

UNIVERSITY OF ARKANSAS FOR MEDICAL SCIENCES  
GRADUATE FACULTY APPLICATION

1. Name: Joseph Bonner, PhD

2. UAMS Graduate Program Sponsor: DBMI Major field: Biomedical Informatics

3. Present UAMS academic title or administrative position: Instructor

Date appointed this rank/position: 12/27/2017 Employed by: UAMS

4. Comments of Department Chair/Head or Program Director including: evidence of scholarly development, effectiveness as a teacher, quality of publications and reallocation of duties if this application is approved.

Dr. Bonner is an outstanding teacher with extensive experience in Clinical and Clinical Research Informatics. He is actively engaged in clinical trial research here at UAMS and a member of our faculty.

*Fred Prior*

5/1/18

\_\_\_\_\_  
Date

Department Chair/Head or Program Director  
Graduate Council Representative

I have read the comments of my Department Chair/Head or Program Director and I do, do not (circle one) wish to supply additional information in support of my application.

*Cosum Bonner*  
Applicant's Signature

04/09/2018  
Date

**Approvals**

*M. Macnial*  
Chair, Graduate Faculty Committee

5/17/18  
Date

*M. Macnial*  
Chair, Graduate Council

5/17/18  
Date

*Robert B. Kelley*  
Dean of the Graduate School

5-17-2018  
Date

# INSTRUCTIONS FOR COMPLETION OF THE COMPUTERIZED FORM FOR APPLICATION TO THE UAMS GRADUATE FACULTY

1. Please read the form carefully and answer all questions. The form begins on the next page.
2. The form has been designed with fields for your responses, and these are indicated in blue and gray shading. Use the “tab” key to move between fields. The form will automatically expand to accommodate your entries. **IF YOU NEED HELP IN ANY OF THE FIELDS, PRESS THE F1 KEY AND A HELP WINDOW WILL OPEN.**
3. When you have completed the form, save it as a document on your own disk for future reference.
4. Print the document, and then obtain the appropriate signatures before submitting the form to the Graduate Office.

**5. List your planned involvement in graduate education (courses, theses, dissertations):**

I currently teach BMIG 5112 Introduction to Human Computer Interaction and substitute frequently in BMIG 5012 Introduction to Biomedical Informatics II.

I am slated to teach BMIG 5016 Clinical and Translational Research and BMIG 6110 Fundamentals of Research Data Management this Summer and BMIG 6010 Information Systems in Clinical Research this Fall.

**6. Briefly summarize your experience in graduate-level classroom teaching:**

I have taught several public health informatics and epidemiology at Michigan State University. I also concurrently teach Health Informatics to undergraduate at another university.

**7. Briefly summarize your experience in research and student research mentoring:**

I have 35 peer reviewed publications and have participated in many grant-funded research projects.

**8. Attach Curriculum Vita showing educational background (including institutions attended, degrees awarded and dates), honors or awards received, scholarly or professional organization affiliations, teaching experience (give school, dates and advanced and graduate subjects taught), including student theses and/or dissertations supervised. Cite publications and research in progress.**

## *Curriculum Vitae*

**Joseph Bonner, PhD**  
1101 Burkley Road  
Williamston, MI 48895  
(517) 256-6748 – JoeDonBonner@gmail.com

### **EDUCATION**

**PhD, Epidemiology Comparative Medicine and Integrated Biology** (December 2013)

College of Veterinary Medicine, Michigan State University, East Lansing, MI  
Dissertation: Mitochondrial Molecular Epidemiology of Longevity/Lifespan in a Population Isolate  
Advisor: Dr. Brian Schutte

**MS, Epidemiology**, (January 2000)

College of Human Medicine, Michigan State University, East Lansing, MI  
Thesis: Molecular Epidemiology of Colorectal Cancer  
Advisor: Dr. Dorothy Pathak

**BA, Biology and Chemistry**, (January 1989)

Spring Arbor University, Spring Arbor, MI

### **TEACHING EXPERIENCE**

**Adjunct Lecturer/Specialist:** Michigan State University, Department of Epidemiology

Courses: EPI851 SAS Programming and Data Management-I (2005-2013)  
EPI852 SAS Programming and Data Management-II (2005-2013)  
EPI853 Advanced SAS Programming (2005-2007)

**Adjunct Lecturer:** Michigan State University, Program in Public Health

Courses: HM868 Integrated Informatics and Study Design (2014)  
Focus on clinical trial design, execution and data management.  
HM843 Methods in Public Health Informatics (2011-2014)  
Includes material on data governance and management  
HM845 Informatics and Information Technology (2011-2014)  
HM846 Advanced Topics in Public Health Informatics Management (2011-2014)

