

Larry Adam is a Managing Director and serves the dual role of Chief Investment Officer and Chief Investment Strategist for Wealth Management – Americas. In his role as CIO, he chairs the Americas Regional Investment Committee, the management team responsible for investment strategy and asset allocation for discretionary portfolios in the Americas, and is a voting member on the Multi Asset Investment Committee, which formalizes and establishes the global house view. As Chief Investment Strategist, Mr. Adam is responsible for articulating and providing detailed research on the outlook for the economy and each major asset class in support of the house view. Previously, Mr. Adam was the Head of the Asset Allocation and Quantitative Analysis Group, the group responsible for analyzing and implementing client-specific asset allocation strategies. He is widely published and has been quoted in various mainstream and financial publications, including *The Wall Street Journal, Barron*'s and *International Herald Tribune*. He also frequently appears on television and has been featured on CNBC and Bloomberg TV. Mr. Adam joined Deutsche Bank Alex. Brown in 1992. Mr. Adam received a B.B.A. and a master's degree in business with a concentration in finance from Loyola University Maryland. He has earned the Chartered Financial Analyst®, the Certified Investment Management Analyst® and the Certified Financial Planner™ designations.

Rye Barcott is a Co-Founder and managing Partner of Double Time Capital. He previously led a new energy investments team as a special advisor to the CEO of Duke Energy. Rye is a former United States Marine Corps officer. He also co-founded the non-governmental organization Caroling for Kibera. Rye's current board affiliations include Carolina For Kibera, NDI, and the Environmental Defense Fund – Southeast. He is a graduate of the University of North Carolina at Chapel Hill, Harvard Kennedy School and Harvard Business School, and he received an honorary doctorate from Dartmouth College.

Laura Bazer is a Vice President-Senior Credit Officer with an over 20-year career in the Life and Health Insurance Group at Moody's Investors Service. Within the Life Insurance Group, she is responsible for a portfolio of U.S. ratings, including the ratings of the U.S. operations of Canadian insurance groups and leading US insurance groups. Ms. Bazer worked for 6 years as a lending officer in the insurance and international divisions at The Bank of New York/Irving Trust Company prior to joining Moody's in November 1993. A graduate of Cornell University and Fulbright Scholar, Ms. Bazer holds an MBA in finance and international business from NYU (1987), as well as an M.A. in economic and legal translation from the University of Geneva, Switzerland.

Richard Bielen joined Protective Life Corporation in July 1991 as Vice President. In June 1996, Mr. Bielen became Senior Vice President of the Company; in January 2002, he became Chief Investment Officer and Treasurer of the Company; in August 2006, he became Executive Vice President of the Company; in June 2007 he became Vice Chairman and Chief Financial Officer of the Company and in January 2016, he became President and Chief Operating Officer of the Company. Before joining Protective, Mr. Bielen was Senior Vice President of Oppenheimer & Company. Prior to joining Oppenheimer, Mr. Bielen was a Senior Accountant with Arthur Anderson and Company. Mr. Bielen is on the Board of Directors of the United Way of Central Alabama, the Alabama Trust Fund, and Children's of Alabama. Mr. Bielen is a former Director of the McWane Science Center. Mr. Bielen received his undergraduate degree and Masters of Business Administration from New York University. Mr. Bielen became a Director for the Company in 2015.

