Harvard Medical School
Curriculum Vitae

Name: Joel B. Krier

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Place of Birth: St. Louis, MO

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Education

1998	B.A., B.M. (double degree program)	Neuroscience, Saxophone Performance	Oberlin College and Conservatory of Music, Oberlin, OH
2006	M.D.	Medicine	University of Pittsburgh School of Medicine, Pittsburgh, PA
2014	M.M.Sc.	Biomedical Informatics	Harvard Medical School (HMS), Boston, MA

Postdoctoral Training

7/06-6/10	Intern/Resident	Internal Medicine/Pediatrics	Rush University Medical Center (RUMC), Chicago, IL
7/10-6/11	Chief Resident	Pediatrics	RUMC
7/11-6/14	Clinical Fellow	Pediatrics/Medical Genetics	HMS Genetics Training Program, Boston Children's Hospital, Boston, MA

Faculty Academic Appointments

12/10-6/11	Instructor	Pediatrics	RUMC
9/14-	Instructor	Medicine	HMS

Appointments at Hospitals/Affiliated Institutions

12/10-6/11	Adjunct Attending	Inpatient Pediatrics Internal Medicine/Pediatrics Outpatient Clinic	RUMC
10/13-	Associate Physician	Genetics	Brigham and Women's Hospital (BWH), Boston, MA
5/15-	Associate Physician	Division of General Internal Medicine	BWH
6/15-	Pediatrician	Newborn Medicine	BWH

Other Professional Positions

1998-1999	Research Associate (Management Consultant)	Nextera, Inc., Lexington, MA
1999-2001	Business Strategy Associate (Management Consultant)	ZEFER, Inc., Boston, MA
2001-2002	Clinical Research Assistant (Neurology)	Massachusetts General Hospital Boston, MA

Major Administrative Leadership Positions

Local

2014-2015	Acting Clinical Chief, Division of Genetics	BWH
2014-2016	Clinical Director, Brigham Genomic Medicine	BWH
2014-	Director, Internal Medicine/Medical Genetics Residency Program	BWH
2014-	Rotation Director, HMS Genetics Training Program	BWH
2015-	Clinical Chief, Division of Genetics	BWH
2016-	Director, Brigham Genomic Medicine (BGM)	BWH

Committee Service

Local

2015-	Genetics Training Program Admissions Committee	HMS
2015-	Partners Biobank Return of Results Taskforce	Partners HealthCare; Boston, MA
2016-	Advanced Labs Diagnostics Review Committee, Department of Pathology	BWH

Professional Societies

2006-	American Academy of Pediatrics	
2011-	American College of Medical Genetics and Genomics (ACMG)	
	2013-	Economics Committee
2011-	American Society of Human Genetics (ASHG)	

Honors and Prizes

1996	Howard R. Swearer Student Humanitarian Award for Excellence in Community Service	Campus Compact	Awarded for founding the Oberlin Music Coalition (non-profit focused on increasing access to music education)
1998	Phi Beta Kappa	Oberlin College	
1998	Pi Kappa Lamda	Oberlin Conservatory of Music	National Music Honors Society
1998	Neuroscience Department Award	Oberlin College	Academic excellence
2006	Gold Humanism Honor Society	Arnold P. Gold Foundation/ University of Pittsburgh School of Medicine	
2010	Finalist, Clinical Case Competition	American Academy of Pediatrics, Section on Medical Students, Residents, and Fellowship Trainees	
2015-2016	Brigham Leadership Program	BWH	Nominated by Division Chief

Report of Funded and Unfunded Projects

Funding Information

Past

2002-2006 Dean's Merit Full-Tuition Scholarship
University of Pittsburgh School of Medicine
This scholarship was awarded based on academic excellence and potential for a career in academic medicine.

2014-2016 The Clinical Genome Resource (The ClinGen Project)
National Institutes of Health (NIH) 1U41HG006834-01A1
Co-investigator (PI: Heidi Rehm)
The overall mission of the ClinGen initiative is to develop and curate authoritative information on genomic variants relevant to human disease and useful for clinical practice. My activities were primarily based within the Phenotype Working Group, which focused on improving and standardizing and phenotype data acquisition and curation for clinical genomic databases.

