DAY 1

9:00-9:30 a.m.:   Keynote Presentation
Andrew Davidson, President and Founder, Andrew Davidson & Company

Andrew Davidson is a financial innovator and leader in the development of financial research and analytics. He has worked extensively on mortgage-backed securities product development, valuation, and hedging. He is president of Andrew Davidson & Co., Inc., a New York firm specializing in the application of analytical tools to investment management, which he founded in 1992.

Andrew was instrumental in the creation of the Freddie Mac and Fannie Mae risk-sharing transactions: STACR and CAS. These transactions allow Freddie Mac and Fannie Mae to attract private capital to bear credit risk, even as they remain in government conservatorship. Andrew is also active in other dimensions of GSE reform and has testified before the Senate Banking Committee on multiple occasions. Andrew also helped establish the Structured Finance Association and served on the Executive Committee at its inception. He founded the not-for-profit Financial Life Cycle Education Corp. (FiCycle) to help improve financial decision making by linking finance and mathematics education for high school students.

9:30-10:15 a.m.:   Panel Discussion: Regulatory Guidance for Model Risk Management
Moderator: Mike Lee, Associate Director, FHFA, Division of Enterprise Regulation

Michael Lee has worked at FHFA/FHFB for 18 years and currently leads the Office of Models and Methods in the Division of Enterprise Regulation. He has supervised model risk at Fannie Mae, Freddie Mac, and the Federal Home Loan Banks. He has a Ph.D. in Economics from the University of Illinois at Urbana-Champaign.

Kirsten Landeryou is a Senior Associate Director, Office of Risk Analysis and Modeling, Federal Housing Finance Agency. Kirsten Landeryou has worked at the Federal Housing Finance Board (FHFB) and FHFA since August of 2000. Kirsten has worked in the Market Risk Modeling Branch (and its predecessors) and supervised a team of economists who focus on mortgage credit modeling and risk-based capital requirements. Kirsten currently serves as a Senior Associate Director leading the Office of Risk Analysis and Modeling in the Division of Federal Home Loan Bank Regulation at FHFA. The office includes economists and financial analysts who focus on market risk, model risk, and risk-based capital.

Kirsten graduated from Kalamazoo College with a B.A. in Mathematics. She earned a Ph.D. in Economics from the University of California at Berkeley.

David Palmer is a Lead Supervisory Financial Analyst in the Division of Banking Supervision and Regulation at the Federal Reserve Board. He focuses on model risk management, capital planning, validation of stress testing models, and use of new financial technologies. He was a primary author of the Federal Reserve's Supervisory Guidance on Model Risk Management, jointly issued with the OCC, and he continues to lead the implementation of that guidance within the Federal Reserve. More recently, David has been involved in evaluating the use of AI/ML.

He has a bachelor's degree from Oberlin College and a master's degree from Georgetown University.

Chul Park is an Assistant Director in the Division of Trading and Markets at the Securities and Exchange Commission. He leads the Office of Quantitative Risk Analysis within the Office of Broker-Dealer Finance. Before joining the SEC in 2011, he worked at the CFTC for 13+ years. In the past, he has also been a professor at several universities including Georgetown University and Johns Hopkins. He has a Ph.D. and MA in economics from Georgetown University and a BA in mathematics and economics from New York University. He is a CFA Charterholder and a certified Financial Risk Manager (FRM).

Jitendra Rathod is a Senior Quantitative Risk Specialist at FDIC. Previously, Jitendra has worked at the Federal Reserve Bank of New York where he participated and led many examinations in the New York banks in the areas of credit, operational and model risk, and economic capital. He was also involved in the CCAR for both credit and operational risk. Prior to Federal Reserve, Jitendra has worked at JP Morgan Chase, Freddie Mac, PNC, and Bank of America for the development of risk management framework in the areas of credit and operational risk and for performance measurement and Basel II.

Jeremiah Richey is a Lead Modeling Expert in the Retail Credit Risk Analysis Division at the OCC specializing in Machine Learning and Artificial Intelligence. He has a Ph.D. in Economics from Iowa State University and a bachelor's degree in mathematics from Greensboro College. Before joining the OCC, he worked as an Assistant Professor of Economics at Kyungpook National University in South Korea where he worked primarily on decomposition methods and economic mobility research which has been published in journals such as Journal of Applied Econometrics, Econometrics Reviews, and Economic Inquiry.

