

Kyle Brothers, MD, PhD
231 East Chestnut Street, N-97
Louisville, Kentucky 40202
(502) 588-0797
(502) 629-5285
kyle.brothers@louisville.edu

EDUCATION

Aug 1996 - Jun 2000 Bachelor of Science, *Magna Cum Laude*
Centre College
Major/Focus: Religion, Biochemistry and Molecular Biology
Danville, Kentucky

Aug 2000 - Jun 2004 Doctor of Medicine, *Magna Cum Laude*
University of Louisville School of Medicine
Louisville, Kentucky

Jul 2004 - Jun 2007 Pediatric Intern/Resident
Vanderbilt Children's Hospital
Nashville, Tennessee

Jul 2007 - Jun 2008 Chief Resident in Pediatrics
Vanderbilt Children's Hospital
Nashville, Tennessee

Aug 2008 - May 2015 Doctor of Philosophy
Vanderbilt University Graduate Department of Religion
Major/Focus: Program in Ethics and Society
Nashville, Tennessee

ACADEMIC APPOINTMENTS

Jul 2007 - Jun 2008 Clinical Instructor
Department of Emergency Medicine
Vanderbilt University School of Medicine
Nashville, Tennessee

Jul 2008 - Jun 2012 Clinical Instructor
Department of Pediatrics
Vanderbilt University School of Medicine
Nashville, Tennessee

Jul 2008 - Jun 2012 Instructor
Center for Biomedical Ethics and Society
Vanderbilt University School of Medicine
Nashville, Tennessee

Jul 2010 - Jun 2012 Adjunct Professor
Law School
Vanderbilt University
Nashville, Tennessee

Jul 2012 - Present Assistant Professor
Department of Pediatrics

University of Louisville School of Medicine
Louisville, Kentucky

Jul 2012 - Present

Adjunct Assistant Professor
Department of Pediatrics
Vanderbilt University School of Medicine
Nashville, Tennessee

Jul 2012 - Present

Affiliated Faculty Member
Institute for Bioethics, Health Policy, and Law
University of Louisville School of Medicine
Louisville, Kentucky

Oct 2012 - Present

Associate
Department of Family and Geriatric Medicine
University of Louisville School of Medicine
Louisville, Kentucky

CERTIFICATION AND LICENSURE

Jun 2002 - Jun 2004

Advanced Cardiac Life Support
American Heart Association

Jul 2002 - Present

Basic Life Support for Healthcare Providers
American Heart Association
Expiration Date: May 2016
Renewed continuously, most recently in May 2014

Jun 2004 - Jun 2008

Neonatal Resuscitation Program
American Academy of Pediatrics

Jun 2004 - Oct 2012

Pediatric Advanced Life Support
American Heart Association
Renewed most recently in June 2010

Jun 2007 - Apr 2014

Medical License
State Medical Board of Tennessee
License Number: MD0000042526

Oct 2008 - Present

Board-Certified Pediatrician
American Board of Pediatrics
Expiration Date: Oct 2015

May 2012 - Present

Motivational Interviewing
Training Course led by Ken Resnicow

Jun 2012 - Present

Medical License
Kentucky Board of Medical Licensure
License Number: 45218

PROFESSIONAL MEMBERSHIPS AND ACTIVITIES

Jun 2004 - Present

Fellow, American Academy of Pediatrics
Sections: Section on Bioethics, Section on Obesity

Jun 2010 - Apr 2014 Member, American Medical Association

Jun 2010 - Present Member, American Society of Bioethics and Humanities

HONORS AND AWARDS

May 2000 Inductee, Phi Beta Kappa

Jun 2002 Second Place Winner, John Conley Ethics Essay Contest

Jun 2004 Awardee, Billy F. Andrews, M.D. Scholarship for Pediatrics

Jun 2004 Inductee, Alpha Omega Alpha Medical Honors Society

Jun 2006 First Place Winner, AAP Section on Bioethics Essay Contest

Apr 2011 Scholars Abstract Award, 2011 Clinical and Translational Research and Education Meeting

Apr 2014 Faculty Peer Clinician-Teacher Excellence Award for New Faculty, Department of Pediatrics, University of Louisville School of Medicine

Jun 2015 Faculty Peer Clinician-Teacher Excellence Award for Mid-Career Faculty, Department of Pediatrics, University of Louisville School of Medicine

COMMITTEE ASSIGNMENTS AND ADMINISTRATIVE SERVICES

University (Intramural):

Jun 2004 - Jun 2008 Member, Pediatric Primary Care / Continuity Clinic Committee
Vanderbilt Children's Hospital

Jul 2004 - Jul 2008 Member, Pediatric Residency Program Curriculum Committee
Vanderbilt Children's Hospital

Jul 2007 - Jul 2008 Member, Hospital Pharmacy and Therapeutics Committee
Vanderbilt Children's Hospital

Jul 2007 - Jul 2008 Member, Hospital Process Management and Improvement Committee
Vanderbilt Children's Hospital

Jul 2008 - Dec 2008 Member, Medical Center Ethics Plan for Avian Flu Pandemic Committee
Vanderbilt University Medical Center

Jul 2008 - Jul 2012 Member, Medical Center Ethics Committee
Vanderbilt University Medical Center

Jul 2009 - Jul 2012 Ethics Reviewer for Study Proposals, BioVU Biobank
Vanderbilt University School of Medicine

Sep 2012 Poster Judge, Research! Louisville 2012
University of Louisville

Mar 2013 - Present Member, Pediatric Pharmacology Symposium Planning Committee
Department of Pediatrics, University of Louisville

Oct 2014 - Present Member, Research Oversight Committee for Dr. David Lohr
University of Louisville School of Medicine

Non-University (Extramural):

Jul 2008 - Nov 2011 Member, Consent and Community Consultation Committee
eMERGE (Electronic Medical Records and Genomics) Consortium

Jul 2008 - Nov 2011 Member, Return of Results Working Group
eMERGE (Electronic Medical Records and Genomics) Consortium

Jul 2008 - Nov 2011 Member, Return of Results Oversight Committee
eMERGE (Electronic Medical Records and Genomics) Consortium

Nov 2011 - Present Member, Workgroup for Consent, Education, Regulation, and Consultation
eMERGE-2 (Electronic Medical Records and Genomics) Consortium

Nov 2011 - Present Member, Workgroup for Actionable Variants
eMERGE-2 (Electronic Medical Records and Genomics) Consortium

Sep 2012 - Present Member, Hospital Ethics Committee
Kosair Children's Hospital

Dec 2012 - Present Member, BioVU Ethics Advisory Board
Vanderbilt University Medical Center

Jan 2013 - Present Co-Chair, Pediatric Bioethics Day Planning Committee
Kosair Children's Hospital

Jun 2013 - Dec 2013 Member, Pediatric Workgroup
CSER (Clinical Sequencing Exploratory Research) Consortium

Jun 2013 - Present Member, Actionable Results/Return of Results Workgroup
CSER (Clinical Sequencing Exploratory Research) Consortium

Jun 2013 - Present Member, Outcomes and Measures Workgroup
CSER (Clinical Sequencing Exploratory Research) Consortium