## PROFESSIONAL EXPERIENCE

**Manager III, Data Governance Office/Ascension Clinical Research Institute, Ascension Health, St. Louis, MO** April 2016-October 2017

### *Enhance a data governance/informatics research organization*

- Worked in Cloudera HDFS environment to query data for data governance analyses.
- Worked in Oracle OBIEE environment to query/profile data.
- Created Tableau dashboards presented data governance metrics and issues
- Served as informatics liaison for a major precision medicine initiative
- Launched advanced analytics efforts to discover physician ordering and care plan patterns and clinical variability
- Served as informatics liaison for several corporate service lines (Cardiology, Orthopedics, Oncology) for research and analytics efforts
- Used informatics approaches to ensure data quality for population/community/employee health research initiatives
- Lead an effort to standardize electronic clinical quality measure (eCQM) submissions
- Served on many clinical informatics/governance bodies for system initiatives for acute care, nursing care, physician orders, population health and ambulatory care
- Managed a team of up to six stewards/informaticists/analysts
- Established an informatics approach supporting a Centers for Medicare/Medicaid Services (CMS) Hospital Engagement Network (HEN) research grant
- Established data warehousing (data lake) approaches and practices for diverse clinical and administrative data sources including Cerner™, STAR™, McKesson™, EPIC™, AllScripts™, aethnaHealth™.
- Served/Lead a Premier™ governance panel establishing data standards and quality practices for a nation-wide comparison data platform.
- Served as principal data governance contact for data science and analytics projects within the institute
- Established Informatica™ as data governance technology platform for Business Glossary, Meta Data Management/Repository
- Established Symedical™ (Clinical Architecture) as reference data management basis for governed data.
- Worked within a data governance council structure for standards development and approval
- Maintained office transparency in decision making and background research processes, proceedings and status reporting
- Established weekly executive status reporting framework
- Participated in data needs discussions for analytics, data science and clinical research projects including Nursing Attrition Analytics
- Established on-going data quality score carding practice for governed data
- Established a reference data model for warehouse and data mart extracts as basis for governed data
- Started a master data management practice of patients, organizations, reference data and providers.

**Director, Data Governance and Data Science/Research, Trinity Health, Livonia, MI 2013-2016*****Built a data science organization***

- Hired and trained 5 data scientists. Solicited commissions from many business units.
- Conducted (or lead) analyses of:
  - Dual-eligible high cost episodes prediction using CMS data using neural network approach
  - Malpractice claims including NLP analyses
  - Failure to diagnose within ED setting
    - Including care transformation practice changes
  - Race/ethnicity reporting patterns,
  - Plan of care usage and inpatient mortality prediction
  - Cluster analysis of physician order patterns
  - Cluster analysis/better practice discovery inside ambulatory settings
  - Segmentation analysis of health insurance enrollment campaign
  - Establish research relationships with Mathematica policy research unit and Blue Cross/Blue Shield of Michigan Foundation and several universities.
  - establish data science/biostatistics consulting center
- Presented a monthly fellowship of data scientists of analysts from across the nation to present their work with a feedback forum
- Established a company-wide SAS and SPSS support center
- Directed the clinical reporting organization
- Fostered clinical, epidemiology and health services research potential of the Trinity Health data assets.
- Directed staff of managers, project managers, programmers, analysts, data scientists up to 25.
- Managed capital and operating budgets
- Served on system-wide Institutional Review Board.
- Prepared a manuscript of integrated plan of care usage and mortality (submission imminent), presented findings to a Board of Directors sub-committee with CMO and CMIO
- Co-wrote textbook chapter on Big Data in Nursing with CNO and CNIO
- Lead the data migration and standardization effort for new EMR system deployment.
- Established Teradata HDFS platform as standard for new clinical and administrative warehouses.

