

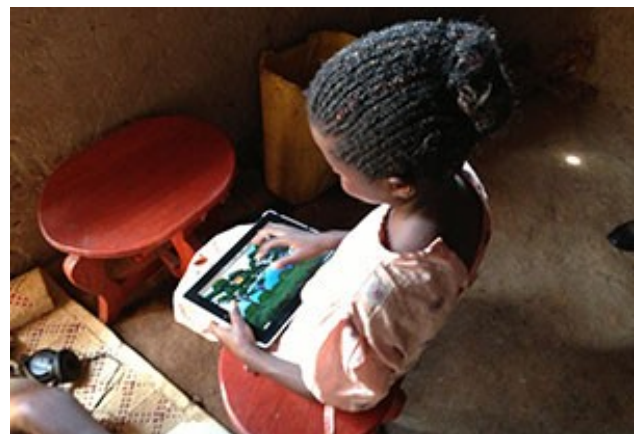
Introduction to Mentoring Plan: The African post-doctoral research fellow selected to work with me will have a unique opportunity to participate in the 1st year of implementing a 5-year research program sponsored by an NIH/NICHD research grant awarded to me and my collaborative study teams at MSU (Professor Alla Sikorski, Dr. Itziar Familiar-Lopez, Mr. Brian Winn), the University of Michigan (Professor Bruno Giordani), Johns Hopkins University (Professors Mary Glenn Fowler, Taha Taha, Dr. Sufia Dubadhai), Makerere University – Johns Hopkins University (MU-JHU) (Dr. Lillian Wambuzi), and Malawi College of Medicine Johns Hopkins Research Collaboration (Dr. Maclean Mallewa). With a special emphasis on nutrition, growth, and health through early childhood for our participating study cohorts in Kampala Uganda and Blantyre and Lilongwe Malawi, the African postdoctoral fellow selected for this program will participate in weekly study meetings and calls with the study sites as well as periodic site visits to Kampala and to Lilongwe and Blantyre with Professor Boivin and Dr. Familiar-Lopez for implementation of the approved study protocols for this R01 research program. The Study Aims are outlined below, and represent all phases of the research plan, which the postdoctoral scholar will receive experience in and to which she will contribute.

1.4 SPECIFIC AIMS

Opening a window into an HIV-affected child's developing brain with African Brain Powered Games (BPG) training in at-risk children (<http://gamedev.msu.edu/brain-powered-games-africa/>). How can BPG be both an intervention and an assessment? We will use BPG as a neurocognitive "stress test" or medical "challenge" test, in order to evaluate brain/behavior functional integrity in HIV-affected children. This dual use of BPG is a key innovative feature.

Aided by NIH funding, we have developed an open access African BPG, a non-proprietary CCRT digital games package for HIV+ and affected school-age children living in the sub-Saharan. Mobile coverage for internet access is extremely high in this region (100% in Uganda and similarly widespread in Malawi, our test countries). In the first year of this proposal we will finish developing the cognitive assessment capacity for scaling up our BPG

mobile cognitive training apps for touch screen tablets. Each of the 5 core BPG games lasts 10 minutes and trains fine motor, monitoring/attention, visual/auditory working memory, spatial navigational learning. In Year 3 we'll add an Executive Functioning (EF) test to BPG. As an African child plays with



BPG (Brain Powered Games) will be the first CCRT validated for dual cognitive assessment, both *static* (assessment for one CCRT session only) and *dynamic* (assessments across 12 CCRT sessions spread over 4 weeks).

Aim 1. Evaluate concurrent and predictive validity of BPG static (baseline) and dynamic (during 12 training sessions) cognitive assessments. We will evaluate whether BPG static (baseline) assessment will correspond well to our gold standard static measures previously adapted to our HEU, HUU, and HIV+ study cohorts at our Uganda and Malawi country sites (KABC-II, TOVA, CogState). Furthermore, **we hypothesize** that compared to these tests, dynamic BPG-based testing will provide for a more sensitive evaluation of brain/behavior function, as affected by both more proximal factors of HIV exposure (disease and treatment status and clinical response). **We also hypothesize** that **dynamic** assessments will be more sensitive to distal developmental risk factors (e.g., SES, nutrition/growth, maternal caregiving quality).

