Institutional Biosafety Committee

Michael H. Bachmann, M.D., Sc.D.
Associate Professor, Dept. of Microbiology and Molecular Genetics, MSU
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https://mmg.natsci.msu.edu/people/faculty/bachmann-michael/
Dr. Bachmann studied medicine in Germany and the U.K., and did his doctoral work on the molecular epidemiology of human and feline immunodeficiency viruses at the Harvard University School of Public Health. His laboratory at MSU is 1) focussing on the molecular genetics of cancer immunity and transplantation tolerance, and 2) developing novel agents to overcome antimicrobial resistance. For the molecular genetic studies his lab employs transposons for gene transfer and knockout in mouse models of cancer and transplantation. All of these biological processes are monitored in real time with highly sensitive bioluminescence imaging, which increases the data obtained per animal and greatly facilitates the analysis.

Hans Cheng
Supervisory Research Geneticist, Avian Disease & Oncology Laboratory
hcheng@msu.edu
Dr. Cheng is the lead scientist of a research program focused on identifying the genetic and immunological basis for resistance to Marek's disease in chickens. His lab develops a number of genomic reagents as well as recombinant DNA viruses in order to better understand the virus-host interaction.

Elena Demireva, PhD
Research Specialist
Office of Vice President for Research & Graduate Studies
Institute for Quantitative Health Science and Engineering
Dr. Demireva is the co-director of MSU’s Transgenic and Genome Editing Facility (TGEF), where she is responsible for the Molecular Services Program. TGEF collaborates with researchers to develop transgenic and genome edited organisms by providing support at all stages of the genome editing work process from target strategy to generation of transgenic
systems. Dr. Demireva obtained her HBSc in Molecular Biology and Molecular Genetics from the University of Toronto. She joined Columbia University’s Center for Neurobiology and Behavior for her PhD work in neuroscience, where she studied the molecular determinants of motor circuit assembly in the developing spinal cord. She went on to apply her molecular and circuit neurobiology skills to translational studies of psychiatric disease mouse models for her post-doctoral work at the New York State Psychiatric Institute and Columbia University. Dr. Demireva’s multidisciplinary background and expertise in molecular biology, genetics, development and neuroscience, is the foundation of TGEF’s consulting services, which include assistance with grant and manuscript editing, gene targeting strategies and experimental design, as well as detailed technical expertise in molecular genetics and genome editing.

**Scott Counts**
Associate Professor, Translation Science & Molecular Medicine
Scott.counts@hc.msu.edu
Dr. Counts was recruited to Michigan State University as an Associate Professor of Translational Science and Molecular Medicine (primary) and Family Medicine (secondary) at the Grand Rapids campus. The goal of Dr. Counts’ research is to understand the molecular pathogenic mechanisms of selective neuronal vulnerability in Alzheimer’s Disease.

**David Douches**
Associate Professor, Crop & Soil Science
douchesd@msu.edu
Dr. Douches' areas of specialization are potato genetics and developing potato varieties specific to Michigan needs. He also studies potato genetics and breeding for pest resistance.

**Frances Pouch Downes**
Professor, Biomedical Laboratory Diagnostics Program
downefl@msu.edu
Dr. Downes's general research interests are development of diagnostic tools for emerging infectious diseases and newborn screening; and development of the evidence basis for practices used in public health and clinical laboratory practice.
**John Gerlach**, IBC Chairperson
Associate Professor, Biomedical Laboratory Diagnostics
[gerlach@msu.edu](mailto:gerlach@msu.edu)
Research interests include studies in the following areas: the major histocompatibility complexes of man and domestic animal species, the genetic basis of disease resistance and/or susceptibility, and insulin-dependent diabetes mellitus and the use of the dog as an animal model.

**Sarah Godbehere Roosa**, Lab Representative Member
Research Technologist II, Microbiology and Molecular Genetics
[godbeher@msu.edu](mailto:godbeher@msu.edu)
Research Technician in the Amalfitano lab where they study the host-vector innate and adaptive immune responses to adenovirus. They use adenovirus as a gene transfer vector in the development of vaccines for malaria and HIV as well as understanding the pathogenesis of ankylosing spondylitis.

**Rebecca Grumet**
Professor, Horticulture
[grumet@msu.edu](mailto:grumet@msu.edu)
Dr. Grumet studies plant-virus interactions in cucurbits (cucumbers and melons). She is trying to develop plants that are resistant to certain diseases as well as understand the genetic mechanisms that control flower and fruit production.

