

Michelle Powell Kvalsund, DO, MS

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Education:

2004-2009

Michigan State University College of Osteopathic
Medicine, East Lansing, MI
Degree: Doctor of Osteopathic Medicine

2001-2008

Michigan State University College of Human Medicine,
East Lansing, MI
Degree: Master of Science, Epidemiology

1994-1998

Michigan State University
East Lansing, MI
Degree: Bachelor of Science, Psychology with
specialization in health and humanities

Internship and Residency

2009-2010

Vanderbilt University Medical Center, Department of
Internal Medicine, Internship. Nashville, TN

2010-current

Vanderbilt University Medical Center, Department of
Neurology, Resident. Nashville, TN

Board Certification:

NBOME Step 1 completed
June 2006

USMLE Step 1 completed
June 2006

NBOME Step 2-CE completed
December 2008

NBOME Step 2-PE completed
December 2008

USMLE Step 2-CK completed
December 2008

NBOME Step 3 completed
September 2011

Research Experience:

2007-2008

Research Assistant, Clinical Research Unit and Center
for Biomedicine, Federal University of Ceará, Fortaleza,
Brasil

Project: Work on Richard L. Guerrant's NIH-funded
project, "Long-term Impact and Intervention for Diarrhea
in Brasil"

Experience: Collection of cognitive and anthropometric data at field study site in children enrolled in a multi-armed micronutrient intervention trial. Assisted in database management and logistical coordination between University of Virginia, Center for Global Health and field study team. Data analysis and manuscript writing resulting in publication authorship and poster presentation at international conference.

Project: Dr Érico Arruda's project, "Molecular Characterization of HIV in the state of Ceará: Profile of Primary Resistance, Subtype, and correlation with Neurological Disturbances"

Experience: Involved in study design, selection and creation of data collection instruments for assessing cognitive impairment in HIV patients. Conducted chart abstractions for retrospective piece of this longitudinal study and led training of key research personnel in administration of cognitive instruments and prospective data collection.

2004-ongoing

Research Assistant, Michigan State University, International Neurologic & Psychiatric Epidemiology Program

Project: Dr. Gretchen Birbeck's grant entitled "Rural ART Adherence in Zambia Study."

Experience: Ongoing collaboration of cultural and methodological concerns, and incoming data analysis. Assistance with selection and design of data collection instruments and preparation of facilitator training. Collaboration with Zambian researchers on methodological concerns during site visits to rural health clinics in Southern Province, Zambia in August 2006.

August 2005

Project: Dr Gretchen Birbeck's project entitled, "Epilepsy Associated Stigma in Zambia, Socioeconomic Status Survey"

Experience: Facilitated training of interviewers and assisted in enrollment launch at Chikankata Salvation Army Hospital in Mazabuka, Zambia and Chainama College of Health Sciences, Lusaka, Zambia.

2003-2004

Project: Masters Thesis Research funded by U.S. Student Fulbright Grant entitled, "Screening instruments for Neurocognitive Impairment in HIV/AIDS Patients: A Pilot Study Utilizing Non-Physician Healthcare Providers in Ka;ingalinga, Lusaka, Zambia.

Experience: Field research on prevalence and assessment of cognitive impairment among Zambian HIV/AIDS patients. Development of brief screening instruments for use by non-physician healthcare workers to identify cognitive impairment in HIV/AIDS patients.

Thesis Committee Chair: Dr. Gretchen Birbeck, Michigan State University, Department of Epidemiology

Field Supervisor: Dr. Alan Haworth, University of Zambia, Department of Psychiatry.

1998-2002

Graduate/Research Assistant, Michigan State University,
Department of Neurology & Ophthalmology

Project: Dr. Daniel Murman's National Institute of Aging Grant entitled "Cost of Healthcare in Alzheimer's Relative to Gained Effectiveness". Cross-sectional study with prospective follow-up investigating how features of specific neurodegenerative dementias such as parkinsonism, psychosis, and pharmacologic control of such symptoms influence healthcare utilization patterns and where resource allocation can be most cost-effective.