***Built a data governance framework***

- Fosters consistency in data presentations between all clinical data collection systems. Program includes:
  - Nine information owner committees/practices and sub-committees chartered and organized. Served as co-chair of clinical information owner committee.
  - Oversaw the analytics and warehousing capital prioritization through information owner committees
  - Assembled data stewards with a formalized process to discover and remedy inconsistencies with focus on population health/clinical data assets.
  - Established Informatica Master Data Management practices for
    - Physicians (credentialing, human resources and clinical sources)
    - Organization (financial and clinical sources)
    - Reference data (administrative and clinical sources)

- Created a business glossary practice to collect and maintain business terms and measure definitions
- Established data standards for payer feeds to population health management platform.
- Moved the data governance practice towards greater maturity along the Stanford Data Governance Maturity Model
  - Established data governance within IT strategic initiatives.
    - Including committee structures, data standards and data quality

***Established Data quality/profiling practice for clinical and administrative data warehousing***

- Establish patient/member matching quality thresholds
- Build complex models to discover time-series based expected values of clinical and administrative data.
- Build routines to compare observed data elements of nightly data warehouse runs to model-built expected value.
- Establish data quality stewards to research data expected/observed anomalies
- Establish recall, precision and F-value scores for data quality routines

***Transformed the clinical reporting data environment***

- Lead the creation of an ambulatory data warehouse of data downstream from population health informatics platform with feeds from EPIC, NextGen, Cerner, AllScripts, Meditech, Siemens/Sorian
- Offered the reporting source to Payer strategies, community benefit and Provider network organization.
- Moved the group from solely acute EMR platform to encompass payer claims and ambulatory reporting
- Lead the re-organization of the Cerner Power Insight-Explorer to a more reporting/analytic friendly environment.

**Informatics Core Manager/Research Specialist**, Michigan State University, Clinical and Translational Sciences Institute, Biomedical Research Informatics Core, East Lansing, MI 2005-2013

***Duties***

- Managed programmers and data managers dedicated to clinical research informatics for faculty investigators with focus on supporting clinical trials, epidemiology and health services research studies.

***Accomplishments***

- Served as principal investigator of several sub-contracts to manage genomic data.
- Prepared several IRB applications for eventual approval.
- Prepared and signed several NDA/CDA agreements.
- Participated in clinical trial contract negotiations.
- Developed a clinical trial cohort discovery procedure based on MSU HealthTeam data sources.
- Served on Data Safety and Monitoring Board for a trial of Levothyroxine in premature infants.
- Participated in the industry-sponsored and federally-funded clinical study/clinical trial grant applications

- Leadership position with Data Coordinating Center for Centers for Disease Control (CDC) Study to Explore Early Development (SEED a large epidemiology study)
  - Developed a data governance strategy for the research study data resource
  - Implemented data cleaning strategy
  - Deployed meta-data management strategy for harmonization with national standards
- Oversaw the database architecture and development of a platform to manage large studies including a data warehouse and data cleaning/management strategies
- Moved into an advisory role for the eventual data extraction, warehousing and analytics
- Built a clinical research informatics platform in Oracle to support clinical investigators
  - Designed architecture for trial billing grids and Medicare coverage analysis
  - Initiated the sunset of the package in favor of RedCAP® and OpenClinica®

#### ***Data Warehousing***

- Initiated and lead efforts to begin warehousing EMR data from the MSU Health Team clinicians
- Developed standard operating procedures addressing the consensus positions of stakeholders
- Conducted consensus meetings to discover clinician's/researchers needs and desires for access to clinical data, registry building and cohort discovery
- Wrote a white paper and established data governance SOPs
- Participated in Core Measures and Phase 2 Meaningful Use reporting effort
- Sought internal and external funding
- Gave Informatics Grand Rounds at Henry Ford Health System (June 2011) on data warehouse platforms and governance strategies
- Prototyped the capacities of I2B2 to deliver these data to site-level investigators and TranSmart for the genotype, clinical, exposure and phenotype data

#### ***Served as informatics consultant on several projects:***

- Trial recruitment alerts/participation flags within EMR system
- Securely analyze Medicare Claims data
- Consulted with College of Veterinary Medicine on data warehousing and governance strategy for VMDB (a large database of veterinary clinical and pathology results from 1965-current)
- Detroit Beacon Community for population health analytics
- Consulted with MSU Vice President for Research and Graduate Studies on data governance strategy for a Data Intensive Biology initiative
- Analyze EMR data from Trinity-Health to research epidemiology of pressure ulcers and hospital falls
  - Conducted a “high-throughput” analysis and model building strategy to predict Pressure Ulcers and better allocate Nursing resources on preventive measures to high risk patients
  - Conducted clustering analysis of ICD-9 codes to better understand nuances of “never event” epidemiology
  - Participated in discussions with Trinity-Health leadership on data warehousing platforms

#### ***Health Information Exchange***

- Initiated an effort to prepare a distributed research network from a local health information exchange.