2014-2017 Integration of Whole Genome Sequencing into Clinical Medicine (The MedSeq Project)
NIH U01 HG006500
Co-investigator (PI: Robert Green)
The MedSeq Project's primary goal was to explore the impact of whole genome sequencing on the practice of clinical medicine. My initial project activities focused on the development of the analytical pipeline and clinical genome reports, with a focus on pharmacogenomic variant analysis and reporting. As the lead medical geneticist supporting the Genome Resource Center, I assisted physician subjects with genomic report interpretation and monitor for safety concerns or miscommunications of genetic information in sequencing result disclosure sessions (publication in process).

2016-2017 Brigham Genomic Medicine
Brigham Research Institute Director's Transformative Award
Director (PI: Richard Maas)
The goals of the initiative are to identify clinical cases of rare, unsolved genetic disorders and use genomic sequencing, informatics analysis, and experimental validation to identify novel genetic etiologies, enable scientific discovery, and improve the management of patients.

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Current

2014- Center for Integrated Approaches to Undiagnosed Disease
NIH 1U01HG007690-01
Co-investigator (PI: Joseph Loscalzo)
This project is HMS's collaborative clinical site initiative for the NIH Undiagnosed Disease Network. I participate in case assessment for the Harvard site and management of diagnostic evaluations for subjects at BWH (currently in pre-enrollment phase).

2016- Brigham Genomic Medicine
PlumCare, LLC; Sponsored Research Agreement
Co-investigator (PI: Shamil Sunyaev)
The goals of the project are to utilize the informatics pipeline developed by Brigham Genomic Medicine to develop an automated genomic sequencing analysis pipeline to identify pathogenic variants relevant in the newborn and pediatric populations.

Unfunded Current Projects

2013- The BabySeq Project
NIH U19 HD077670
Collaborator
My primary role in the BabySeq Project is as a member of the multi-disciplinary team working to adapt the interpretive pipeline and reporting strategy developed for the MedSeq Project into a concise and understandable genomic newborn screening report that includes known pathogenic variants associated with childhood-onset Mendelian conditions, carrier status and response to medications.

Report of Local Teaching and Training

Teaching of Students in Courses

RUMC Courses

2010-2011	Pediatrics Clerkship Didactic Lecture Series 3rd year medical students	RUMC 1 lecture every 8 weeks
2011	Physicianship Program 2nd year medical students	RUMC 1 hour lecture

HMS Courses

2017-	Genetics Course, Harvard-MIT Program in Health Sciences and Technology (HST) Lecturer, "Clinical Genetic Testing: Prenatal / Postnatal Testing, Personalized Medicine,	HMS, Massachusetts Institute of Technology 1 hour lecture per year

	Pharmacogenetics”	
2017-	Human Genetics, Advanced Integrative Science Course Lecturer, “Personalized Genetics”	HMS 1 hour lecture per year

Formal Teaching of Residents, Clinical Fellows and Research Fellows (post-docs)

RUMC Courses

2010-2011	Pediatrics Residency Educational Conference Series Presenter and Facilitator	RUMC 3-4 hour-long conferences per week

HMS Courses

2016	Advanced Human Genetics Course Lecturer	HMS 1 hour lecture per year

Clinical Supervisory and Training Responsibilities

RUMC

2010-2011	Ambulatory Internal Medicine-Pediatrics Clinic Preceptor / RUMC	One 4-hour session per week
2011	Attending, Inpatient Pediatrics Teaching Service / RUMC	Two 2-week service blocks

HMS

2014-	Faculty / Clinical Preceptor, Harvard Medical Genetics Training Program, BWH Internal Medicine Residency Ambulatory Elective	One to two 4-hour sessions per week
2015-2016	Attending Physician, Integrated Teaching Unit (Inpatient Internal Medicine), BWH	One to two 2-week blocks per year
2017-	Attending Physician, Human Genetics, Advanced Integrative Science Course, HMS	Two to four clinic sessions per academic year

Laboratory and Other Research Supervisory and Training Responsibilities

2016-	Supervision of post-doctoral research fellow, rotating clinical fellows, and students in genomic sequencing analysis for gene discovery/ Brigham Genomic Medicine, BWH	One-hour project meeting per week and 1:1 supervision one hour per week

Mentored Trainees and Faculty

2013-2014 Patience Gallagher / Resident, Internal Medicine, Thomas Jefferson University, Philadelphia, PA.
Career stage: medical student, Albert Einstein College of Medicine, New York, NY. *Mentoring role:* research advisor. *Accomplishments*: Abstract accepted for platform presentation at ACMG annual clinical meeting.

