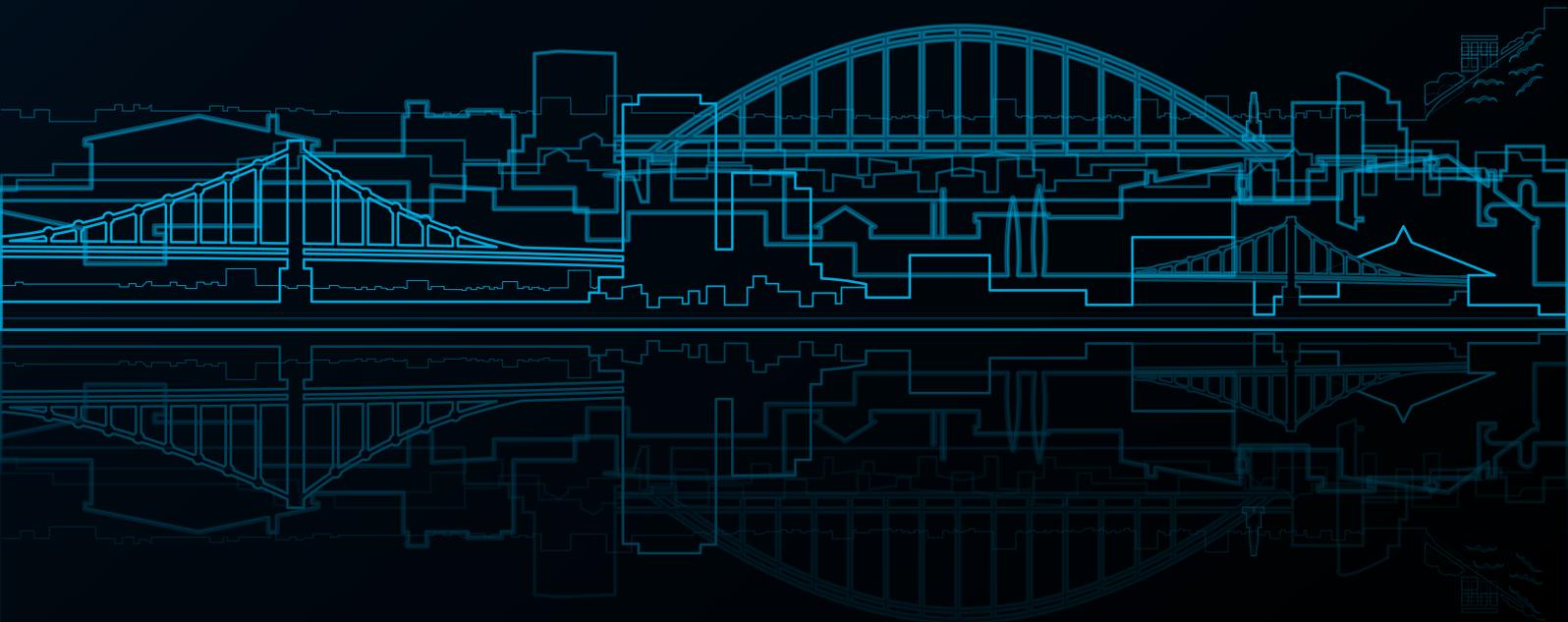




Forging the future

The Intersection of Health, AI & Tech

📅 October 19-21, 2025 📍 Pittsburgh, Pennsylvania, USA



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A Message from Council on Competitiveness and GFCC Leadership



With this letter and summary report, we reflect with great pleasure and profound gratitude on an extraordinary gathering that took place October 19-21, 2025 in Pittsburgh: Forging the Future - The Intersection of Health, AI, and Technology. This landmark summit represented a historic convergence of vision, collaboration, and action, bringing together world leaders, innovators, and change-makers to address some of the most consequential challenges and opportunities of our time.



For the first time, the Council on Competitiveness and the Global Federation of Competitiveness Councils (GFCC) joined forces to combine two flagship initiatives: the Council's pathbreaking series of "Competitiveness Conversations Across America" and the GFCC's annual Global Innovation Summit. This pioneering collaboration harnessed a breadth of local, state, regional, national and global perspectives, creating a dynamic forum where leaders from Pittsburgh, across the United States, and from around the world engaged in meaningful dialogue focused on the transformative power fast-moving technologies – such as Artificial Intelligence (AI) – can have on place-making innovation.

The choice to visit, explore and understand Pittsburgh was deliberate and strategic. The city is a national and global reference for reinvention and reinvigoration. Pittsburgh is a case study in renewal, resilience, creativity, and determination. From the 19th century steel furnaces that powered the growth of the world's largest, manufacturing-based middle class, to today's cutting-edge research in artificial intelligence and the life sciences, Pittsburgh embodies the spirit of innovation that has driven economic prosperity and human progress.





Together, the University of Pittsburgh and Carnegie Mellon University comprise the heart of this transformation. These institutions generate nearly \$10 billion in annual economic impact for Pennsylvania, support tens of thousands of jobs, and serve as the backbone of the region's research and innovation landscape. The University of Pittsburgh, with over \$1 billion in annual R&D spending and ranking 16th nationally for research performance, continues to advance discoveries that improve lives worldwide. Carnegie Mellon University, the nation's top-ranked institution for AI programs, has become a global powerhouse for translating breakthrough research into new industries.

The convergence of health, artificial intelligence, and technology represents far more than a technological frontier—it is an economic imperative and a fundamental commitment to leverage innovation to solve health challenges and improve lives at scale. Healthy societies unleash human potential and economic growth. So, health-focused technologies and the innovations they empower are not merely tools for well-being; they are engines for new industries, new value creation, and future prosperity. In Pittsburgh, we witnessed firsthand how investments in health innovation and AI are transforming the local economy and creating models of renewal that resonate worldwide.

The “Competitiveness Conversation” that unfolded in Pittsburgh—and across the ten U.S. regions the Council on Competitiveness has visited over the past 18 months—are action-driven, and focused on implementation. We are committed to transforming not only our collective understanding of regional innovation

ecosystems but, most important, elevating the tools and frameworks at our disposal to shape both regional and national policy. In this age of incredible disruption and discontinuity, we must leverage our combined intellect and experiences to change the trajectory of our future – we must find ways to operationalize innovation by prioritizing talent, technology, infrastructure and investment for a new reality.

The place-making innovation imperative that we advanced in Pittsburgh builds upon previous work of the GFCC but also the Council on Competitiveness' seminal work on clusters of innovation research in the 1990s. In some way, the work represents a return to first principles—understanding that true innovation emerges from the intersection of research excellence, entrepreneurial culture, collaborative ecosystems, and intentional policy frameworks. As we witnessed in Pittsburgh's journey from steel to science, from smoke to innovation, transformation requires bold vision, sustained commitment, and the alignment of private and public sectors with academic institutions and civic organizations.

The exceptional leadership and partnership with our host institutions ensured the success of “Forging the Future.” We extend our deepest gratitude to the University of Pittsburgh Chancellor Joan Gabel, whose vision and commitment made this gathering possible. Chancellor Gabel—as the 19th Chancellor and first woman to lead that great institution; as the Council's Academic Vice Chair and Co-Chair of its National Commission on Innovation and Competitiveness Frontiers—exemplifies the innovative, creative, and entrepreneurial spirit we celebrated throughout our summit.

We also offer thanks to Carnegie Mellon University President Farnam Jahanian for his partnership and leadership within the Council on Competitiveness' Executive Committee. His commitment to advancing innovation ecosystems—both locally and nationally—inspires our work.

To the dedicated teams at both universities who managed the complex logistics of this summit, created welcoming spaces for dialogue, and ensured every detail contributed to a productive experience—thank you. Your professionalism and hospitality reflected the very best of Pittsburgh's collaborative spirit.

To our global colleagues who traveled from across continents to participate in this dialogue—your presence enriched our conversations immeasurably and reinforced the fundamental truth that the challenges we face transcend borders, demanding collaborative solutions.

As we look to the future, the work we undertook in Pittsburgh continues. The Council's "Competitiveness Conversations Across America" will continue in 2026 – the Council's 40th anniversary year – exploring best and next place-making practices in Baltimore, College Park, Omaha, and San Diego. And the GFCC will continue to serve as a platform for global leaders to exchange strategies, share insights, and learn from one another as we collectively work to make our countries and communities more competitive, inclusive, and prosperous.

The intersection of health, AI, and technology that we explored in Pittsburgh represents just one dimension of the broader transformation underway. From cutting-edge life sciences research to AI-powered healthcare innovations developed through strategic industry partnerships, we are witnessing the emergence and convergence of new paradigms that will redefine how we detect disease, deliver care, and move from treatment to prevention. Thank you for your commitment to forging the future. Together, we are not merely imagining what is possible—we are building it.