Experience: Coordination of interviews and data collection at 9 state-wide research sites. Involved in development of database and introduced to SAS programming for statistical analyses. Involvement in data analysis resulted in authorship on several publications (see below).

Project: Dr. Daniel Murman's grant entitled "Genetic Predictors of Psychosis in Dementia" This project used a nested, case-control design to evaluate whether Alzheimer's patients with psychosis were more likely to carry specific polymorphisms in the D1 and D3 dopamine receptor genes or have the presence of an apoE e4 allele.

Experience: Direct involvement in study design, implementation, and data analysis resulting in publication authorship (see below).

Related Clinical Experience:

2007-2008

Student Observer, São Jose Hospital for Infectious Disease, Roldolpho Téofilo, Fortaleza, Ceará, Brasil
Experience: Conducted twice weekly morning inpatient rounds with infectious disease specialists at public infectious disease hospital for the state of Ceará

2003-2004

Volunteer, Our Lady's Hospice, Kalingalinga, Lusaka, Zambia
Experience: Assisted caregivers with patient care including bathing, feeding, medication taking, cleaning wounds, phlebotomy. Assisted with medication distribution. Three days/week traveled with home-based care team into community to identify new patients and follow-up existing patients. Also attended rounds with physicians and clinical officers.

1997-2003

Healthcare Assistant, Michigan State University,
Department of Neurology & Ophthalmology

Experience: Perform and evaluate neuropsychological examinations on patients with neurodegenerative dementias. Initial and follow-up medical history and

evaluation of neuro-ophthalmology patients, including cranial nerve assessments and visual field perimetry.

2002

Student Observer, University Teaching Hospital and Chainama College of Health Sciences, Lusaka, Zambia, 2002

Experience: Observed in local health clinics and inpatient wards including general medicine, tuberculosis, psychiatric, neurology and pediatric clinics. Pilot research for Master's thesis.

Related Teaching Experience:

2002

Chainama College of Health Sciences, Lusaka, Zambia
Experience: Gave presentations on HIV-associated dementia and epidemiological methods including study design, study base, directionality, and community surveys, morbidity and mortality statistics, and measures of association in epidemiological studies

Publications:

Kvalsund MP, Birbeck GL. Epilepsy Care Challenges in Developing Countries. *Curr Opin Neurol* 2012 Feb:

Mitter SS, Oriá RB, **Kvalsund MP**, Pamplona P, Joventino ES, Mota RM, Gonçalves DC, Patrick PD, Guerrant RL, Lima AA. Apolipoprotein E4 influences growth and cognitive responses to micronutrient supplementation in shantytown children from northeast Brazil. *Clinic (Sao Paulo)* 2012L 67 (1): 8-11.

Birbeck GL, **Kvalsund MP**, Byers PA, Bradbury R, Mang'ombe C, Organek N, Kaile T, Sinyama AM, Sinyangwe SS, Malama K, Malama C. Neuropsychiatric and socioeconomic status impact antiretroviral adherence and mortality in rural Zambia. *Am J Trop Med Hyg* 2011 Oct;85(4):782-789.

Kandiah PA, Atadzhanov M, **Kvalsund MP**, Birbeck GL. Evaluating the Diagnostic Capacity of a Single-question neuropathy screen (SQNS) in HIV positive Zambian adults. *J Neurol Neurosurg Psychiatry* 2010; doi:10.1136/jnnp.2009.183210.