2015- Andrew Stergachis, MD, PhD / Resident, Internal Medicine, BWH.
Career stage: resident. *Mentoring role*: Training program director, clinical mentor. *Accomplishments*: Collaboratively designed customized combined Internal Medicine/Clinical Genetics training program to facilitate his interest in pursuing career in clinical genetics.

2016-2018 Agnes Toth-Petroczy, PhD / Research Group Leader, Max Planck Institute of Molecular Cell Biology and Genetics, Dresden, Germany.
Career stage: Staff Scientist, Instructor, BWH. *Mentoring role*: research supervisor, mentor in diagnostic genomic sequencing analysis. *Accomplishments*: Developed and standardized the genomic sequencing analysis pipeline for Brigham Genomic Medicine; received Group Leader award and position at Max Plank Institute.

Local Invited Presentations

2014 Brigham Genomic Medicine: Multidisciplinary Mendelian Gene Discovery and Clinical Genomic Medicine Case Conference
BWH/Partners Healthcare

2015 Carrier Reporting From Genomic Sequencing in the MedSeq and BabySeq Projects/ Genomic Medicine Case Conference
BWH/Partners Healthcare

2015 Gene Discovery via Diagnoses of Mendelian Diseases/ Medical and Population Genetics Group Meeting (w/ co-presenters Dana Vuzman, PhD; Shamil Sunyaev, PhD)
Broad Institute; Cambridge, MA

2016 Brigham Genomic Medicine: Multidisciplinary Mendelian Gene Discovery and Clinical Translation/Medical Grand Rounds
Department of Medicine, BWH

2017 Clinical Genomic Sequencing and Novel Gene Discovery/Medical Grand Rounds
Department of Medicine, BWH-Faulkner Hospital; Boston, MA.

2017 Mendelian genomics of rare, very rare, and truly unique disorders/ Medical and Population Genetics Group Meeting (w/ co-presenters Agnes Toth-Petroczy, PhD; Shamil Sunyaev, PhD)
Broad Institute; Cambridge, MA

Report of Regional, National and International Invited Teaching and Presentations

Invited Presentations and Courses

Those presentations below sponsored by outside entities are so noted and the sponsor is identified in parentheses.

National

2014	Genomic Sequencing in Pediatrics/ Combined Rush-Stroger Pediatric Grand Rounds Department of Pediatrics, RUMC, Chicago, IL (Department of Pediatrics, RUMC)
2017	Genomic Sequencing of Healthy and Sick Newborns in the BabySeq Project Precision Medicine: Beyond the Genome for Insights into New Treatments/ Invited Lecture Molecular Medicine Tri-Conference, San Francisco, CA (Cambridge Healthtech Institute)
2017	Educating for the Business of Genetics / Co-moderator, Trainee and Resident Workshop ACMG Annual Clinical Genetics Meeting, Phoenix, AZ
2017	Utilizing Genomic Sequencing for Diagnosis and Gene Discovery / Grand Rounds RUMC & Stoger Hospital, Chicago, IL (Department of Pediatrics, RUMC)

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National Abstract Oral Presentations

2013	The Return Of Pharmacogenomic Variants In The Medseq Project: Reporting Approach And Physician Response (Abstract selected for platform presentation) ASHG Annual Meeting, Boston, MA
2015	Communication and management of genomic sequencing results by non-geneticist physicians (Abstract selected for platform presentation) ASHG Annual Meeting Baltimore, MD
2016	Phenotype-based Matching Using PhenoDB Terms in Mendeliangenomics.org (Abstract selected for platform presentation) ACMG Annual Clinical Genetics Meeting Tampa, FL
2017	Educating, Supporting, and Monitoring Non-Geneticist Physicians Disclosing Genomic Sequencing and Family History Reports in the MedSeq Project ACMG Annual Clinical Genetics Meeting Phoenix, AZ

Report of Clinical Activities and Innovations

Current Licensure and Certification

2009	Illinois Medical License
2010	Board Certified, American Board of Pediatrics
2010	Board Certified, American Board of Internal Medicine
2011	Massachusetts Medical License
2014	Board Certified, American Board of Medical Genetics (Clinical Genetics)