Jun 2013 - Present Member, Qualitative Measures Workgroup
CSER (Clinical Sequencing Exploratory Research) Consortium

Jan 2014 - Present Co-Chair, Pediatric Workgroup
CSER (Clinical Sequencing Exploratory Research) Consortium

Aug 2014 - Present Member, Ethics Advisory Council for MyCode Community Health Initiative
Geisinger Health System

Jun 2015 - Present Early Career Reviewer, Societal and Ethical Issues in Research (SEIR) Study Section
National Institutes of Health

EDUCATIONAL ACTIVITIES

Nursing and Allied Health Students:

- Jul 2010 - Jun 2012 Workshop Leader
Ethics and Palliative Care in Pediatric Nursing Care
Pediatric Nurse Residency Program
Vanderbilt Children's Hospital
- Aug 2015 Guest Speaker and Small Group Leader
2015 Book in Common - "The Immortal Life of Henrietta Lacks"
University of Louisville School of Dentistry

Nursing and Allied Health Professionals:

- Oct 2010 Workshop Leader
Ethics Cases in Child Life Practice
Department of Child Life
Vanderbilt Children's Hospital
- Oct 2013 - Present Guest Lecturer
Ethics Cases in PICU Nursing
Pediatric Intensive Care High-Tech Nursing Training Program
Kosair Children's Hospital
Lecture provided on the following dates:
October 1, 2013
October 27, 2014
- Jul 2014 - Present Guest Lecturer
Ethics Cases in Pediatric Critical Care
Pediatric Critical Care Nursing Lunch and Learn Sessions
Kosair Children's Hospital
Lecture provided on the following dates (with case themes):
July 7, 2014 (Professional Boundaries)
- Oct 2014 - Present Guest Lecturer
Qualitative Methods in Educational Research
Introduction to Research Methods, Certificate in Health Professions Program
University of Louisville

Medical Students:

- Oct 2006 Clinical Preceptor
Shade Tree Clinic
Vanderbilt University Medical Center
- Jul 2007 - Jun 2008 Lecturer
Chief Resident Lecture Series
Third Year Medical Student Pediatrics Clerkship
Vanderbilt University School of Medicine
Topics:
"Pediatric Fluid Management"
"Neonatal Hyperbilirubinemia"
"Managing Asthma Urgencies"
"Common Pediatric Gastrointestinal Problems"
"Common Pediatric Respiratory Tract Problems"
- Jan 2008 - Jun 2008 Course Co-Director

Second Year Medical Student Clinical Pediatrics Elective
Vanderbilt University School of Medicine

- Sep 2011 Panelist
Diverse Career Paths in Academia
Medical Scientist Training Program
Vanderbilt University School of Medicine
- Nov 2011 Lecturer
The Immortal Life of Henrietta Lacks: Race and Medical Research
American Medical Association: Medical Student Section
Meharry Medical College
- Sep 2012 - Present Small Group Leader
Professionalism Small Groups
Introduction to Clinical Medicine 1
University of Louisville School of Medicine
Year (number of small group sessions led): 2012 (1), 2013 (1), 2014 (1)
- Oct 2012 Lecturer
Choose Your Own Outcome: Ethics Cases in Longitudinal Clinical Care
Longitudinal Ambulatory Rotation
University of Louisville School of Medicine
- Nov 2012 - Present Core Faculty
Ethics Section
Introduction to Clinical Medicine 2
University of Louisville School of Medicine
Year (number of small group sessions led): 2012 (1), 2013 (4), 2014 (4)
Year (number of lectures provided): 2012 (1), 2013 (3), 2014 (3)
Sample lecture titles:
"Working with Parents and Adolescents"
"Balancing Autonomy and Beneficence"
"Laws and Policies in Clinical Ethics"
"Just Distribution of Medical Resources"
- Sep 2013 - Present Small Group Leader
Family Medicine Clerkship Small Group Discussions on Ethical Issues in Family Medicine
Department of Family and Geriatric Medicine
University of Louisville School of Medicine
Year (number of small group sessions led): 2013 (1), 2014 (1)
- Oct 2013 Guest Lecturer
Global Health Ethics
Distinction in Global Health Program
University of Louisville School of Medicine
Lecture provided on the following dates (with case themes):
October 17, 2013 (Clinical Cases in the Context of Religious Medical Missions)
November 10, 2014 (Ebola: Professional and Public Health Ethics)
- Nov 2014 Panelist
Guest Panel on Ebola Epidemic
Schools of Medicine, Nursing, and Public Health
University of Louisville

Law and Graduate Students:

- Jan 2010 - Jun 2010 Teaching Assistant

- Ethics in Theological Perspectives*
Vanderbilt Divinity School
This course for Masters of Theological Studies and Masters of Divinity students explores a number of religious and philosophical ethical traditions, with a focus on application to religious or professional practices.
- Jan 2011 - Jun 2011 Co-Instructor
Ethics, Law, and Medicine
Vanderbilt Law School
This cross-listed interdisciplinary course explores a variety of topics and problems at the intersection of ethical, legal, and medical concerns in the modern world of health care.
- Jan 2012 - Jun 2012 Teaching Assistant
Theology and Health in a Therapeutic Culture
Vanderbilt Divinity School
This course for Masters of Theological Studies and Masters of Divinity students explores the theological and ethical implications of the cultural shift toward “therapy” as opposed to “care”.
- Jan 2012 - Jun 2012 Co-Instructor
Genetics, Law, and Medicine
Vanderbilt Law School
This cross-listed interdisciplinary course explores a variety of topics and problems at the intersection of human genetics, medical practice, and the law. The course included law students, medical students, and graduate students in human genetics.
- Oct 2012 - Present Guest Lecturer
Newborn Screening in the Digital Age
Legal and Ethical Aspects of Public Health Course
University of Louisville School of Public Health and Information Sciences
Lecture provided on the following dates:
October 3, 2012
October 23, 2013
October 22, 2014
- Mar 2013 - Present Guest Lecturer
Pediatric Ethics
Bioethics and the Law
University of Louisville Louis D. Brandeis School of Law
Lecture provided on the following dates (with case themes):
March 4, 2013 (Pediatric End of Life)
March 3, 2014 (Children with Severe Neurological Injury)
- Mar 2013 - Present Guest Lecturer
Ethical Issues in Research with Children
Ethical Conduct of Health Research
University of Louisville School of Public Health and Information Sciences
Lecture provided on the following dates:
March 6, 2013
March 26, 2014
February 19, 2015
- Nov 2014 - Present Guest Lecturer
Newborn Screening and Public Policy
Genomics and the Law
University of Louisville Louis D. Brandeis School of Law
Lecture provided on the following dates:
November 17, 2014

Residents:

Jul 2007 - Jun 2008	Presenter <i>Morning Conference Series</i> Pediatrics Residency Program Vanderbilt Children's Hospital
Jul 2008 - Jun 2010	Clinical Preceptor Children's Hospital Pediatric Primary Care Clinic Vanderbilt Children's Hospital <i>4 hours twice monthly</i>
Jul 2008 - Jun 2012	Clinical Preceptor Pediatric Weight Management Clinic Vanderbilt Children's Hospital
Jul 2009 - Jun 2012	Lecturer <i>Core Curriculum Lecture Series</i> Pediatrics Residency Program Vanderbilt Children's Hospital <i>Once annually</i> Topics: <i>"Pediatric Clinical Ethics Cases: Caring for Neurologically Devastated Children"</i> <i>"Clinical Ethics Consultation: What It Is and How to Get One"</i> <i>"Choose Your Own Outcome: Provider-Patient Conflict"</i>
Oct 2010	Lecturer <i>Pediatric Neurology Clinical Ethics Cases: The Role of Prognostication in Caring for Neurologically Devastated Children</i> Pediatric Neurology Resident Core Curriculum Lecture Series Vanderbilt Children's Hospital
Jul 2011 - Jun 2012	Lecturer <i>The Clinical Ethics of Personalized Medicine</i> Internal Medicine Residency Ethics and Professionalism Series Vanderbilt University Medical Center <i>Lecture given once annually</i>
Jul 2012 - Jun 2014	Clinical Preceptor UofL Pediatrics Broadway University of Louisville School of Medicine <i>8 hours weekly</i>
Nov 2013	Guest Lecturer <i>Global Health Ethics: Pediatric Cases in Medical Missions</i> Global Child Health Series, Pediatrics Residency Program Kosair Children's Hospital
Jan 2014 - Present	Presenter <i>Morning Report</i> Pediatrics Residency Program Kosair Children's Hospital <i>Presentation provided on the following dates (with case themes):</i> <i>January 15, 2014 (Adolescent Consent and Confidentiality)</i> <i>September 24, 2014 (Brain Death)</i>
May 2014 - Present	Guest Lecturer <i>Family Medicine Residency Core Lecture Series</i> Family Medicine Residency Program

University of Louisville School of Medicine
*Lecture provided on the following dates (with case themes):
May 29, 2014 (Adolescent Consent and Confidentiality for Family Physicians)*

Jul 2014 - Present Clinical Preceptor
University of Louisville Pediatrics - Downtown
University of Louisville School of Medicine
8 hours weekly

Dec 2014 - Present Guest Lecturer
Pediatrics Residency Core Lecture Series
Pediatrics Residency Program
University of Louisville School of Medicine
*Lecture provided on the following dates (with case themes):
December 12, 2014 (Ebola: Professional and Public Health Ethics Issues)*

Fellows:

Jul 2011 - Jun 2012 Course Co-Director
Pediatric Critical Care Fellows Clinical Ethics Curriculum
Vanderbilt Children's Hospital
Designed 12-session curriculum, co-directed course, and led sessions.
Sessions include:
"Re-Introduction to Clinical Ethics: Beyond the Principles"
"Religious, Philosophical, and Cultural Objections to Medical Interventions"
"Decision-making for Children Dying from Non-accidental Trauma"

Mar 2013 - Present Guest Lecturer
Choose Your Own Outcome: Ethics Cases in Pediatric Subspecialty Medicine
Pediatrics Fellowship Programs
University of Louisville School of Medicine
*Lecture provided on the following dates (with case themes):
March 18, 2013 (End of Life Care)*

Apr 2014 - Present Guest Lecturer
Pediatric Critical Care Fellows Core Lecture Series
Department of Pediatrics
University of Louisville School of Medicine
*Presentation provided on the following dates (with case themes):
April 9, 2014 (Patient care after the decision to withdraw life-sustaining treatment has
been made)*

Physicians:

Oct 2012 Presenter
Consent and Confidentiality of Adolescents in Primary Care
Division of General Pediatrics Scholarly Conference
University of Louisville School of Medicine

CLINICAL ACTIVITIES

Jul 2007 - Jun 2012 Attending Physician
Pediatric Emergency Department
Vanderbilt Children's Hospital
*Provided urgent care 2-6 shifts per month for non-emergent patients presenting to the
Pediatric Emergency Department.*

Jul 2008 - Jun 2009 Attending Physician

	<p>Children's Hospital Primary Care Clinic Vanderbilt Children's Hospital <i>Provided care one half day per week as attending physician seeing primary care and acute care patients in an outpatient pediatric clinic. Care also involved supervision of pediatric residents and medical students.</i></p>
Jul 2008 - Jun 2012	<p>Attending Physician Pediatric Weight Management Clinic Vanderbilt Children's Hospital <i>Provided care one half day per week, and later two half days per week, as an attending physician providing evaluation and treatment of children with obesity. This involved counseling patients and their parents on healthy eating and activity, motivational interviewing, and evaluation for complications of obesity. Central to this clinical activity was coordination with an interdisciplinary team, including dietitians, physical therapists, and exercise physiologists.</i></p>
Jul 2012 - Jun 2014	<p>Attending Physician University of Louisville Pediatrics - Broadway Clinic University of Louisville Physicians Group <i>Provided care two half days per week as attending physician seeing primary care and acute care patients in an outpatient pediatric clinic. Care also involved supervision of pediatric residents and medical students.</i></p>
Jul 2014 - Present	<p>Attending Physician University of Louisville Pediatrics - Downtown University of Louisville <i>Provided care two half days per week as attending physician seeing primary care and acute care patients in an outpatient pediatric clinic. Care also involved supervision of pediatric residents and medical students.</i></p>

GRANTS AND CONTRACTS

GRANTS

Current:

1. *Genomic Diagnosis in Children with Developmental Delay*

PI: Richard Myers

My Role: Lead Investigator, Component 3 (40% effort)

Granting Agency: National Institutes of Health, National Human Genome Research Institute

Funder Grant Number: 1UM1HG007301-01

UofL Office of Grants Management Number: OICB130098

Direct Costs: \$5,981,992 Indirect Costs: \$8,990,104

Dates: Jun 2013 - (May 2017)

Component 3, Specific Aim 1: Measure whether families with a child with DD/ID provided with a genetic diagnosis experience improved perceived personal control, decreased uncertainty in future care, and decreased anxiety as compared to those for whom a genetic diagnosis cannot be identified.

Component 3, Specific Aim 2: Test in a clinical trial whether parents whose preferences regarding incidental findings are elicited prospectively experience improved perceived control, decreased anxiety, and request fewer incidental findings as compared with parents whose preferences are elicited post-hoc.

2. *Social Media, Teen Moms, and PPD*

PI: Cynthia Logsdon

My Role: Ethics Advisor, Data Safety and Monitoring Board Member (1% effort)

Granting Agency: National Institutes of Health, National Institute for Nursing Research

Funder Grant Number: 1R15NR013563-01A1

UofL Office of Grants Management Number: OICB121360

Direct Costs: \$299,467 Indirect Costs: \$150,476

Dates: Jun 2013 - May 2015

3. *Patient Perspectives on Broad Consent in Biobank Research in the eMERGE Network (eMERGE Coordinating Center)*

PI: Jonathan Haines

My Role: Co-Investigator (3% effort)

Granting Agency: National Institutes of Health, National Human Genome Research Institute

Funder Grant Number: 3U01HG006385-03S1

UofL Office of Grants Management Number: OGMB140173

Direct Costs: \$15,010 Indirect Costs: \$3,903

Dates: Aug 2013 - Jul 2015

In this project I serve as a consultant to the eMERGE Coordinating Center located at Vanderbilt University. My role is to serve as the coordinator for the centralized project database for this multi-site survey study. In this role I have designed, developed, deployed and maintained the project database, and provide oversight to ensure that data is captured correctly and at the appropriate intervals.