Aim 2. Compare the validity of BPG static and dynamic assessments. Cohorts will be clinically and neurodevelopmentally very well characterized, due to participating in our previous NIH-sponsored HIV clinical trials. **We hypothesize** that BPG-based static and dynamic assessments will be sensitive to cohorts' prior early childhood longitudinal trajectories, as affected by proximal & distal risk factors causing developmental delay and cognitive problems; as measured in repeated testing in our cohorts previously.

Aim 3. Test the sensitivity of dynamic assessment to learning loss over time by evaluating how much BPG performance gains diminish during a 6-month absence of training. advantage of foundation for a trajectory of professional research opportunity and collaborative partnerships at MSU.

Michael J. Boivin, PhD, MPH – Select Curriculum Vitae

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Department of Neurology & Ophthalmology
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Fax: +1 517 432 2893

Michael J Boivin, PhD, MPH – Professional Web Sites

https://www.researchgate.net/profile/Michael_Boivin

<http://psychiatry.msu.edu/about/faculty-directory/boivin.html>

<https://neurology.msu.edu/directory/michael-boivin>

<https://www.thriveearly.msu.edu/>

Education

<i>Jan 1992 - Apr 1994</i>	University of Michigan MPH, Public Health Policy and Administration Ann Arbor, Michigan, United States
<i>Sep 1976 - Dec 1980</i>	Western Michigan University MA, PhD, Experimental Analysis of Behavior Kalamazoo, Michigan, United States
<i>Sep 1973 - May 1976</i>	Spring Arbor University BA, Psychology Spring Arbor, Michigan, United States

Doctoral Thesis

Michael J. Boivin: *A discrete trial choice procedure for assessing the periodic equivalent of aperiodic ratio schedules of reinforcement.* Western Michigan University, PhD thesis; approved 01/1981

Faculty Appointments

<i>May 2006 – present</i>	Associate Professor, Full Professor Department of Psychiatry and Department of Neurology & Ophthalmology, Michigan State University; East Lansing, Michigan, USA
<i>May 2006 – present</i>	Core Faculty Member African Studies Center, Michigan State University; East Lansing, Michigan, USA For the past 30 years I have pioneered neuropsychological assessments African children
<i>Sept 1996- April 2006</i>	Professor (Full) Department of Psychology, Indiana Wesleyan University; Marion, Indiana, USA
<i>Sept 1978-August 1996</i>	Lecturer, Assistant, Associate, Full Professor Department of Psychology, Spring Arbor University; Spring Arbor, Michigan, USA
<i>Sept 1983- Present</i>	Visiting Associate, Research Associate, Adjunct Associate, Adjunct Full Professor Department of Psychiatry, University of Michigan; Ann Arbor, Michigan, USA
<i>Dec 1976-Dec 1978</i>	Research Assistant, Teaching Assistant Department of Psychology, Western Michigan University; Kalamazoo, Michigan, USA

Fellowships

<i>Aug 2003</i>	Award (\$48000): Fulbright African Regional Research Award - Uganda
<i>May 1996</i>	Award (\$8000): West African Research Association Fellow - Senegal
<i>Aug 1990</i>	Award (\$36000): Fulbright Senior Scholar Research Award - DR Congo

Pending Grants

R21 HD098588: Caregiver early child development training for preventing konzo from toxic cassava in the DR Congo. (Principal Investigator: Michael J. Boivin). Program Officer: Danuta Krotoski (email krotoskd@mail.nih.gov) Designated for funding at NICHD Advisory Council 24-January-2019; Just in Time request pending.