**András Komáromy**
Associate Professor, Small Animal Clinical Sciences
[komaromy@msu.edu](mailto:komaromy@msu.edu)
Dr. András Komáromy is a board certified veterinary ophthalmologist and associate professor at the Michigan State University (MSU). As a clinician-scientist he has a special interest in the study of molecular and cellular disease mechanisms involved in blinding retinal and optic nerve diseases. He is involved in the pre-clinical work for a number of viral-mediated ocular gene therapies. Dr. Komáromy received his veterinary degree (1993) and doctorate (1996) at the University of Zurich. Following his internship in medicine and surgery at MSU (1995/96), he
performed his graduate work (PhD 2002) and residency (2000-03) at the University of Florida. He was a post-doctoral fellow (2003-04) and assistant professor at the University of Pennsylvania before joining the faculty at MSU in 2012.

L. Karl Olson
Professor, Physiology
olsonla@msu.edu
Dr. Olson's work is in the area of molecular endocrinology. Specifically his work centers around the chemical-induced alterations of the regulation of pancreatic islet B cell physiology and signal transduction. Educational Background: University of Minnesota, Ph.D., Pharmacology, 1991. Dr. Olson holds memberships in the American Association for the Advancement of Science, the American Diabetes Association, the Endocrine Society, and the Juvenile Diabetes Research Foundation International.

Simon Petersen-Jones
Professor, Small Animal Clinical Sciences
Myers-Dunlap Endowed Chair in Canine Health
peter315@msu.edu
Research Interests include: Hereditary Eye Disease, Retinal Dystrophies, Therapies for Retinal Dystrophies

Patrick Venta, IBC Co-Chairperson
Associate Professor, Small Animal Clinical Sciences
venta@msu.edu
Dr. Venta is trained in human molecular genetics (Ph.D., Human Genetics, University of Michigan, 1983). He has experience in the isolation of mammalian genomic and cDNA recombinant DNA clones since 1980. He also has experience in bacterial and mammalian recombinant DNA expression systems for normal and mutant mammalian genes.

Jamie Sue Willard-Smith
Biological Safety Officer
Select Agent Responsible Official
cherryme@msu.edu

Dr. Willard, in conjunction with other EHS Bioteam members, specializes in biosafety and biosecurity for the MSU campus at large. In terms of recombinant DNA research, she and her team review all registrations to determine adequacy of containment and other biosafety/biosecurity related concerns including training, inspections and exposure response.

Community Representatives

Carrie Anglewicz
Carrie Anglewicz is the Biosafety Officer, State Training Coordinator and Alternate Responsible Official for the Tier 1 select agent program at Michigan Department of Health and Human Services, Bureau of Laboratories. Her focus is on enhancing laboratory safety in public health and clinical laboratories in Michigan with an emphasis on preparing for novel epidemics/pandemics. Carrie has also consulted with several university laboratories to prevent laboratory acquired infections.

Judith Kloss Smith
Laboratory Scientist Specialist, Michigan Department of Community Health
smithj77@michigan.gov

Ms. Smith is the Laboratory Health and Safety Officer for the Michigan Department of Community Health Bureau of Laboratories. Her responsibilities include leading the laboratories Health and Safety program in addition to serving as the Responsible Official for the Tier 1 Select Agent and Toxin Program. In this capacity she has oversight for the laboratories biosafety, biosecurity, chemical and radiological safety.

Kimberly Signs, DVM
Epidemiologist, Michigan Department of Community Health
signsk@michigan.gov

Dr. Signs conducts public health surveillance for zoonotic and vector-borne diseases with the Michigan Department of Community Health. These diseases include West Nile virus, rabies, and Lyme disease. Her current duties include collaborating with other state and federal agencies on zoonotic and vector-borne topics, updating surveillance information on the state’s Emerging
Diseases website, presenting to public health, healthcare provider, student, and other audiences on the topic of zoonotic and vector-borne diseases, and responding to the public on questions regarding these topics.

**Ex-Officio Members**

**Kevin Eisenbeis**  
Director, Environmental Health and Safety

**J.R. Haywood**  
Assistant Vice President, Regulatory Affairs

**Theresa Kelley**  
Assistant General Counsel, Office of the General Counsel

**David Weismantel**  
University Physician, Olin Health Center