- Lobbied neighboring universities to join the effort
- Wrote a white paper outlining data governance and management strategy options including Institutional Review Board (IRB) applications
- Currently seeking external funding to execute the plans
- Consulted with numerous data warehousing platform vendors (PerfectSearch, Explorys, I2B2, Recombinant by Deloit, Meridios, MQIC by GE, Crimson Initiative, Trillium) to refine requirements and understand offerings
- Participated in Health Data Warehousing Association discussions/webinars/conferences
- Was sponsored by the Milbank Foundation for a special population health informatics colloquium with Indiana Health Information Exchange.

**Research Programmer**, University of Michigan, Comprehensive Cancer Center, Gruber Lab, Ann Arbor, MI 1998-2005

***Duties***

- Supported a large international epidemiology study of colorectal cancer
  - Including data management, edit checking, meta-data management, data entry supervision, entry application building
- Supported several cancer epidemiology studies
  - Including natural language processing and structured data abstraction from pathology reports

***Accomplishments***

- Built a clinical research informatics platform (BioDBx) in Oracle ©
- Assisted in BioDBx broader deployment in the Michigan Institute for Clinical and Health Research
- Published many scientific publications about the epidemiology of the study

**Clinical Data Manager/Programmer Analyst**, Parke-Davis, Pharmaceutical Research Division (Pfizer), Ann Arbor, MI 1992-1997

***Duties***

Data manager cleaning data from clinical trials

- Quality improvement projects programmer (SAS and Oracle, PL/SQL)

***Accomplishments***

- Built a system to process data clarification efforts back to sites
- Implemented Oracle Clinical ® as a clinical trials management platform (as part of a team)

**Data Consultant**, Michigan Hospital Association, Service Corporation, Lansing, MI 1989-1992

***Duties and Accomplishments***

- Served as operational manager and salesperson for a statewide hospital performance database operated by the American Hospital Association. (Monitrend®)
- Consulted with member/client hospitals on productivity and financial statistics from Monitrend®
- Total Quality Management/Improvement (TQMI) training to better consult with client hospitals

**Hospital Management Intern**, Battle Creek Health System, Battle Creek, MI  
1988-1989

***Duties and Accomplishments***

- Served as aid for hospital management team during a merge for two hospitals
- Assisted in developing combined policy and procedure documents for two combining hospital facilities
- Ran a marketing effort for physician recruitment that recruited a pediatrician to the community
- Lead an effort to renovate and move and combine two medical records department

**PROFESSIONAL ASSOCIATION MEMBERSHIP**

Health Data Analytics Association (Formerly HDWA) 2010-Current  
Past Member of Data Governance Leadership Section

American Medical Informatics Association (AMIA) 2009-Current  
Past Member of Clinical Research Informatics Sub-Committee  
Michigan Institute for Data Science (MIDAS)

**PEER-REVIEWED PUBLICATIONS AND POSTERS**

1. **Joseph D. Bonner**, Brandon J. Stange, Mindy Kjar, Margaret A. Reynolds, Eric Hartz, Donald J. Bignotti, Miriam Halimi, Meredith Zozus, Denise Atherton, Sandra Breck, Gay Landstrom, Nora Triola, Charles Bowling, Robert Sloan, Interdisciplinary Plans of Care and in-hospital mortality. Submitted to Applied Clinical Informatics
2. Meredith N. Zozus, **Joseph D. Bonner**; Towards Data Value-Level Metadata for Clinical Studies. *Studies in health technology and informatics*. 234 2017: 418-423
3. Triola N, Halimi M, **Bonner J.D**, Dreher M. Case Study: Improving Nursing Care through Trinity Health System Data Warehouse. Chapter 7 of Nursing Knowledge and Practice Enabled by Big Data. co-editors Connie Delaney, Charlotte Weaver, Judy Warren, Tom Clancy and Roy Simpson. (2015 – Submitted)
4. Gardiner, J. C., Reed, P. L., **Bonner, J. D.**, Haggerty, D. K., & Hale, D. G. (2014). Incidence of hospital-acquired pressure ulcers—a population-based cohort study. *International wound journal*.
5. **Bonner, Joseph D.**, Rachel Fisher, James Klein, Qing Lu, Ellen Wilch, Karen H. Friderici, Jill L. Elfenbein, Debra L. Schutte, and Brian C. Schutte. "Pedigree Structure and Kinship Measurements of a Mid-Michigan Community: A New North American Population Isolate Identified. *Human biology* 86, no. 1 (2014): 59-68
6. Diana E Schendel, Carolyn DiGuseppi, Lisa A Croen, M Daniele Fallin, Philip L Reed, Laura A Schieve, Lisa D Wiggins, Julie Daniels, Judith Grether, Susan E Levy, Lisa Miller, Craig Newschaffer, Jennifer Pinto-Martin, Cordelia Robinson, Gayle C Windham, Aimee Alexander, Arthur S Aylsworth, Pilar Bernal, **Joseph D Bonner**, Lisa Blaskey, Chyrise Bradley, Jack Collins, Casara J Ferretti, Homayoon Farzadegan, Ellen Giarelli, Marques Harvey, Susan Hepburn, Matthew Herr, Kristina Kaparich, Rebecca Landa, Li-Ching Lee, Brooke Levenseller, Stacey Meyerer, Mohammad H Rahbar, Andria Ratchford, Ann Reynolds, Steven Rosenberg, Julie Rusyniak, Stuart