Current Grants

R01 HD098027: *Culture-specific neurodevelopmental assessment of HIV-affected children.*
(Principal Investigator: Michael J. Boivin). Program Officer: Sonia Lee (e-mail leesonia@mail.nih.gov)
03/15/2019 – 02/29/2024. \$3,227,407

R01 HD094009: *Understanding maternal-fetal zika virus transmission and its complications in Nicaragua.*
(Principal Investigator: Elizabeth Stringer). Role: Co-I
09/01/2018-07/31/2023. \$2,730,462

Grand Challenges Canada Saving Brains Seed Grant 1809-18726. *Training caregivers to enhance early child neurodevelopment in the prevention of konzo disease from toxic cassava in the Democratic Republic of Congo.*
(Principal Investigators: Esperance Kashala-Abotnes, [Michael J. Boivin](#)) 04/2018-03/30/2020. CA\$250,000

R21 HD088169: *Perinatal HIV infection/exposure, stress and long-term functional survival in Ugandan adolescents.*
(Principal Investigator: Amara Ezeamama). Role: Co-I
07/2017-06/2019. \$290,000 (\$157,233)

2R01ES019841-06A1: *Toxicodietary and genetic determinants of susceptibility to neurodegeneration*
(Principal Investigator: Daniel Desire Tshala-Katumbay). Role: Co-I
09/2016-08/2021. \$2,740,647 (\$571,328)

R01 HD095277-01: *Novel pediatric neurocognitive screening using central auditory tests.*
(Principal Investigator: Jay C. Buckey). Role: Consultant
08/16/2018 – 04/30/2023.

R01 HD080467: *Latent reservoir characterization and correlations with neurocognitive functioning.*
(Principal Investigator: Mark Cotton). Role: Consultant
04/2014-03/2019. \$3,747,020

2D43TW009608: *Multidisciplinary NeuroAIDS Research Training to Improve HIV Outcomes in Nigeria: University of Ibadan, Nigeria.*
(Principal Investigator: Babafemi O. Taiwo). Role: Mentor
02/2018-01/2023. \$1,373,130

NIH SBIR/STTR MTG-18-09-6674: *Adaptable pediatric neurocognitive assessment (APNA).* Creare LLC
(Principal Investigator: Odile Clavier). Role: Consultant
08/2018-09/2021.

Past Grants

R01 HD073296: *Developmental and Growth Outcomes for ARV Exposed HIV Uninfected African Children.*
(Principal Investigators: Mary Glenn Fowler, [Michael J. Boivin](#))
08/2012-07/2018. \$2,396,524

Michigan State University African Studies Center African Alliance Partnership Grant (MSU-AAP): *A Partnership for Training Caregivers to Prevent Konzo Disease from Toxic Cassava in Congolese Children.* (Principal Investigators: [Michael J. Boivin](#), Desire Tshala-Katumbay, Esperance Kashala-Abotnes) 04/2017-10/2018. \$200,000

R01 HD064416: *Computerized Cognitive Rehabilitation in Children after Severe Malaria.*
(Principal Investigator: [Michael J. Boivin](#) and Noline Nakasujja)
04/01/2011-03/31/2018. \$2,062,034 (\$416,555)

R01HD070723: *Enhancing Ugandan HIV-affected child development with caregiver training.*
(Principal Investigators: [Michael J. Boivin](#), Judith K. Bass).

08/2011-07/2018. \$2,304,641

3R01HD070723: *Enhancing Ugandan HIV-affected child development with caregiver training.* (Principal Investigators: Michael J. Boivin, Judith K. Bass).

03/2013-07/2018. \$823,339

1R01HD081985-01A1: *MISC-CBO: A community-based intervention for HIV affected children* (Principal Investigator: Carla Sharp). Role: Co-I

09/2015-08/2018. \$839,561 (\$296,736)

2R01 NS055349: *Neurodevelopmental outcomes in children with severe malaria.*

(Principal Investigator: Chandy C. John). Role: Co-I 01/2014-12/2018. \$2,710,531

R21TW010004: *Onchocerciasis-associated neurodevelopmental deficits: the hit squad* Fogarty Other

(Principal Investigator: Desire Tshala-Katumbay). Role: Co-I

04/2014-03/2016. \$200,000

D43TW009609-01: *Training in HIV-related Non-communicable Disease Complications in Malawi*

(Principal Investigator: Taha Taha). Role: Mentor

08/2013-01/2018. \$1,268,700

International AIDS Society CIPHER award: Chronic HIV, Executive Function, Psychosocial Adjustment and Quality of Life in Ugandan School-aged Children - A Study of Long-term Functional Survival with Perinatal HIV Infection and Exposure. (Principal Investigator: Amara Ezeamama) Role: Mentor. 05/2013-04/2015. \$128,000

13-CTSI-204: *Pilot tasting of Brain Powered Games for cognitive rehabilitation of Ugandan children with HIV.*

Michigan State University Clinical Translational Science Institute (CTSI) (Principal Investigator: Michael J. Boivin).