Deborah L. Wince-Smith

Founder & President, Global Federation of Competitiveness Councils; President & CEO, Council on Competitiveness

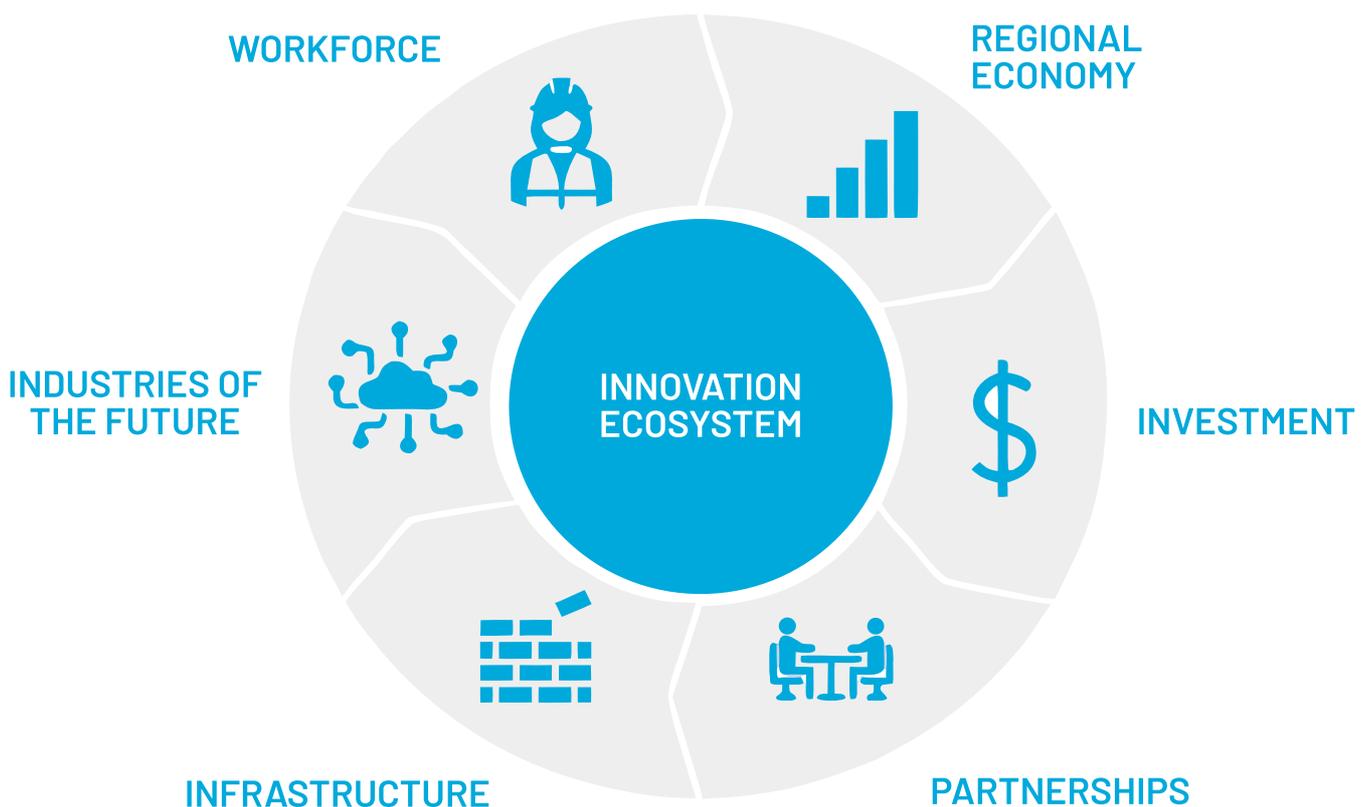


Charles O. Holliday Jr.

Chairman, Global Federation of Competitiveness Councils

Pittsburgh Innovation Ecosystem Snapshot – from the Council on Competitiveness

To create a “common ground” in understanding local, state, regional, and national innovation-based economic performance, the Council on Competitiveness has developed a series of “Ecosystem Snapshots” for each edition of its “Competitiveness Conversations Across America” – short, insightful, regional economic analyses grounded by a consistent framework: a look at (1) the Regional Economy; (2) Industries of the Future; (3) Investment; (4) Partnerships; (5) Workforce; and (6) Infrastructure.



Pittsburgh's innovation ecosystem has distinctive strengths and areas for growth.

Strengths

INNOVATION & TECH	Pittsburgh's \$50B life sciences sector thrives on its healthcare, tech, and robotics strength.
RESEARCH EXCELLENCE	The University of Pittsburgh (Pitt) ranks 12 th nationally in federal R&D spending, while Carnegie Mellon University (CMU) boasts the nation's top AI program.
STRONG PARTNERSHIPS	Pittsburgh's emerging health and AI hub is attracting influential corporate partners, including Amazon, Google, and NVIDIA.
FUTURE OF AI INFRASTRUCTURE	Pennsylvania received over \$90B in funding commitments for new data centers, energy generation, and transmission upgrades in 2025.

Areas for Growth

GDP	Pittsburgh's GDP level has grown 6.6 points slower than the rest of the nation since 2020.
WORKFORCE	Pittsburgh's workforce has shrunk by 4% since 2019, or over 40,000 workers, while the nation's workforce continues to grow.
SKILLS	In 2023 alone, Southwest Pennsylvania had over 15,000 more job openings for skilled positions than the annual supply of sufficiently credentialed workers.
POWER DEMAND AND SUPPLY	Power demand is expected to grow almost 50% by 2045, largely driven by power-intensive data center growth.

Pittsburgh: Regional Economy

Pennsylvania's strong economy is driven by healthcare, tech, and manufacturing.

Bureau of Economic Analysis; PA Gets It Done; Bureau of Labor Statistics; UPMC

- Pennsylvania's 2024 real GDP totaled \$819B, 6th highest in the nation, on par with countries like Switzerland or the Netherlands.
- In the last ten years, professional, scientific, and technical services have been the largest contributor to state GDP growth—accounting for 15% of GDP growth—with health care and social assistance following closely behind at 14%.
- Pittsburgh anchors the state's manufacturing and life sciences sectors, which support roughly 20% of state GDP (\$162B in 2023).
- Above-average employment in healthcare practitioners and technical healthcare support roles anchors the state's labor market. The University of Pittsburgh Medical Center (UPMC) is the largest private employer in the state with approximately 100,000 employees.

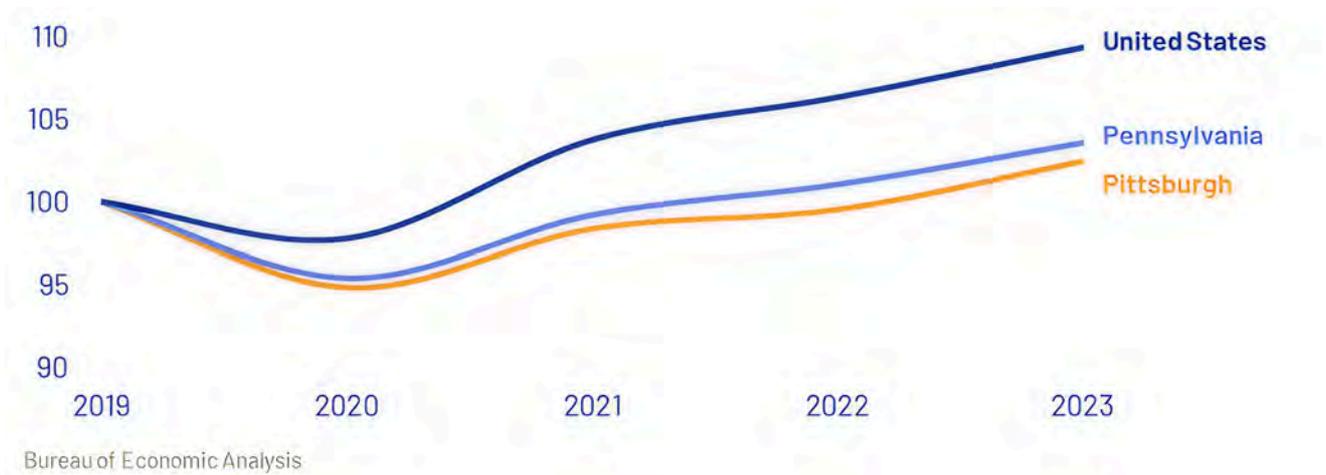
Pittsburgh has struggled to recover from pandemic-related disruptions.

Bureau of Economic Analysis; Cleveland Federal Reserve

- Although Pennsylvania's economy is strong, growth is stalling relative to the rest of the country. Since 2019, GDP in Pittsburgh and Pennsylvania has grown by 2.4% and 3.5%, respectively, 6-7 percentage points below the national average.
- While employment is up 3.6% nationally compared to pre-pandemic levels, Pittsburgh has seen a decline. Total employment fell 2.1% from pre-pandemic levels through 2024, making Pittsburgh the second-lowest performing city in the United States.

Pittsburgh and Pennsylvania Lag Nation in Post-Pandemic Recovery

GDP levels 2019-2023, Indexed to 2019



Pittsburgh: Industries of the Future

Pittsburgh's healthcare and tech sectors are regional engines of growth.

PA Gets It Done; Pittsburgh Region; CompTIA; NSF

- The life sciences industry in Pittsburgh is currently valued at nearly \$50B. In the decade from 2012 to 2022, the industry had more than \$1.1B in R&D expenditures and \$4.7B in capital investments.
- Pittsburgh's technology sector has an estimated direct economic impact of \$11.9B. Across the University of Pittsburgh (Pitt) and Carnegie Mellon University (CMU) in 2024, computer and information science accounted for over \$233M in combined R&D expenditures.
- Known as the "Robotics Capital of the World", Pittsburgh's leading role in robotics has translated to a well-developed advanced manufacturing sector, with roughly \$8.5B in capital investment from 2012 to 2022.

Public funding is bolstering developments in life sciences and technology.

NSF; PA.gov; PA Dept. of Community Development; Economic Development Administration

- The Pennsylvania Department of Health spent over \$55M in 2023, earning it a spot in the top 15 highest spending state agencies nationally. Grants from the PA DOH fund research at institutions like the University of Pittsburgh and help build healthcare development pipelines.
- The Manufacturing PA Innovation Program awarded \$3M in state funds in 2023 to university researchers partnering with PA manufacturers to tackle company-specific R&D challenges, boost innovation, and retain in-state talent.
- The Economic Development Administration awarded LifeX, a regional life science accelerator and incubator, \$2M in funding to scale its commercialization program and develop the life science workforce.

Leaders Bridging Research, Entrepreneurship, and Industry in Pittsburgh

BioForge; AI Avenue; Innovation Works



BioForge

Pitt's \$250M biomanufacturing facility is built to accelerate discovery and production of precision medicines.



AI Avenue

The mile-long corridor with over 20 startups that thrive alongside anchors Google and Duolingo and CMU's semi-autonomous Cloud Lab.



Innovation Works

A regional incubator supporting 780+ startups around Pittsburgh, providing accelerator programs across AI, life science, robotics, and more.

Pittsburgh: Investment

Pennsylvania's innovation ecosystem is sustained by one of the strongest higher education R&D investment systems in the country.

NSF; University of Pittsburgh; US News; Pittsburgh's Public Source

- In 2022, higher education institutions in Pennsylvania performed \$5.5B in R&D, the 4th highest higher education R&D performance relative to GDP in the United States.
- Pitt ranks 6th in National Institutes of Health funding, 16th in research performance and 12th in federal R&D expenditures among all university recipients.
- CMU is the top-ranked university in the nation for AI programs. Since 2008, CMU has received over \$2.8B in funding from the Department of Defense—the third-highest total among private universities in the nation.
- In 2024, Pitt and CMU were granted 174 utility patents, ranking 20th and 32nd nationally among universities for total patents granted.

