

## Office of the Vice President for Finance

The [Office of the Vice President for Finance \(VPF\)](#) works to advance MIT's mission by supporting the thoughtful stewardship and effective deployment of the Institute's financial resources.

In fiscal year 2021 (FY2021), VPF focused its efforts in the areas detailed below and engaged with campus leadership to address Institute-wide financial implications in the second year of the Covid-19 pandemic.

### Leadership Change

VPF saw a change in its leadership in FY2021. After serving nearly six years as vice president for finance, Glen Shor was named executive vice president and treasurer (EVPT) on October 2. Shor retained oversight of VPF until a new vice president was named.

On February 16, Katherine Hammer was named vice president for finance. In addition to leading VPF's 165-person staff, Hammer is a member of MIT's Academic Council, Budget and Finance Steering Group, Supplemental 401(k) Oversight Committee, Employee Benefits Oversight Committee, Enrollment Management Group, Gift Policy Committee, and Committee for the Review of Space Planning.

Prior to joining MIT, Hammer served the City of Detroit in leadership roles including chief deputy CFO and deputy chief operating officer. During her tenure, she oversaw budget, treasury, procurement, and other financial functions for the City of Detroit's Office of the Chief Financial Officer. From 2015 to 2017, Hammer was budget director for the City of Boston, where she developed and managed the city's \$3 billion annual operating budget and \$2 billion five-year capital plan. Hammer also held appointments as director of workforce management and finance at the Massachusetts Convention Center Authority and assistant secretary for administration and chief of staff at the Commonwealth of Massachusetts Executive Office for Administration and Finance.

Hammer holds a BA in political science and economics from Washington University in St. Louis and an MPA from the Princeton School of Public and International Affairs at Princeton University with a concentration in economics and public policy.

### New Directors Named to VPF Leadership Team

Zheming Yu was named VPF director of treasury and planning in November, following the August 2020 resignation of Allen Marcum from the directorship role he held for 13 years. In this role, Yu leads the VPF team responsible for managing MIT's non-endowed financial assets and the Institute's debt portfolio and for maintaining relationships with MIT's rating agencies and operating and investment banks.

Yu brings deep treasury experience in industry and higher education, spanning debt and liquidity management, long-term financial planning, and the investment of operating assets. She was previously treasury director for capital markets and foreign exchange at Nuance Communications. Earlier she served as associate director in the Office of

Treasury Management at Harvard University, where she managed Harvard's central bank and liquidity management for its individual schools and units.

Yu holds a BA in British and American literature from Fudan University in Shanghai, China, an MBA from Vanderbilt University's Owen Graduate School of Management, and multiple finance certifications including certified public accountant (CPA) and certified treasury professional (CTP).

Edward McDonough was named VPF director of budget and financial analysis in June after serving as interim director since December 2020, when his predecessor Richard Crook resigned.

McDonough leads the VPF team responsible for administering the annual budget process for the Institute. He and his team provide recurring and ad hoc financial analyses to MIT's senior leadership to inform decision-making. He joined VPF in 2016 as a senior financial analyst, and since then has taken on roles of increasing responsibility in areas that span the annual financial cycle.

Before joining MIT, McDonough served as a vice president and senior analyst for Bank of New York Mellon in its Global Distribution division. He holds a BS in finance and economics from Fordham University.

### **Covid-19 and the Institute's Financial Position**

MIT completed FY2021 with net results of \$216.4 million, a 5.0% positive operating margin. Covid-19 had offsetting impacts on the overall operating performance. MIT saw significant revenue exposures and new spending commitments to keep the campus safe and support the community. At the same time, MIT spent less in certain areas due to constraints on campus activity.

The FY2021 budget took initial steps to respond to Covid-19, freezing distribution per Pool A unit at FY2020 levels and implementing a salary freeze for most categories of employees, reductions in allocations of central funding to units, and other belt-tightening actions. At the time MIT adopted the FY2021 budget, MIT projected additional pressures from Covid-19 on operating performance due to anticipated constraints on normal levels of campus activity.