10:30-11:30 a.m.:   Panel: Modeling and Model Risk Activities at FHFA
Moderator: Tim Heller, Supervisory Risk Analyst, FHFA, Division of Enterprise Regulation

Tim Heller is a Supervisory Risk Analyst in the Division of Enterprise Regulation. Currently, Mr. Heller leads the Methods Branch in the Office of Models and Methods. At FHFA, Mr. Heller has worked on a variety of modeling topics including Dodd-Frank Act Stress Testing, credit modeling, prepayment modeling and interest rate modeling. Previously at FHFA, Mr. Heller has worked on retained portfolio management, reference rate reform, mortgage insurers, private label securities, interest rate risk management, liquidity risk management, and reverse mortgages. Mr. Heller has also worked as an examiner at FHFA. Mr. Heller was the primary drafter of FHFA Advisory Bulletin 2018-09: Interest Rate Risk Management. Prior to joining FHFA, Mr. Heller was a Vice President at HSBC Securities in mortgage-backed securities trading. Mr. Heller has an MBA from Carnegie Mellon University and a BS in Finance from Virginia Tech.

Stefan Szilagyi is a Risk Modeling Examinations Manager at the Federal Housing Finance Agency in Washington DC. After a few years as a Director of Model Risk at Freddie Mac Stefan decided to pursue his current career serving in the Federal Government. Prior to his tenure in model risk, Stefan's career spanned various modeling and related areas such as financial model development at model vendors, quantitative research, modeling consultant at leading Banks, and model user as a trader of fixed income financial instruments. Stefan Szilagyi is also a holder of the Financial Risk Manager designation and published articles on volatility as chapters of F. Fabozzi's: "Professional Perspectives in Portfolio Management". He also co-leads the Assessing Exposure to Climate Change Working Group Stefan is a frequent speaker at various conferences on model risk, capital planning, assessing exposure to climate change, and market risk. Stefan completed his graduate studies in Financial Economics at the State University of New York at Albany and his undergraduate studies in Economics and Accounting at the "Babes-Bolyai" University in Romania. He also earned a Leadership for a Democratic Society Certificate from the Federal Executive Institute.

Charles Hu leads a team at FHFA responsible for developing and maintaining single-family mortgage credit models and providing analytical support for regulatory capital policy for Fannie Mae and Freddie Mac. Additionally, he co-chairs FHFA's Climate Risk Committee, supporting the agency's Climate Change and ESG initiatives. Hu's 30-year career span academia, private sectors, and federal government. His research products have been published in peer-reviewed academic journals. Hu holds a Ph.D. in Economics from Boston College.

Bryan Goudie is Supervisory Financial Analyst at the Federal Housing Finance Agency. Bryan leads the Supervisory Stress Testing Branch in the Division of Housing Mission and Goals' Office of Capital Policy. In this role, Mr. Goudie directs a team on the development of FHFA-driven stress tests of the Enterprises' risk exposures to ensure that the Enterprises are well-capitalized across the economic cycle. In prior positions at FHFA, Mr. Goudie contributed to the development of the Enterprise Regulatory Capital Framework (ERCF), the Conservatorship Capital Framework, and the financial aspects of the Private Mortgage Insurer Eligibility Requirements (PMIERs). Bryan holds a Ph.D. in Economics from the University of California, San Diego and a Bachelor of Science in Economics from the University of Victoria, Canada.

Geoff Newton has been an examiner in DER since 2014, including leading the Model Risk Branch of the Fannie Mae Examination Team since 2020. In this role he has overseen examinations of Fannie Mae's core Single-Family, Multifamily, and Capital Markets models, as well as Fannie Mae's forecasting and stress testing activities and its model governance framework. Prior to joining FHFA he worked at the Federal Reserve Bank of Kansas City and HUD, as well as several consulting firms. He completed his undergraduate coursework at Northwestern University and holds a master's degree in public policy from Carnegie Mellon.