- K Shapira, Karen Smith, Margaret Souders, Patrick Aaron Thompson, Lisa Young, Marshalyne Yeargin-Allsopp; The Study to Explore Early Development (SEED): a multisite epidemiologic study of autism by the Centers for Autism and Developmental Disabilities Research and Epidemiology (CADDRE) network; *Journal of autism and developmental disorders*; Vol 42 No 10 (2121-2140)
7. Ladd-Acosta, Christine; Lee, Brian K; **Bonner, Joseph**; Sheppard, Brooke; Gidaya, Nicole; Weiss, Lauren; Quinn, Jeffrey; Windham, Gayle; Reynolds, Ann; Croen, Lisa; Application of Genome-wide Gene-environment Interaction Methods: The SEED Autism Study; *Genetic Epidemiology*; Vol:36 No:7 P(757-757)
  8. Jeter, Joanne M; **Bonner, Joseph D**; Johnson, Timothy M; Gruber, Stephen B; Nonsteroidal anti-inflammatory drugs and risk of melanoma; *Journal of skin cancer* 2011
  9. Gruber, Stephen B; Moreno, Victor; Rozek, Laura S; Rennert, Hedy S; Lejbkowitz, Flavio; **Bonner, Joseph D**; Greenson, Joel K; Giordano, Thomas J; Fearon, Eric R; Rennert, Gad; Genetic variation in 8q24 associated with risk of colorectal cancer; *Cancer biology & therapy* Vol:6 No:7 (1143-1147)
  10. Greenson, JK; Rennert, G; Presswala, S; Low, M; Rozek, LS; **Bonner, JD**; Thomsho, LP; Gruber, SB; Validation of morphologic predictors of microsatellite instability in colorectal cancer; *Laboratory Investigation*; Vol:87 (116A)
  11. Greenson, Joel K; Huang, Shu-Chen; Herron, Casey; Moreno, Victor; **Bonner, Joseph D**; Tomsho, Lynn P; Ben-Izhak, Ofer; Cohen, Hector I; Trougouboff, Phillip; Bejhar, Jacob; Pathologic predictors of microsatellite instability in colorectal cancer; *The American journal of surgical pathology* Vol:33 No:1 (126)
  12. Gruber, S; Rozek, L; Rennert, H; **Bonner, J**; Rennert, G; Chemopreventive potential of aspirin and NSAIDs in APC 11307K carriers; *Annals of Oncology*; Vol18 (VII20)
  13. Poynter, Jenny N; Cooney, Kathleen A; **Bonner, Joseph D**; White, Kirsten A; Tomsho, Lynn P; Rennert, Gad; Gruber, Stephen B; APC 11307K and the risk of prostate cancer; *Cancer Epidemiology and Prevention Biomarkers* Vol:15 No:3 (468-473)
  14. Soliman, Amr S; Bondy, Melissa; Webb, Charity Renee; Schottenfeld, David; **Bonner, Joseph**; El-Ghawalby, Nabih; Sulttan, Ahmed; Abdel-Wahab, Mohamed; Fathy, Omar; Ebidi, Gamal; Differing molecular pathology of pancreatic adenocarcinoma in Egyptian and United States patients; *International journal of cancer*; Vol:119 No:6 Pages: (1455-1461)
  15. Douglas, Julie A; Gruber, Stephen B; Meister, Karen A; **Bonner, Joseph**; Watson, Patrice; Krush, Anne J; Lynch, Henry T; History and molecular genetics of Lynch syndrome in family G: a century later; *JAMA* Vol:294 No:17 (2195-2202)
  16. Rennert, Gad; Almog, Ronit; Tomsho, Lynn P; Low, Marcelo; Pinchev, Mila; Chaiter, Yoram; **Bonner, Joseph D**; Rennert, Hedy S; Greenson, Joel K; Gruber, Stephen B; Colorectal polyps in carriers of the APC 11307K polymorphism; *Diseases of the colon & rectum*; Vol:48 No:12 (2317-2321)
  17. Jeter, JM; **Bonner, JD**; Johnson, T; Gruber, SB; Non-steroidal anti-inflammatory drugs and the risk of melanoma; *Journal of Clinical Oncology*; Vol:23 No:16 supplement (1027-1027)
  18. Rennert, G; Almog, R; **Bonner, JD**; Rennert, HS; Pinchev, M; Low, M; Gruber, SB; Hypothyroidism and the risk of colorectal cancer. *CANCER EPIDEMIOLOGY BIOMARKERS & PREVENTION* 14 (11), (2728S-2729S)