Lima AAm Soares AM, Lima NL, Mota RM, Maciel BL, **Kvalsund MP**, Barrett LJ, Fitzgerald RP, Blaner WS, Guerrant RL. Effects of Vitamin A Supplementation on Intestinal Barrier Function, Growth, Total Parasitic, and Specific *Giardia* spp Infections in Brazilian Children: A Prospective Randomized, Double-blind, Placebo-controlled Trial. *J Pediatr Gastroenterol* 2010 Mar;50(3):309-15

Kvalsund MP, Haworth A, Murman DL, Velie E, Birbeck GL. Closing Gaps in ART Access: Screening Instruments for Use by Non-Physician Healthcare Workers. *Am J Trop Med Hyg*. 2009 Jun;80(6):1054-9

Birbeck GL, Chomba EN, **Kvalsund MP**, Bradbury R, Mang'ombe C, Malama K, Kaile T, Byers PA, Organek N. Antiretroviral adherence in rural Zambia--The first year of treatment availability. *Am J Trop Med Hyg* 2009; 80(4):669-674.

Kandiah, P., **Powell M.**, Birbeck G., Validation of the Singe-Question Neuropathy Screen (SQNS) Used in Zambian ARV Clinics. *Neuroepidemiology* 2007; 28:121-134

Powell MC, Murman DL, Haworth A, Velie E, Birbeck GL. Assessing Cognitive Impairment in Persons Living with AIDS in Zambia. *Neuroepidemiology* 2005; 24(3):175.

Murman DL, Kuo SB, **Powell MC**, Colenda CC. The impact of parkinsonism on costs of care in patients with AD and dementia with Lewy bodies. *Neurology* 2003; 61:944-949

Murman DL, Chen Q, **Powell MC**, Kuo SB, Bradley CJ, Colenda CC. The incremental direct costs associated with behavioral symptoms in AD. *Neurology*. 2002 Dec 10;59(11):1721-9.

Murman DL, Kuo SB, **Powell MC**, Friderici KA. Genetic variations in serotonin neurotransmission and psychiatric symptoms in Alzheimer's disease. *JAOA* 2002; 120(8):439.

Murman DL, Chen Q, **Powell MC**, Colenda CC. The incremental costs associated with behavioral symptoms in Alzheimer's Disease. *Neurology*, 2001; 56(8) suppl 3:A160-161.

Murman DL, Kuo SB, **Powell MC**, Colenda CC. A comparison of preference-weighted, health status classification systems in Alzheimer's disease. *Neurology*, 2002; 58 suppl 3:A186.

Presentations.

Kvalsund MP, Mbewe E, Mulenga J, Atadzhanov M, Haworth A, Chomba E, Birbeck G. Quality Indicators for Epilepsy Care in Zambia: Roadwork for the WHO Mental Health Gap Programme Guidelines. Poster at American Academy of Neurology, New Orleans, LA, April 2012

Kvalsund MP, Pomplona P, Oriá, Soares AM, Most RMS, Fitzgerald RP, Guerrant RL, Lima AAM. Impact of Glutamine, Zinc and Retinol Supplementation on Cognitive Outcomes in Brazilian Children: A Prospective Randomized, Double-Blind, Placebo-Controlled Trial. Poster at World Congress of Pediatric Gastroenterology, Hepatology and Nutrition. Iguazu Falls, Brazil. August 2008.

Powell MC, Birbeck GL. Assessing Cognitive Impairment in Persons Living with AIDS in Zambia. Oral Presentation at World Federation of Neurology Meeting, Miami Beach, FL, April 2005

Awards and Honors

2009	American Academy of Neurology Medical Student Prize for Excellence
2009	Michigan State University Department of Neurology and Ophthalmology Clinical Neuroscience Outstanding Achievement Award
2007-2008	Fogarty/ National Institute of Health International Clinical Research Scholar
2006-2007	College of Osteopathic Medicine International Health Enrichment Award
2003-2004	Fulbright Student Fellow to Zambia
2003-2004	Sigma Delta Epsilon, Women in Science Hartley Fellow

Professional Memberships

American Academy of Neurology, member since 2009

Tennessee Medical Association, member since 2009

American Osteopathic Association, member since 2004