11:30-12:30 p.m.:   Presentations: Modeling and Model Risk at the Enterprises

Mark An is Vice President and Head of Enterprise Models at Fannie Mae. In this role, Mark is responsible for developing and advancing core models and common modeling applications that support business decisions, risk management, financial valuations, and capital planning. Mark works with other analytics leaders for setting the strategic vision and investment planning in the areas of modeling and analytics and first-line model risk management in alignment with business priorities and initiatives.

Mark's previous positions at Fannie Mae include Vice President and Co-Lead of Business Analysis & Decisions division; Vice President for Single-Family Research and Pricing Analytics; Director for Credit Analytical Systems; Director for Home Price Models; and Senior Economist, Credit Pricing and Analytics. Prior to joining Fannie Mae in 2000, Mark was Assistant Professor of Economics, Duke University and Visiting Associate Professor, University of Aarhus, Denmark.

Srikanth Ranganathan is Vice President, Head of Model Validation, Enterprise Risk Management Group at Freddie Mac. In this role, he leads teams responsible for validation of Multifamily, Climate, Pricing & Counterparty Risk models. Previously he was the Chief Model Risk Officer and Vice President of Enterprise Risk Management Group at USAA Management Group. Prior to that, he was Managing Director at AIG and Managing Director of GE Capital and Director at GE Treasury. He holds an MBA from the University of Chicago and a Ph.D. from the University of Michigan in Atmospheric & Space Sciences and Scientific Computing.

1:30-2:30 p.m.: Panel Discussion: Recent Developments in Modeling at the Federal Home Loan Banks
Moderator: Kirsten Landeryou, Senior Associate Director, FHFA, Division of Federal Home Loan Bank Regulation

Ervin Zhao is currently the director of Model Risk Management at FHLBNY. He has been with FHLBNY since October 2018. Prior joining FHLBNY, he spent 20 years as a market risk manager and model validator at two international investment banks in NYC focusing on fixed-income assets. After he earned his Ph.D., he also worked 5 years with several finance professors from UCLA and UC Berkeley to develop risk software and engage in portfolio insurance overlay strategy.

Mike Roginsky has 30+ years of experience working in various financial industry organizations ranging from financial model providers to insurance and bank companies. He started at BARRA working in the research department contributing to its fixed income product analyzing behavior of all types of mortgage and optional products. He was a head of analytics department in RMT, the firm that provided ALM, FTP, and RWC products to major international and domestic banks. At PMI he was responsible for HPI forecast modeling and portfolio analysis. Dr. Roginsky joined CoreLogic's LoanPerformance division in the middle of housing crises and held responsibility for re-estimation of all mortgage behavioral models and building HPI forecast capabilities. Since 2011 he leads model risk management group at FHLBSF. Mike Roginsky holds BS in Computer Science and MS in Applied Math from Leningrad Polytechnic Institute, Russia and Ph.D. in Statistics from UC Berkeley, California.

Amy Shi brings two decades of expertise in market risk and earnings oversight and currently serves as the Senior Director of the Market Risk & Earnings Analysis group within the risk department at the Federal Home Loan Bank of Chicago. Her team is tasked with establishing market risk and earnings limits and guidelines, as well as conducting independent compliance monitoring to ensure the Bank's risk profile aligns with its risk appetite. Ms. Shi holds an undergraduate degree in Precise Instrument Engineering from Shanghai Jiaotong University. She also earned dual master's degrees in finance and computer Information Systems from Georgia State University. Additionally, she completed the Executive Program for Leadership Development at Harvard Business School and is a proud Harvard alumna. In 2009, she achieved both the CFA and FRM designations.

Riten Dixit is a VP in the Enterprise Risk Management area at Federal Home Loan Bank of Cincinnati. He is a thought leader with over 10 years of progressively responsible experience in wide variety of risk modeling and analytics positions. He has a passion for developing and leading high achieving risk analytics teams focused on designing market and credit risk modeling frameworks that best fits the organization's scale, complexity, appetite, and mission. Mr. Dixit holds a master's degree in quantitative finance from the Illinois Institute of Technology.