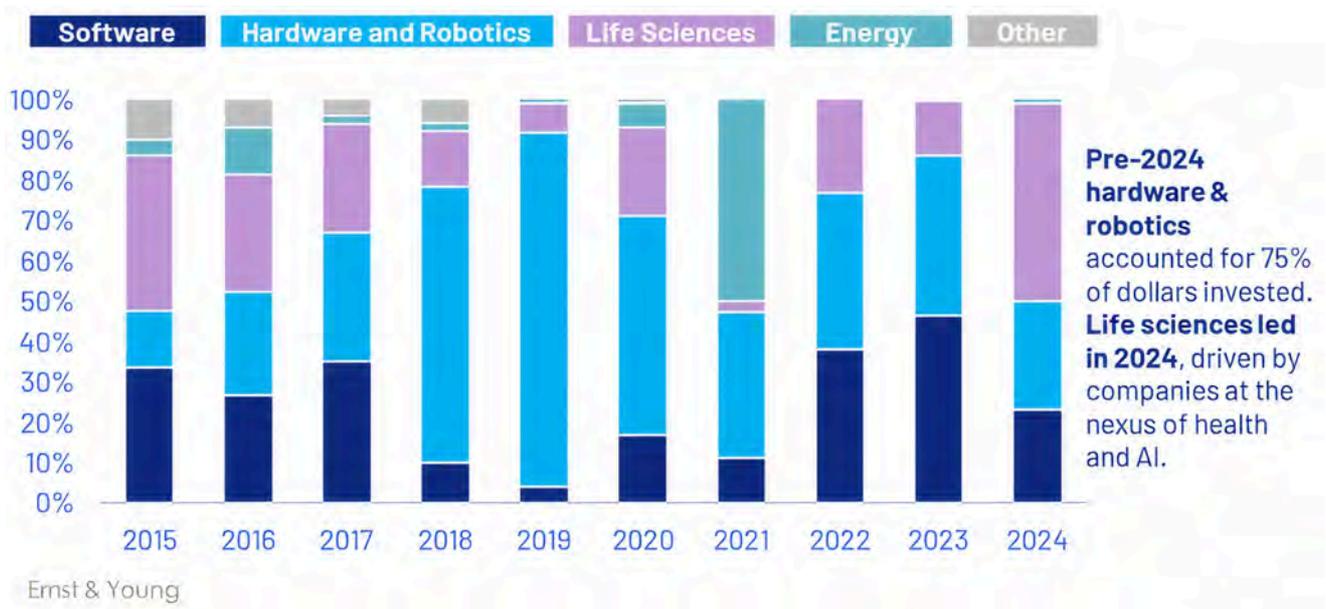
Pittsburgh's life science leadership is pulling in venture capital.

CEWIT; Pitchbook; EY

- Pennsylvania ranked 13th in the nation for venture capital disbursement in 2024, totaling \$2.2B. Pittsburgh accounted for nearly half that amount (\$1B).
- In 2024, life sciences accounted for almost half (49.3%) of all tech-sector investments in Pittsburgh, underscoring the region's emerging health-tech scene.

Venture Capital Investment in Pittsburgh by Technology Sector

2024, percent by sector



Pittsburgh: Partnerships

Joint Pitt and CMU research initiatives integrate expertise and resources.

University of Pittsburgh; University of Pittsburgh Medical Center; PSC; CAIMI

- In 2023, Pitt Med and CMU secured 48 joint research awards totaling \$15.8M.
- The Pittsburgh Supercomputing Center (PSC) has received more than \$14.9M in NSF grants to build out its flagship supercomputer, Bridges-2—increasing access to high-performance computing systems for university, government, and industry researchers.
- The Pittsburgh Center for AI Innovation in Medical Imaging (CAIMI) brings together computational and clinical expertise to advance AI models for medical imaging.
- The Resilient Energy Technology and Infrastructure (RETI) Consortium — an NSF Regional Innovation Engine — unites Pitt, CMU, and West Virginia University to develop innovative energy efficiency technologies to strengthen industrial grid resilience and meet the growing energy demands of AI.

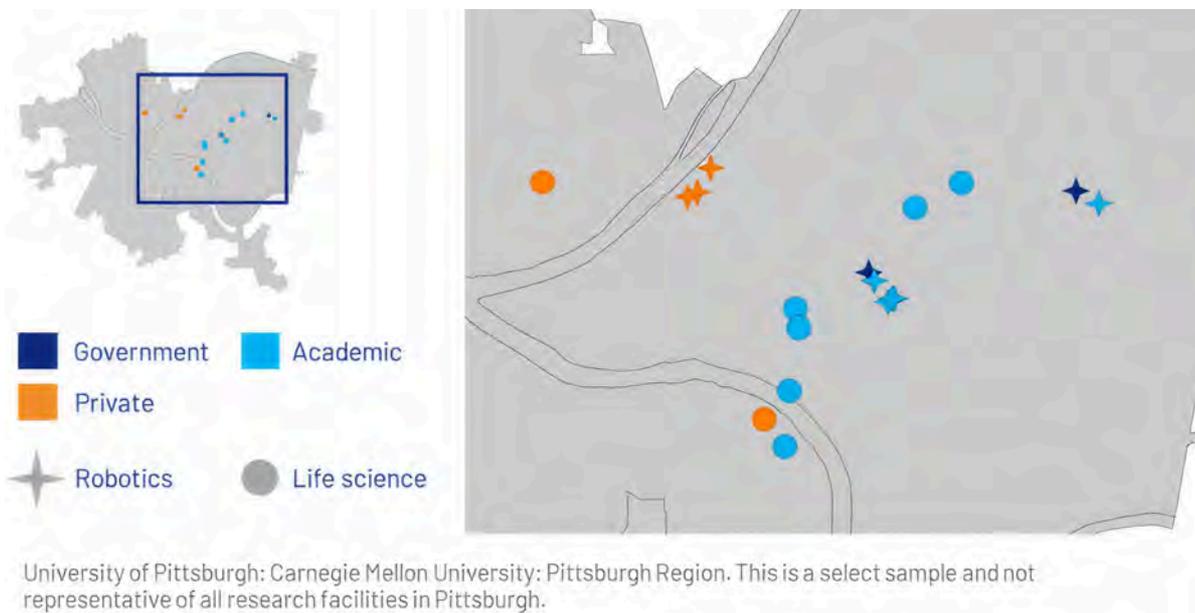
Private sector AI leaders are partnering with Pittsburgh’s research institutions to drive innovation and real-world impact.

Nvidia; Leidos

- Nvidia launched its AI Tech Community Initiative in 2024, building joint research centers with access to Nvidia’s full stack AI platform at Pitt and CMU to strengthen AI capabilities in health sciences and robotics, respectively.
- Leidos is investing \$10M over five years in collaboration with Pitt to develop AI-powered tools for disease detection and expand the university’s Computational Pathology and AI Center of Excellence.

Co-located Research Facilities in Pittsburgh Driving Collaboration

2025



Pittsburgh: Workforce

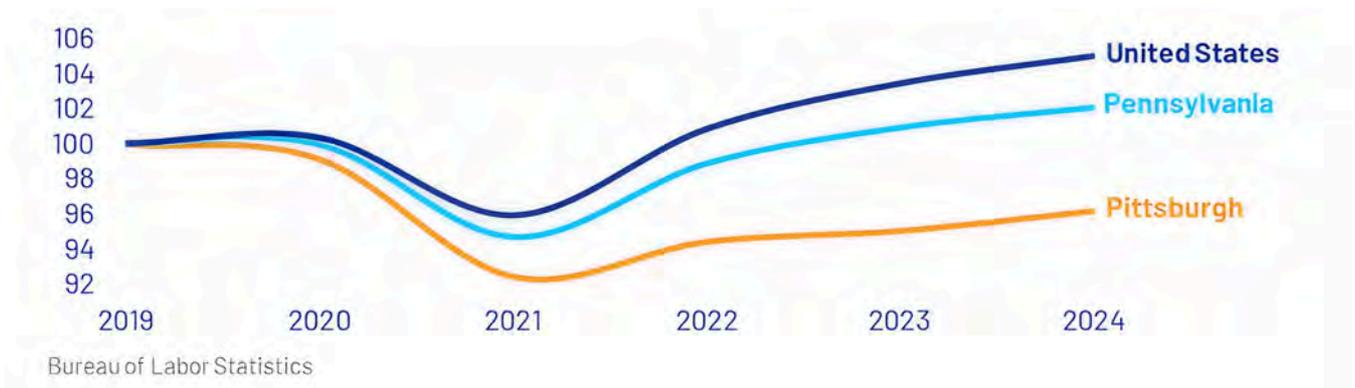
Workforce trends could threaten future growth potential.

Bureau of Labor Statistics; Allegheny Institute; Allegheny Conference; Cleveland Federal Reserve

- Pittsburgh’s labor market is tight, with a regional unemployment rate of 3.6% in 2024— 0.4 percentage points below the national rate.
- At the same time, the region’s labor force is shrinking. It is 40,000 workers smaller compared to pre-pandemic levels, even as the prime-age labor force participation rate outstrips the national rate by over 2 percentage points.
- Outmigration drove a 1.4% population decline in Pittsburgh from 2020 to 2023, the highest drop among comparable regional benchmark, while the national population grew 1%.
- Pittsburgh’s aging population is also impacting the workforce. Pittsburgh has the 3rd largest share of residents aged 55-64 years (15%) among the 100 largest cities in the nation and saw the steepest drop in employment (-5%) from 2019 to 2022.