Colin Devine provides strategic advisory services to the insurance and investment management sectors on a host industry of issues including capital and risk management, general account investments, variable annuity de-risking, retirement income products and investor relations. He has also been a frequent guest speaker at various industry conferences held by the American Council of Life Insurers (ACLI), Life Insurance Marketing Research Association (LIMRA) and the Society of Actuaries (SOA) as well as corporate boards of directors. Previously, Colin was a Managing Director with both Jefferies LLC and Citigroup Investment Research responsible for equity research coverage on North American life insurance companies. He has been consistently ranked among the top analysts in the insurance sector and was on the Institutional Investor All-America Research Team for 14 straight years and held the #1 ranking in the Life Insurance Equity Research category for six consecutive years. Colin was also named one of the "Last Honest Analysts" by Smart Money Magazine. Before joining Citigroup, Colin was a Director in Standard & Poor's Insurance Ratings group. Preceding that, Colin was a vice president of a major Canadian life insurer where he was involved in investment and risk management as well as a number of corporate development and treasury initiatives. Colin serves on the board of directors of the Sea to Shore Alliance, an organization dedicated to protecting and conserving the world's fragile coastal ecosystems and the endangered species that call them home. Sea to Shore's focus is on three key species: manatees, sea turtles and right whales and it undertakes projects in the Southeastern U.S., Belize, Cuba, and West Africa. Colin is a Chartered Financial Analyst, Chartered Professional Accountant and a Certified Financial Planner. He holds an MBA in Finance from the Schulich School of Business at York University in Toronto and a B.Sc. in Biology from the University of Guelph.

Alex Edlich is a senior partner at McKinsey & Company. As one of the senior leaders of our Financial Services and Private Equity Practices, Alex has served leading institutions around the world to improve their performance. Since he joined our New York Office in 1999, he has covered a broad range of assignments on corporate strategy, business unit strategy, growth strategies, performance transformation, corporate turnarounds, organizational design, operational improvement, digital and technology enablement, and sourcing. Alex now leads globally our corporate and business functions work, which helps institutions improve their general and administrative (G&A) activities and spend. He works with companies to help them capture strategic value from functions such as finance, human resources, risk, compliance, and marketing. Those functions collectively account for \$1.8 trillion in annual spend at public institutions. Senior executives believe their corporations spend too much on these functions overall, and gain insufficient value relative to their potential. Alex advises CEOs, CFOs, and COOs in all industries and speaks frequently on these topics. Alex founded the CFO Practice in 2001. He continues to counsel CFOs on their enterprise and functional roles. As part of our rotational leadership culture, Alex has led various practices on strategy, operations, technology, organization, and sourcing. Alex is also active with major non-profits outside McKinsey. He currently serves as a trustee of Prep for Prep, an internationally recognized non-profit dedicated to developing leaders through access to superior education and opportunities for New York City's most promising students of color. He chairs the Board Technology Committee. Before joining McKinsey, Alex was a Fulbright Scholar in France.

Bruce Ferguson serves as Senior Vice President, State Relations Department. Bruce oversees the ACLI's legislative and regulatory advocacy efforts in the states and before such organizations as the National Association of Insurance Commissioners, National Conference of Insurance Legislators, National Conference of State Legislatures and the National Governors Association. Bruce also leads the ACLI's efforts to modernize the state-based system of insurance regulation, working with both industry and government stakeholders to enhance the uniformity and efficiency of our nation's insurance regulatory system. Over his career, Bruce covered legislative and regulatory affairs in almost half the states. A native Michigander, Bruce, his wife Patty and their sons currently reside in Silver Spring, Maryland.