2:45-3:45 p.m.:   Panel Discussion: Industry Trends in Model Development and Implementation
Moderator: Paul Priest, Associate Director, FHFA, Division of Enterprise Regulation

Paul Priest serves as a Special Advisor in Federal Housing Finance Agency's Division of Enterprise Regulation Office of Models and Methods. Paul researches, evaluates, and analyzes emerging trends in the mortgage industry, housing finance market developments and innovation, and potential risks for market participants. Paul has over 19 years of experience as a federal regulator focusing on IT, operational risk and most recently, model risk management.

Divas Sanwal is seasoned modeling and analytics professional with 16+ years of mortgage experience, mostly at Fannie Mae, applying Modeling, Data Science and Machine Learning to mortgages performance and Capital Markets. He had additional 7+ years of academic research experience. He has a track record of shaping high performing, engaged analytics and software teams to develop models, applications, frameworks, processes, and visualizations for analytics driven business decisions. He previously worked at NASA on design and development of novel instruments in scientific spacecrafts and their usage for astronomical research. He holds a Ph.D. and Master's in Astronomy from University of Texas at Austin and a bachelor's in electrical engineering from Indian Institute of Technology, Kanpur, India.

Dapeng Hu is a Managing Director, Global Head of Aladdin Sustainability Analytics and Co-Chair of Aladdin Sustainability Lab at BlackRock. He is responsible for the development of sustainability and climate analytics within Aladdin and enterprise risk management. Previously Dapeng was a Co-Head of Financial Modeling Group and Head of Structured Finance Research and Modeling team, where he was responsible for all models in Aladdin. Prior to joining BlackRock, Dapeng was at Wells Fargo as a Director of financial modeling and with Citigroup as Vice President of empirical modeling.

Dapeng earned a BS degree from Peking University, an MS degree from the Chinese Academy of Sciences, and a Ph.D. from the University of Pennsylvania.

Josh Goldberg leads Summit's data science practice, where he brings industry best practices to Summit's clients and develops Summit staff. As an experienced risk management executive, Mr. Goldberg has two decades of mortgage finance experience, most recently focusing on model development, model validation, model audit, credit risk management, stress testing, and valuation techniques. Mr. Goldberg has an MBA in finance and corporate accounting from the University of Rochester's Simon Business School and a BA in economics from Wesleyan University. He is also a Certified Public Accountant, a Chartered Financial Analyst, and a Certified Internal Auditor, and he holds a Financial Risk Certification from the Global Association of Risk Managers.

Olga Harris is a Modeling and Analytics Principal with PwC's Financial Services Cyber, Risk & Regulatory practice, specializing in Model Risk Management and AI Governance. She supports financial services and banking clients across the three lines of defense. Her passion is helping clients enhance their model risk management and AI governance programs to meet evolving risk management and regulatory requirements while maintaining a focus on effectiveness and efficiency. Additionally, Olga leads large and complex model validation engagements, working with the second lines of defense to streamline and expedite model validation testing and documentation. At PwC, Olga has been driving thought leadership and methodologies for the validation of AI/ML and Gen AI models. She has been involved in developing and operationalizing PwC's Responsible AI Toolkit, a suite of customizable frameworks, tools, and processes designed to help clients develop and implement AI/ML solutions in an ethical and responsible manner.

Olga holds a bachelor's in mathematical economics from Denison University and a Ph.D. in Economics from Boston College.

DAY 2

8:45-9:30 a.m.: **Presentation: Education for Advanced Modeling**
Dan Keating, University of Rochester

Dan Keating teaches courses in applied AI, analytics, general business, and communication in the MBA, Masters, and Undergraduate programs at Simon Business School at the University of Rochester. Teaching is a mid-life career change for Dan: he had a 25+ year career in regional and global Technology organizations such as Oracle, Qlik, and smaller marketing, IoT, and analytics firms. His clients included Apple, SAP, Dell, Abbott Labs, Merck, JP Morgan Chase, and others.

9:30-10:30 a.m.: **Panel Discussion: Model Risk at HUD**
Moderator: Dan Levy, Supervisory Examiner, FHFA, Division of Enterprise Regulation

Dan Levy is a Supervisory Examiner and manages the credit risk branch, focused on Fannie Mae, within FHFHA's Division of Enterprise Regulation. Prior to joining FHFA, Dan was the director of the modeling and budget division at Ginnie Mae, where his responsibilities included developing econometric models and overseeing Ginnie Mae's budget formulation and reporting. Dan began his career as a member of KPMG's structured finance group, where his responsibilities included oversight of consulting engagements focused on helping clients ensure their econometric models' compliance with regulatory standards.