Practice Activities

2010-2011	Ambulatory Care	Lifetime Medical Associates, RUMC	One session per week
2011	Inpatient Care	Inpatient General Pediatrics Service, RUMC	Two 2-week service blocks
2014-	Ambulatory Care	Genetics and Genomic Medicine Service, BWH	3-5 sessions per week
2014-	Inpatient Consultation Service	Genetics and Genomic Medicine Service, BWH	Weekday coverage year round and 12-20

			weekends/year
2015-2016	Inpatient Attending	Integrated Teaching Unit (Inpatient Internal Medicine), BWH	One to two 2-week blocks per year

Clinical Innovations

Brigham Genomic Medicine: Integrated gene discovery initiative at BWH (2014-)	Developed IRB protocol and workflow for genomic sequencing and gene discovery for patients with suspected Mendelian disorders who have had thorough but negative genetics evaluation. Protocol allows for return of clinically actionable diagnostic findings to patients. BGM's experience has been reported at the ASHG annual meeting and ACMG annual clinical meeting.
Genetics and Genomic Medicine Program Development (2014-)	Operational innovations I have implemented include a tablet-based family history acquisition tool (Proband) for structured pedigree acquisition and direct incorporation into clinical notes and the development of a workflow to incorporate virtual visits into the Genetics and Genomic Medicine Service.
Morquio A Treatment protocol at BWH (2015-)	Initiated treatment for two adult patients with Morquio A syndrome with an infusion therapy (elosulfase alfa) approved by the FDA in 2013. In addition to facilitating multidisciplinary management, we successfully applied for approval to use the infusion product with the Partners HealthCare Procedures and Therapeutics Committee, and facilitated training for the BWH Infusion Center staff.
Return of clinically actionable results from Partners Biobank (2016-)	Serve as primary clinical geneticist returning clinically actionable genetic variants identified as part of patients' participation in the Partners Biobank. Through service on the Biobank Return of Results Task Force, I also contributed to the development of the selection of genetic variants for return and workflow for contacting patients.

Report of Scholarship

Peer-reviewed publications in print or other media

Research Investigations

1. Schnipper JL, Ackerman RH, **Krier JB**, Honour M. Diagnostic yield and utility of neurovascular ultrasonography in the evaluation of patients with syncope. Mayo Clin Proc. 2005 Apr; 80(4):480-8.
2. Vassy JL, Lautenbach DM, McLaughlin HM, Kong SW, Christensen KD, **Krier J**, Kohane IS, Feuerman LZ, Blumenthal-Barby J, Roberts JS, Lehmann LS, Ho CY, Ubel PA, MacRae CA, Seidman CE, Murray MF, McGuire AL, Rehm HL, Green RC; MedSeq Project. The MedSeq Project: a randomized trial of integrating whole genome sequencing into clinical medicine. Trials. 2014 Mar 20; 15:85.
3. Kong SW, Lee IH, Leshchiner I, **Krier J**, Kraft P, Rehm HL, Green RC, Kohane IS, MacRae CA; MedSeq Project. Summarizing polygenic risks for complex diseases in a clinical whole-genome report. Genet Med. 2015 Jul; 17(7):536-44.
4. McLaughlin HM, Ceyhan-Birsoy O, Christensen KD, Kohane IS, **Krier J**, Lane WJ, Lautenbach D, Lebo MS, Machini K, MacRae CA, Azzariti DR, Murray MF, Seidman CE, Vassy JL, Green RC, Rehm HL; MedSeq Project. A systematic approach to the reporting of medically relevant findings from whole genome sequencing. BMC Med Genet. 2014 Dec 14; 15:134.

