



# Scientific Advisory Board Biographies

Medical Care Corporation's Scientific Advisory Board is divided into two distinct fields of expertise - the Medical field and the Informatics field. The Medical Advisory Board is populated with eminent researchers in the field of Alzheimer's Disease and Related Disorders (ADRD). The Informatics Advisory Board consists of world-class mathematicians and quantitative modeling experts.

## Medical Advisory Board

The mission of the Medical Advisory Board is to provide guidance and support to the company regarding clinical research efforts as well as commercial and clinical communication initiatives. Members of this Board have expertise in Neurology, Psychiatry, Neuropsychiatry, pure research, and clinical trials. This Board is chaired by Dr. David Goldmacher and members include Dr. Jeffrey Cummings, Dr. Murali Doraiswamy, Dr. Michael Rafii, Dr. Marwan Sabbagh, and Dr. Frederick Schmitt.

**Jeffrey L. Cummings, MD** the director of Alzheimer's Disease Center at the University of California, Los Angeles, and also his current title includes the Augustus S. Rose Professor of Neurology and Professor of Psychiatry and Biobehavioral Sciences at UCLA. In addition, he is a member of the Alzheimer's Disease Cooperative Study and the Neuroprotection in Parkinson's Disease oversight committee. His interests embrace clinical trials and the development of new treatments for neurodegenerative disorders and other neurological diseases, and he has authored or edited 30 books and over 500 peer-reviewed papers. He is a frequent consultant to industry for issues related to drug discovery and development. He has broad interests in dementing disorders, neuropsychiatry, neurotherapeutics, and the interface of neuroscience and society. He received his MD from the University of Washington in Seattle, and completed his residency in Neurology and fellowship in Behavioral Neurology at Boston University. He was completed a Research Fellowship in Neuropathology and Neuropsychiatry at the National Hospital for Nervous Diseases, Queen Square, London, England.

**P. Murali Doraiswamy, MD** is Chief of the Division of Biological Psychiatry in the Department of Psychiatry and Senior Fellow in the Center for the Study of Aging, both at Duke University Medical Center. He is widely regarded as a leader and innovative thinker in the fields of brain longevity, clinical trials and mental health. As the Director of Psychiatry Clinical trials at Duke's psychiatry department for 10 years, He served as the lead physician on numerous landmark clinical trials of diagnostics and drugs. He is also the Head of the Biological Psychiatry division at Duke University, which comprises several laboratories involved in neuroscience discovery research. He has served on many national advisory committees and as a consultant to the FDA, WHO, NIA, and leading pharmaceutical companies. He has served on the editorial boards of several journals, and authored over 200 scientific articles. He is an author of "The Alzheimer's Action Plan" (St. Martin's Press, 2008), an acclaimed guide for people with memory problems.

**David S. Goldmacher, MD\***, is the Harrison Distinguished Teaching Associate Professor of Neurology at the University of Virginia Health System in Charlottesville, Virginia, where he also serves as the Medical Director of the Memory Disorders Clinic. He has chaired several major Alzheimer's disease physician education initiatives and has served as a principal investigator in numerous Alzheimer's studies. In addition, he has served as a scientific grant reviewer as well as a journal and book reviewer for a variety of journals, including Neurology, Alzheimer's Disease and Associated Disorders, the Annals of Neurology, and Lancet. He earned his MD with a certificate in academic research at the State University of New York Health Science Center at Syracuse College of Medicine. He served his internship at Mt. Sinai Medical Center and completed a residency in neurology at Case Western Reserve University School of Medicine, both in Cleveland. He completed a postdoctoral fellowship in behavioral neurology from the Center for Neuropsychological Studies at the University of Florida College of Medicine in Gainesville.

\*Chairman of Medical Advisory Board



## Scientific Advisory Board Biographies

**Michael Rafii, MD, Ph.D** is a senior Dementia and Cognitive Neurology fellow in the department of Neurosciences at the University of California, San Diego. He specializes in the molecular mechanisms of neurodegenerative diseases including Alzheimer's disease. His current research interests include neuroimaging of dementia as well as clinical trials. He received his MD and Ph.D from Brown University, and completed his neurology residency at the Johns Hopkins Hospital.

**Marwan Sabbagh, MD** is the founding director of Cleo Roberts Center for Clinical Research at Sun Health Research Institute, Sun City, Arizona. He is also the Associate Director of the Arizona Alzheimer's Disease Core Center, a clinical instructor in the Sun Health/St. Joseph's Hospitals Geriatric Fellowship Program, clinical assistant professor of neurosciences at the University of California-San Diego and a visiting scientist in the Department of Neurology at Mayo Clinic Scottsdale. He, as the principal investigator, has conducted numerous clinical trials for Alzheimer's and Parkinson's diseases, as well as prostate cancer and arthritis, and has published over 70 articles in AD. He is also an author of "The Alzheimer's Answer" (John Wiley & Sons, 2008). He received his MD from the University of Arizona, and completed his residency in neurology at Baylor College of Medicine and a fellowship in geriatric neurology and dementia at the UC-SD School of Medicine.