Total Workforce

2019-2024, indexed to 2019



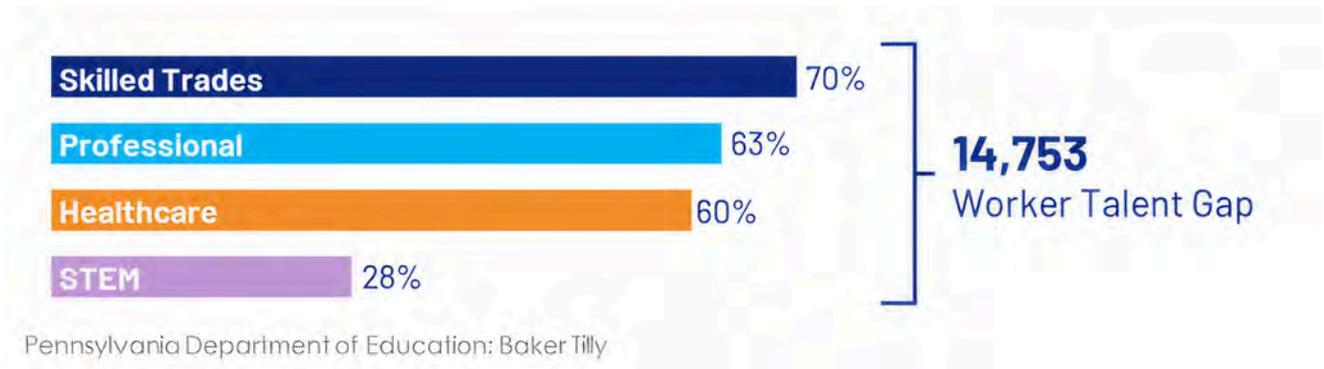
Prime-Age Labor Force Participation Rate

2024, ages 25-54



Share of Unmet Workforce Demand Across Skilled Occupations

Job openings and annual postsecondary credential supply for select occupations in Southwest Pennsylvania, 2023



The workforce skills gap is widening in Pittsburgh.

Allegheny Conference; Next Pittsburgh

- Corporate facility capital expenditures in Pittsburgh reached \$2.4B in 2023, yet the construction industry lost 7,600 workers the same year.
- By 2029, the region could face a 10,000-worker gap in the skilled professions critical to infrastructure buildout. The region has lost 23% of its skilled trades workforce ages 25-44 since 2012.
- The region lacks sufficient job opportunities for educated professionals. Nearly half of Pittsburgh's graduates leave the region, often due to limited job availability. In a national ranking, Pittsburgh was the 10th-worst metro area for graduate retention.
- Demand for specialized skills remains high across the energy, health & life sciences, and tech & robotics sectors. In 2023, Pittsburgh trailed peer cities in closing the skill gap, with 52% of job demand unmet across nearly all southwestern PA counties.

Regional leaders are building talent pipelines to align workforce skills with emerging industries.

UPMC; Advanced Robotics for Manufacturing Institute; Next Pittsburgh

- UPMC's Pathways to Work program connects healthcare professionals to training and employment opportunities through recruitment support and customized development plans.
- Advanced Robotics for Manufacturing Institute received part of a \$62.7M grant to expand the robotics workforce by establishing a regional hub and scaling services for small and mid-sized manufacturers.
- Major workforce developments in AI include Google's "AI Works for Pennsylvania" initiative, expanded apprenticeships through a partnership between First Energy and the International Brotherhood of Electrical Workers, and a collaboration between CMU and Anthropic to support K-12 cybersecurity education.

Pittsburgh: Infrastructure

Pennsylvania is emerging as a national leader in AI infrastructure.

Baxtel; Amazon

- Pennsylvania's concentration of research expertise, skilled workers, abundant energy resources, and available land make it an attractive hub for data center growth.
- Currently 26th nationally, Pittsburgh's data center market is set to expand quickly, driven by major projects like Amazon's June 2025 commitment to build a data center campus as part of its \$20B statewide investment.

Meeting rapidly growing power demands from data centers will require significant upgrades to the region's grid infrastructure.

PJM Interconnection; Reuters; Synapse Energy Economics

- PJM, the region's grid operator, hit record high auction prices in FY25 and FY26, almost 8X FY24 prices. Rising prices reflect inadequate capacity to meet future data center demand, which accounts for 90% of new power demand through 2030.
- Interconnection backlogs led 45% of energy projects added from 2020 to 2025 to withdraw and applications for new power have been paused as the queue resolves.

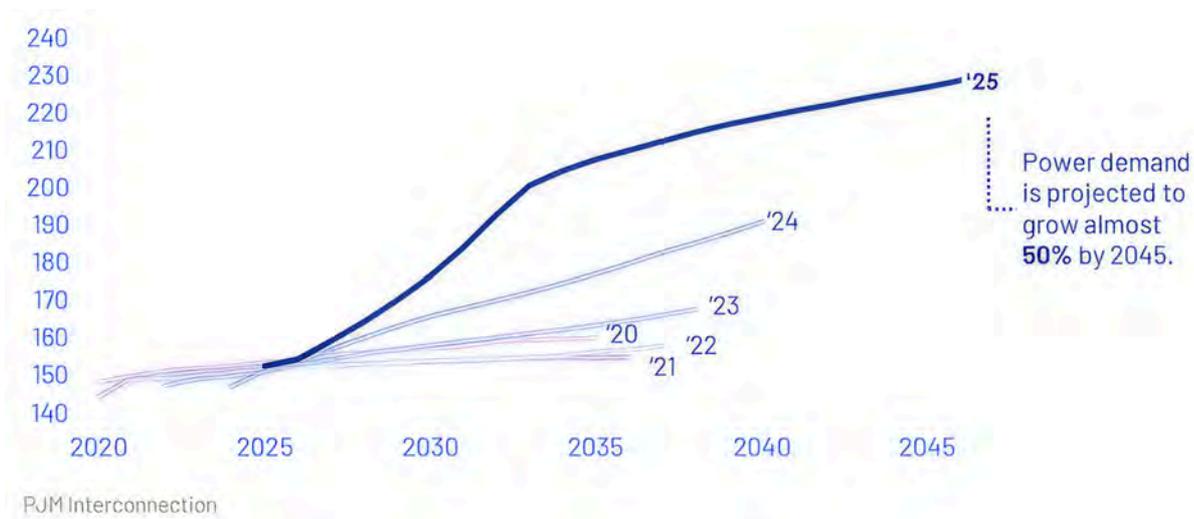
Unprecedented investment in AI infrastructure will help boost growth.

Allegheny Conference

- At the July 2025 Pennsylvania AI and Energy Innovation Summit, the state secured over \$90B in commitments for AI and energy infrastructure, including \$21B for southwestern PA, with backing from Google, Blackstone, First Energy, Westinghouse, and others.

PJM Interconnection Summer Peak Load Forecast

2020-2025 projections, GW



GFCC 2025 Call to Action



The launch of the 2025 Call to Action: Advancing Competitiveness in a Turbulent and Fast-Changing World was a highpoint for the GFCC's 2025 Annual Meeting and Global Innovation Summit. In a context marked by rapid change, uncertainty, and real-time shocks, the very process of developing this Call to Action stands out as a significant achievement. Close collaboration among members of the GFCC, spanning countries and regions, sectors, and institutional realities created the Call to Action. Despite profound differences in context and perspective, GFCC members coalesced around a shared ambition: to articulate a forward-looking, pragmatic framework that responds to today's challenges while seizing emerging opportunities.

This flagship thought piece provides strategic guidance for cities, regions, and nations seeking to strengthen their economic standing and improve living standards. Discussions throughout the Annual Meeting were deeply anchored in the themes and recommendations of the Call to Action. And the Summit's conversations directly led to the launch of a range of new GFCC task forces. In this sense, the Call to Action is more than a statement of intent. More important, it is a catalyst for collective action. Beyond inviting stakeholders to read and disseminate this work, the GFCC and its community are already moving to implement its ideas—and we invite partners across the globe to join us in turning this shared vision into concrete outcomes.

Advancing Competitiveness in a Turbulent and Fast-Changing World

We live in a time of profound transformation. Technology is evolving rapidly, but just as critically, the global system is in flux. Uncertainty now defines the geopolitical, economic, and technological landscape. Climate change is already disrupting infrastructure, food systems, finance and supply chains. At the same time, societies are increasingly vulnerable to digital threats – from cyberattacks to the erosion of public discourse. These risks are growing more complex and interconnected, demanding faster and more strategic responses from nations, institutions, organizations and communities.

In this shifting environment, a focus on competitiveness is no longer optional – it is a necessity. Emphasizing competitiveness, economies, local or national, can further expand their ability to create value, better manage costs across the economy and prepare to secure access to markets, resources, talent and capital.

Competitiveness is closely associated with the long-term feasibility of socioeconomic systems; that is, to their sustainability at the intersection of the economic, social and environmental dimensions. That means ensuring economic sustainability – delivering performance and results; social sustainability – maintaining cohesion and preventing disruption; and environmental sustainability – preserving the natural systems that support life and prosperity. These three dimensions are inseparable. Together, they define whether societies will endure – or unravel.

To successfully compete and thrive, countries and regions must align priorities and worldviews and bring together stakeholders across sectors to design and execute future-building strategies. In a world flooded with fragmented information and prone to digital disruption, building consensus and forming effective public-private coalitions has become harder – and more vital. Nations need to reduce friction in the economy but also in social processes, accelerate strategic decision-making, and foster environments where bold action is possible. This is not only a governance imperative – it is a competitive decision.

To navigate this complexity, the GFCC proposes a strategic framework for action. The following ten recommendations provide a roadmap for nations and regions to reinforce their economic foundations, harness emerging technologies, and build resilient systems capable of thriving in a volatile global landscape.

Invest in innovation to create new value and move up the economic ladder

01

To raise income levels and move from middle-income to high-income status, countries must build high-value-added industries powered by innovation. That requires deliberate investment in innovation, science, technology, and internationalization. Only economies that innovate can achieve sustained productivity gains at scale and unlock new sources of growth. Without innovation, growth stalls, and development plateaus.

Reinforce the foundations for innovation and economic efficiency

02

Innovation thrives where economies run smoothly. To be competitive, countries must create business environments that lower friction, support entrepreneurship, and enable collaboration across sectors. That means making it easy to start new ventures, test ideas, engage with universities, and mobilize partnerships. At the same time, core inputs – infrastructure, talent, and capital – must be readily available. Growth, cost-efficiency, and innovation must go hand in hand in a system built for agility and impact.