Scott Gallin has been a managing director of PineBridge Investments, a multi-strategy investment manager, since 2002. Additionally, Mr. Gallin is an adjunct professor of finance and economics at Columbia Business School, where he has taught courses since 2003 on private equity. He has also previously taught at the University of California, Berkeley's Haas School of Business, London Business School, Instituto de Ensino e Pesquisa (INSPER) in Sao Paolo, Brazil and at the Tsinghua University in Beijing, China. Mr. Gallin currently serves as the chairman of the board of managers for Happy Mountains, LLC (dba PhysicianOne Urgent Care) and Flash Global, a supply chain services business. He is also a director of Oskar Blues Brewery Holdings, Covenant Surgical Partners and MC Sports Acquisition LLC. He has previously served on the board of directors, has served on the audit and compensation committees and has served as chairman of the corporate governance and nominating committees of Body Central Corp. from September 2006 to June 2014. Mr. Gallin also served on the board of directors, and was chairman of the audit committee, of This Technology Inc. from June 2010 to August 2015. Other board roles include serving on the boards of directors of Faith Media Holdings, a book publisher, from June 2006 to December 2006, Best Brands Corp., a distributor and manufacturer of baking products, from December 2006 to March 2009, where he was also a member of the compensation committee. Everest Connections, a broadband communications company, from June 2006 to February 2008, where he served on the audit and compensation committees, Medispectra Inc., a medical device company, from February 2007 to June 2007, and Legendary Pictures, a motion picture production company, from June 2009 to September 2010, each a private company. Prior to joining PineBridge, he worked for Kluge & Co., an affiliate of Metromedia Company that is responsible for executing and managing venture-stage. growth equity and buyout transactions. Mr. Gallin received B.A. and M.A. degrees in 1995 from the University of Pennsylvania and an M.B.A. degree in 2002 from Columbia Business School. He was awarded a Fulbright Scholarship in 1995 and attended McGill University.

Mark Hopkins is an Executive Director in EY's Life Insurance and Retirement Advisory Practice. He has advised insurance companies and wealth firms on a broad range of strategic and operational initiatives. One his current interests is the future of distribution of life insurance and annuity products and the importance of including insurance products on digital advice platforms. Mark was formerly Head of the Financial Institutions Division of an emerging markets investment bank, where he had responsibility for the development of the capital markets. He was also CEO of an insurance and retirement company in Southern Africa.

Kevin Kallaugher (Kal) is the international award-winning editorial cartoonist for The Economist and the Baltimore Sun. The first resident cartoonist in The Economist's 145-year history, his diverse portfolio includes more than 8,000 cartoons, 140 covers, and six books. The World Encyclopedia of Cartoons said, "Commanding a masterful style, Kallaugher stands among the premier caricaturists of the (twentieth) century." In a distinguished - and syndicated - career than spans five decades, his work has appeared in more than 100 publications worldwide. Exclusively represented by Leading Authorities speakers bureau, Kal shares his unique take on current events, politics, and the economy. He has lectured at TED, Harvard, Pixar, and Google, and his commentaries have engaged, enraged, and entertained readers and leaders around the globe. In lively and entertaining illustrated presentations, he utilizes his sharp wit and biting insight to tackle the issues of the day with wellplaced humor and precision art. His presentation is capped off with live drawing of his favorite targets and a surprise for the audience (their own original cartoons to take home). Kal has garnered international honors and awards in seven countries and held exhibitions of his work in 12. He was a 2015 finalist for the Pulitzer Prize in editorial cartooning, recipient of the 2015 Herblock Prize and the 2014 Grand Prix for Cartoon of the Year in Europe. His work includes three award-winning illustrated wall calendars; acclaimed animations; and a 2008 board game about the financial crisis entitled "Credit Crunch." In 2013, he published a major retrospective collection of his Economist drawings entitled Daggers Drawn: 35 Years of Kal Cartoons in The Economist. An earlier collection of

his *Economist* work, *Drawn from The Economist*, was printed in 1988. Four collections of his *Baltimore Sun* cartoons have also been published: *KALtoons* (1992), *KAL Draws a Crowd* (1996), *KAL Draws the Line* (2000), and *KAL Draws Criticism* (2006). He also launched his first iPhone app in 2010. Early in his career Kal spent 10 years working in London as a cartoonist for publications like the *Observer*, the *Sunday Telegraph*, *Today*, and the *Mail on Sunday*. He returned to the U.S. in 1988 to join the *Baltimore Sun* as its editorial cartoonist. Between 1988 and 2006, he drew more than 4,000 cartoons for the *Sun* while continuing to draw two cartoons per week for *The Economist*. After a six year hiatus, Kal rejoined the *Sun* in 2012. In 2007, he teamed up with Chicago's famous Second City comedy troupe for a six-city touring show called "The Art of Satire." He worked with animation legend Richard Williams to produce an award-winning, 30-second television commercial and has created animations for The Economist, ABC's *Nightline* and CNN's *Lou Dobbs*. He has been the artist-in-residence at the University of Maryland Baltimore County (UMBC), The Studios at Key West and the Masterworks Museum in Bermuda. Kal is the past President of The Association of American Editorial Cartoonists and Cartoonists Rights Network International, a human rights group dedicated to protecting cartoonists around the globe.