Starting in the summer of 2020, VPF teams began forecasting these pandemic-related costs to total approximately \$200 million to \$225 million for FY2021. They worked closely with MIT Medical, the Office of the Chancellor and the Division of Student Life (DSL), the Department of Facilities (DoF), Information Systems & Technology (IS&T), MIT's five schools and the college, and dozens of departments, labs, and centers (DLCs) to make projections in all of these areas and more. They tracked the financial implications of a \$5,000 tuition rebate, analyzed occupancy levels in MIT's student residences, factored in the cost of a one-time child care subsidy to staff, faculty, and researchers, and projected the cost of various levels of Covid-19 testing, knowing that individual units were not able to cover many of these costs in their normal operating budgets. The team helped the Institute forecast, tally, and then cover a significant portion of the Covid-related expenses from the Institute's central reserves in FY2021.

MIT experienced an exceptional return on its endowment in FY2021. Pool A yielded a return of 55.5%—the strongest annual performance in more than 20 years. This translates to an increase of \$9 billion in MIT’s endowment, bringing its total value to \$27.4 billion. The extraordinary investment performance did not impact operating revenues for FY2021 or FY2022 but provides a unique opportunity for FY2023.

Working with the EVPT, Treasury and Planning established an ongoing monthly liquidity meeting to further enhance and refine the process to forecast liquidity and quickly adjust to changing financial conditions. This cross-functional team of key stakeholders is engaged in the regular forecasting process and includes the vice president for finance and representatives from VPF’s Office of the Recording Secretary (RSO), Accounts Payable, and Accounts Receivable, and MIT Resource Development (RD), DoF, the Office of the Vice President for Research (VPR), and the MIT Investment Management Company (MITIMCo).

VPF developed a debt framework to support the future capital plan and provide Institute leaders with an overview of MIT’s position with regard to debt. The framework addressed the need to use debt to fund capital projects (not programmatic expenses) while also maintaining intergenerational equity by funding debt service out of normal budgetary expenses. This approach is designed to ensure financial resources are spent appropriately for current and future constituents. The framework maintains a conservative capital structure and preserves the Institute’s strong credit ratings.

The Office of Insurance—in response to evolving market conditions—is investigating alternative methods of risk financing on an individual institution basis and a group basis with Ivy Plus peer institutions.

## **Responding to the Ongoing Covid-19 Pandemic**

As the Institute entered a second year of operating under the constraints of the global Covid-19 pandemic, VPF addressed community needs through innovative offerings, creative problem-solving, and participation in campus-wide concerns.

### **Covid-19 Store on Buy-to-Pay**

Building on the success of the Covid-19 Store on VPF’s Buy-to-Pay (B2P) system, Strategic Sourcing and Contracts continued to provide personal protective equipment (PPE) including gloves, masks, and face shields, and cleaning and disinfecting supplies to the Institute’s DLCs. These items are purchased centrally by VPF and are provided without cost to DLCs. This centralized access to, and pre-vetting of essential supplies, made it easy and efficient for the community to follow specific Covid protocols without having to procure essential supplies individually or determine the quality, authenticity, or safety of products.

Launched in FY2020, the store was established during a time of extreme disruption to global supply chains, many of which persist into the second year of the pandemic. It was set up to support broader Institute goals for students, faculty, and staff to safely return to teaching, learning, living, and working on campus, and removing the financial burden to address safety protocols from DLCs. Since its inception, DLCs have made

more than 2,000 purchases from the store, with MIT Mail Services providing 98% of on-campus deliveries within 24 hours of receiving orders. The Covid-19 Store solution was developed by and continues to be supported by Financial Systems.

Many of MIT's preferred suppliers helped to stock the on-campus store and arranged flexible delivery and warehousing options. The Covid-19 Store is a result of a collaboration with the Office of the Vice President for Campus Services and Stewardship, VPR, the Koch Institute for Integrative Cancer Research, DSL, MIT Medical, and MIT Environmental Health and Safety (EHS).

### **Travel and Event Cost Avoidance**

As campus events and travel were canceled due to the pandemic, Strategic Sourcing and Contracts helped members of the community cancel, receive refunds, obtain credits, or postpone bookings, and as a result, secured more than \$4.1 million in cost avoidance. The team renegotiated contracts on behalf of individual DLCs with industry sectors including airlines, hotels, ground transportation, restaurants, event supply rental companies, and registration software licensing.