Think and act globally to raise the bar for innovation and competitiveness

03

Innovation is relative—it depends on the market being considered—and true competitiveness requires aiming beyond local impact and striving for global relevance and impact. Companies and economies that target global markets need to build stronger capabilities, better products and more robust infrastructures and business structures. Competing internationally forces economies to level up, and that exposure – through trade, global partnerships and outward investment – strengthens both firms, regional and national innovation systems. Only by aiming to operate and compete at a global scale can regions and countries unlock the full economic value of innovation and reap productivity and income gains.

Rebuild manufacturing capacity to boost resilience and drive innovation

04

The COVID-19 crisis exposed the risks of limited manufacturing capacity, even for basic goods. Today, shifts in global trade and growing geopolitical uncertainty are prompting countries to rethink what they must be able to produce. Manufacturing

is now a national security issue – and a critical engine for innovation. Economies that lead in advanced manufacturing also lead in technological development. Building domestic production capacity strengthens resilience, but success hinges on carefully selecting the sectors and technologies that matter most.

Unlock human potential by building talent at scale

05

Talent is the cornerstone of national competitiveness – yet billions remain in the liability’s column of the global balance sheet, lacking the skills to contribute and thrive. To create value in the innovation economy, countries must provide universal access to high-quality education and equip people for a world shaped by AI. That means addressing deep deficits in both access and content, while transforming education systems to develop advanced capabilities and innovation leaders. Technology, especially AI, must be leveraged not only as a learning tool, but as core knowledge for every future job.

Build future-enabling infrastructures – physical, digital, and institutional

06

Innovation depends on entrepreneurs who challenge the status quo – and they need the right infrastructures to do so. That means not only physical assets like roads, energy, and telecommunications, but also advanced digital infrastructures: data, computation, and AI. Just as crucial are legal and institutional frameworks that allow for experimentation, reduce regulatory friction, and evolve through practice. Future-ready nations will invest in the full spectrum of infrastructures that enable bold ideas, new ventures, and transformative industries to emerge and scale.

Overhaul health systems to unlock value and enable prosperity

07

Health is foundational to economic productivity – yet most systems are costly, inefficient, and underutilize available technologies. As aging populations increase demand, countries must re-engineer health systems to boost efficiency, reduce societal costs, and improve quality of life. Technology, especially AI, offers a powerful tool to reshape care delivery, streamline operations, and create new markets. By transforming health systems, nations can not only support thriving populations but also build new industries and engines of growth around health innovation.

Be bold: Launch transformational projects that mobilize entire systems

08

Throughout history, transformational projects – driven by vision and scale – have reshaped economies and societies. Whether led by governments or catalyzed by the private sector, these initiatives require deep public-private coordination, strong leadership, and robust frameworks for collaboration. Bold, future-focused projects can mobilize resources, unlock new infrastructure, solve systemic problems, and create the opportunities for entrepreneurship and innovation to thrive. To build new industries and shift trajectories, countries must dare to think big.

Co-invest in future industries that solve global challenges

09

Advanced economies are powered by knowledge-intensive, innovation-driven sectors. In a time of rapid technological change and mounting global challenges – from food security to climate change – countries must seize emerging opportunities to create new industry verticals. Clean energy, sustainability solutions, and resource innovation are at the frontier of both impact and growth. But realizing these opportunities requires deliberate public-private action: environments that support entrepreneurs, attract capital, and enable collaboration across sectors. To build the industries of the future, countries must forge cross-sector partnerships with purpose.

Focus on impact on the ground and build from existing strengths

10

Change happens through action – new infrastructure, new companies, new education and manufacturing initiatives deployed at the local level. To create real value, countries must engage with realities on the ground: cities, regions, and communities. That starts with understanding what assets exist – in research, talent, production, and education – and identifying what’s missing to unlock future growth in each geography. Coalitions across stakeholders – educators, researchers, entrepreneurs, corporations, and public leaders – are essential. These alliances must be locally rooted and nationally supported, bottom-up but enabled by enabling top-down policy and business frameworks.

Event Agenda

Forging the Future: The Intersection of Health, AI & Tech

Sunday, October 19 | GFCC Annual Meeting (Morning and Afternoon)

- 12:30 PM Welcome Remarks
- 12:45 PM Participants Individual Introductions
- 01:15 PM Annual Meeting Introduction
- 01:20 PM GFCC State of Affairs – Presentation by the GFCC Team
- 01:45 PM Advancing Competitiveness in a Turbulent and Fast-Changing World
- 01:50 PM Call to Action: Advancing Competitiveness in a Turbulent and Fast-Changing World
- 02:05 PM Subgroup discussion
- 02:45 PM Moderated conversation
- 03:20 PM Coffee Break
- 03:40 PM AI at the Core of Competitiveness
- 04:20 PM Closing remarks
- 04:30 PM GFCC Group Photo

Welcome Dinner (Evening)

- 05:30 PM Cocktail Reception and Nationality Room Open House
- 05:15 PM Dinner
- 07:15 PM Opening remarks
- 07:30 PM Keynote: Senator Dave McCormick, U.S. Senator for Pennsylvania
- 07:55 PM Fireside Chat: AI-Driven Possibilities in Healthcare

Monday, October 20 | Sessions, Site Visits and Formal Dinner

- 08:20 AM Welcome Remarks and Introduction
- 08:30 AM Opening Discussion: The Health, AI, and Productivity Imperative
- 09:15 AM Innovation Spotlight: BioForge

- 10:00 AM Panel 2: Transforming Realities: Pittsburgh, Birmingham, and Belfast Shape a Sustainable & Prosperous Future
- 10:45 AM Keynote: Mehmood Khan
- 11:00 AM Panel 3: AI Innovations Increasing the Health Span of Aging Populations
- 12:00 PM GFCC: 15 Years, A New Brand and A Call to Action
- 12:10 PM Lunch and Panel 4: AI-Powered Education for the Next Generation of Innovators and Leaders Forging
- 02:00 PM Site Visits and Demonstrations
- 06:15 PM Reception and Poster Session
- 07:00 PM Dinner
- 07:45 PM Global Competitiveness Awards
- 08:10 PM Partner Spotlight: Accelerating Health Innovation Through Cloud Computing and Collaboration
- 08:30 PM Panel 5: Forging the Future: Local and Regional Alliances to Build and Advance Health Innovation Hubs

Tuesday, October 21 | Sessions at Alumni Hall

- 08:45 AM Welcome Remarks
- 09:00 AM Panel 6: At the Leading Edge of Health, AI, and Technology
- 09:45 AM Panel 7: From Diagnostics to Treatments: Leveraging Tech Opportunities to Advance Health Care
- 10:45 AM Panel 8: Health, AI, and Tech: Investing in a Future
- 11:30 AM Keynote: Governor Josh Shapiro
- 12:00 PM Lunch and Panel 9: Unlocking the Promises of Health Technologies for Economic Growth
- 01:30 PM Panel 10: Advanced Manufacturing in a Dynamic Economy
- 02:15 PM Innovation Spotlight: Pittsburgh Partnerships Driving Global Innovation – Vizzhy Inc./GAINMED
- 02:45 PM Innovation Spotlight: Aging, Longevity and Vitality Reimagined
- 03:15 PM Panel 11: From Ideas to Impact: Innovation Ecosystems Driving Transformative Place-Making
- 04:00 PM Event Closing and 2026 Global Innovation Summit Launch

Key Takeaways

"Forging the Future" convened global leaders in Pittsburgh to explore how artificial intelligence, advanced manufacturing, and collaborative innovation are transforming healthcare and regional economies. The summit revealed both the transformative potential of AI-driven healthcare and the practical challenges that need to be overcome to realize this vision at scale. Beyond that, Forging the Future served as a global platform to showcase experiences and competitiveness strategy best practices from dozens of nations.





Infrastructure: The Invisible Barrier

While generative AI applications garner headlines, the "unglamorous" work of building data infrastructure is the urgent priority.

The Data Wall: Healthcare faces a "data wall" due to fragmentation and privacy concerns. Success depends on creating clean, interoperable datasets and utilizing "clean room" technologies that allow collaboration without compromising privacy.

Investment Shift: Capital is increasingly flowing toward foundational data architecture and biology-focused AI (proteomics/genomics) rather than simple application layers.



Education for an AI-Native World

The educational mandate has expanded beyond computer science departments. Universities are pivoting to ensure AI fluency across all disciplines, from the humanities to medicine.

Critical Thinking: As AI provides answers instantly, education should shift from grading final answers to evaluating the "questioning mindset" and the process of inquiry.

Cross-Disciplinary AI Literacy: The next generation of innovators need to be bilingual in both technology and ethics/social sciences to deploy AI effectively and responsibly.



The "Health Span" Imperative

With the global population facing a "demographic cliff," the conversation shifted from simply extending lifespans to extending "healthspans"—the number of years lived in good health.

Economic Opportunity: Aging populations should be viewed as assets rather than liabilities. Extending healthy life by even one year could generate trillions in global economic value.

New Care Models: Innovations from Singapore, Japan, and the United States demonstrate keeping seniors independent and in their communities requires integrating technology, housing, and social engagement.



The "Pittsburgh Model" of Place-making Innovation

Pittsburgh served as the primary case study for post-industrial transformation, offering a blueprint for other regions with a similar history or set of assets. The region's evolution from "steel" to "meds and eds" stems from:

Intentional Collaboration: A unique culture where universities, healthcare systems (UPMC, Highmark), foundations, and government align on a shared civic purpose despite diverse perspectives.

Anchor Institutions: Universities are acting as economic engines, not just educational bodies, by driving initiatives like BioForge to manufacturing life-saving therapies locally.



Inclusivity as a Design Principle

A recurring warning was innovation should not create new divides, nor exacerbate existing divides. Whether addressing the rural-urban healthcare gap or the life expectancy disparities within cities, inclusivity must be an intentional "design feature" of innovation ecosystems.

Democratization: AI has the potential to democratize access to high-quality care (making "super-specialist" diagnostics available in rural areas) and advanced manufacturing tools for small and medium-sized enterprises.

Addressing factors outside hospitals: Innovation needs to address the outside determinants of health outcomes—food access, education, housing—rather than focusing solely on clinical interventions.



The Human-AI Frontier: Automation- Augmentation Spectrum

While the potential for AI is undisputed, the summit highlighted a vigorous debate regarding the ultimate role of AI and the human expert. Rather than a settled consensus, experts identified a spectrum of possibilities in the Human-AI integration in the health sector that depends on the complexity and risk of the task.

