

## BIOGRAPHIES

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### MICHAEL J. FEDERLE, PH.D.

Associate Professor  
Center for Pharmaceutical Biotechnology  
Department of Medicinal Chemistry and Pharmacognosy  
College of Pharmacy  
University of Illinois at Chicago, Chicago, IL



**Michael Federle** is an Associate Professor at the University of Illinois at Chicago in the Department of Medicinal Chemistry. His work investigates chemical communication pathways among bacteria, a process known as quorum sensing, and how microbial social behaviors contribute to health and disease. A long-term goal of the Federle laboratory is to develop methodologies that disrupt bacterial communication and manipulate microbial behavior with the intention of improving health outcomes following bacterial infections. Dr. Federle's research is funded by the National Institutes of Health, the Burroughs Wellcome Fund, and the Chicago Biomedical Consortium. He earned his PhD degree from Emory University and trained at Princeton University before joining UIC in 2008.

### TATYANA V. GOLOVKINA, PH.D.

Professor  
Department of Microbiology  
Committee on Immunology  
Committee on Microbiology  
The University of Chicago, Chicago, IL



**Tatyana Golovkina** received her M.S. in Biochemistry from Moscow State University, Moscow, USSR. She pursued graduate studies at the USSR Academy of Medical Sciences Cancer Research Center, Moscow, USSR in the laboratory of Andrei Gudkov. Her doctoral thesis describes studies on evolution of endogenous retroviruses in mammalian genome. She then joined Susan Ross' laboratory at the Department of Biochemistry, University of Illinois at Chicago and later moved with the lab to University of Pennsylvania, Department of Microbiology. She joined The Jackson Laboratory in Bar Harbor, ME in 1997 where she studied genetics of resistance to viral infection, and in 2005 she re-located her laboratory to the Department of Microbiology at the University of Chicago.

Tatyana's laboratory uses different retroviruses to study distinct aspects of retrovirus-host interactions, including the anti-virus immune response and the genetics of resistance to retroviral infection and to virally induced tumors. Recently her laboratory became interested in understanding the mechanisms by which commensal bacteria colonized in the gut influence the outcome of viral infections.



## **ROBERT A. LAMB, PH.D., SC.D.**

John Evans Professor of Molecular Biology and Cell Biology  
Chair, Department of Molecular Biosciences,  
Investigator, Howard Hughes Medical Institute  
Northwestern University, Evanston, IL

**Prof. Robert A. Lamb** received his undergraduate degree in biochemistry at the University of Birmingham, England and obtained his Ph.D. degree in 1974 from the University of Cambridge, England. Dr. Lamb came to the U.S. to do post-doctoral work with Prof. Purnell Choppin at the Rockefeller University, New York City, where he later joined the faculty first as an assistant professor and then as an associate professor. In January 1983, he joined the faculty of Northwestern University as an associate professor in the Dept. of Biochemistry, Molecular Biology and Cell Biology (now known as Molecular Biosciences). In 1986 he was promoted to professor and in 1990, he was named the John Evans Professor of Molecular and Cellular Biology. Dr. Lamb was awarded a Sc.D. by the University of Cambridge in 1990. In 1991 he became an Investigator of the Howard Hughes Medical Institute and was also appointed a Professor in the Dept. of Microbiology-Immunology at Northwestern University Feinberg School of Medicine. Currently, Dr. Lamb is Chair of the Dept. of Molecular Biosciences in the Weinberg College of Arts and Sciences at Northwestern University.

Dr. Lamb has been a recipient of the Irma T. Hirschl Career Scientist Award, the Phoebe Weinstein Award for Creativity in Negative Strand Virus Research, an Established Investigator of the American Heart Association, two consecutive MERIT awards from the National Institutes of Health, a Bristol-Myers Squibb Infectious Diseases Unrestricted Five Year Research Grant, and the Wallace Rowe Award for Excellence in Virologic Research by the National Institute for Allergy and Infectious Disease. Dr. Lamb has served on multiple NIH grant review and governmental advisory panels. He also served as Editor-in-Chief of *Virology* for 19 years, was President of the American Society for Virology in 2001-2 and chairman of the Virology Division of the International Union of Microbiological Societies. Dr. Lamb was elected a Fellow of the American Academy of Microbiology in 1987, a Member of the National Academy of Sciences, USA in 2003 and a Fellow of the American Academy of Arts and Sciences in 2007. In 2010 Dr. Lamb was awarded a D.Sc. *honoris causa* by the University of Birmingham, UK.