4. *Patient Perspectives on Broad Consent in Biobank Research in the eMERGE Network*

PI: Dan Roden

My Role: Co-Investigator (5% effort)

Granting Agency: National Institutes of Health, National Human Genome Research Institute

Funder Grant Number: 3U01HG006378-03S1

UofL Office of Grants Management Number: OGMB140172

Direct Costs: \$15,350 Indirect Costs: \$4,771

Dates: Sep 2013 - Jul 2015

For this project I serve as a consultant to the Vanderbilt Genome Electronic Records project at Vanderbilt University. In this role I share responsibility with co-investigators in work to implement the planned survey among Vanderbilt patients, with a focus on my related work for the Coordinating Center managing the centralized project database. I also contribute to efforts to develop and test the survey instrument, perform statistical analyses, place findings in their ethical and policy context, and disseminate findings in publications.

Pending:

1. *Addressing Ethical Challenges in Networked Biorepositories*

PI: **Kyle Brothers**, Aaron Goldenberg

My Role: Co-Principal Investigator (25% effort)

Granting Agency: National Institutes of Health, National Human Genome Research Institute

Funding Mechanism: 1R01HG008988-01

UofL Office of Grants Management Number: OGMB151489

Direct Costs: \$1,026,001 Indirect Costs: \$232,138

Dates: Jun 2015 - Present

Individual institutions across the country have worked to support research in a wide variety of areas by developing large biorepositories comprised of biospecimens and health data collected from local patients and controls. To address the need of larger sample sizes for increasingly refined analyses, researchers have begun to promote the networking of multiple repositories within or across multiple institutions. This networked biorepository approach makes it possible for researchers to access larger, more diverse sets of data and biospecimens in a way that leverages the research relationships that local institutions have built with their own communities of donors. In order for this approach to be successful, networked biorepositories need to address important ethical, legal, and social challenges. Networked biorepositories are comprised of diverse sets of specimens and data from different institutions, each with their own governance structures and donor needs. For these reasons, they encounter complex issues related to consent and donor permission, privacy and data security, and data access. These novel challenges have not previously been examined in detail, and best practices for addressing these issues through governance and oversight processes are lacking. This study will address these important needs through a rigorous, mixed-methods study of the perspectives and experiences of stakeholders currently engaged in designing, operating, and governing networked biorepositories. It will also aim to develop approaches to consent and donor permission, privacy and data security, data access, governance, and oversight that are most appropriate and effective for a variety of networked biorepository configurations.

Past:

1. *Vanderbilt Genome-Electronic Records Project*

PI: Dan Roden

My Role: Co-Investigator (10% effort)

Granting Agency: National Institutes of Health, National Human Genome Research Institute
Funder Grant Number: 5-U01-HG004603
UofL Office of Grants Management Number: NA
Expiration Date: Nov 2012
Dates: Sep 2007 - Oct 2011

2. Body and Soul Seminar

PI: **Kyle Brothers**, Dan Morrison, Trevor Bibler
My Role: Seminar Co-Leader
Granting Agency: Robert Penn Warren Center Graduate Student Led Seminar Series
UofL Office of Grants Management Number: NA
Direct Costs: \$3500
Dates: Jul 2010 - Jul 2011

3. Translating Pharmacogenomic Research to the Clinic: PREDICT Focus Groups Phase 2

PI: **Kyle Brothers**
Granting Agency: Vanderbilt Institute for Clinical and Translational Research (VICTR)
Funder Grant Number: VR1240
UofL Office of Grants Management Number: NA
Direct Costs: \$10,000
Dates: Nov 2010 - Nov 2012

4. Vanderbilt Genome-Electronic Records Project, eMERGE II

PI: Dan Roden
My Role: Co-Investigator (10% effort)
Granting Agency: National Institutes of Health, National Human Genome Research Institute
Funder Grant Number: U01-HG006378
UofL Office of Grants Management Number: NA
Expiration Date: Nov 2012
Direct Costs: \$2,000,000 Indirect Costs: \$1,089,497
Dates: Nov 2011 - Jun 2012

Unfunded:

1. Voluntariness, Feasibility, and Costs of an Opt-Out Approach to Biosample Research

PI: Gordon Bernard
My Role: Lead Investigator (5% effort)
Granting Agency: National Institutes of Health, National Center for Advancing Translational Sciences
Funding Mechanism: U24 Mechanism
UofL Office of Grants Management Number: NA
Submission Date: Mar 2012

2. The Era of the Empowered Patient: Ethics, Practice, and Public Policy

PI: **Kyle B. Brothers**
Granting Agency: Greenwall Foundation
Funding Mechanism: Greenwall Foundation Faculty Scholars Program
UofL Office of Grants Management Number: NA
Direct Costs: \$96,749 Indirect Costs: \$45,874
Submission Date: Jan 2014

EDITORIAL WORK

Jul 2008 - Present Ad-hoc Reviewer, *American Journal of Medical Genetics*
 Manuscripts reviewed during the following years (number reviewed): 2008 (1)

Jan 2010 - Present Ad-hoc Reviewer, *Cancer Epidemiology, Biomarkers, & Prevention*
 Manuscripts reviewed during the following years (number reviewed): 2010 (1)

Jan 2010 - Present	Ad-hoc Reviewer, <i>Pediatrics</i> <i>Manuscripts reviewed during the following years (number reviewed): 2010 (1), 2011 (1), 2013 (1), 2014 (1), 2015 (2)</i>
Jan 2010 - Present	Ad-hoc Reviewer, <i>Science</i> <i>Manuscripts reviewed during the following years (number reviewed): 2010 (1)</i>
Jan 2010 - Present	Ad-hoc Grant Reviewer, <i>Wellcome Trust</i>
Jan 2010 - Present	Ad-hoc Reviewer, <i>American Journal of Bioethics</i> <i>Manuscripts reviewed during the following years (number reviewed): 2010 (1), 2014 (1)</i>
Mar 2012 - Present	Ad-hoc Reviewer, <i>Personalized Medicine</i> <i>Manuscripts reviewed during the following years (number reviewed): 2011 (1), 2012 (2), 2013 (1), 2014 (1)</i>
Dec 2012 - Present	Ad-hoc Reviewer, <i>Genome Medicine</i> <i>Manuscripts reviewed during the following years (number reviewed): 2012 (1), 2014 (2)</i>
Jan 2013 - Present	Ad-hoc Reviewer, <i>Genetics in Medicine</i> <i>Manuscripts reviewed during the following years (number reviewed): 2012 (1), 2013 (1), 2015 (2)</i>
Feb 2013 - Present	Ad-hoc Reviewer, <i>BMC Medical Research Methodology</i> <i>Manuscripts reviewed during the following years (number reviewed): 2013 (1)</i>
Mar 2013 - Present	Ad-hoc Reviewer, <i>AJOB Empirical Bioethics</i> <i>Manuscripts reviewed during the following years (number reviewed): 2013 (1), 2014 (1)</i>
Jan 2014 - Present	Ad-hoc Reviewer, <i>BMC Medical Ethics</i> <i>Manuscripts reviewed during the following years (number reviewed): 2014 (2)</i>
Feb 2014 - Present	Ad-hoc Reviewer, <i>Health Affairs</i> <i>Manuscripts reviewed during the following years (number reviewed): 2014 (1)</i>
Apr 2014 - Present	Ad-hoc Reviewer, <i>Journal of Pediatrics</i> <i>Manuscripts reviewed during the following years (number reviewed): 2014 (1)</i>
May 2014 - Present	Ad-hoc Reviewer, <i>Journal of Genetic Counseling</i> <i>Manuscripts reviewed during the following years (number reviewed): 2014 (1)</i>
Jan 2015 - Present	Ad-hoc Reviewer, <i>PLOS One</i> <i>Manuscripts reviewed during the following years (number reviewed): 2015 (1)</i>
Feb 2015 - Present	Ad-hoc Reviewer, <i>European Journal of Human Genetics</i> <i>Manuscripts reviewed during the following years (number reviewed): 2015 (1)</i>
Apr 2015 - Present	Ad-hoc Reviewer, <i>Journal of Biorepository Science for Applied Medicine</i> <i>Manuscripts reviewed during the following years (number reviewed): 2015 (1)</i>
May 2015 - Present	Ad-hoc Reviewer, <i>Clinical Genetics</i> <i>Manuscripts reviewed during the following years (number reviewed): 2015 (1)</i>
Aug 2015 - Present	Ad-hoc Reviewer, <i>Pediatric Blood and Cancer</i> <i>Manuscripts reviewed during the following years (number reviewed): 2015 (1)</i>