Targeted Automation (Replacement): There was a clear acknowledgment that for high-volume, repetitive, or narrow diagnostic tasks—such as initial radiology screenings, administrative billing, or standard lab analysis—AI is moving toward full automation. In these domains, AI can outperform human consistency and speed, effectively replacing the need for human intervention in the primary task.

Strategic Augmentation (Partnership): Conversely, in "broad" or high-stakes scenarios like complex neurosurgery or multi-morbidity patient care, AI is viewed as an essential co-pilot. Here, the "art of medicine"—nuanced judgment, empathy, and ethical reasoning—remains a human-led process, where AI provides the data-driven insights to sharpen that judgment.

The "Hybrid" Reality: The conversation shifted from a binary (replace vs. assist) to a more nuanced reality: the most successful organizations will be those that effectively triage their operations—automating where efficiency is paramount and augmenting where human complexity is irreplaceable.

The 2025 GFCC Annual Meeting

📅 Sunday, October 19 | Morning and Afternoon

The GFCC 2025 Annual Meeting marked a significant milestone as the organization celebrated its 15th anniversary. Held at the Assembly, a transformed Ford Motor Company facility now serving as a biomedical research hub powered by the University of Pittsburgh, the meeting brought together representatives from over 17 nations to review the achievements of the GFCC over the year, share insights and critical information about economies across the world and strategize what will come next in the organization.



GFCC members and fellows at the 2025 Annual Meeting in Pittsburgh.

The State of GFCC: A Growing Global Network

- **The Hon. Deborah L. Wince-Smith**, Founder & President, GFCC; President and CEO, Council on Competitiveness, USA
- **Dr. Roberto Alvarez**, Executive Director, GFCC, Brazil
- **Prof. Aleks Subic**, Vice-Chancellor and CEO, Aston University, UK

As GFCC marks 15 years since its inception, the organization continues to evolve in membership composition and scope. The network now represents 19 countries through direct membership, expanding to 33 countries when including fellows. This geographic diversity proves essential for developing perspectives and approaches that address global competitiveness challenges.

Throughout 2025, the GFCC's thought leadership focused on the power of place-making and the role of universities as vital catalysts for socioeconomic change. We moved beyond theory by distilling practical insights from the Birmingham Innovation Precinct, a premier example of a university-led ecosystem. This work culminated in a study trip to Lisbon. In partnership with Universidade Católica Portuguesa, we convened global leaders to decode the multi-sector collaboration—between government, academia, and private sector—that has elevated Lisbon into one of the world's most vibrant innovation hubs.

This commitment to growth extended into direct institutional building. By architecting the foundations for new national competitiveness councils in Albania and Bulgaria, we effectively expanded the frontier of our global community. Simultaneously, we deepened our footprint in the Indo-Pacific; GFCC leadership took part in the Council on Competitiveness' delegation to Australia to solidify a new stage in the nations' bilateral Strategic Innovation Alliance, aligning cross-city and cross-national leadership on critical frontiers such as mineral strategy and emerging technologies.

19

COUNTRIES

through direct
Membership

33

COUNTRIES

including
Fellows





Reimagining Competitiveness in Turbulent Times

Moderator :

Charles “Chad” O. Holliday Jr.

Chairman, GFCC; Chair Emeritus, Council on Competitiveness, USA

Lead discussants:

- **Eldar Abdrazakov**, CEO, Centras Group, Chairman, Kazakhstan Competitiveness Council, Kazakhstan
- **Sandra Duxbury**, Entrepreneur and Consultant in Strategic Policy and Advanced Education, Canada
- **Chad Evans**, Executive Vice President and COO, Secretary and Treasurer to the Board, Council on Competitiveness; Treasurer, GFCC, USA
- **Dr. Hippolyte Fofack**, Distinguished Fellow, GFCC, USA
- **Prof. Sir Ian Greer**, Vice-Chancellor and President, Queen’s University of Belfast, Northern Ireland

During interactive breakout, five working groups examined the 2025 Call to Action. Despite different starting points, the groups remarkably converged over **three main recommendations**

Unlock human potential by building talent at scale:

Working groups unanimously prioritized unlocking human potential and building talent at scale as the most important competitiveness strategy in a moment when AI growth is reshaping economies and societies. The emphasis on "talent at scale" reflects recognition that technological capabilities mean little without people equipped to leverage them effectively. Investment in STEM education, reformed curricula that move beyond policy to actual classroom implementation, and lifetime learning programs emerged as critical priorities. When AI experiences tremendous growth, GFCC leaders recognized the need to double down on humanity. To turn this conviction into action, we established the **Task Force on a Human-Centered AI approach** – description appears later in this section.

Build future-enabling infrastructures:

Both physical and digital infrastructure received attention as essential innovation and competitiveness enablers. Members of the various groups emphasized human capital and economic activity depend on adequate infrastructure to function and thrive. In turn, infrastructure investments require skilled human capabilities to generate value and deliver returns. The bi-directional relationship between these elements underscores the integrated nature of competitiveness strategies.

Focus impact on-the-ground and build from existing strengths:

working groups identified an increasing disconnect between policy intentions and real-world outcomes. This gap is evident in education systems, where curriculum changes do not always translate into classroom practice, as well as in broader economic development initiatives. Addressing this implementation challenge requires a stronger focus on "impact on the ground" and an approach that recognizes and builds on existing strengths rather than imposing solutions designed in/for other realities.



Artificial Intelligence: Tool or Transformation?

Moderator:

Athina Chatzipetrou

Distinguished Fellow, GFCC, Greece

Discussants:

- **Shamsa Khamis Al Balushi**, Global Indicators Specialist, National Competitiveness Office (NCO), Oman
- **Prof. Razvan Bologa**, Innovation Coordinator, Bucharest University of Economic Studies – ASE, Romania
- **Dr. Nkem Khumbah**, Head of STI Policy Systems, Governance and Partnerships, The African Academy of Sciences, Kenya
- **Mark Minevich**, Senior Fellow, GFCC, USA
- **Sasha Sears**, Sr. Program Manager, Lockheed Martin Corporation, USA

An extended panel discussion explored how nations and organizations can harness AI for inclusive transformation while managing its disruptive potential. The conversation revealed both the promise and complexity of AI's role in competitiveness.

On the opportunity side, AI represents what panelists called "our generation's moonshot"—a transformative technology requiring bold vision and coordinated action. The United States currently leads in AI development, having produced the majority of foundation models, built record-breaking data center infrastructure, and maintained the world's premier talent marketplace in Silicon Valley. Projections suggest over \$1 trillion in global AI infrastructure investment will occur over the next 24 months.

However, this current leadership concentration raises concerns about global impacts and access.

When discussing AI's potential for developing regions to **"leapfrog"** traditional development paths, participants noted that technological mastery matters more than access. Many countries use technologies developed elsewhere without understanding their foundations or contributing to their evolution. For AI to benefit global development broadly, leadership across government, academia, and industry should look beyond immediate use cases and master the strategic, ethical, and structural consequences of the technology. Only then can they move from being mere consumers of AI to becoming active architects of their future.

Challenges and opportunities:

Workforce Disruption and Transition:

Estimates suggest AI will displace 85 million jobs while creating 97 million new ones—a net gain that obscures the difficulty of transition. The challenge is not job loss per se but managing the accelerating shift as jobs and roles evolve or disappear. This requires aggressive re-skilling programs, lifetime learning initiatives, work redesign, social safety nets, and real-time collaboration between industry, academia, and government to track skills needs.

Educational Reform:

Current educational systems struggle to adapt to AI's pace. Teachers often resist new technologies or lack capacity to teach them effectively. Promising approaches include deploying university students into schools to teach AI literacy and developing discipline-specific AI curricula rather than generic technology courses. Early exposure matters, as children represent the most creative potential innovators.

Infrastructure and Energy Demands:

The computational requirements for training and deploying AI at scale create unprecedented energy demands. Data centers consume massive resources, raising questions about environmental sustainability and access equity. Regions already struggling with basic energy access face compounded disadvantages in the AI era. At the same time, the race to build AI capabilities and capacity has the potential to catalyze innovation in energy—from nuclear fusion to energy harvesting in space, from small nuclear reactors to grid-scale renewable energy storage.

Governance and Ethics:

As AI moves from generative models to agentic systems that can reason, plan, and execute autonomously; and as AI moves even further into physical and autonomous systems like robots, governance frameworks are lagging dangerously. The challenge lies in creating regulations that protect human interests without stifling innovation.

Bias and Representation:

AI systems trained on biased datasets risk ossifying existing stereotypes and inequities. When discussing "human-centered" AI, participants emphasized the need to define which humans and to ensure AI development reflects diverse global demographics, values, and needs rather than only the perspectives of technology centers.

Future Directions

The exchange of perspectives during the breakout sessions, followed by the plenary group discussion, directly led to the creation of two task forces the GFCC will implement in the years ahead, with active participation from its members and fellows:



Human-Centered AI Task Force:

GFCC leaders recognized the urgent need to address the complex challenges of AI governance and human-centered technology development. Drawing on the community's diverse expertise, this task force will develop insights and practical frameworks members can adapt to their specific contexts to augment human potential.



Competitiveness Playbook Task Force:

Acknowledging the GFCC's historic strength in exchanging best practices and competitiveness strategy insights, GFCC leaders stressed the need to accelerate knowledge dissemination, policy templates, and best practices to help those “coming from behind” to leapfrog. This resource will help members and their community at large to address competitiveness challenges while respecting the diverse political, economic, and cultural contexts in which they operate.