19. Jeter, JM; Bonner, J; Berwick, M; Johnson, T; Gruber, SB; Statins and risk of melanoma. *CANCER EPIDEMIOLOGY BIOMARKERS & PREVENTION* Volume:14 Number:11 Pages: 2702S-2703S
20. Niell, Bethany L; Rennert, Gad; **Bonner, Joseph D**; Almog, Ronit; Tomsho, Lynn P; Gruber, Stephen B; BRCA1 and BRCA2 founder mutations and the risk of colorectal cancer. *Journal of the National Cancer Institute* Vol:96 No:1 (15-21)
21. Amend, Kandace L; Elder, James T; Tomsho, Lynn P; Bonner, Joseph D; Johnson, Timothy M; Schwartz, Jennifer; Berwick, Marianne; Gruber, Stephen B; EGF gene polymorphism and the risk of incident primary melanoma *Cancer research* Volume:64 Number:8 Pages: 2668-2672
22. Rennert, G; Almog, R; Bonner, JD; Rennert, HS; Low, M; Gruber, SB; Allopurinol use and colorectal cancer risk. *CANCER EPIDEMIOLOGY BIOMARKERS & PREVENTION* Vol:13 No:11 (1930S-1930S)
23. Rennert, Gad; Almog, R; Greenson, JK; Low, M; Tomsho, L; Rennert, HS; **Bonner, JD**; Gruber, SB; Correlates of microsatellite instability in a population based study of colorectal cancer in Israel. *CANCER EPIDEMIOLOGY BIOMARKERS & PREVENTION* Vol:13 No:11 (1898S-1898S)
24. Niell, BL; Rennert, G; Tomsho, LP; **Bonner, JD**; Gruber, SB; APC D1822V and the risk of colorectal cancer. *AMERICAN JOURNAL OF HUMAN GENETICS* Vol:71 No:4 (246)
25. Gruber, SB; Rennert, G; **Bonner, JD**; Sprecher, B; Lee, N; Misek, DE; Kuick, R; Tomsho, LP; Kardia, SR; Taylor, JM; Integrated epidemiologic, genomic proteomic approach to colorectal cancer. *AMERICAN JOURNAL OF EPIDEMIOLOGY* Vol:153 No:11 (S96-S96)
26. Gruber, SB; Greenson, JK; Tomsho, LP; **Bonner, JD**; Kim, E; Rennert, HS; Almog, R; Low, M; Rennert, G; Prevalence of microsatellite instability in a population-based study of colorectal cancer in Israel. *AMERICAN JOURNAL OF EPIDEMIOLOGY* Vol:153 No:11 (S203-S203)
27. Gruber, SB; Shea, KA; **Bonner, JD**; Sturgeon, DY; Berwick, M; Young age of diagnosis is a predictor of multiple primary melanoma: An interim analysis of the genes, environment and melanoma (GEM) study. *AMERICAN JOURNAL OF EPIDEMIOLOGY* Vol:153 No:11 (S184)
28. Niell, BL; Rennert, G; Tomsho, LP; **Bonner, JD**; Gruber, SB; BRCA1 and BRCA2 founder mutations are not associated with a high risk of colorectal cancer. *AMERICAN JOURNAL OF HUMAN GENETICS* Vol:69 No:4 (253)
29. Almog, Ronit; Low, Marcelo; Rennert, Gad; Gruber, Stephen B; Greenson, Joel K; Tomsho, Lynn P; Rennert, Hedy S; **Bonner, Joseph D**; Pinchev, Mila; Chaitey, Yoram; Colorectal Polyps in Carriers of the APC I1307K Polymorphism  
*CANCER EPIDEMIOLOGY BIOMARKERS & PREVENTION* Vol:11 No:2, (222)
30. Low, M; Gruber, SB; Almog, R; Chaitey, Y; Pinchev, M; Tomsho, LP; Rennert, HS; **Bonner, JD**; Rennert, G; Colorectal cancer in Jews and Arabs in Israel *INTERNATIONAL JOURNAL OF CANCER* 2002 (182-183)
31. Rennert, Gad; Almog, R; Tomsho, LP; Low, M; **Bonner, JD**; Rennert, HS; Gruber, SB; Colorectal phenotype of carriers of the APC I1307K mutations *CANCER EPIDEMIOLOGY BIOMARKERS & PREVENTION* Vol:11 No:2 (222-222)
32. Poynter, JN; Rennert, G; **Bonner, JD**; Rennert, HS; Greenson, JK; Gruber, SB; HMG CoA reductase inhibitors and the risk of colorectal cancer. *Journal of Clinical Oncology* Vol:22 No:14 Supplement (42736)
33. Schutte, D., Rivard, J., Fisher, R., **Bonner, J.**, Wei, C., Lu, Q., & Schutte, B. (2011, March). LINKING GENE DISCOVERY AND TRANSLATION IN A LARGE FOUNDER POPULATION