11/2013-12/2014. \$25,000

University of Michigan Medical School Global Reach Program. Cognitive Rehabilitation with HIV positive Children in Uganda. (Principal Investigators: Bruno Giordani and Michael J. Boivin).

06/2013-08/2017. \$60,000 (\$20,000)

International AIDS Society CIPHER award: Does HIV subtype moderate ART effect on neurocognitive functioning in children? (Principal Investigator: Paul Bangirana) Role: Mentor

05/2013-04/2015. \$128,000

R21MH097115: *Implementing a School Based Child Mental Health Prevention Program in Uganda.*

(Principal Investigator: Yen Huang). Role: Co-I

05/2013-04/2015. \$2,165,000

MSU Discretionary Funding Initiative (DFI) Neuropsychological Benefits of Cognitive Training in Ugandan and Kenyan HIV Children. (Principal Investigator: Michael J. Boivin).

09/2012-08/2014. \$60,000

Neuropsychological Assessment Battery for 5 to 7 year old Rural African Children in Uganda and Burkina Faso.

Grand Challenges Canada Saving Brains Program. (Principal Investigator: James Tumwine). Role: Consultant

09/2012-08/2014. \$1,000,000

R01HD074261: *Comparative Effectiveness of Pediatric HIV Disclosure Interventions in Uganda.*

(Principal Investigator: Lisa Butler). Role: Co-I

08/2012-06/2016. \$1,284,816

12-DFI-COM: *Neuropsychological benefits of cognitive training in school-age Ugandan HIV children* Michigan State University Office of the Vice President of Research and Graduate Studies (OVRGS).

(Principal Investigator: Michael J. Boivin)

07/2012-06/2014. \$60,000

UMI A/068632: *A Longitudinal Developmental and Neuropsychological Assessment of the P1060 Clinical Trial Cohorts and HIV-uninfected Controls* NIH/DAIDS

(Protocol Chair: Michael J. Boivin)

06/2012-05/2018. \$480,300

R01HD071664: Longitudinal Neuroimaging and Cognitive Study of HIV-Infected Children.

(Principal Investigators: van der Kouwe, Willem, Meintje, Laughton). Role: Consultant.

09/2011-06/2016. \$2,416,927

D43TW009082: Research training in infection and neurodevelopment in Uganda.

(Principal Investigator: Chandy C. John). Role: Mentor

06/2011-05/2016. \$1,039,280

R01ES019841: Toxicodietary and Genetic Determinants of Susceptibility to Neurodegeneration.

(Principal Investigator: Tshala-Katumbay). Role: Co-I

04/2011-03/2016. \$201,841 (\$58,798)

R01HD064416: Computerized cognitive rehabilitation in children after severe malaria.

(Principal Investigators: Michael J. Boivin, Noeline Nakasujja).

04/2011-03/2016. \$2,554,870

Cognitive and family intervention trials (Uganda) UM Medical School Global Reach Program

(Principal Investigators: Bruno Giordani, Michael J. Boivin)

06/2010-08/2013. \$20,000

R34MH084782: Neuropsychological Benefits of Cognitive Training in Ugandan HIV Children. NIH/NIMH

(Principal Investigator: Michael J. Boivin)

03/2010-02/2014. \$571,163

R21HD060524: Anemia in pregnancy in Benin and impact on cognitive function in childhood

(Principal Investigator: Bodeau-Livinec). Role: Co-I

03/2010-02/2012. \$349,792

U01HD064698: Acute vs. Delayed Iron Therapy: Effect on Iron Status, Anemia and Cognition.