ABSTRACTS AND PRESENTATIONS

ORAL PRESENTATIONS

National/International Presentations:

1. Topic Symposium, Pediatric Academic Societies
Symposium/Panel Title: *Ethical Challenges in Pediatric Biobanks: Balancing Risks and Benefits*
Presentation Title: *Designing and Implementing a Large-Scale De-Identified DNA Biobank: The Vanderbilt Experience*
Role: Presenting Author
May 2009 Baltimore, Maryland
2. Pediatric Pharmacogenomics and Personalized Medicine Symposium (*Invited Talk)
Presentation Title: *Pediatric Biobanking Initiatives: Ethical Considerations and Legal Requirements*
Role: Presenting Author
Apr 2010 Kansas City, Missouri
3. Tercer Simposio Internacional de Bioética (*Invited Talk)
Presentation Title: *Biobanks and Research Databases: Beyond the Refrigerator*
Role: Presenting Author
Aug 2010 San Jose, Costa Rica
4. Panel Presentation, American Society of Bioethics and Humanities
Symposium/Panel Title: *Too Young to Understand the Risks? Old Enough to Reap the Results?*
Presentation Title: *Pediatric BioVU: Parent Perspectives on an Opt-Out Biobank*
Role: Presenting Author
Oct 2010 San Diego, California
5. Panel Presentation, Genomics and Public Health Conference
Symposium/Panel Title: *Genomic Testing [of] Minors: Implications for Primary Prevention*
Presentation Title: *Peds BioVU: Including Pediatric Samples in a Non-Human Subjects Biobank*
Role: Presenting Author
Dec 2010 Bethesda, Maryland
6. Alfried Krupp Wissenschaftskolleg Greifswald (*Invited Talk)
Presentation Title: *BioVU: Research Ethics in the Design of a Biorepository*
Role: Presenting Author
Jan 2011 Greifswald, Germany
7. Panel Presentation, 2011 Congress of the Ethical, Legal and Social Implications Research Program
Symposium/Panel Title: *Pediatric Biobanks: Not Just Biobanks for Little Adults*
Presentation Title: *Pediatric Biobanks: An Alternative Governance Model*
Role: Presenting Author and *Organizing Presenter
Apr 2011 Chapel Hill, North Carolina
8. Panel Presentation, Pediatric Academic Societies
Symposium/Panel Title: *Ethical Controversies in Pediatric Biobanks*
Presentation Title: *Pediatric Biobanks: An Alternative Governance Model*
Role: Presenting Author
May 2011 Denver, Colorado
9. State of the Art Presentation, CTSA Consortium Child Health Oversight Committee (*Invited Talk)
Presentation Title: *BioVU: Using Biorepositories to Answer Research Questions*
Authors: **Brothers KB**, Van Driest SL
Role: Presenting Author
Apr 2012 Boston, Massachusetts

10. Platform Presentation, American Society for Human Genetics
Presentation Title: *Genome-wide association study of vancomycin pharmacokinetics using a de-identified biorepository*
Authors: Van Driest SL, McGregor TL, Lu Z, Vear S, Creech CB, Kannankeril PJ, **Brothers KB**, Potts A, Bowton E, Delaney JT, Bradford Y, Wilson S, Olson L, Crawford DC, Saville B, Roden DM, Denny JC
Role: Non-Presenting Author
Nov 2012 San Francisco, California

11. Panel Presentation, Why We Can't Wait: Conference to Eliminate Health Disparities in Genomic Medicine (*Invited Talk)
Symposium/Panel Title: *Health IT, Privacy and Genomics*
Presentation Title: *Human Non-Subjects Biobanking: Privacy, Perspectives, and Personalized Medicine for Everyone*
Role: Presenting Author
May 2013 San Francisco, California

12. Guest Speaker, National Cancer Institute (*Invited Talk)
Symposium/Panel Title: *Ethical and Regulatory Issues in Cancer Research (ENRICH) Forum*
Presentation Title: *Different Headaches: The Human Non-Subjects Approach to Biobanking*
Role: Presenting Author
Jan 2014 Shady Grove, Maryland

13. Expert Presentation and Workshop Contributor, Ethical and legal aspects of molecular genetic incidental findings in Germany, Austria, and Switzerland (*Invited Talk)
Presentation Title: *The Challenges of Managing Incidental Findings: The U.S. Perspective*
Role: Presenting Author
Mar 2014 Greifswald, Germany

14. Panel Presentation, Clinical Sequencing Exploratory Research Consortium In-Person Meeting
Symposium/Panel Title: *Pediatric Genomics: Resolving Conflicts & Improving Decision-Making*
Presentation Title: *Preferences in Pediatric Result Sharing: The Disease Category Approach*
Authors: **Brothers KB**, East KE
Role: Presenting Author and *Organizing Presenter
Oct 2014 Bethesda, Maryland

15. Panel Presentation, American Society of Bioethics and Humanities
Symposium/Panel Title: *Operationalizing Choice and Autonomy: Approaches to Ethically Offering and Returning Secondary Genetic Results*
Presentation Title: *Preferences in Pediatric Result Sharing: The Disease Category Approach*
Authors: **Brothers KB**, East KE
Role: Presenting Author
Oct 2014 San Diego, California

16. Panel Presentation, American Society of Bioethics and Humanities
Symposium/Panel Title: *The DNA Lives On: Genetic Testing and DNA Banking at the End of Life*
Presentation Title: *Ethical and Legal Issues in Genetic Testing and DNA Banking At the End of Life*
Role: Presenting Author
Oct 2014 San Diego, California