Vinay V. Singh is passionate about process and project management. He has been in numerous leadership roles in the private sector for over 25 years, spanning accounting, finance, technology & operations management spheres. He is a Certified Public Accountant. He joined the U.S. Department of Housing and Urban Development (HUD) in July 2022 from the Small Business Administration where he helped implement a new mission for the Office of Disaster Assistance. In November 2023, HUD announced Mr. Singh in the additional role of Chief AI Officer. Prior to this he was Lead Partner, World Bank Group and Chief Operating Officer for KPMG in India.

Menelik Geremew is currently a Financial Economist in the Office of Risk Management at the U.S. Department of Housing and Urban Development (HUD) and is an Adjunct Professor at George Mason University. In his current position at HUD, he is responsible for model risk management, independent model validation and verification, data quality management and climate risk modeling for HUD's Commercial and Single-Family portfolio. Prior to joining HUD, Dr. Geremew held positions at Kalamazoo College and Colorado College as Associate and Visiting Professor of Economics, respectively. He also worked at the Federal Reserve Bank of Chicago as research consultant and visiting scholar. He received his Ph.D. and master's Degrees from Texas Tech University.
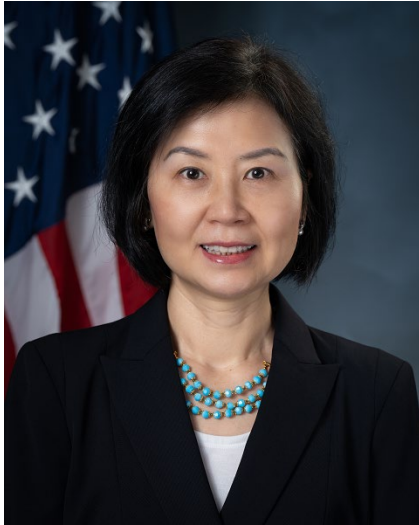
Mingchao Chen is the Head of Ginnie Mae's Enterprise Modeling Division. She provides strategic directions and oversight on a broad range of research and development activities. These innovative research and modeling activities are essential to support Ginnie Mae's risk management, budget forecast, and policy initiatives. Since 2021, Ms. Chen has been championing Ginnie Mae's climate risk capabilities development.

Previously, Ms. Chen had spent 15 years in the private sector, including as Director of Balance Sheet Management at Capital One and Director of Counterparty Risk Management and Principal Economist at Fannie Mae. She has an MBA from the University of Maryland and a master's degree in economics from Zhongshan University. She is a Chartered Financial Analyst (CFA®) Charter holder and holds the Sustainability and Climate Risk (SCR®) Certificate by GARP.

10:45-11:45 a.m.: Panel Discussion: Considerations in Developing Model Platforms
Moderator: Paul Priest, Associate Director, FHFA, Division of Enterprise Regulation

Asim Qureshi is a technology executive with over two decades of experience in high tech industry and management consulting. He has held cross functional leadership roles as the Chief Digital Marketing Officer, Chief Product and Marketing Officer, General Manager, and Strategy and Business Development Officer across both commercial and public sector organizations in the US and Europe. Currently, he leads Business Development for Artificial Intelligence and Machine Learning (AI/ML) across the US Federal Sector for Amazon Web Services. He holds computer science and MBA degrees and a patent with IBM in Remote Data Replication.

Chris Brophy is Senior Principal Industry Consultant at SAS Institute. Through innovative software and services, SAS empowers and inspires customers around the world to transform data into intelligence.

Chris has 20 years of experience in the financial services industry with a focus on quantitative risk management. Chris has led both model risk management and model development organizations with direct experience in Stress Testing, Risk Quantification, and Portfolio Analytics. Chris believes in using data and analytics to provide insights into the increasing complex problems faced by businesses today. Previously, Chris has held positions at Alliance Data Services, Key Bank, and PNC Bank.

Chris holds a Bachelor of Science degree in Economics from State University of New York at Buffalo, and a Master of Business Administration degree from the University of Rochester Simon School of Business.