5. Vassy JL, McLaughlin HM, McLaughlin HL, MacRae CA, Seidman CE, Lautenbach D, Krier JB, Lane WJ, Kohane IS, Murray MF, McGuire AL, Rehm HL, Green RC. A one-page summary report of genome sequencing for the healthy adult. Public Health Genomics. 2015; 18(2):123-9. Erratum in Public Health Genomics. 2015 Apr;18(3):191. (Corrected name of second author.)
6. Philippakis AA, Azzariti DR, Beltran S, Brookes AJ, Brownstein CA, Brudno M, Brunner HG, Buske OJ, Carey K, Doll C, Dumitriu S, Dyke SO, den Dunnen JT, Firth HV, Gibbs RA, Girdea M, Gonzalez M, Haendel MA, Hamosh A, Holm IA, Huang L, Hurles ME, Hutton B, **Krier JB**, Misyura A, Mungall CJ, Paschall J, Paten B, Robinson PN, Schiettecatte F, Sobreira NL, Swaminathan GJ, Taschner PE, Terry SF, Washington NL, Züchner S, Boycott KM, Rehm HL. The Matchmaker Exchange: a platform for rare disease gene discovery. Hum Mutat. 2015 Oct; 36(10):915-21.
7. Cipriano C, Brockman L, Romancik J, Hartemayer R, Ording J, Ginder C, **Krier J**, Gitelis S, Kent P. The Clinical Significance of Initial Pulmonary Micronodules in Young Sarcoma Patients. J Pediatr Hematol Oncol. 2015 Oct; 37(7):548-53.
8. **Krier J***, Barfield R*, Green RC, Kraft P. Reclassification of genetic-based risk predictions as GWAS data accumulate. Genome Med. 2016 Feb 17; 8(1):20. (*Co-first authors)
9. Lin AE, Michot C, Cormier-Daire V, L'Ecuyer TJ, Matherne GP, Barnes BH, Humberson JB, Edmondson AC, Zackai E, O'Connor MJ, Kaplan JD, Ebeid MR, **Krier J**, Krieg E, Ghoshhajra B, Lindsay ME. Gain-of-function mutations in SMAD4 cause a distinctive repertoire of cardiovascular phenotypes in patients with Myhre syndrome. Am J Med Genet A. 2016 Oct; 170(10):2617-31.
10. Vassy JL, Christensen KD, Schonman EF, Blout CK, Robinson JL, **Krier J,** Diamond PM, Lebo M, Machini K, Azzariti DR, Dukhovny D, Bates D, MacRae CA, Murray MF, Rehm HL, McGuire AL, Green RC for the MedSeq Project. The impact of genome sequencing on the primary care outcomes of healthy adult patients. A pilot randomized trial. Ann Int Med. 2017;167(3):159-69.

Other peer-reviewed publications

1. **Krier JB**, Green RC. Management of incidental findings in clinical genomic sequencing. Curr Protoc Hum Genet. 2013 Apr 1; 77:9.23.1-9.23.13. Updated in Curr Protoc Hum Genet. 2015 Oct 6; 87:9.23.1-9.23.16.
2. Cantu S, **Krier J**, Hashemi N. Hepatocyte Nuclear Factor 1a Mutation-associated MODY-3 and Familial Liver Adenomatosis. J Clin Gastroenterol. 2016 Feb; 50(2):181-2. (letter to the editor)
3. **Krier JB**, Kalia SS, Green RC. Genomic sequencing in clinical practice: applications, challenges, and opportunities. Dialogues Clin Neurosci. 2016 Sep; 18(3):299-312.

Abstracts, Poster Presentations and Exhibits Presented at Professional Meetings

1. Gallagher P, **Krier J**, Carere DA, Chen C, Cupples L, Roberts J, Green R, PGen Study Group. Healthcare Utilization Following Personal Genomic Testing. ACMG Annual Clinical Genetics Meeting. (Platform Presentation by mentee Gallagher P). March, 2015. Salt Lake City, UT.
2. **Krier J**, Henrie A, Roberts A, Rehm H, Maglott D, Benson M, Rubinstein W, Eilbeck K, Miller D. Exploring Existing Disease-to-Clinical Feature Annotations for Case-Level Phenotypic Term Entry in Genomic Databases. ACMG Annual Clinical Genetics Meeting (Poster Presentation). March, 2015. Salt Lake City, UT.
3. Hoffman-Andrews L, Robinson J, Blout C, Kalia S, Walsh R, **Krier J**, Jamal L, McGuire A, Green R. The Association of Monogenic Findings from Whole Genome Sequencing with Known Phenotypes: 4 Case Studies. American College of Medical Genetics and Genomics Annual Clinical Genetics Meeting. (Poster Presentation) March, 2016. Tampa, FL.