(Principal Investigator: John). Role: Key Investigator

10/2009-01/2014. \$1,218,000

R01NS055349: Pathogenesis of Cognitive and neurologic deficits in central nervous system malaria (Uganda).

(Principal Investigator: John). Role: Co-PI

05/2008-03/2014. \$2,660,830

R21MHOB3166: Variation in neurocognitive impairment of HIV Ugandan children by HIV subtype.

(Principal Investigator: Wong). Role: Co-I

05/2008-04/2010. \$407,106

Cognitive and psychosocial effects of true cerebral malaria in Malawian children. Michigan State University Office of the Vice President of Research and Graduate Study (OVPRGS).

(Principal Investigator: Michael J. Boivin).

05/2008-04/2009. \$39,000

R34MH082663: Cognitive and psychosocial benefits of caregiver training in Ugandan HIV children.

(Principal Investigator: Michael J. Boivin).

04/2008-02/2012. \$599,648

University of Michigan Medical School Global Research Mentoring Program. Neuropsychological, cognitive, and academic benefits of a computerized cognitive rehabilitation training intervention for HIV-infected Ugandan school children. (Principal Investigators: Bruno Giordani, Michael J. Boivin)

06/2007-08/2008. \$15,000

University of Michigan Global Health Institute Faculty Grant. The neuropsychological impact of a computerized cognitive rehabilitation training intervention with Ugandan cerebral malaria survivors.

(Principal Investigators: Bruno Giordani, Michael J. Boivin)

01/2007-05/2008. \$15,000

Metanexus Institute and the John Templeton Foundation: Templeton Applied Research Program (TARP). Breast cancer disease and treatment: modeling the relationships among spiritual and emotional well-being, quality of life, neuropsychological function, and immunological resilience. (Principal Investigator: Michael J. Boivin)

06/2006-11/2010. \$999,921

K01TW007403: Morbidity/Mortality and disability in children (MADIC) study.

(Principal Investigator: Heena Brahmhatt). Role: Mentor

09/2005-08/2009. \$345,934

MIMCOM Internet Access Award WHO Multilateral Initiative on Malaria (MIM)

(Principal Investigator: Justin Byarugaba). Role: Co-I

02/2005-02/2006. \$20,000

SIDA Faculty Development Award Swedish International Development Agency (SIDA) program to develop medical research at the Makerere University Medical School, Uganda.

(Principal Investigator: Robert O. Opoka). Role: Co-I

04/2004-03/2005. \$4,000

R21TW006794: Cognitive and neurologic sequelae of cerebral malaria

(Principal Investigator: Chandy John). Role: Co-I

09/2003-02/2007. \$287,000

Theological Exploration of Vocation Grant Lilly Endowment for Higher Education

(Principal Investigator: Bill Millard). Role: Co-I 11/2001-10/2006. \$2,000,000

Dreams of Distinction Grant Lilly Endowment for Higher Education

(Principal Investigator: David Wright). Role: Co-I

08/2000-07/2007. \$10,600

Initiative Grants to Network Christian Scholars Council of Christian Colleges and Universities (CCCU) (Principal Investigator: Michael J. Boivin)

05/2000-04/2003. \$15,000

Student Success and Retention Program Lilly Endowment for Higher Education.

(Principal Investigator). Role: Co-I

08/1997-07/2000. \$500,000

National Review Panels – Global Health Research

Fulbright Reviewer (three-year term: 2005 - 2007). Council for the International Exchange of Scholars (CIES) Africa Programs Division through the U.S. State Department.

Fulbright Orientation Advisor (2005 - 2007). Council for the International Exchange of Scholars (CIES) Africa Programs Division through the U.S. State Department.

Wellcome Trust Open Research Grants (2016-2018). Reviewer for Career Enhancement Award, The Wellcome Trust Tropical Medicine Research Division, UK.

Grand Challenges Canada (2018-2019). Reviewer of Transition-to-Scale Saving Brains Awards, Canada Ministry of Health and the Bill and Melinda Gates Foundation.