### **Tax Treaty Guidance**

HR/Payroll maintained continuity of service to provide one-on-one tax treaty guidance for international students, scholars, and staff by transitioning from in-person support at the Atlas Service Center to providing online appointments via Zoom.

### **Task Force 2021 and Beyond**

In light of the Covid-19 pandemic, MIT established Task Force 2021 and Beyond to “use the lessons of this extraordinary time to explore how the Institute might invent a new future in which it and others can thrive.” The work was developed in two phases: Phase One—spring 2020 to spring 2021—included a collection of Working Groups for Idea Generation, and Phase Two—summer 2021 to fall 2021—established sixteen Refinement and Implementation Planning Committees (RICs). VPF staff participated in Task Force 2021 and Beyond as follows:

#### ***Phase One***

- Danielle Khoury, controller, served on the Task Force Coordinating Committee and co-chaired the Finance and Data Workstream
- Christina Lo and Kathleen McGrath, director of Financial Operations, served on the Administrative Processes Working Group
- Julia Chabrier served on the Financial Modeling Working Group
- Tyler Brezler served on the Data and Research Working Group
- Naziat Adnan staffed the Financial Modeling Working Group

## **Phase Two**

- Danielle Khoury continued on the Task Force Coordinating Committee, chaired the Employee Development, Strategy, and Career Pathways RIC, and also served on the Underrecovery RIC
- Christina Lo and Ann E. Warner-Harvey served on the Work Succeeding RIC
- Allison Parisi served on the Campus Working Spaces RIC
- John Donnelly served on the Underrecovery RIC
- James Nutter staffed the Underrecovery RIC
- Long Tran staffed the Employee Development, Strategy, and Career Pathways RIC

## **Advancing Strategic Initiatives**

In FY2021, VPF continued to make progress on a collection of initiatives, as detailed below.

### **Providing pay and tax information to payees**

VPF and IS&T embarked on a three-phased approach to more efficiently provide payroll information and related tax documentation for the MIT community. MIT has engaged Automated Data Processing (ADP) to generate W-2 forms and paystubs to MIT's payees, thereby eliminating the need for MIT to maintain a secure printing room for such purposes. In addition, through ADP and its online tools and app, employees and students who leave MIT can now have secure access to these essential forms eliminating the need for HR/Payroll staff to print and mail W-2 forms and paystubs or resend those that are returned to VPF with invalid addresses.

Phase One was completed in early 2021, with ADP printing and mailing W-2 forms for all payees who opted to receive paper forms for tax year 2020.

The ADP implementation project team, comprised of multiple teams from VPF and IS&T, then entered Phase Two, in which ADP provided paystubs for all payees except those without social security numbers. The bulk of this work occurred in the second half of the fiscal year to meet the scheduled launch on August 13, 2021.

Activities included untangling complex data mapping, transfer, and validation protocols; modifying and testing new processes; delivering a seamless integration into the Atlas platform; and developing and delivering a communications plan to address those changes to the MIT community. The final phase of the project will merge all W-2 form delivery for MIT payees to ADP for tax year 2021 (via Atlas, on the ADP website or mobile app, or in the mail) with a targeted completion date in January 2022.

### **Modernizing Financial Operations through Robotic Process Automation**

Following a Request for Information conducted in FY2020, Financial Operations evaluated proposals from three Robotic Process Automation (RPA) firms and

awarded a contract to NICE Robotic Process Automation in March 2021. VPF project sponsors—Kathleen McGrath, Danielle Khoury, and Karon McCollin, manager of Financial Systems— assembled a project team with representatives from IS&T, NICE RPA, and VPF Financial Operations, from which Cindy Vye was designated as the project manager. Following the project kick-off, members attended training, then began discovery and development sessions to automate the travel expense dunning process. The team documented process flows, work instructions, and provided demonstrations of VPF processes to the RPA team. The project team is preparing to automate six additional travel, accounts receivable, and accounts payable processes in FY2022.