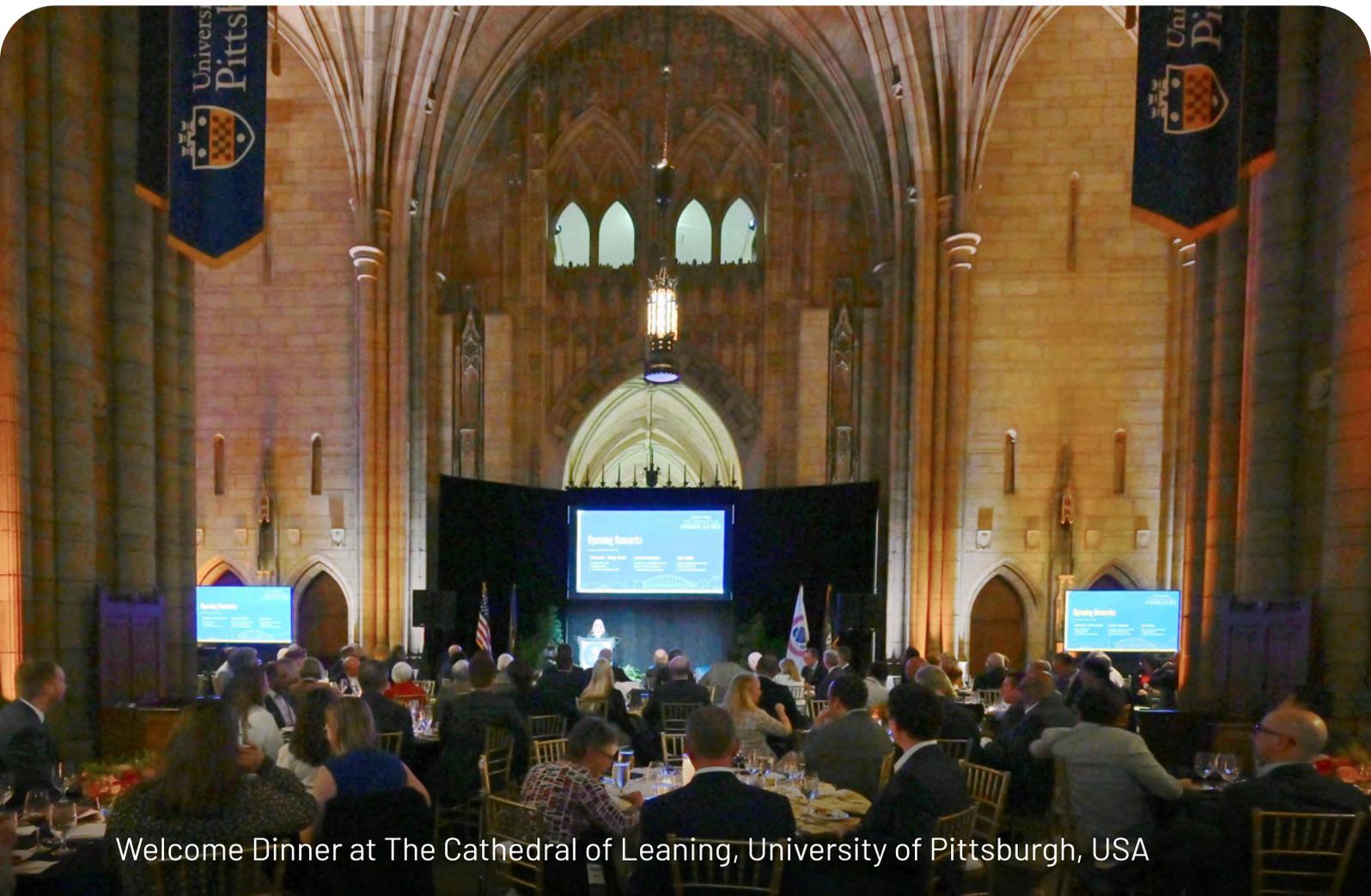
These initiatives reflect GFCC's maturation into an active leadership network and actionable/practical knowledge platform—one that facilitates dialogue; produces and disseminates practical tools; mobilizes expertise; and drives coordinated action on the most pressing competitiveness challenges facing nations and regions worldwide.

Welcome Dinner

📅 Sunday, October 19 | Evening

“**Forging the Future**” officially launched on October 19 with an inspiring welcome dinner in the historic Commons Room of the University of Pittsburgh's Cathedral of Learning. This event marked the first-ever collaboration between the Global Federation of Competitiveness Councils (GFCC) Global Innovation Summit and the U.S. Council on Competitiveness’ series of “**Competitiveness Conversations Across America,**” bringing together world leaders, academics, and industry experts to explore the critical intersection of health, artificial intelligence, and technology.

Attendees had the opportunity to explore the building's 31 nationality rooms lining the first and third floor corridors, which commemorate the cultural heritages of communities who supported the building's construction and serve as working classrooms for students today.



Welcome Dinner at The Cathedral of Learning, University of Pittsburgh, USA

Opening Remarks

- **Deborah L. Wince-Smith**, Founder & President, GFCC; President and CEO, Council on Competitiveness, USA
- **Farnam Jahanian**, President, Carnegie Mellon University, and Executive Committee Member, Council on Competitiveness USA
- **Joan Gabel**, Chancellor, University of Pittsburgh, and Academic Vice-Chair, Council on Competitiveness USA



GFCC Founder & President and Council on Competitiveness President and CEO
Deborah L. Wince-Smith.

Deborah L. Wince-Smith set the tone for the summit by outlining the its ambitious goals: to leverage collective intellect and experience to transform understanding of regional innovation ecosystems, and to elevate policy tools at both regional and national levels. Leaders from Pittsburgh, across the United States, and around the world participated in discussions addressing fundamental questions about expanding and deepening the geography and demography of innovation in America.

The “Competitiveness Conversations Across America”, a Council on Competitiveness initiative, has visited 10 regions around the United States over 18 months – with more Conversations to come in 2026 and 2027. The GFCC engagement in the summit clearly added an interational dimension to the range of panels, keynotes, and dialogues.

The summit's location in the Cathedral of Learning connects to Pittsburgh's broader narrative of reinvention, moving from 19th-century steel innovation to today's knowledge-based economy. Deborah L. Wince-Smith described the city's journey as one moving from "steel to science, and from smoke to innovation." Dr. Farnam Jahanian provided further context on Pittsburgh's distincitve position as a model of economic reinvention, and on the transformative role nnovation ecosystems play in driving economic growth and well-being.

Jahanian outlined the city's evolution from producing one-third of the nation's steel during the manufacturing era to becoming a global center of innovation. A unique alignment of the private and public sectors with academic institutions and civic organizations powered this change, which took two decades to achieve following the collapse of the steel industry in the late 1970s and early 1980s. Artificial intelligence is now positioned as perhaps the most consequential technological development of our time, with its impact being nowhere more profound than in healthcare and the life sciences.

Jahanian highlighted current developments including AI-powered drug discovery, biomarker development, and advances in genomics and RNA-based therapies. These innovations, alongside real-time health monitoring and telehealth diagnosis, are extending care beyond hospitals and shifting the medical field from treatment-based to prevention-based paradigms. Beyond economic measures, the potential impact on individual and collective wellbeing is truly immeasurable, framing the “Forging the Future” summit as a celebration of the power of “place” in driving innovation.

Chancellor Joan Gabel described the Cathedral of Learning as the tallest educational structure in the Western Hemisphere, standing 42 stories and 535 feet high. The building was designed to express “a spirit of achievement with such force of sublimity that the whole world would understand.” Gabel highlighted several major initiatives positioning Pittsburgh at the forefront of the AI-health intersection. The Pitt BioForge project represents the transformation of a former steel mill site into a top-tier innovation destination, supported by a \$100 million gift from the RK Mellon Foundation and focused on precision medicine breakthroughs to cure cancer and other conditions.



University of Pittsburgh Chancellor Joan Gabel

The NVIDIA AI Tech Community designation, achieved jointly with Carnegie Mellon, brings together industry and the public sector to create cutting-edge breakthroughs, such as enhancing the accuracy of cancer diagnoses through whole-slide image assessment in pathology. Additionally, a partnership between Vizzhy and the University of Pittsburgh leverages AI through a new platform, called Gainmed, to understand better both disease and health while enhancing care delivery. Gabel emphasized these partnerships are driving defining moments in healthcare cost and quality, as well as amplifying the region's distinction as a global epicenter of innovation.



Carnegie Mellon University President Farnam Jahanian

KEYNOTE SESSION

SENATOR DAVE MCCORMICK

U.S. SENATOR FOR PENNSYLVANIA, USA

Senator Dave McCormick addressed the leaders participating in Forging the Future—recognizing the summit’s diverse stakeholders are actively building the future of healthcare – pursuing a shared mantra to improve global health outcomes through collaboration and innovation.

Artificial intelligence is a revolutionary technology with the potential to drive innovation on par with historical, paradigm-shifting innovations like the steam engine, the printing press, and the automobile. Current AI applications in healthcare are already delivering tangible results, including earlier and more precise disease detection, accelerated drug discovery, and personalized medicine breakthroughs.

The Senator emphasized the need for continued, robust funding for basic research through institutions like the National Institutes of Health (NIH), while also calling for grant process reforms to ensure transparency, apolitical project selection, and measurable public health outcomes with clear outcomes for citizens.

Finally, he highlighted Pittsburgh as a central hub for this metamorphosis, with the University of Pittsburgh and Carnegie Mellon University leading efforts at the intersection of health, AI, and technology

Fireside Chat: AI-Driven Possibilities in Healthcare

Joan Gabel, Chancellor, University of Pittsburgh, and Academic Vice-Chair, Council on Competitiveness USA

In Conversation with

Sandra Colner, GM Global Healthcare and Life Sciences, Dell Technologies, USA

Artificial Intelligence is playing a critical role in the healthcare ecosystem by leveraging high-performance computing to reshape patient outcomes and research capabilities. AI is already delivering measurable impact, from "digital humans" that streamline patient intake to operational improvements in radiology that have increased efficiency by over 40 percent. By providing a 360-degree view of the patient, AI effectively optimizes both the administrative and clinical experience.

Beyond operations, AI has the capacity to create "personalization at scale" and to accelerate discovery. By integrating multimodal data—including electronic medical records, genomics, and lifestyle factors—AI enables true precision medicine while shortening the timeline for pre-clinical drug discovery through advanced protein modeling. To support these advancements, robust infrastructure acts as the "wind beneath the wings" for innovators, providing the "AI Factories" necessary to break down data silos. This allows researchers and clinicians to focus on solving complex problems rather than managing hardware.

Looking toward the future, trust, education, and ethical deployment are critical. "AI education for all" is essential to establish a common nomenclature across the industry. In clinical settings, the technology need to remain a decision-support tool with human judgment always in the loop.