NIH Review Panels (2006 – Present). NIH ZRG1 HDM-A (55) review panel of mHealth applications; NIH/CSR Special Emphasis Panel on HIV/AIDS ZRG1 AARR-N (02) M; NIH/CSR Special Emphasis Panel ZRG1 AARR-F(02, 04) on HIV/AIDS; NIMH HIV/AIDS Special Emphasis Panel/Scientific Review Group; NIMH HIV/AIDS Interventions R34 & T32 Special Telephone Panel. NIMH internal review group special panel.

Fellowship Research Awards

April, 1988: Growth in Research Effectiveness and Teaching (G.R.E.A.T.) Grant for research (\$5000 award), used for eight-week pediatric neuropsychology research project at St. Andrews University, Scotland.

April, 1990: Selected for a Fulbright Senior Research Award to Zaire, Africa. Council for the International Exchange of Scholars and the United States Information Agency (USIA) Washington, DC. (\$35,000 award plus travel and \$2500 allowance for dependents).

November, 1993: Growth in Research Effectiveness and Teaching (G.R.E.A.T.) Grant for research (\$5000 award), used for six-week neuropsychology teaching and research assignment in Laos.

March, 1997: WARA Research Fellowship (\$7500), Summer Research Program. Awarded by West African Research Association (WARA) (Office at Howard University, Washington, DC) and funded by the U.S. Department of Education, Office for International Studies. Affiliation for research project with West African Research Center (WARC) in Dakar, Senegal, and Cheikh Anta Diop University, Dakar (June, 2007 to August 2007).

Regional Awards

1994 February, 1994: Winning entry of the John Templeton Foundation 1993 Call for Papers in Humility Theology Program (\$2000 award) for published manuscript entitled "The Hebraic model of the person: Toward a unified psychological science among Christian helping professionals."

Institutional Awards

May, 1986: Baldwin Award for Teaching Excellence (\$1000), Social Science Division, Spring Arbor College.

Co-recipient of Annual Faculty Merit Award for outstanding faculty professional achievement, Spring Arbor University (1993, 1988, 1983).

May, 1995: Young Leader of the Year Award (one of four recipients), Alumni Association of Spring Arbor College.

December, 1998: Selected for the John Templeton Oxford Seminar on Science and Christianity (all travel, lodging expenses, and \$2000 stipend for one-month seminar for each of three successive summers at Oxford University, England). Co-sponsored by the Coalition of Christian Colleges and Universities (CCCU) and the John Templeton Foundation. One of 30 scholars selected from 116 applicants for this three-year program.

Fulbright Award nomination (but not selected) to Israel (2001), Ireland (1999), and Ghana (1994).

August, 2002: Templeton Foundation and Metanexus Institute (Univ. of Pennsylvania) finalist in Spiritual Transformation program grant competition (one of 60 finalists selected from over 470 initial letter-of-intent applicants).

April, 2003: Fulbright African Regional Research Award recipient for the study of the neuropsychological effects of early cerebral malaria in children; Makerere University/Mulago Hospital, Kampala, Uganda.

December, 2004: IWU recipient of the "Award for Innovative Excellence in Teaching, Learning and Technology" and first IWU nominee for the "Ernest L. Boyer International Award for Excellence in Teaching, Learning and Technology." Presented at the 16th International Conference on College Teaching and Learning; Jacksonville, FL, March 29 - April 2, 2005.

March, 2004: Hind's Fellow for Indiana Wesleyan University. One of two faculty selected for 2004-2005 academic year to receive 25% teaching load release time for research and

\$3000 budget for research/scholarship. Renewed for 2005-2006 academic year.

July, 2005: Health Prize winner in 1st annual Science and Religion Contest, sponsored by Science & Theology News, for essay on research project entitled "Responding as whole persons in the face of life-threatening disease: Emotional and spiritual well-being, quality of life, neuropsychological function, and immunological resilience." (Award shared with study collaborator Dr. Burton Webb, Indiana Wesleyan University).