17. Platform Presentation, Translation in Healthcare - Exploring the Impact of Emerging Technologies
Symposium/Panel Title: *Data Sharing for Translation*
Presentation Title: *Clinical Decision-Making and Secondary Findings in Systems Medicine*
Authors: Langanke M, Fischer T, Erdmann P, **Brothers KB**
Role: Non-Presenting Author
Jun 2015 Oxford, England

Local/Regional Presentations:

1. Paper Response, Social and Political Thought Seminar
Symposium/Panel Title: *Enhancing Evolution*

- Presentation Title: *Exploring Gendered Experience When Gender Has Been Destabilized*
Role: Presenting Author
Feb 2010 Nashville, Tennessee
2. Nineteenth Annual Joel G. Hardman Student-Invited Pharmacology Forum (*Invited Talk)
Symposium/Panel Title: *Personalized Medicine*
Presentation Title: *Pediatric Biobanking Initiatives: Ethical Considerations and Legal Requirements*
Role: Presenting Author
Apr 2010 Nashville, Tennessee
3. Nashville Chapter of the Society of Clinical Research Associates (*Invited Talk)
Presentation Title: *Human Non-Subjects Biobanking: Ethical and Legal Considerations for Research Users*
Role: Presenting Author
Jun 2010 Nashville, Tennessee
4. Grand Rounds, Department of Pediatrics, University of Louisville (*Invited Talk)
Presentation Title: *Refusers, Deniers, and Objectors: Working with Vaccine-Hesitant Parents*
Role: Presenting Author
Aug 2010 Louisville, Kentucky
5. Panel Presentation, Vanderbilt Kennedy Research Center Ethics Grand Rounds
Symposium/Panel Title: *'Curing' Disabilities: Ethical Considerations*
Role: Presenting Author
Apr 2011 Nashville, Tennessee
6. Belmont University (*Invited Talk)
Symposium/Panel Title: *Panel Discussion on The Immortal Life of Henrietta Lacks by Rebecca Skloot*
Presentation Title: *The Immortal Life of Henrietta Lacks: Research Controversies and Regulations*
Role: Presenting Author
Nov 2011 Nashville, Tennessee
7. Guest Speaker, Hillsboro High School, Academy of Global Health and Science
Presentation Title: *Synthetic Biology: Frankenstein in the 21st Century*
Role: Presenting Author
May 2012 Nashville, Tennessee
8. St. Jude Children's Research Hospital Clinical Research Mini-Symposium (*Invited Talk)
Symposium/Panel Title: *Genomics, Research and Children: Regulations, Ethics and Community*
Presentation Title: *Issues of Consent and Return of Results in Genomics Research with Children*
Role: Presenting Author
Aug 2012 Memphis, Tennessee
9. Center for Genetics and Molecular Medicine Symposium (*Invited Talk)
Symposium/Panel Title: *Whole Genome Sequencing: From Lab to Clinic*
Presentation Title: *The Genome on the Exam Table: Clinical Applications of Whole Genome Sequencing*
Role: Presenting Author
Nov 2012 Louisville, Kentucky
10. CME Presentation, Carle Foundation Hospital (*Invited Talk)
Symposium/Panel Title: *Bioethics Seminar Series*
Presentation Title: *Working with Vaccine-Hesitant Parents*
Role: Presenting Author
Sep 2013 Urbana, Illinois
11. Research Symposium Presentation, Kentucky General Pediatrics Scholarship Symposium
Presentation Title: *Genomic Diagnosis in Children with Developmental Delay*
Role: Presenting Author
May 2014 Lexington, Kentucky

12. Grand Rounds, Department of Pediatrics, University of Louisville
Symposium/Panel Title: *Ebola - The 21st Century Plague*
Presentation Title: *Ebola: Professional and Public Health Ethics*
Role: Presenting Author
Oct 2014 Louisville, KY

13. Panel Presentation, Genomics and Ethics in Research and Medical Decision-Making
Symposium/Panel Title: *Beyond Dualist Perspectives on Genetic Exceptionalism*
Presentation Title: *Finding a Better Way: Genomic Distinctiveness*
Authors: **Brothers KB**, Goldenberg AJ, Garrison NA
Role: Presenting Author and *Organizing Presenter
Mar 2015 Cincinnati, Ohio

14. Platform Presentation, Genomics and Ethics in Research and Medical Decision Making
Presentation Title: *Eliciting Parents' Preferences for Receiving Secondary Genomic Results*
Authors: **Brothers KB**, East KE
Role: Presenting Author
Mar 2015 Cincinnati, Ohio

15. Platform Presentation, Rare Disease Symposium (*Invited Talk)
Presentation Title: *Ethical and Legal Issues in Clinical Genomics*
Authors: **Brothers KB**
Role: Presenting Author
Mar 2015 Birmingham, Alabama

POSTERS

National/International Presentations:

1. HUGO Symposium on Genomics and Ethics, Law and Society
Symposium/Panel Title: *Sequencing of Individual Genomes: Impact on Society and Ethics*
Presentation Title: *Acceptability of an Opt-out Biobank Based on Electronic Medical Record and Residual Blood Samples*
Authors: **Brothers KB**, Morrison DR, Pulley J, Masys D, Clayton EW
Role: Non-Presenting Author
Nov 2009 Geneva, Switzerland

2. Pediatric Academic Societies
Presentation Title: *Acceptability of an Opt-Out Pediatric Biobank Based on Electronic Medical Record and Residual Blood Samples*
Authors: **Brothers KB**, Clayton EW, Morrison DR, Pulley JM, Masys D
Role: Presenting Author
May 2010 Vancouver, British Columbia, Canada

3. American Society of Bioethics and Humanities
Presentation Title: *The Nashville Community Health Survey: Perspectives on DNA Biobanking in a Population-Based Survey*
Authors: **Brothers KB**, Morrison DR, Clayton EW
Role: Presenting Author
Oct 2010 San Diego, California

4. 2011 Congress of the Ethical, Legal and Social Implications Research Program
Presentation Title: *Patient Perspectives on the PREDICT Program: Focus Groups on Practical Issues in the Design of a Clinical Pharmacogenomics Program*
Authors: Wright MF, Clayton EW, Pulley J, **Brothers KB**
Role: Non-Presenting Author
Apr 2011 Chapel Hill, North Carolina

5. American Society for Human Genetics

Presentation Title: *Mapping the Incidentalome: Quantifying Incidental Findings Generated Through a Clinical Pharmacogenomics Project*
Authors: **Brothers KB**, Westbrook MJ, Wright MF, Van Driest SL, McGregor TL, Denny JC, Zuvich RL, Clayton EW
Role: Presenting Author
Nov 2012 San Francisco, California

6. Pediatric Pharmacogenomics and Personalized Medicine Symposium
Presentation Title: *Genome-Wide Association Study of Vancomycin Pharmacokinetics*
Authors: McGregor TL, Van Driest SL, Lu Z, Vear S, Creech CB, Kannankeril PJ, **Brothers KB**, Potts A, Bowton E, Delaney JT, Bradford Y, Wilson S, Olson L, Crawford DC, Saville B, Roden DM, Denny JC
Role: Non-Presenting Author
Apr 2013 Kansas City, Missouri