### **Increasing Options to Support Sustainable Purchasing**

Strategic Sourcing and Contracts is advancing efforts to provide more sustainable products and services that support the community's purchasing needs. This work is in alignment with Fast Forward: MIT's Climate Action Plan for the Decade, the Institute's ambitious new plan for action to address the climate crisis.

Strategic Sourcing and Contracts has supported several key kick-off initiatives for the plan, including engaging a consultant to lead the development of a carbon offset strategy for travel, procurement efforts for electric vehicle and charging infrastructure on campus, and overall support to DLCs as they develop sustainable procurement plans.

The team has worked to ensure that MIT's vendors are aware of the Institute's sustainability goals by emphasizing the need for expanded green product offerings, more competitive pricing on those products, reduced packaging, and improved sustainability reporting.

In FY2021, Strategic Sourcing opened a competitive bid process for the Institute's office supplies and services contract. As a result, the team gained an increased commitment to MIT's goals from Staples, Inc. who will offer better pricing on an expanded inventory of green products, provide in-depth sustainability reporting, and plans to use electric vehicles to make its deliveries to campus. The success of this bid will provide a template for future bids that put sustainability considerations at the forefront of the evaluation process.

### **Expanded Engagement with Black- and Minority-Owned Businesses**

In an email to the MIT community on July 1, President L. Rafael Reif detailed actions that the MIT community can immediately pursue to make progress toward racial equity and justice at MIT. His charge to "increase MIT's purchasing and contracting with minority-owned businesses, including Black-led enterprises" is one of the items now listed on the [Institute Commitments](#) website which documents [progress on a range of initiatives](#).

MIT's Small and Diverse Business Program—which aims to increase MIT's participation with small businesses and those with historically underrepresented ownership—has taken significant steps to respond to this charge. Program staff meets regularly with DLCs looking to reallocate some of their spending to small, diverse, and sustainable businesses, to provide them with data on past spending and discuss strategies to meet broader departmental goals. Foundational work has begun on two fronts: improving the visibility of supplier diversity information, and building a network of engaged stakeholders.

Campus purchasers have expressed a need for increased visibility of supplier diversity information and improved supplier search tools. The Small and Diverse Business Program team is working to design and develop the VPF Data Vault, a new model to aggregate and manage VPF's supplier data.

The Data Vault will be a key element in an updated version of VPF's Supplier Search, an advanced tool to support MIT's purchasers to identify suppliers that best meet their needs and purchasing goals. The new Supplier Search will enable MIT's buyers to find specific demographic information on businesses including company reputation, ownership demographics, size, and location. The project is currently in design and development, after a year-long discovery phase that engaged a variety of campus purchasers in focus groups about their needs and analyzed VPF's technical capabilities to address those needs. The new Supplier Search is scheduled to launch in July 2022.

A new Procurement Website (working title), will host Supplier Search and consolidate resources and tools that support the MIT community to make purchases. The Procurement Website will emphasize MIT's purchasing priorities, including buying from small, diverse, and sustainable suppliers, in a new and exciting way. The website is planned for launch in the early fall of 2022, along with Purchase with Purpose—an outreach campaign to the community. The campaign is currently under development, with a goal to engage the entire MIT community in meeting both President Reif's charge and the goals of the Fast Forward Climate Action Plan.

### **Process Changes and Efficiencies**

VPF teams implemented a series of process improvements to address operational and billing efficiencies, meet new compliance requirements, and improve customer service.

- In January, HR/Payroll made a change in salaried employee payroll proration calculations. In this new approach, payroll proration is based on work days in each semimonthly pay period, replacing the former method based on calendar days. This change was implemented in part to meet the requirements of the Massachusetts Paid Family and Medical Leave Act (PFMLA), which went into effect on January 1, 2021, and aligns with best practices in payroll administration.
- Strategic Sourcing worked with Airgas to implement a change in the process for gas cylinder returns. This change enables DLCs to process cylinder pick-ups via B2P so that returns are documented and accounted for in MIT's buying system. This streamlined approach helps DLCs to accurately account for all cylinders associated with their unit, improves billing processes, and eliminates the need to track empty cylinders via phone calls and emails to Airgas. This new automated process tracks approximately 7,000 gas cylinders that are on campus at any given time.
- The RSO and Financial Systems collaborated with RD and the Alumni Association to streamline the gift entry process. Together they developed a dashboard to measure productivity and introduced an automated lockbox for check deposits, resulting in reduced data entry, reduced manual processing, and increased team workflow management capabilities.