October, 2007: Alumnus of the year award, Spring Arbor University, Spring Arbor, MI. September 26, 2013: Co-recipient of the Michigan State University - College of

September 27, 2013: College of Osteopathic Medicine Faculty Humanism Award: Michigan State University, East Lansing, Michigan, USA.

April 27, 2014: Selected as an MSU Global Innovations Fellow, 2014-15 Academic Year. Michigan State University Global Outreach Program, Office of the Provost. This award used to develop “Thrive Early” research program.

May 21, 2014: Winner of best faculty research poster and co-presenter on runner-up research poster at the 1st annual research poster session of the Michigan State University College of Osteopathic Medicine Statewide Campus System (SGS) meeting, East Lansing, MI: May 21, 2014.

October 18, 2018: College of Osteopathic Medicine Faculty Research Excellence Award: Michigan State University, East Lansing, Michigan, USA.

February 5, 2019: Michigan State University Community Engaged Scholar Award (CESA); in partnership with Professor Desire Tshala-Katumbay on behalf of the *Institut National des Recherches Biomedicales* – Democratic Republic of Congo. East Lansing, Michigan, USA.

February 20, 2019: Michigan State University Community Engaged Scholar – Outstanding Research partnership with Dr. Esperance Kashala-Abotnes on behalf of the *Institut National des Recherches Biomedicales* – Democratic Republic of Congo. East Lansing, Michigan, USA.

Books

Michael J Boivin: *Neuropsychology of Children in Africa: Perspectives on Risk and Resilience*. Edited by Elaine Fletcher-Janzen, 05/2013; Springer Science and Business Media Publications., ISBN: ISBN 978-1-4614-6833-2; ISBN 978-1-4614-6834-9 eBook, DOI:10.1007/978-1-4614-6834-9

Michael J Boivin: *The accidental anthropologist: A Fulbright scholar unloads his cultural baggage in Zaire*. Edited by Wally Metts, 04/1995; Spring Arbor College Press., ISBN: ISBN 0-9634232-1-5

Book Chapters

Sarah Benki-Nugent & Michael J. Boivin: Neurocognitive complications of pediatric HIV infections. In Lucette A. Cysique and Sean B. Fourke (Eds) Neurocognitive complications of HIV-infection: Neuropathogenesis to implications for clinical practice. (in press). Series: Current Topics in Behavioral Neurosciences. Springer Nature Switzerland AG.

Michael J Boivin & Leslie L. Davidson: *New directions for the science of child development in the African context*. In Mark Tomlinson, Charlotte Hanlon, and Anne Stevenson (Eds.) Child and Adolescent Development: An Expanded Focus for Public Health in Africa (pp. 7 – 23). Claremont, South Africa: University of Cape Town Press, 2018; IASBN: 978-1-91989-551-2.

Carla Sharp, Cilly Shohet, Deborah Givon, Lochner Marais, Kholisa Rani, Molefi Lenka, & Michael Boivin: *Early childhood development interventions: a focus on responsive caregiving*. In Mark Tomlinson, Charlotte Hanlon, and Anne Stevenson (Eds.) Child and Adolescent Development: An Expanded Focus for Public Health in Africa (pp. 245-270). Claremont, South Africa: University of Cape Town Press, 2018; IASBN: 978-1-91989-551-2.

Bryan Novak, Bruno Giordani, Michael Boivin, Brian Winn: *Potential Uses of Computer-Based Cognitive Rehabilitation Programs*. In Amina Abubakar and Fons J.R. van de Vijver (Eds.) Handbook of Applied Developmental Science in Sub-Saharan Africa, 11/2017: pages 281-290 New York, NY: Springer Publishing, ISBN: 978-1-4939-7326-2, DOI:10.1007/978-1-4939-7328-6_15

Erin E. Lorencz, Michael J. Boivin: *Screening for Neurodisability in Low-Resource Settings Using the Ten Questions Questionnaire*. In Michael J. Boivin and Bruno Giordani (Eds.) Neuropsychology of Children in Africa, 04/2013: pages 139-153; New York, NY: Springer Publishing, ISBN: 978-1-4614-6833-2, DOI:10.1007/978-1-4614-6834-9_7