7. Poster Presentation, National Human Genome Research Institute (NHGRI) Scientific Symposium
Presentation Title: *The Electronic Medical Records and Genomics (eMERGE) Network: A Population Survey of Perspectives toward Proposed Rule on Broad Consent and Data Sharing in Biomedical Research*
Authors: Odgis JA, Holm IA, Smith ME, Garrison NA, **Brothers KB**, Myers MF, McCormick JB, Aufox SA, Antommaria AH, Chandler A, Christensen KD, Veerkamp M, Connolly N, Ziniel S, Ludman EJ, Fullerton SM, Scrol A, Williams JL, DeWalle J, Nowakowski KE, Connolly JJ, Brilliant MH, Hitz P, Kitchner T, Joyce J, Conway P, McCarty CA, McManus VD, Negron R, Pacheco JL, Horowitz C, Clayton EW, Price L, Basford MA, Stallings SC, Claar MB, Scrubsole MJ, Mercaldo ND, Schildcrout JS, Sanderson SC, Kaufman D, Lockhart N, Li R
Role: Non-Presenting Author
Dec 2014 Bethesda, Maryland

8. Poster Presentation, Ethical and Legal Aspects of Molecular Genetic Incidental Findings in Germany, Austria, and Switzerland (*Invited Talk)
Presentation Title: *How Could This Have Happened? The US Perspective on Incidental Findings in the ACMG Recommendations*
Authors: Brothers, KB
Role: Non-Presenting Author
Feb 2015 Greifswald, Germany

Local/Regional Presentations:

1. Research! Louisville 2012
Presentation Title: *Mapping the Incidentalome: Quantifying Incidental Findings Generated Through a Clinical Pharmacogenomics Project*
Authors: Westbrook MJ, Wright MF, Van Driest SL, McGregor TL, Denny JC, Zuvich RL, Clayton EW, **Brothers KB**
Role: Presenting Author
Sep 2012 Louisville, Kentucky

2. Research! Louisville 2014
Presentation Title: *Geographic Disparities of Pediatric Obesity Clinic Attendance*
Authors: Yeager RA, Sweeney BR, Myers JA, Burkhead TA, Shaffer LA, **Brothers KB**
Role: Non-Presenting Author
Sep 2014 Louisville, Kentucky

3. Poster Presentation, Research! Louisville 2014
Presentation Title: *Factors Associated with Attendance at a Pediatric Weight Management Program*
Authors: Burkhead TA, Shaffer LA, **Brothers KB**, Myers JA, Yeager RA, Sweeney BR
Role: Non-Presenting Author
Sep 2014 Louisville, Kentucky

PUBLICATIONS

PEER-REVIEWED

Original Research Articles, Major Author:

1. **Brothers KB**. Covenant and the Vulnerable Other. *Journal of the American Medical Association*. 2002; 288 (9): 1133.
2. **Brothers KB**, Glascoe FP, Robertshaw NS. PEDS: Developmental Milestones--an accurate brief tool for surveillance and screening. *Clinical Pediatrics*. 2008; 47 (3): 271-279.
3. **Brothers KB**, Clayton EW. "Human Non-Subjects Research": Privacy and Compliance. *American Journal of Bioethics*. 2010; 10 (9): 15-17.
4. **Brothers KB**. Biobanking in Pediatrics: The Human Non-Subjects Approach. *Personalized Medicine*. 2011; 8 (1): 71-79.
5. **Brothers KB**. Dependent Rational Providers. *Journal of Medicine and Philosophy*. 2011; 36 (2): 133-147.
6. **Brothers KB**, Morrison DM, Clayton EW. Two Large Scale Surveys on Community Attitudes Toward an Opt-Out Biobank. *American Journal of Medical Genetics*. 2011; 155A (12): 2982-2990.
7. **Brothers KB**, Clayton EW. Parental Perspectives on a Pediatric Human Non-Subjects Biobank. *American Journal of Bioethics: Primary Research*. 2012; 3 (3): 21-29.
8. Westbrook MJ, Wright MF, Van Driest SL, McGregor TL, Denny JC, Zuvich RL, Clayton EW, **Brothers KB**. Mapping the Incidentalome: Estimating Incidental Findings Generated Through Clinical Pharmacogenomics Testing. *Genetics in Medicine*. 2012; 15 (5): 325-331.
9. Webster THG, Beal SJ, **Brothers KB**. Motivation in the Age of Genomics: Why Incidental Genetic Findings of Disease Susceptibility Might Not Motivate Behavior Change. *Life Sciences, Society, and Policy*. 2013; 9 (8).
10. **Brothers KB**, Westbrook MJ, Wright MF, Myers JA, Morrison DR, Madison JL, Pulley JM, Clayton EW. Patient Awareness and Approval for an Opt-Out Genomic Biorepository. *Personalized Medicine*. 2013; 10 (4): 349-359.
11. **Brothers KB**, Langanke M, Erdmann P. The Implications of the Incidentalome for Clinical Pharmacogenomics. *Pharmacogenomics*. 2013; 14 (11): 1353-1362.
12. **Brothers KB**, Lynch JA, Aufox SA, Connolly JJ, Gelb BD, Holm IA, Sanderson SC, McCormick JB, Williams JL, Wolf WA, Antommaria AHM, Clayton EW. Practical Guidance on Informed Consent for Pediatric Participants in a Biorepository. *Mayo Clinic Proceedings*. 2014; 89 (11): 1471-1480.
13. **Brothers KB**, Rothstein MA. Ethical, Legal, and Social Implications of Incorporating Personalized Medicine into Healthcare. *Personalized Medicine*. 2015; 12 (1): 43-51.

Original Research Articles, Co-Author:

1. Bryant KA, Humbaugh K, **Brothers KB**, Wright J, Pascual FB, Moran J, Murphy TV. Measures to Control an Outbreak of Pertussis in a Neonatal Intermediate Care Nursery After Exposure to a Healthcare Worker. *Infection Control and Hospital Epidemiology*. 2006; 27 (6): 542-545.
2. Bishop JP, **Brothers KB**, Perry JE, Ahmad A. Reviving the conversation around CPR/DNR. *American Journal of Bioethics*. 2010; 10 (1): 61-67.
3. Langanke M, **Brothers KB**, Erdmann P, Weinert J, Krafczyk-Korth J, Dorr M, Hoffmann W, Kroemer H, Assel H. Comparing different scientific approaches to personalized medicine: research ethics and privacy protection. *Personalized Medicine*. 2011; 8 (4): 437-444.
4. Fullerton SM, Wolf WA, **Brothers KB**, Clayton EW, Crawford DC, Denny JC, Greenland P, Koenig BA, Leppig KA, Lindor NM, McCarty CA, McGuire AL, McPeck Hinz ER, Mirel DB, Ramos EM, Ritchie MD, Smith ME, Waudby CJ,

Burke W, Jarvik GP. Return of Individual Research Results from Genome-wide Association Studies: Experience of the Electronic Medical Records and Genomics (eMERGE) Network. *Genetics in Medicine*. 2012; 14 (4): 424-431.