David Kuplic is Executive Vice President of Advantus Capital Management, David provides broad investment and business leadership to both Advantus and Securian Financial Group. He serves as Chief Investment Officer for Securian Financial Group, where he is accountable for Securian's \$15 billion of invested assets. David is also President of Securian Funds Trust, a \$3 billion group of funds offered through variable insurance contracts. He joined Advantus in 2004 and was named Executive Vice President in 2007. David holds an MBA in finance from Indiana University. He is a CFA Charterholder, and a member of the CFA Institute and CFA Society of Minnesota. He serves the Board and Investment Committee of Allina Health in Minnesota, the Board of the Ordway Theater in St. Paul, Minnesota, and the Board of Carlson Funds at the University of Minnesota.

Emmy Labovitch is a senior private pensions expert in the Directorate for Financial Affairs of the OECD, where she is working on a number of projects related to pension fund regulation and the governance of institutional investments, with a particular focus on fiduciary duty and ESG investing. Prior to joining the OECD in 2015, she worked in asset management, as an equity fund manager and in international business development. She headed the emerging markets equity desk at Fortis Investments before joining the executive committee as Head of Marketing; she later moved to Geneva to take up the same role at Union Bancaire Privée Asset Management. Emmy was also a Director of Novarca, a specialist consultancy that creates cost transparency for institutional investors, where she worked with some of the biggest European institutional investors. She is a member of the board and audit committee of Phoenix Futures, a UK charity and housing association that helps people overcome drug and alcohol problems.

Richard Leist is a Senior Managing Director and Head of Global Portfolio Management in the Investments Department of MetLife Inc. In this role he is responsible for managing, developing and coordinating MetLife's portfolio and asset liability management strategies across \$516 billion of globally managed assets. In this role, the group partners with MetLife's diverse businesses to support product design and pricing, while constructing strategies to maximize risk-adjusted returns on in-force business. Richard joined MetLife in August 1988 as a financial consultant in the corporate Controllers department. He assumed positions of increasing responsibility, primarily in the Investments Department, from 1990 through 1999, at which time he was promoted to Vice President & Chief Risk Officer. In July 2002, he moved to Corporate Ethics & Compliance, assuming Chief Compliance Officer responsibilities. In 2004, he was promoted to Senior Vice President & Chief Compliance Officer. Before joining MetLife, Richard was a senior accountant at Peat, Marwick, Mitchell & Co. Richard received his undergraduate degree from Shippensburg University of Pennsylvania and holds an MBA from Lehigh University. He is a CPA and a Registered Principal.

Howard Liao (New York) is a Senior Managing Director of Medley and Head of Corporate Credit. Mr. Liao has over 15 years of leveraged finance, direct lending and private equity experience originating, structuring and investing in a variety of credit-oriented alternative investments. Prior to joining Medley, Mr. Liao held several positions at Lehman Brothers. He was a member of Lehman's Leveraged Finance Group, a founding principal of Lehman's Mezzanine Fund and, most recently, a Managing Director in Lehman's Private Equity Principal Investments Group managing private and syndicated debt and private equity investments for the Lehman estate. Mr. Liao has served on the board of directors, either as a representative or observer, of the following companies: Varel International, Castex Energy, DHS Drilling Company, Universal Pegasus, Invicta Financial, Greenbrier Minerals and Energy Maintenance Services. Mr. Liao received a BSBA from Georgetown University and an MBA from UCLA Anderson School of Management.

