

# Exhibit A

## *AMICI CURIAE*

*Note:* Institutional affiliations are provided for identification purposes only.

**Michael P. Keane** is Professor of Economics and Australian Laureate Fellow at the University of New South Wales. Previously, Professor Keane was Professor of Economics at the University of Minnesota, New York University, and Yale University, and the Nuffield Chair of Economics at Oxford. He is a member of the Council of the Econometric Society and Chair of the Australasian Regional Standing Committee of the Econometric Society. Professor Keane is recognized as a leading expert on discrete choice modeling, human capital investment, the economics of education, and consumer demand. He has published roughly 100 articles in leading journals in both economics and management science and has received numerous honors, including the John D.C. Little Award, the Kenneth J. Arrow Award, the Dennis J. Aigner Award, and the Australian Federation Fellowship. He is also a Fellow of the Econometric Society, a Fellow of the Journal of Econometrics, and a Founding Fellow of the International Association for Applied Econometrics.

**Hanming Fang** is Class of 1965 Term Professor of Economics at the University of Pennsylvania and a Research Associate at the National Bureau of Economic Research (NBER). Previously, Professor Fang held faculty positions at Yale University and Duke University. Professor Fang is an applied microeconomist with broad theoretical and empirical interests focusing on public economics. His research covers topics ranging from discrimination, social economics, psychology and economics, and welfare reform to public good provision mechanisms, auctions, health insurance markets, and population aging. He is a Fellow of the Econometric Society. In 2008, he received the Kenneth J. Arrow Award. He has been a co-editor for leading economics journals, including the Journal of Public Economics and the International Economic Review, and has served on the editorial board of numerous journals.

**Yingyao Hu** is Professor of Economics at Johns Hopkins University. Previously, Professor Hu held a faculty position at the University of Texas at Austin. Professor Hu is an econometrician and an applied microeconomist with research interests in micro-econometrics, empirical industrial organization, and labor economics. His research covers topics ranging from identification and estimation methods for microeconomic models with latent variables, such as ability, belief, effort, and unobserved heterogeneity, to empirical topics including auctions, learning behavior and subjective beliefs, unemployment rates, and fertility decisions. He is a leading expert on measurement error models. He has published many articles in leading journals in both economics and statistics. Since 2013, he has been a Fellow of the Journal of Econometrics.

**Glenn C. Loury** is the Merton P. Stoltz Professor of the Social Sciences, Professor of Economics, and Professor of International and Public Affairs at Brown University. Previously, he held faculty positions at Boston University, Harvard

University, Northwestern University, and the University of Michigan. As an academic economist, Professor Loury has published in the fields of applied microeconomic theory, game theory, industrial organization, natural resource economics, and the economics of race and inequality. He is a Fellow of the American Academy of Arts and Sciences and of the Econometric Society, a Member of the American Philosophical Society and of the Council on Foreign Relations, a former Vice President of the American Economics Association, and a former President of the Eastern Economics Association. He is a winner of the John von Neumann Award and a recipient of a Guggenheim Fellowship and of a Carnegie Scholarship. He has given the Tanner Lectures on Human Values at Stanford (2007), the James A. Moffett '29 Lectures in Ethics at Princeton (2003), and the W. E. B. Du Bois Lectures in African American Studies at Harvard (2000). As social critic and public intellectual, Professor Loury has published over 200 essays and reviews in journals of public affairs in the U.S. and abroad, writing mainly on the themes of racial inequality and social policy. His books include *One by One, From the Inside Out: Essays and Reviews on Race and Responsibility in America* (The Free Press 1995) (winner of the American Book Award and the Christianity Today Book Award); *The Anatomy of Racial Inequality* (Harvard University Press 2002); *Ethnicity, Social Mobility and Public Policy: Comparing the US and the UK* (ed., Cambridge University Press 2005); and *Race, Incarceration and American Values* (M.I.T. Press 2008).

**John P. Rust** is the Gallagher Family Professor of Economics at Georgetown University. He was previously professor of economics at the University of Maryland, Yale University, and the University of Wisconsin. Professor Rust is best known for his research on the development of computationally tractable methods for empirically modelling dynamic decision-making under uncertainty. In a series of publications, Professor Rust demonstrated that these discrete dynamic programming models provide accurate predictions of actual human decision-making in a variety of contexts. Professor Rust was awarded the Ragnar Frisch Medal by the Econometric Society in 1992 for his research. He is a Fellow of the Econometric Society.

**Matthew S. Shum** is the J. Stanley Johnson Professor of Economics at the California Institute of Technology. Previously, he held faculty positions at the University of Toronto and Johns Hopkins University. His research lies at the intersection of industrial organization, econometrics, and statistics. He has worked on diverse topics ranging from methodological areas such as discrete-choice models, dynamic modeling, and machine learning to applied areas including consumer search and learning, voting and polarization, and the economics of internet markets. He has over 50 publications in leading academic journals, including *Econometrica*, the *American Economic Review*, *Management Science*, and the *Journal of Political Economy*.