BIOGRAPHICAL SKETCH

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NAME	POSITION TITLE
Thadeus B Koontz	Principal Helicase llc
eRA COMMONS USER NAME (credential, e.g., agency login)	

EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable.)*

INSTITUTION AND LOCATION	DEGREE *(if applicable)*	MM/YY	FIELD OF STUDY
Duke University Psychiatry Residency	Graduate Medical and Postdoctoral	07/01/2013	Psychiatry, Neurology, Genomics, Immunology Bioinformatics
University of Alabama at Birmingham	MD/PhD	06/01/2009	Neurobiology, Infectious Disease, Genomics
Vanderbilt University	BS	05/01/2000	Neuroscience

A. Personal Statement

My qualifications include experience with inpatient and outpatient psychiatry and neurology. Supplementing my clinical experience I have been involved with basic laboratory research beginning in my undergraduate education, at that time working to understand how antidepressant medication interacts with monoamine neurotransmitter transporters. For my doctoral degree, I was an early adopter of genomic technology, leveraging my successful virology training grant to fund micro-arrays. In residency at Duke University I spent equal time in the clinic and the research lab of HHMI investigator Bryan Cullen. As a resident I was sole author of a successful National Multiple Sclerosis Society grant and a Nugen corporate genome challenge grant, garnered IRB approval for this project, and then converted this project into a multi-center collaboration. One year out of residency, I successfully competed for the position of medical director at a 55 bed hospital. In that position I reinstated our hospital lab accreditation, developed point of care capability for numerous lab tests, cut approximately $200,000.00 in annual medication expenditures, and was awarded status as a clinical training site of the University of Washington for the first time at our hospital. Subsequently, I was appointed Medical Director of the Saint Alphonsus outpatient psychiatric clinic in Boise, Idaho.

I aspire to translate my clinical, research, and management experience into development of novel diagnostics and therapeutics for medicine. I conceptualize my work as that of a clinical scientist, without regard for traditional arbitrary clinical specialization. A primary ongoing goal I hope to complete is the project I began as a resident using genomic tools to identify targets for new disease markers and disease modifying agents for Multiple Sclerosis. The Covid-19 pandemic has influenced me to seek to contribute to surveillance and monitoring of viral infection and evolution relevant to disease transmission or pathogenesis.

B. Research and Professional Experience

Helicase llc Contract Psychiatric services to SHN and private bioinformatic and genomic research. (current)

Saint Alphonsus Outpatient Behavioral Health, Medical Director (8/2016-8/2017)

Idaho Department of Health and Welfare (8/2014-8/2016)
Medical Director and Lab Director, State Hospital North (SHN) in Orofino Idaho
Carry inpatient caseload, optimize treatment delivery and modality
Supervise: pharmacy, SHN inpatient prescribers, Region 1 outpatient prescribers, inpatient lab services, and research activities

St. Luke's Regional Medical Center, Psychiatric Wellness Clinic, Psychiatry (8/2013-8/2014)
Director: Amy Edwards, M.D.
Outpatient Psychiatry Practice, Psychopharmacology, Cognitive Behavioral Therapy, Exposure Therapy.
Team approach collaborating with paired therapists and nurse practitioner.

Duke University Medical Center; Departments of Neurology, Psychiatry, Microbiology and Molecular Genetics, Computer Science, and The Institute for Genome Science and Policy (7/2011-7/2013)
Advisors: Bryan Cullen PhD, Simon Gregory PhD
Extracted human cerebrospinal fluid from MS patients and control patients, performed deep sequencing and bioinformatics for differential expression. Ongoing collaborative multi-center trial with UC Denver Neurology.

University of Alabama at Birmingham, Neuroimaging and Translational Research Lab Department of Psychiatry (10/2008-6/2009)
Advisor: Adrienne Lahti.
Analyzed functional brain imaging data in patients with schizophrenia.

University of Alabama at Birmingham, Department of Neurobiology (6/2003-12/2007)
Advisor: William J Britt, M.D.
Thesis: MCMV induced cerebellar mal-development. Investigated pathogenic mechanisms of disordered brain development in Cytomegalovirus infected neonates. Molecular genetics and immunohistochemistry applied.

Colorado Division of Wildlife (10/2000-4/2001)
Advisor: Barry Nehring
Performed research involving the parasite myxbolus cerebralis in wild trout populations.

Vanderbilt University (9/1997-12/1999)
Advisor: Randy Blakely
Undergraduate honors research investigated the structure-function relationship of monoamine neurotransmitter transporter with respect to antidepressant mediated serotonin uptake inhibition.

C. Bibliographical Citations

Publications

Altered Development of the Brain after Focal Herpesvirus Infection of the Central Nervous System.
Koontz, et al. J. Experimental Medicine. 2008; 205: 423-435.

CD8+ T Lymphocytes Control Murine Cytomegalovirus Replication in the Central Nervous System of Newborn Animals.
Bantug GR, Cekinovic D, Bradford R, Koontz T, Jonjic S, Britt WJ. J Immunol. 2008 Aug 1;181(3):2111-23.

Abstracts

Haloperidol Increases Striatal rCBF and Alters Functional Connectivity in Cortico-striatal Neural Networks. Koontz, et al, Organization for Human Brain Mapping, 2009 annual meeting. San Francisco, CA.
Trainee Award Winner

Murine Cytomegalovirus Infection Induces a Complex Innate Immune Response and Impairs Expression of HOXa5 in the Developing Hindbrain. Koontz, et al.,
11th International Betaherpesvirus Workshop. May13-17, 2007. Toulouse, France.

MCMV Induced Cerebellar Maldevelopment. Koontz, et al.,
31st International Herpesvirus Workshop. July 22-28, 2006. Seattle, Washington.