Penny Holding, Michael J. Boivin: *The Assessment of Neuropsychological Outcomes in Pediatric Severe Malaria*. In Michael J. Boivin and Bruno Giordani (Eds.) Neuropsychology of Children in Africa, 04/2013: pages 235-275; New York, NY: Springer Publishing, ISBN: 978-1-4614-6833-2, DOI:10.1007/978-1-4614-6834-9_12

Florence Bodeau-Livinec, Michel Cot, Ghislain K. Koura, Michael J. Boivin: *Assessing the Effects of Maternal Anemia on Child Development in Benin*. In Michael J. Boivin and Bruno Giordani (Eds.) Neuropsychology of

Children in Africa, 04/2013: pages 203-214; New York, NY: Springer Publishing, ISBN: 978-1-4614-6833-2, DOI:10.1007/978-1-4614-6834-9_10

Michael J. Boivin, Hailey Wouters, Bruno Giordani: *An Introduction to the Neuropsychology of African Children Within a Co-constructivist Paradigm*. In Michael J. Boivin and Bruno Giordani (Eds.) Neuropsychology of Children in Africa, 04/2013: pages 1-16; New York, NY: Springer Publishing, ISBN: 978-1-4614-6833-2, DOI:10.1007/978-1-4614-6834-9_1

Michael J. Boivin, Karen Dobias, Bruno Giordani: *Postscript: Towards a Universal Brain/Behavior Omnibus in the Neuropsychology of African Children*. In Michael J. Boivin and Bruno Giordani (Eds.) Neuropsychology of Children in Africa, 04/2013: pages 329-333; New York, NY: Springer Publishing, ISBN: 978-1-4614-6833-2, DOI:10.1007/978-1-4614-6834-9_16

Rachelle A. Busman, Evelyn Oka, Bruno Giordani, Michael J. Boivin: *Examining the Psychosocial Adjustment and School Performance of Ugandan Children with HIV/AIDS*. In Michael J. Boivin and Bruno Giordani (Eds.) Neuropsychology of Children in Africa, 04/2013: pages 117-138; New York, NY: Springer Publishing, ISBN: 978-1-4614-6833-2, DOI:10.1007/978-1-4614-6834-9_6

Rachelle A. Busman, Connie Page, Evelyn Oka, Bruno Giordani & Michael J. Boivin: *Factors Contributing to the Psychosocial Adjustment of Ugandan Preschool Children with HIV/AIDS*. In Michael J. Boivin and Bruno Giordani (Eds.) Neuropsychology of Children in Africa, 04/2013: pages 95-115; New York, NY: Springer Publishing, ISBN: 978-1-4614-6833-2, DOI:10.1007/978-1-4614-6834-9_5

Paul Bangirana, Michael J. Boivin & Bruno Giordani: *Computerized Cognitive Rehabilitation Therapy (CCRT) for African Children: Evidence for Neuropsychological Benefit and Future Directions*. In Michael J. Boivin and Bruno Giordani (Eds.) Neuropsychology of Children in Africa, 04/2013: Chapter 13: pages 277-297; New York, NY: Springer Publishing, ISBN: 9781461468332, DOI:10.1007/978-1-4614-6834-9_13

Michael J Boivin & Burton Webb: *Modeling the role of spirituality within psychoneuroimmunology through breast cancer research*. In Fraser Watts (Ed.) Spiritual Healing: Social, Scientific and Philosophical Perspectives, 01/2011: pages 128-139; Cambridge University Press, ISBN: 978-0-521-19793-9

Michael J. Boivin & Bruno Giordani: *Neuropsychological assessment of African children: evidence for a universal brain/behavior omnibus within a co-constructivist paradigm*. In Joan Chiao (Ed.) Cultural Neuroscience: Cultural Influences on Brain Function, 01/2009 (pp. 113-135). The Netherlands: Elsevier Press. ISBN: 978-0-444-53361-6. DOI: 10.1016/S0079-6123(09)17808-1

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Select Journal Publications in Chronological Order of Most Recent Since Coming to MSU in 2006 (of 238 publications: *all cited below were published in peer-reviewed journals)

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