Rishi Ranjan is the head of Data & AI at Common Securitization Solutions. He directs and oversees the design and development of data systems used for managing data from the Common Securitization Platform (CSP), an advanced cloud-based mortgage securitization platform. An expert in big data, real-time technologies, machine learning, and modern cloud data platforms, Rishi is an innovative leader with a talent for building cutting-edge enterprise-scale data products and services.

11:45-12:30 p.m.:   Discussion: Model Considerations at Large Banks

Christophe Rougeaux has 12+ years' experience helping global organizations ensure effective and sustainable management of their analytics, through robust oversight governance.

He previously led the McKinsey's Model Risk Management service line and is now the head of non-retail model validation at TD Bank Group.

Kiran Yalavarthy is an executive vice president and the head of Enterprise Model Risk Management, responsible for overseeing model lifecycle practices of the company. Prior to this role, he was head of the Risk Modeling Group in the Corporate Risk division of Wells Fargo. In this role, he led the team responsible for development and delivery of models leveraged for Credit Risk, Compliance Risk, and Operational Risk. These include models for credit and income forecasting, credit underwriting, collections, fraud, financial crimes, and fair lending. He also initiated a transformation of the underlying computing technology platform for model development and deployment. Before joining Corporate Risk, he worked in the Wholesale Banking Credit division where he focused on building the foundational framework for wholesale credit risk modeling and in the Credit Strategies Group as a portfolio management associate. He joined Wells Fargo in 2006. Kiran holds a Bachelor of Technology and Master of Technology degree from Indian Institute of Technology and a Master of Science in Quantitative Finance from the Georgia Institute of Technology.

1:30-2:30 p.m.: **Panel Discussion: Model Risk Management of Multifamily Models**
Moderator: Dan Levy, Supervisory Examiner, FHFA, Division of Enterprise Regulation

Gauhar Turmuhambetova is a Managing Director and Head of Structured Product and Rates Modeling at BlackRock. She leads the global team of quantitative modelers responsible for the development and implementation of prepayment and credit models for mortgages and other consumer and public/private corporate credit assets. Her team is also responsible for the forecast of macroeconomic indicators, interest rates and FX rates. Previously Gauhar was at Centerbridge Partners as a senior member of a team.

Gauhar earned MS degree in Mathematics from the Moscow State University. She earned Ph.D. in economics degree from the University of Chicago.

Seth Laughlin is a Managing Director at Green Street, a commercial real estate intelligence and analytics provider. Seth leads the Market Analytics team, which produces research on the top 50 U.S. markets across the major commercial real estate property types. Seth has been with Green Street since 2013, holding various leadership positions. Prior to joining Green Street, Seth was a member of ISI's #1 ranked Institutional Investor REIT research team covering the apartments, student housing and storage sectors. Seth began his career at Merrill Lynch on the equity trading desk as a REIT sector specialist. Seth earned a B.A. from the University of North Carolina at Chapel Hill, majoring in Economics and Political Science.

Kulwant Sharma is a Senior Examiner and Capital Market Advisor in the Division of Enterprise Regulation. He has previously worked at Fannie Mae, Freddie Mac, John Hancock and E*TRADE Financial in managing risk of a wide variety of credit-sensitive assets. In addition to his deep expertise in model risk management, Kulwant brings over 23+ years of industry experience across Risk and Finance. Kulwant holds an MBA in Finance from Temple University, PA. He is a CFA Charterholder and a Professional Risk Manager from PRMIA.

Luis Mejia is a credit risk modeling specialist with more than twenty years of financial and mortgage analytics experience. Luis currently serves as a Supervisory Financial Analyst at FHFA's Office of Capital Analysis and Policy (OCAP), where he leads the multifamily analytics function. Luis' primary role is to assess the quality and performance of the regulated entities' multifamily portfolios and measure the Enterprises' multifamily business risk exposure. Prior to joining FHFA, Luis was director of U.S. multifamily research for the CoStar Group. He also worked for over ten years for Fannie Mae, where he served as a multifamily credit risk research director in the company's modeling and analytics division. Luis received his Ph.D. and MBA from The George Washington University and holds an ALM with a concentration in Government from Harvard University's Extension School.