Michael Lovendusky is Vice President & Associate General Counsel at the American Council of Life Insurers. He has managed policy-making on many issues during his tenure at the American Council of Life Insurers. He is liaison to the National Association of Insurance Commissioners, and served for several years as Chairman of the Industry Advisory Committee to the Interstate Insurance Product Regulation Commission, where he worked to make the interstate insurance compact a useful reality. The subject matter of his professional responsibilities to the ACLI at this time include Insurance Company Membership in FHLBanks; Life Insurance Company Investments; Unclaimed Life Insurance Benefits; Stranger-Originated Life Insurance and life settlements; premium financing and state insurable interest laws; and life insurance issues generally. He was responsible for many years managing issues relating to producer licensing and broker compensation disclosure, during which time he served as the ACLI Director on the National Insurance Producer Registry. He also has supervised policymaking in such issues as Privacy, Suitability of Products, Terrorism Response, and financial services modernization. Prior to his work for the life insurance industry, Michael was an attorney with the American Insurance Association specializing in property and casualty industry reinsurance, residual market mechanisms, and insurance use of credit history. Before becoming an insurance industry advocate, Mr. Lovendusky was in private legal practice for international trade, energy resource development and litigation. He also served five years as a legislative assistant to two members of the California delegation to the U.S. House of Representatives. Mr. Lovendusky is a member of the District of Columbia Court of Appeals, the United States District Court for the District of Columbia, and the United States Court of International Trade. In addition to studying at the University of Edinburgh in Scotland, he received his Juris Doctor from the Georgetown University Law Center and his Bachelor of Arts, with honors, from The Johns Hopkins University.

Dan McCready is a Co-Founder and Managing Partner of Double time Capital. He was formerly a consultant with McKinsey & Company, the global management consulting firm. Dan is a former United States Marine Corps officer. He founded This Land, a social enterprise focused on revitalizing American craftsmanship. He currently serves on the board of the North Carolina Sustainable Energy Association and on the Friends of Trinity Board, Trinity Episcopal School. Dan is a graduate of Duke University and Harvard Business School.

LaLantika Medema is a senior vice president and product manager in the Newport Beach office, responsible for credit alternatives and mortgage- and real-estate-related strategies. Previously, she worked in the portfolio management group and focused on mortgage-backed securities and residential whole loans. Prior to joining PIMCO in 2006, she worked at Deutsche Bank's Trust & Securities Services Division, specializing in collateralized debt obligations (CDOs). She has 14 years of investment experience and holds an MBA from the Anderson School of Management at the University of California, Los Angeles. She also received an undergraduate degree from the University of California, Los Angeles.

Ana Morales is Director who leads the iShares Insurance General Account Team on the East Coast of the U.S. She joined BlackRock in 2012 and has since worked closely with insurance clients to drive the deployment of ETFsolutions within balance sheet assets. Prior to joining BlackRock, she spent 7 years at Morgan Stanley where she held a cross-product strategy and distribution role within Fixed Income Middle Market Institutional Sales. She also managed relationships with family offices, high-net-worth individuals, and foundations globally. Ms. Morales graduated from the University of Notre Dame in South Bend, IN with BS degrees in Accounting and Marketing, magna cum laude, and varsity letters in Track & Field and Cross Country.

Maurice Perkins is Senior Vice President of Federal Relations and joined the American Council of Life Insurers in 2005. Mr. Perkins was promoted to the position of Senior Vice President in July 2011. Prior to joining ACLI's Federal Relations Department, Mr. Perkins served almost five years as a Professional Staff Member in the U.S. Senate. First on the Senate Foreign Relations Committee - then to Chairman Richard Shelby (R-AL) on the Senate Banking Committee.