**Frederick Schmitt, Ph.D.** is a professor of Neurology at University of Kentucky College of Medicine, and serves as a co-director of Memory Disorders Clinic and as co-director of Biostatistics and Data Management Core at Alzheimer's Disease Research Center, University of Kentucky Medical Center. His research interest includes Alzheimer's disease, Frontotemporal, Dementia, HIV, Neurocognition, Clinical Trials, Biostatistics, Epilepsy. He received his Ph.D. in Life-Span Developmental Psychology from Rensselaer Polytechnic Institute, Troy, NY.

### Informatics Advisory Board

The mission of the Informatics Advisory Board is to advise the company on sophisticated methodological approaches for performing data analysis. Specific competencies across the Board membership include disease modeling, hierarchical Bayesian analyses, data compression and mining, probabilistic modeling, machine learning and artificial intelligence, content analysis, and pure mathematics. This Board is chaired by MCC's Medical Director, William R. Shankle and members include Dr. William Batchelder, Dr. Natalia Komarova, Dr. Michael Lee, Dr. Kim Romney, Dr. Jared Smith, and Dr. Mark Steyvers.

**William H. Batchelder** is a Professor of Cognitive Sciences at U.C. Irvine, and also an elected member of the Society of Experimental Psychologists. He has held various academic positions including visiting professor at the University of Wisconsin, Stanford University, University of Groningen, The Santa Fe Institute, and the University of Amsterdam. He is also a Past President of the Society for Mathematical Psychology, and a Past Director of the Institute for Mathematical Behavioral Sciences at U.C. Irvine. His research interests include measurement, methodology, and modeling in the social and behavioral sciences, especially in the areas of cognitive psychology, cultural anthropology, and social networks. He received his Ph.D. in Psychology from Stanford University.

**Natalia Komarova** obtained her MS in Physics from Moscow State University in 1993, and a PhD in Applied Mathematics from the University of Arizona in 1998. She spent 5 years as a member at Institute for Advanced Study in Princeton. Her first faculty appointment was Assistant Professor at the Department of Mathematics, Rutgers University. In 2004, she moved to University of California Irvine; she became Associate Professor at the Mathematics Department in 2006. Her main interest is to apply mathematical tools to life sciences, from evolution and learning of language to biomedical research including cancer, viruses and Alzheimer's disease. She is a recipient of the 2002 Prize for Promise, 2005 Sloan Fellowship Award and the 2006-2007 Distinguished Assistant Professor Award for Research (UCI). She co-authored two books, "Computational Biology of Cancer: lecture notes

#### Medical Care Corporation

19782 MacArthur Blvd., Suite 310, Irvine, CA 92612 USA

Phone (949) 838 0154 / Fax (949) 838 0153

[www.mccare.com](http://www.mccare.com)

Page 2 of 2



## Scientific Advisory Board Biographies

and mathematical modeling" and "The Laws of History. Century-long cycles and millennial trends. Demography, Economy, Wars".

**Michael D. Lee** is an Associate Professor of Cognitive Sciences at U.C. Irvine, and serves on the editorial boards of the Journal of Mathematical Psychology, Psychonomic Bulletin and Review, Cognitive Science, and the Journal of Problem Solving. His research interests are in developing and evaluating mathematical and algorithmic models of human memory, perception, cognition, and decision-making. He was awarded the New Investigator Award from the Society for Mathematical Psychology. He received his Ph.D. in Cognitive Science from the University of Adelaide.

**A. Kimball Romney** is currently Emeritus Professor of Quantitative anthropology at U.C. Irvine, a Fellow of the American Academy of Arts and Sciences, and a Member of the National Academy of Sciences. He has been a leader in the field of quantitative anthropology for the past four decades, and has been a pioneer in the application of metric scaling (correspondence analysis, multidimensional scaling, principal components analysis) of quantitative data in the social and biological sciences. He held several academic positions at Harvard University, University of Chicago and Stanford University prior to joining U.C. Irvine. His recent research includes human color vision ranging from cross-cultural studies of color perception to representing physical reflectance spectra in low dimensional Euclidean space, comparative cognitive studies of semantic structures, the measurement of cultural knowledge using culture consensus theory, and multidimensional scaling. He received his Ph.D. in Social Anthropology from Harvard University.

**Jared Smith** specializes in the assessment of individual differences in memory and cognition through the application of custom built statistical models. He holds an M.A. from the Institute of Mathematical and Behavioral Sciences resulting from over 40 credit hours of graduate work in statistics, and is currently completing his Ph.D. program in Cognitive Sciences at U.C. Irvine.

**Mark Steyvers** is an Associate Professor of Cognitive Science at U.C. Irvine, and holds joint appointments with the Departments of Computer Science and of Psychology & Social Behavior. His research interests include human memory and decision-making as well as computer science topics in the domain of statistical machine learning and information retrieval, for which he was awarded Early Investigator Award from The Society for Experimental Psychologists, American Psychological Association New Investigator Award and Research Achievement Award from Indiana University. He received his Ph.D. in Cognitive Psychology and Cognitive Science from Indiana University.