5. Pulley JM, Denny JC, Peterson JF, Bernard GR, Vnencak-Jones CL, Ramirez AH, Delaney JT, Bowton E, **Brothers KB**, Johnson K, Crawford DC, Schildcrout J, Masys DR, Dilks H, Clayton EW, Schultz E, Laposata M, McPherson J, Jirjis JN, Roden DM. Operational implementation of prospective genotyping for personalized medicine: The design of the Vanderbilt PREDICT project. *Clinical Pharmacology & Therapeutics*. 2012; 92 (1): 87-95.

6. Langanke M, Fischer T, Erdmann P, **Brothers KB**. Gesundheitliche Eigenverantwortung im Kontext Individualisierter Medizin (Personal Responsibility in the Context of Individualized Medicine). *Ethik in der Medizin*. 2012; 25 (13): 243-250.

The content in this article overlaps with the content of a book chapter, originally published in English, that is also listed here. It was revised, updated, and translated into German at the invitation of the journal Ethik in der Medizin.

7. McGregor TL, Van Driest SL, **Brothers KB**, Bowton EA, Muglia LJ, Roden DM. Inclusion of pediatric samples in an opt-out biorepository linking DNA to de-identified medical records: Pediatric BioVU. *Clinical Pharmacology & Therapeutics*. 2013; 93 (2): 204-211.

8. Rosenbloom ST, Madison JL, **Brothers KB**, Bowton EA, Clayton EW, Malin BA, Roden DM, Pulley J. Ethical and Practical Challenges to Studying Patients Who Opt Out of Large-Scale Biorepository Research. *Journal of the American Medical Informatics Association*. 2013; 20: e221-e225.

9. Hazin R, **Brothers KB**, Malin BA, Koenig BA, Sanderson S, Rothstein MA, Williams MS, Clayton EW, Kullo IJ. Ethical, Legal and Social Implications of Incorporating Genomic Information into Electronic Health Records. *Genetics in Medicine*. 2013; 15 (10): 810-816.

10. Jarvik GP, Amendola LM, Berg JS, **Brothers KB**, Clayton EW, Chung W, Evans BJ, Evans JP, Fullerton SM, Gallego CJ, Garrison NA, Gray SW, Holm IA, Kullo IJ, Lehmann LS, McCarty C, Prows CA, Rehm HL, Sharp RR, Salama J, Sanderson S, Van Driest SL, Williams MS, Wolf SM, Wolf WA, eMERGE ROR Committee & CERC Committee, CSER Act-ROR Working Group, Burke W. Return of Genomic Results to Research Participants: The floor, the ceiling, and the choices in-between. *The American Journal of Human Genetics*. 2014; 94 (6): 818-826.

11. Van Driest SL, McGregor TL, Velez-Edwards DR, Saville BR, Kitchner TE, Hebring SJ, Brilliant M, Jouni H, Kullo IJ, Creech CB, Kannankeril PJ, Vear SI, **Brothers KB**, Bowton EA, Shaffer CM, Patel N, Delaney JT, Bradford Y, Wilson S, Olson L, Crawford DC, Ho R, Potts AL, Ho RH, Roden DM, Denny JC. Genome-Wide Association Study of Serum Creatinine Levels during Vancomycin Therapy. *PLOS One*. 2014.

12. Khan CM, Rini C, Bernhardt BA, Roberts JS, Christensen KD, Evans JP, **Brothers KB**, Roche MI, Berg JS, Henderson GE. How Can Psychological Science Inform Research About Genetic Counseling for Clinical Genomic Sequencing?. *Journal of Genetic Counseling*. 2015; 24 (2): 193-204.

Journal Articles In Press:

1. McCullough LB, **Brothers KB**, Chung WK, Joffe S, Koenig BA, Wilfond BS, Yu JH. Professionally Responsible Disclosure of Genome Sequencing Results in Pediatric Practice. *Pediatrics*. 2015.

2. **Brothers KB**, Holm IA, Childerhose JE, Antommara AHM, Bernhardt BA, Clayton EW, Gelb BD, Joffe S, Lynch JA, McCormick JB, McCullough LB, Parsons DW, Sundaresan AS, Wolf WA, Yu JH, Wilfond BS. When Genomic Research Participants Grow Up: Contact and Consent at the Age of Majority. *The Journal of Pediatrics*. 2015.

Books, Book Chapters, and Monographs:

1. Langanke M, Fischer T, **Brothers KB**. Public Health – It is running through my veins: Personalized Medicine and Individual Responsibility for Health. *Individualized Medicine between Hype and Hope: Exploring Ethical and Societal Challenges for Healthcare*. 2012: 165-188.

2. **Brothers KB**. Wie konnte das passieren? Die US-amerikanische Perspektive auf Zufallsbefunde in den ACMG-Empfehlungen (How could this have happened? The US Perspective on Incidental Findings in the ACMG

Recommendations). *Zufallsbefunde bei molekulargenetischen Untersuchungen – Medizinische, rechtliche und ethische Herausforderungen (Incidental Findings in Molecular Genetics Research - Medical, Legal and Ethical Challenges)*. 2015.

NON-PEER-REVIEWED

Original Research Articles:

1. Centers for Disease Control and Prevention (CDC). Outbreaks of Pertussis Associated with Hospitals - Kentucky, Pennsylvania, and Oregon. *Morbidity and Mortality Weekly Report*. 2005; 54 (3): 67-71.
Acknowledged as case report contributor
2. **Brothers KB**. Putting Autonomy First: Should the pediatrician refuse to provide emergency contraception?. *AAP Section on Bioethics Newsletter*. 2006: 10-12.
3. **Brothers KB**. Coping with Religious Coping: When What We Want and What is Best for Us Are Not the Same. *Virtual Mentor*. 2009; 11 (10): 1140-1147.
4. **Brothers KB**, Clayton EW. Biobanks: Too Long to Wait for Consent. *Science*. 2009; 326 (5954): 798.
Comment On: Gurwitz D, Fortier I, Lunshof JE, Knoppers BM. Research ethics. Children and population biobanks. Science. Aug 14 2009;325(5942):818-819.
5. Bishop JP, **Brothers KB**, Perry JE, Ahmad A. Finite knowledge/finite power: "death panels" and the limits of medicine. *American Journal of Bioethics*. 2010; 10 (1): W7-9.
6. **Brothers KB**. Informed consent in the era of biobanks. *Genome Medicine*. 2013; 5 (4).
7. **Brothers KB**. Ethical Issues in Pediatric Pharmacogenomics. *Journal of Pediatric Pharmacology and Therapeutics*. 2013; 18 (3): 192-198.
8. **Brothers KB**. Diversity, Ethics, and Personalized Medicine Research. *Celebrating Diversity: The Newsletter of the UofL HSC Office of Diversity and Inclusion*. 2014: 1, 7-8.
9. Clayton EW, **Brothers KB**. State-Offered Ethnically Targeted Reproductive Genetic Testing. *Genetics in Medicine*. 2015.
10. Rothstein MA, Wilbanks JT, **Brothers KB**. Citizen Science on your Smartphone: An ELSI Research Agenda. *Journal of Law, Medicine, and Ethics*. 2015.