Mr. Perkins had responsibility for legislation regarding national security issues, trade, and international financial institutions. He worked closely with U.S. Department of Treasury and Department of State officials and aided Presidential nominees through the confirmation process. At ACLI, Mr. Perkins helps to manage a team of federal lobbyists covering tax, financial services, and retirement security issues of importance to the life insurance industry on Capitol Hill, including the Dodd-Frank Wall Street Reform Act, the Pension Protection Act and reinsurance issues. A native of Miami, Florida, Maurice has Bachelors in Political Science from Ithaca College in upstate New York and a Masters Degree from Columbia University.

Joe Rado joined Deutsche Asset Managment in 2006 with 26 years of industry experience. Prior to joining, Joe served as a Senior Underwriter at CWCapital. Previously, he worked as Manager of Real Estate Investments at Nissho Iwai American Corporation and in Portfolio Management and Underwriting in the Commercial Real Estate Group at Wachovia. His has a BA in Urban Planning from Rutgers, The State University of New Jersey.

Karen Rudolph is a principal and consulting actuary in the Omaha office of Milliman. She joined the firm in 1981. insurance and annuities. She has experience with business modeling and financial projections, statutory valuation, principle-based valuation, actuarial aspects of mutual company restructuring, actuarial aspects of insurance appraisals, illustration regulation compliance and tax code compliance. Additionally, her work includes reserve reviews for Xxx and Axxx products, economic reserve determination, asset adequacy analysis and statutory system conversions. Karen is also currently involved in the principle- based approach initiative, including SOA research surrounding its implications to various product types. She co-authored the Milliman report Analysis of Proposed Principle-Based Approaches (September 2009), the SOA's Report on 2014 VBT/2017 CSO Impact Study (June 2015), the ACLI's VM-20 Impact Study Compendium 2012, as well as the SOA's current study note on principle-based approaches to valuation. Karen has recently been involved in the Academy of Actuaries' Life Reserve Working Group and chairs the Academy of Actuaries Life Principle-Based Reserve Practice Note working group.

Anne Marie Schultz is Director of BlackRock's Financial Institutions Group within the Institutional Client Business. She is responsible for developing and maintaining relationships with insurance and other taxable clients, with a focus on the health insurance sector. Prior to joining BlackRock in 2010, Ms. Schultz was senior project manager for Oliver Wyman where she was responsible for the design and implementation of strategic and operational solutions for asset managers, insurers, pension funds, and endowments/foundations. Previously, Ms. Schultz was project manager at IBM Global Services. She began her career at Electronic Data Systems as a system engineer. Ms. Schultz

earned a BS degree in electrical engineering from the Johns Hopkins University and an MBA degree with high distinction from the University of Michigan.

Travis Shelton is a Portfolio Manager for Principal Real Estate Investors, the dedicated real estate group of Principal Global Investors. His responsibilities include the construction, management, and reporting of commercial real estate debt portfolios for affiliated and non-affiliated capital clients. He works with clients to establish and implement portfolio strategies for existing holdings, as well as new originations. He is also involved in the workout process for distressed assets. He started his career at a wholly-owned subsidiary specializing in the production of bridge and mezzanine loans. He received a bachelor's degree in finance from lowa State University.

Sarvjeev Sidhu manages over \$4.5 billion in institutional and retail emerging markets debt securities on behalf of AEGON. He manages funds across a wide range of investments in sovereign, corporate, structured, local currency markets, and China QFII A-share equity & RMB bond. In his role as global head of emerging markets, he oversees the firm's international investments across markets in Asia, Latin America, and CEEMEA. Sarvjeev has over twenty-two years in emerging markets investment experience. Prior to joining AEGON in July 1999, he spent eight years with Lincoln Investment Management USA, where he served as a portfolio manager of emerging market fixed income investments. Sarvjeev earned his MBA and MPA from the Indiana University, as well as his BS from the Birla Institute of Technology. Sarvjeev Sidhu has earned the privilege to use the CFA designation.