- IN RURAL MID-MICHIGAN USING COMMUNITY-BASED PARTICIPATORY RESEARCH METHODS. In *NURSING & HEALTH SCIENCES* (Vol. 13, No. 1, pp. 97-97). COMMERCE PLACE, 350 MAIN ST, MALDEN 02148, MA USA: WILEY-BLACKWELL.
34. Michael Potchen, Sam Kampondeni, Khalid Ibrahim, **Joseph Bonner**, Karl Seydel, Terrie E. Taylor, and Gretchen Birbeck. NeuroInterp: A Method for Facilitating Neuroimaging Research on Cerebral Malaria *Neurology* 81(6), 585-588. PMID:23918861
  35. Greenson JK. **Bonner JD**. Ben-Yzhak O. Cohen HI. Miselevich I. Resnick MB. Trougouboff P. Tomsho LD. Kim E. Low M. Almog R. Rennert G. Gruber SB. Phenotype of microsatellite unstable colorectal carcinomas: Well-differentiated and focally mucinous tumors and the absence of dirty necrosis correlate with microsatellite instability. *American Journal of Surgical Pathology*. 27(5):563-70, 2003 May. PMID:127242
  36. Foulkes WD. Thiffault I. Gruber SB. Horwitz M. Hamel N. Lee C. Shia J. Markowitz A. Figier A. Friedman E. Farber D. Greenwood CM. **Bonner JD**. Nafa K. Walsh T. Marcus V. Tomsho L. Gebert J. Macrae FA. Gaff CL. Paillerets BB. Gregersen PK. Weitzel JN. Gordon PH. MacNamara E. King MC. Hampel H. De La Chapelle A. Boyd J. Offit K. Rennert G. Chong G. Ellis NA. The founder mutation MSH2\*1906G-->C is an important cause of hereditary nonpolyposis colorectal cancer in the Ashkenazi Jewish population. *American Journal of Human Genetics*. 71(6):1395-412, 2002 Dec. PMID:PMC420003
  37. Gruber SB. Ellis NA. Scott KK. Almog R. Kolachana P. **Bonner JD**. Kirchhoff T. Tomsho LP. Nafa K. Pierce H. Low M. Satagopan J. Rennert H. Huang H. Greenson JK. Groden J. Rapaport B. Shia J. Johnson S. Gregersen PK. Harris CC. Boyd J. Rennert G. Offit K. BLM heterozygosity and the risk of colorectal cancer. *Science*. 297(5589):2013, 2002 Sep 20.
  38. Poynter JN. Gruber SB. Higgins PD. Almog R. **Bonner JD**. Rennert HS. Low M. Greenson JK. Rennert G. Statins and the risk of colorectal cancer. *New England Journal of Medicine*. 352(21):2184-92, 2005 May 26. PMID:15917383
  39. Amend KL. Elder JT. Tomsho LP. **Bonner JD**. Johnson TM. Schwartz J. Berwick M. Gruber SB. EGF gene polymorphism and the risk of incident primary melanoma. *Cancer Research*. 64(8):2668-72, 2004 Apr 15. PMID:15087376
  40. Beebe-Dimmer JL. Wood DP Jr. Gruber SB. Douglas JA. **Bonner JD**. Mohai C. Zuhlke KA. Shepherd C. Cooney KA. Use of complementary and alternative medicine in men with family history of prostate cancer: a pilot study. *Urology*. 63(2):282-7, 2004 Feb. PMID:14972472