Dr. Lamb is an internationally recognized expert on influenza viruses and an expert on paramyxoviruses, the viruses that cause diseases such as measles, mumps, canine distemper and rinderpest of cattle. He has made seminal discoveries in the replication of both influenza virus and paramyxoviruses. Dr. Lamb is the author of over 300 scientific papers.



## **RUTH LEY, PH.D.**

Associate Professor  
Department of Microbiology  
Department of Molecular Biology and Genetics  
Cornell University, Ithaca, NY

**Ruth Ley** received a BA in Integrative Biology from UC Berkeley and Ph.D. in Environmental, Population and Organismic Biology from the University of Colorado Boulder in 2001. She received a NRC-NASA Fellowship to work on the microbial diversity of hypersaline microbial mats with Dr. Norman Pace at CU Boulder. She then moved to Washington University School of Medicine to work with Dr. Jeffrey Gordon on the human microbiome in the context of obesity. In 2008 Ley joined the Department of Microbiology at Cornell University as an Assistant Professor, and in 2013 became an Associate Professor in the Department of Molecular Biology and Genetics at Cornell. Her awards include Fellowships from the David and Lucile Packard Foundation, The Hartwell Foundation and the Arnold and Mabel Beckman Foundation, the NIH Director's New Innovator Award, and the 2014 ISME Young Investigator Award.

## CHARLES M. RICE, PH.D.

Maurice R. and Corinne P. Greenberg Professor  
The Rockefeller University, New York, NY  
Scientific and Executive Director  
Center for the Study of Hepatitis C



**Dr. Rice** is the Maurice R. and Corinne P. Greenberg Chair in Virology and serves as Head of the Laboratory for Virology and Infectious Disease at Rockefeller University. He is one of the world's most accomplished virologists and a prominent figure in research on members of the *Flaviviridae* including hepatitis C virus (HCV). Dr. Rice received his bachelor's degree from University of California Davis in 1974 and earned his Ph.D. from California Institute of Technology in 1981. From 1986-2000, Dr. Rice was a faculty member at Washington University in St. Louis. His research team has helped to understand the biogenesis and structure of HCV-encoded proteins, discovered a highly conserved RNA element at the 3' terminus of HCV genome RNA, and produced the first infectious molecular clone of the virus—an essential tool for future studies on this important human pathogen. His laboratory has established cell culture systems and animal models for studying HCV replication and evaluating antiviral efficacy. Dr. Rice has co-authored over 400 articles in the field of virology, serves as a reviewer for numerous journals, is a former editor of *Journal of Virology*, is a past President of the American Society for Virology, a Fellow of the American Association for the Advancement of Science, and a Member of the National Academy of Sciences.

For more specific information about Dr. Rice's research, please go to <http://www.hepccenter.org>

## JULIE SEGRE, PH.D.

Chief & Senior Investigator, Translational and Functional Genomics Branch  
Head, Microbial Genomics Section  
National Institute of Health, National Human Genome Research Institute  
Bethesda, MD



**Julie Segre, Ph. D.** received her B.A. from Amherst College in Mathematics and her Ph.D. in Genetics from Massachusetts Institute of Technology under the mentorship of Dr. Eric S. Lander. Her postdoctoral Fellowship was conducted under the supervision of Dr. Elaine Fuchs at the University of Chicago. Segre is a Senior Investigator at the National Human Genome Research Institute, NIH. Her research focuses on microbial genomics, investigating both the diversity of human skin organisms and hospital pathogens. Segre's research integrates high throughput sequence analysis with clinical study design. Segre's research has defined the normal human skin bacterial and fungal communities, enabling studies of alterations associated with pediatric atopic dermatitis and primary immunodeficiency. Segre's research also focused on integrating whole genome sequencing of hospital pathogens both to study nosocomial transmission and to develop a national surveillance network. Segre received the 2013 Service to America Medal, together with NIH Clinical Center epidemiologist Tara Palmore, for deploying genomic sequencing to guide hospital outbreak containment.