4. Higgs J, Suchy S, McBride K, Pai S, **Krier J**. Next-generation Sequencing Panel of Multiple Genes Associated with Hyperammonemia as a Tool for Diagnosing Late-onset Urea Cycle Disorders. American College of Medical Genetics and Genomics Annual Clinical Genetics Meeting. (Poster Presentation) March, 2016. Tampa, FL.
5. **Krier J**, Hamosh A, Schiettecatte F, Sobreira N. Phenotype-based Matching in mendeliangenomics.org. American Society of Human Genetics. (Poster Presentation) October, 2016. Vancouver, BC.
6. Frank NY, Stitziel N, Chopra S, Carmichael N, Hoffman E, Krieg E, **Krier J**, Sunyaev SR, Maas RL, Vuzman D, Brigham Genomic Medicine. Multidisciplinary Mendelian gene discovery and clinical translation. American Society of Human Genetics. (Poster Presentation) October, 2016. Vancouver, BC.
7. Vassy JL, Christensen KD, Schonman EF, Dukhovny D, Diamond PM, Blout CL, Oliver Robinson J, **Krier JB**, Murray MF, McGuire AL, Green RC; for the MedSeq Project. Healthcare Outcomes and Costs after genome Sequencing Among Healthy Adults: Results of a Randomized Controlled Trial. American Society of Human Genetics. (Platform Presentation given by Vassy JL) October, 2016. Vancouver, BC.
8. Schonman EF, Murray MF, **Krier JB**, Blout CL, Bates DW, Green RC, Vassy JL, The MedSeq Project. Do primary care physicians manage genome sequencing results appropriately? Results of an expert panel evaluation. American Society of Human Genetics. (Poster Presentation) October, 2016. Vancouver, BC.
9. A. Haghighi A, Cassa C, Vuzman D, Toth-Petroczy A, MacRae C, Seidman C, Sunyaev S, Maas R, **Krier J**; for Brigham Genomic Medicine. An integrated clinical program and crowdsourcing strategy for genomic sequencing and Mendelian disease-gene discovery. American Society of Human Genetics. (Poster Presentation) October, 2017. Orlando, FL.

Narrative Report

My area of excellence is Clinical Expertise and Innovation and my career goal is to become a leader in translating new discoveries in genomics and bioinformatics into effective clinical practices. My clinical work and significant supporting activity in Administration and Institutional Service have laid the foundation for a multifaceted and impactful career.

I am the primary clinician for BWH's Genetics and Genomic Medicine Service. Since 2014, I have seen patients in 3-5 outpatient sessions weekly. I diagnose and manage patients with rare Mendelian disorders, including second opinions for inherited connective tissue disorders and genomic sequencing evaluations. Patients present from throughout New England, and occasionally beyond. Inpatient consultations include the management of adult presentations of inborn errors of metabolism.

My practice innovations include initiating the first adult Morquio A treatment program in the region and closely integrating the clinical program with Brigham Genomic Medicine's (BGM) novel gene discovery initiative. BGM supports an integrated genomic medicine service for case referrals from multiple BWH departments and external collaborators, a state-of-the-art computational pipeline, and an interdisciplinary team for causal variant identification and disease gene discovery.

My work in Dr. Robert Green's research program focuses on the integration of genomic sequencing into clinical medicine. I was a main contributor in developing the analytical pipeline and genome sequencing reports for the MedSeq and BabySeq Projects. My support and analysis of non-geneticist physician performance in disclosing reports from genome sequencing in the MedSeq project resulted in multiple platform presentations and a publication that is in production. I serve on the UDN's case

assessment committee and as a case champion for multiple case evaluations.

In my first two years as Clinical Chief of the Division of Genetics, I significantly changed the staffing and operational structure of the program and annual clinical volume expanded by 50% over the largest volume of any prior two-year period in the history of the Genetics service. Simultaneously, as Director of the BGM novel gene discovery initiative, I lead a team seeking to identify new genetic causes for rare genetic phenotypes. Utilizing my biomedical informatics training, I have spearheaded improvements in the operational infrastructure and a developed standardized analytical approach to significantly improve the pace of case analysis.

I precept students and trainees in approximately 50 outpatient sessions per year. I serve as the BWH rotation director for the HMS Genetics Training Program, which includes 4-5 first-year clinical genetics trainees per year for 2-month rotations. In the last two years, two senior clinical genetics fellows voluntarily established a continuity clinic with me. In addition, I am the program director for a 2nd year BWH Internal Medicine resident in the combined BWH Internal Medicine/Medical Genetics residency. I have given lectures for the HMS Genetics Training Program, a BWH Medicine Grand Rounds presentation, the MIT-Harvard Health Sciences and Technology program's Genetics course, and the newly formed HMS Advanced Integrative Sciences Course on Human Genetics.

I will continue to build upon my accomplishments in the clinical, administrative, scholarly and educational domains at HMS and look forward to the many opportunities and challenges faced by clinical geneticists in our rapidly developing field.