Alex Singla leads McKinsey's North American Service Operations work, which helps clients transform their customer experience, digital and advanced analytics capabilities, frontline and sales effectiveness, and business support functions—to achieve step-change improvements in cost and profitability. With deep experience in serving major financial institutions, Alex also leads our Financial Services Practice in the Midwest region and is a core leader in the Insurance Practice in the Americas. Over his 15 years with McKinsey, he has advised insurers, banks and other financial institutions on topics including service operations, enterprise strategy, technology, digital, advanced analytics, distribution, underwriting, claims, marketing, and cost. Alex is a Certified Public Accountant (CPA). He is an active supporter of the American India Foundation (AIF), and serves on the Board of Trustees of the John G. Shedd Aquarium in Chicago.

Kent Smith is an executive vice president and portfolio manager in the Newport Beach office on the mortgage credit team. He is responsible for residential loan investments and focuses on origination and servicing risk, as well as distressed mortgage opportunities. Prior to joining PIMCO in 2008, he was the head of capital markets for First Horizon Home Loans' and National Bank of Kansas City's non-prime mortgage originations. Previously, Mr. Smith spent 10 years with Fannie Mae and Freddie Mac as a director in credit portfolio management and credit portfolio acquisitions. He has 30 years of investment experience and holds an undergraduate degree from Kansas State University.

Uri Sobel is a principal and consulting actuary with the New York office of Milliman. He joined the firm in 1999. He is a Fellow of the Society of Actuaries and a member of the American Academy of Actuaries. Uri works with life insurance companies on a variety of matters, including supporting clients' financing projects with both the actuarial as well as deal-modeling aspects. He has also worked on cash flow testing, general actuarial modeling, appraisals for mergers and acquisitions, and dividend management. Uri has led the modeling aspects on several projects as companies attempt to understand the impact of Actuarial Guideline 48 and VM-20 Principles Based Reserves. Uri has presented at a number of industry events on matters related to Principles Based Reserves, reserve financing and actuarial modeling. Recently, Uri was one of the authors of the Milliman report - Issues and Challenges in a Principle-Based Reserving World (2015), and is part of a Milliman led

Society of Actuaries research project on the Impact of VM-20 on Life Insurance Product Development, the Phase 1 report of which was just recently published in November, 2016.

Charles Thomas is Head of US ETF Capital Markets at Vanguard, the team responsible for lowering the cost of ownership for all Vanguard ETF investors. The Capital Markets team ensures that Vanguard ETFs have active and liquid markets by monitoring secondary market conditions, interacting with market makers, collaborating on product management, and working to inform clients and the investing public about ETF trading. Prior to this role, Mr. Thomas contributed to Vanguard's investment thought leadership efforts as a member of the Investment Strategy Group, focusing on macroeconomic analysis, asset pricing, and currency research. A Malvern native and life-long Vanguard investor, Mr. Thomas earned a BA in Economics from the University of Virginia, an MBA in Finance from the University of Chicago Booth School of Business, and is a CFA charterholder.

Tim Urbanowicz currently serves as Head Strategist, ETF Capital Markets, representing the PowerShares family of exchange-traded funds (ETFs). In his current role, Tim works with investment banks, trade desks, market makers, proprietary trading groups, and other institutions that are instrumental in providing liquidity in the global ETF market. In addition, Tim aids buy-side clients on ETF trading and educates them on best practices for sourcing ETF liquidity and execution. Tim is host to the PowerShares Capital Markets video series and co-author of "The ETF Toolkit: The Professional's Guide to ETFs." Previously, Tim served as a Regional Sales Consultant, helping financial advisors, portfolio managers and financial institutions incorporate PowerShares ETFs into their portfolios. Prior to joining PowerShares, Tim was an Investment Representative with JP Morgan Chase as part of a wealth management team servicing the needs of high-net-worth individuals. Tim earned a BA in Business and Economics from Wheaton College (IL) and holds the Series 6, 7, 24 and 63 registrations. Tim also holds the Chartered Financial Analyst® designation and is a member of the CFA Society of Chicago.