetics- Annual Meeting.
- **2013-** High Resolution Karyotype: Still an Integral tool in Clinical Genetics Care for Adults with **Down Syndrome.** *C. Blout, D. Batista, J. Hoover-Fong.* American College of Medical Genetics-Annual Meeting.
- **2013-** Consent for Genome-Wide Sequencing Research in Families with Genetic Disease: The Emerging Issue of Incidental Findings. C. Applegate, A. Bergner, C. Berrios, C. Blout, C. Boehm, J. Bollinger, A. Bytyci, L. Erby, C. James, D. Mathews, B. Murray, K. Reed, K. Siklosi, C. Tichnell. National Society of Genetic Counselor.
- **2013-** An Assessment of Music Exposure in Children with Down Syndrome. *J. Herrera-Mullar, C. Blout, J. Kaplan, M. Skinner.* National Society of Genetic Counselors AEC- Poster Presentation

2013- Nager Syndrome: A Patient's Diagnostic Odyssey. (2013) *J. Hoover-Fong, R. Redett, K. Siefert, C. Blout, N. Beck.* The International Skeletal Dysplasia Society.

2011- Microarray Analysis Leads to Ethical Genetic Counseling Dilemmas Surrounding Consanguinity. *M. Skinner, C. Blout, J. Kaplan.* National Society of Genetic Counselors.

2009- Prenatal genetic counseling in fetuses with mosaic 45,X/isodicentric Y. Is this Turner syndrome? C.L. Blout, B.D. Rink, S.E. Hickey, J.F Atkin. American Society of Human Genetics.

2009- Phenotypic variability in patients with chromosomal microdeletions at 1q21.1, including deletions confined to the proximal TAR region A. Aylsworth, J. Rosenfeld, E. McPherson, C. Powell, A. Asamoah, S. Mundlos, L. Shaffer, 1.21.1 study group (C. Blout- study group member) American College of Medical Genetics.

Other Professional and Community Lectures

| • | Genetic Counseling in the Genomics Era- BWH Genetics Floor Meeting | April 2016 |
|---|--|------------|
| • | Four Interesting Bone Disorder Cases- Greenberg Center Invited Lecture | Feb 2015 |
| • | Highlights from the Human Teratogen course: | May 2014 |
| | Application to genetics clinic- Greenberg Center Invited Lecture | - |
| • | ACMG Recommendations for Reporting of Incidental Findings in Clinical | Mar. 2013 |
| | Exome And Genome Sequencing- Genetic Case Conference Presentation | |
| • | Expanding the Johns Hopkins Cleft Clinic- Greenberg Center Invited Lecture | Dec 2012 |
| • | Retrospective Study of Little People (LP) - Greenberg Center Invited Lecture | Oct. 2012 |
| | Pregnancy: Experiences, Opinions and Utilization of Genetic Counseling Services. | |
| • | Pediatric Needs Assessment Survey Results- Peds SIG members | Oct 2011 |
| • | Genetics and Hospice Working Together To Help Our Families- Gilchrest kids | Mar 2011 |
| • | The Genetics of Hearing Loss- Johns Hopkins Family Webinar | Sept 2010 |
| • | Red Flags of Breast Cancer- LifeBridge Health System | Oct 2009 |
| • | Private Cord Blood Banking: Experiences and Views of Pediatric | Jun 2009 |
| | Hematopoietic Cell Transplantation Physicians- Human Gen. Journal Club | |
| • | Genetic Counseling and Collecting a Family History-OSU OBGYN residents | Feb 2009 |
| • | Genetics and Ethics- LEND (Leadership Education Excellence in | Feb 2009 |
| | Neurodevelopment Disabilities Program) | |
| • | Birth Defects Prevention- Early Intervention Specialists | Dec 2008 |
| • | Jewish Genetic Diseases- JCC Event | Nov 2008 |
| • | Working With Children With Birth Defects- Early Intervention Specialists | May 2008 |
| • | Complex Inheritance Pattern Resembling Autosomal Recessive Inheritance | Nov 2007 |
| | Involving a Microdeletion in Thrombocytopenia Absent Radius Syndrome- | |
| | Hum. Gen. Journal Club | |
| • | Birth Defects Prevention - Early Intervention Specialists | Aug 2007 |
| • | Prenatal Screening and Diagnosis for Genetic Disorders - Athens County | Apr 2007 |
| | Health Department | |
| • | Pregnancy Loss Rates after Midtrimester Amniocentesis - Hum. Gen. Journal | Jan 2007 |
| | Club | |
| • | What is Genetic Counseling?- Eagle Academy | Jan 2007 |
| • | Propionic Acidemia- Dublin Jerome High School | Dec 2006 |

- HNPCC- Case Conference Presentation
- Kenny Caffey Syndrome- Case Conference Presentation

Feb 2006 Sept 2005

References:

Available Upon Request