### Completed Extramural Funding

**RC101661 Reed (PI) Informatics Manager**

**6/1/2012-6/14/2013**

**CDC Data Coordinating Center for Autism & Other Disabilities**

The goals of this project are to serve as the data-coordinating center for a multicenter study to support surveillance data and research data management related to developmental disabilities, such as Autism Spectrum Disorders (ASD) and other Developmental Disabilities (DD). The Data Coordinating Center takes the lead role in coordination of this project and is responsible for central data collection, quality control, management, design and statistical analysis of the data.

**115756-044865 Gardiner (PI) Co-Investigator**

**10/1/2010-6/30/2013**

**Trinity Health**

**Descriptive Epidemiology of Disparities in Health Care**

Conduct a descriptive study of existing disparities in selected defects in care and follow that with the development of a predictive model for one or two priority disparities.

**R01NS074409-01A1 Birbeck (PI) Co-Investigator**

**4/1/2012-6/14/2013**

**NINDS**

This randomized clinical trial is to study the tolerance of enteral lev tiracetam (an anti-epileptic) in comatose cerebral malaria patients. The goal is to prevent long-term neurological deficits from the cerebral malaria by reducing seizures. The study hopes to enroll fewer than 100 children with routine serial blood draws for pharmacokinetics and continuous EEGs for seizure activity. I am a co-investigator with the project to support the data management of this trial.

**Autism Speaks Fallin (PI) Liaison, Data Coordinating Center**

**4/1/2012-6/14/2013**

**A study of DNA methylation in Autism**

A follow-up study of the SEED Gene-Environment-Wide association study (GEWIS) in which we hope to discover areas of DNA-methylation and their differences in age-matched autism cases and controls. The goal of the study is to understand methylation pattern differences in hopes to elicit autism etiology.

**R01NS055101 Paneth (PI) Lead, Data Coordinating Center**

**9/1/2009-3/31/2012**

**NIH/NINDS**

**New Paradigms of Cerebral Palsy Etiology**

This case-control study examines inflammatory, coagulative, asphyxial and hormonal risk factors for CP, using as the exposure matrices, maternal interviews, medical records, archived newborn blood spots left over from state newborn genetic screening, and in some instances, archived maternal serum.

**109286 Roman (PI) Co-Investigator**

**10/1/2009-9/30/2010**

**Michigan Department of Community Health**

**Michigan Family Medicaid Project**

The goals of the project are to collaborate with Medicaid to develop a risk screener and assessment tool and a risk-scoring algorithm to categorize women by risk and need for service. In this project, we aim to develop an informatics intervention involving Michigan Department of Community health data sources delivered timely to home health providers to affect birth outcomes.

**R01ES019001 Fallin (PI) Lead, Data Coordinating Center**

**9/1/2009-8/31/2010**

**Gene-Environment Study for Autism: The SEED study**

The goals of this project are to extend its role as the Data Coordinating Center for the Study to Explore Early Development (SEED) into a gene-environment wide interaction study (GEWIS). The main scientific intent of this project is to complement the phenotype/exposure values within the information systems with genotype values. In this project I manage the data coordinating center activities dedicated to the GEWIS analysis.

**W81XWH-07-1-0409 Calabrese (PI) Co-Investigator, Informatics 5/7/2009-5/6/2010**  
**University Hospitals Case Medical Center /DOD**  
**Risk and Resilience Factors for Combat-Related Posttraumatic Psychopathology and Post**  
**Combat Adjustment**

Subcontract with University Hospitals Case Medical Center (UHMC), to provide clinical research informatics support to a Department of Defense sponsored study entitled "Risk and Resilience Factors for Combat-Related Posttraumatic Psychopathology and Post Combat Adjustment "

**U10 DD000007 Rahbar, MH (PI) & Reed, PL (PI) Core Manager 5/1/2004-4/30/2009**  
**CDC/DHHS**

**Data Coordinating Center for Autism & Other Disabilities**

The purpose of this cooperative agreement, with CDC, is for the Michigan State University Data Coordinating Center (MSU-DCC) to serve as a data coordinating center for a multicenter study to support surveillance data and research data management related to developmental disabilities, such as Autism Spectrum Disorders (ASD) and other Developmental Disabilities (DD).