- Financial Systems continues its support of the B2P system on the Coupa platform. FY2021 marked VPF's first year using Coupa's AutoTrain, a process that allows VPF to implement the three major upgrades deployed by Coupa each year, and positions VPF to take advantage of new features and system improvements. The team will assess the effectiveness of this new process in FY2022.
- Financial Systems worked with shipping vendor eShip Global to make adjustments to its billing system to enable more detailed reporting and invoicing to DLCs. This change enabled individual DLCs to approve payments for specific shipments so that Accounts Payable can process payments more efficiently. This change also gave DLCs better visibility into their specific shipments, charges, and improved overall reporting.
- Merchant Services and IS&T project teams began migrating individual merchant accounts to the JP Morgan Chase Payment platform. The new platform will improve the experience and operations for credit card merchants at MIT by providing greater flexibility in retail payment solutions, new point-of-sale devices, and improved support and reporting tools.
- Office of Insurance and EHS created an injury report form for non-employee injury reporting. This form documents third-party injuries that occur on MIT premises and at MIT-hosted events off-premises. Collecting this information allows both teams to analyze data and identify where risk mitigation activities may be required.

## Community Engagement and Services

Practice and Process Improvement (PPI) introduced two new online training offerings, held 12 live training sessions via Zoom, and revised three online training courses.

New offerings included VPF Foundational Training, a course for new VPF finance staff that provides an overview of VPF processes across a broad spectrum of financial activities, and Fundamentals of Financial Management Drop-In Sessions, an informal course which is designed for members of the community to bring their specific questions to VPF.

In collaboration with the VPF Tax team, PPI offered a Sales Tax Workshop which described MIT's status as a sales-tax exempt organization and explained how to claim the sales-tax exemption in Massachusetts and 30 other states where MIT has an exemption. The workshop also covered instructions on collecting and reporting sales tax for MIT's DLCs that sell goods or services in the course of conducting business on campus.

PPI also collaborated with Tax and HR/Payroll, the Office of Graduate Education, the International Scholars Office, the International Students Office, and Student Financial Services, to produce and record a Tax Workshop for US Citizens and Resident Students and Scholars and a Tax Workshop for Nonresident International Students in March 2021. Both workshops were held via Zoom and had 240 and 300 attendees, respectively. Video recordings and PDFs of the presentations were later posted on the [VPF Tax Guidance for Nonresident Aliens](#) website.



## Evolving as an Organization

In addition to Shor, Hammer, Yu, and McDonough's new appointments already mentioned, VPF made the following changes to its leadership team:

- Jackie Daniels joined the Controllershship's Tax team as tax manager
- Stef Desmond was promoted to manager, Investment and Gift Accounting, on the Financial Accounting and Reporting team in the Controllershship
- Laurie Everett was promoted to senior manager of communications in Administrative Services and Operations
- Ashley Kennedy joined the Administrative Services and Operations team as communications officer from the MIT Office of Government and Community Relations.
- John Parro was promoted to senior manager of Budget and Financial Analysis.
- Franny Zhang joined as executive assistant to the vice president in VPF Headquarters.

Three members of VPF staff, Lillian DeWitt, Damual Greaves, and Karon McCollin, completed Leader-to-Leader (L2L), MIT's year-long leadership development program.

Jodi Kessler, assistant director, Tax on the Controllershship team was appointed to a three-year term to the Internal Revenue Service Advisory Council.

Sandy Mitchell, director of Insurance was elected to a second three-year term to the University Risk Management and Insurance Association (URMIA) Board of Directors.

Ann E. Warner Harvey served on [MIT Values Statement Committee](#), whose charge from the provost and the chancellor is to "engage the MIT community in the foundational work of developing a statement of shared values, one that is grounded in universal ideals but also speaks to MIT's distinctive character and culture." This work began in February 2021 and will continue into FY2022.

Virginia Johnson, accounting officer on Sponsored Accounting and co-lead of the African, Black, American, Caribbean Employee Resource Group, serves on the Institute's Diversity, Equity, and Inclusion (DEI) Strategic Planning Steering Committee.

Administrative Services and Operations' communications team launched *Resuming Our Work on Campus*, a new staff email newsletter to address topics related to VPF's return to campus in September. The weekly email included information on hybrid schedules and technology to support hybrid working arrangements, commuting and parking, MIT policies on Covid safety, and the Institute's Covid Pass testing program.

The MIT PPE Team received the MIT 2021 [MIT Excellence Award](#) in the Serving our Community category. The 27-member team included VPF staff members Jim Bagley (Strategic Sourcing), Ainsley Cray and Kathy Vitale (Office of the Recording Secretary),

Christina Lo (Strategic Sourcing and Contracts), and Courtney Vigo (Budget and Financial Analysis).

VPF continued its tradition of supporting the Cambridge Community Center (CCC) with an annual holiday gift drive. In addition to contributing to the gifts on the center's wish list, VPF's Community Giving Ambassadors tapped into VPF's generous and innovative spirit to develop an Amazon wish list at CCC, so that staff could provide essentials, including diapers and baby formula, directly to the center.

### **Key Metrics Highlighting the Core Work of VPF's Business Units**

- Administering annual payroll of \$1.62 billion; processing 688,669 payments to 22,955 individuals
- Processing more than \$1.40 billion in payments on 380,421 invoices
- Processing 5,443 travel expense reports while overseeing the administration of 3,710 MIT Travel Cards and 3,547 Procurement Cards
- Invoicing, collecting, and reporting on \$723.7 million in campus sponsored revenue (Federal: 52%; Industrial, corporate, and subcontracts: 48%), and managing more than 3,700 unique sponsored research accounts
- Directly collecting and processing \$2.5 billion in revenue via wires, checks, and internal transfers
- Supporting 135 campus merchants in securely collecting \$52.2 million (via 225,167 transactions) in credit card payments to MIT
- Recording 14,924 gifts and pledge payments to MIT, valued at more than \$531 million, and recording 730 pledges valued at more than \$303 million
- Processing 30,457 journal vouchers
- Introducing two new online training offerings, producing 12 live training sessions via Zoom, and revising three online training courses
- Supporting enhancements and upgrades to MIT financial systems that are used Institute-wide including B2P, SAP, and eShip Global
- Tagging and accounting for 5,347 new pieces of equipment, valued at \$53 million
- Processing \$4.476 billion in new capital assets and \$210 million in depreciation expense
- Filing 871 tax forms, including the Institute's IRS Forms 990 and 990-T, multiple state tax filings, and international tax forms
- Orchestrating the overall Institute budget encompassing \$4.0 billion in budgeted expenditures

- Managing submission of 342 departmental budgets and processing more than 2,500 budget change transactions
- Negotiating and providing advisory services on approximately 1,121 distinct strategic complex commercial agreements that provide purchasing benefits to the MIT community and enable streamlined transactions
- Facilitating approximately 22 complex competitive bid solicitations for supplies and services for various DLCs across the Institute
- Facilitating financial and operational processes in 64 countries in support of activities across the Institute
- Managing negotiation and placement of 30 insurance policies and annual budget for insurance-related purposes in excess of \$15 million. Actively managed numerous claims encompassing property, automobile, and liability claims
- Managing new exposure due to a greater number of employees working remotely, both domestically and internationally, and adjusting certain insurance coverages to ensure continuity of protection
- Executing the annual process of closing the Institute's finances, including overseeing the publication of the annual Report of the Treasurer
- Preparing and submitting annual reports/filings for the Institute's Uniform Guidance Report (report and audit of the Institute's annual expenditures of federal awards) and Benefit Plan financial statements and Form 5500s (as required under the Employee Retirement Income Security Act (ERISA), for the Defined Benefit Pension Plan, 401(k) Plan, and Retiree Welfare Benefit Plan)
- Preparing and submitting Payroll and Accounts Payable year-end tax forms
- Publishing the annual Budget Book and internal Report of Financial Results
- Publishing the annual Report of Sponsored Research Activity (known as the Brown Book)

**Katherine (Katie) Hammer**  
**Vice President for Finance**