Ultimately, AI is not merely a tool but a **"catalyst for transformation,"** driving earlier disease detection and advanced innovations, such as bedside bioreactors, that can democratize access to therapeutics globally.



Sessions

Monday, October 20 | Morning

Panel 1:

The Health, AI, and Productivity Imperative:

From University Research to Community Impact



Left to right: GFCC Founder & President and Council on Competitiveness President and CEO **Deborah L. Wince Smith**; University of Pittsburgh Chancellor **Joan Gabel**; Carnegie Mellon University President **Farnam Jahanian**; The Ohio State University President **Ted Carter**; University of Nebraska System President **Jeffrey P. Gold**; GFCC Chairman and Council on Competitiveness Chair Emeritus **Charles "Chad" O. Holliday Jr.**; University of South Carolina President Emeritus **Harris Pastides**.

Moderator:

Deborah L. Wince-Smith

Founder & President, GFCC, USA, & President & CEO, Council on competitiveness USA

Panelists:

- **Ted Carter**, President, The Ohio State University, and Executive Committee Member, Council on Competitiveness USA
- **Joan Gabel**, Chancellor, University of Pittsburgh, and Academic Vice-Chair, Council on Competitiveness USA
- **Jeffrey P. Gold**, President, University of Nebraska System, and Executive Committee Member, Council on Competitiveness USA
- **Charles "Chad" O. Holliday Jr.**, Chairman, GFCC, USA, and Chair Emeritus, Council on Competitiveness USA
- **Farnam Jahanian**, President, Carnegie Mellon University, and Executive Committee Member, Council on Competitiveness USA
- **Harris Pastides**, President Emeritus, University of South Carolina, USA

Artificial intelligence has the potential to shift healthcare from a cost burden into a driver of productivity, competitiveness, and shared prosperity. This transformation is currently underway at the intersection of university research, healthcare innovation, and community impact. While global life expectancy has more than doubled—from 31 years in 1900 to over 70 years today—healthcare costs now represent over 10 percent of gross global product, creating significant competitiveness concerns.

Healthcare already embeds and leverages AI: from diagnostic imaging and clinical decision support, to drug discovery and fraud detection. AI is a tool of human creation rather than something to fear. In this context, Dr. Harris Pastides championed the term "augmented intelligence" over "artificial intelligence," a sentiment echoed by Chad Holliday, who emphasized getting the terminology right is crucial for societal "buy-in." The current anxiety about AI compares to historical concerns about the internet and encyclopedias. This places further emphasis on the point: societies must unleash AI with an ethical imperative and "human touch."

Both Chancellor Gabel and President Jahanian explored Pittsburgh's evolution from a traditional, early 20th century industrial center to a 21st century innovation hub – characterized by collaboration between universities, healthcare systems, and tech. Together, their two universities contribute \$10 billion annually to the local economy, with robust research funding translating into clinical care through major healthcare systems like UPMC and Highmark. While AI's impact spans drug discovery, precision medicine, and public health, it has the potential to drive critical efficiencies. The discussion also highlighted future developments in bioelectric therapeutic implants, and AI's potential to enhance both cognitive and physical well-being.

Dr. Jeffrey Gold articulated a vision in which AI will accelerate research, remove inefficiencies to reduce costs, and democratize access to quality healthcare by bridging the rural-urban divide. The Ohio State University President Ted Carter described his ambitious initiative to make all 67,000 students across his campuses, regardless of discipline and domain. Early efforts already show concrete results, including 12,500 clinical hours freed up through administrative automation and 85,000 additional clinical hours delivered to rural Ohio, allowing



Left to right: Carnegie Mellon University President **Farnam Jahanian**; University of South Carolina President Emeritus **Harris Pastides**; GFCC Founder & President **Deborah L. Wince Smith**; GFCC Chairman and Council on Competitiveness Chair Emeritus **Charles "Chad" O. Holliday Jr.**; University of Pittsburgh Chancellor **Joan Gabel**; University of Nebraska System President **Jeffrey P. Gold**; Council on Competitiveness Executive Vice-President **Chad Evans**; GFCC Executive Director **Roberto Alvarez**.

doctors to spend more face-to-face time with patients. The consensus was clear: education need to evolve to integrate AI deeply across all disciplines, training the next generation of scientists in AI-augmented discovery.

President Jahanian noted AI is the first technology with the potential to make education truly "adaptive and personalized" at scale. Beyond teaching students how to use AI, universities must transform the scientific discovery process itself—moving toward "automated science" where AI accelerates the work in wet labs for biologists and material scientists. As Chad Holliday observed, the goal for the future workforce is to become "the best users of augmented intelligence," ensuring technology remains a tool for human empowerment.

There are significant hurdles, however, in meeting these opportunities, including: cybersecurity risks, ethical implications, bias in machine learning, privacy issues, and the rise of deepfakes associated with AI advancement. In addition, AI computing poses a sustainability challenge: AI-powered searches consume 25 times more energy than standard searches. Furthermore, the pace of AI advancement is so rapid policy and governance models struggle to keep up—reminiscent of the societal adaptation required during the Industrial Revolution. Building trust through transparency is critical to ensuring technology augments, rather than replaces, human wisdom.



Innovation Spotlight: BioForge



Left to right: Benedum Foundation President **Jennifer Giovannitti**; ElevateBio Interim CEO **Ger Brophy**; BioForge CEO **Ken Gabriel**; Richard King Mellon Foundation Director **Sam Reiman**; Hillman Foundation President and Trustee **David K. Roger**; University of Pittsburgh Senior Vice Chancellor for the Health Sciences **Anantha Shekhar**; Pennsylvania Secretary of Community and Economic Development **Rick Siger**.

Moderator:

Jennifer Giovannitti

President, Benedum Foundation, USA

Panelists:

- **Ger Brophy**, Interim CEO, ElevateBio, USA
- **Ken Gabriel**, CEO, BioForge, USA
- **Sam Reiman**, Director, Richard King Mellon Foundation, USA
- **David K. Roger**, President and Trustee, Hillman Foundation, USA
- **Anantha Shekhar**, Senior Vice Chancellor for the Health Sciences and John and Gertrude Petersen Dean of the School of Medicine, University of Pittsburgh, USA
- **Rick Siger**, Pennsylvania Secretary of Community & Economic Development, USA

BioForge is a groundbreaking biomanufacturing initiative in Pittsburgh to revolutionize precision medicine production, and address a critical challenge: making life-saving therapies faster, cheaper, and more accessible

For example, while precision biological therapies (like CAR-T treatments) can cure previously untreatable diseases, they are extremely expensive (\$2-3 million per treatment), complex to manufacture, and time-consuming to produce.

The initiative distinguishes itself through a distinctive operational approach and location. Rather than manufacturing therapies itself, BioForge will focus on developing breakthrough manufacturing innovations to demonstrate their viability and reduce risk, thereby enabling private companies to scale and deliver treatments. This work will take place on a 170-acre former steel mill site in Hazelwood. Pittsburgh foundations purchased this site in 2002 and transformed it into a collaborative hub where industry, startups, academia, and research converge.

A robust partnership model drives the project

- **University of Pittsburgh** - largest academic medical center and federally-funded biomedical research enterprise in the U.S.
- **Carnegie Mellon University** - world-class AI, robotics, and automation expertise
- **Richard King Mellon Foundation** - provided \$100 million, the largest single grant in their 78-year history
- **Hillman Foundation** - strategic investments in health sciences ecosystem
- **ElevateBio** - establishing their second manufacturing campus ("**Camp Two**") in Pittsburgh
- **Pennsylvania State Government** - competitive incentives and workforce development support

The Pittsburgh region combines advanced healthcare and research capabilities with manufacturing and automation expertise, which are essential as medicine shifts from chemical treatments to complex biological therapies.

The expected impact includes making breakthrough treatments accessible to more patients globally and positioning Pittsburgh as a leading center for next-generation biomanufacturing platform technologies. Economically, it promises to create jobs across all skill levels, from PhDs to technical certificate holders, while attracting and retaining biotech companies.

Panel 2:

Transforming Realities:

Pittsburgh, Birmingham, and Belfast Shape a Sustainable and Prosperous Future



Left to right: GFCC Chairman and Council on Competitiveness Chair Emeritus Charles “Chad” O. Holliday Jr.; The Heinz Endowments President **Chris DeCardy**; Queen’s University Belfast President and Vice-Chancellor **Sir Ian Greer**; Carnegie Mellon University Vice President for Research **Theresa Mayer**; Aston University Vice-Chancellor and Chief Executive **Aleks Subic**.

Moderator:

Charles “Chad” O. Holliday Jr.

Chairman, GFCC, USA, and Chair Emeritus, Council on Competitiveness USA

Panelists:

- **Chris DeCardy**, President, The Heinz Endowments, USA
- **Sir Ian Greer**, President and Vice-Chancellor, Queen’s University Belfast, Northern Ireland
- **Theresa Mayer**, Vice President for Research, Carnegie Mellon University, USA
- **Aleks Subic**, Vice-Chancellor and Chief Executive, Aston University, U.K.

Three former industrial powerhouses—Pittsburgh, Birmingham, and Belfast—share remarkably similar transformation journeys, evolving from declining manufacturing centers to thriving innovation economies. Common strategies for post-industrial renewal – coupled with each region's unique approach to building sustainable, inclusive prosperity – underpin the cities' journeys from steel-making, shipbuilding, and manufacturing to cutting-edge technology and life sciences hubs. a groundbreaking biomanufacturing initiative in Pittsburgh to revolutionize precision medicine production, and address a critical challenge: making life-saving therapies faster, cheaper, and more accessible.

Pittsburgh's renaissance demonstrates how adversity can become advantage. Chris DeCardy highlighted five key strengths positioning the region for success: political significance as a bellwether city; experience bringing everyone along despite population decline; a region more insulated from climate change relative to others; relevant manufacturing skills returning to prominence; and universities deeply embedded in communities.

In addition, Pittsburgh’s universities have a distinctive approach of combining foundational research with aggressive translation, exemplified by the Robotics Institute where 150 full-time researchers focus on implementation. This model helped Pittsburgh capture a remarkable share of global robotics investment, with one month seeing more investment than the rest of the world combined. However,

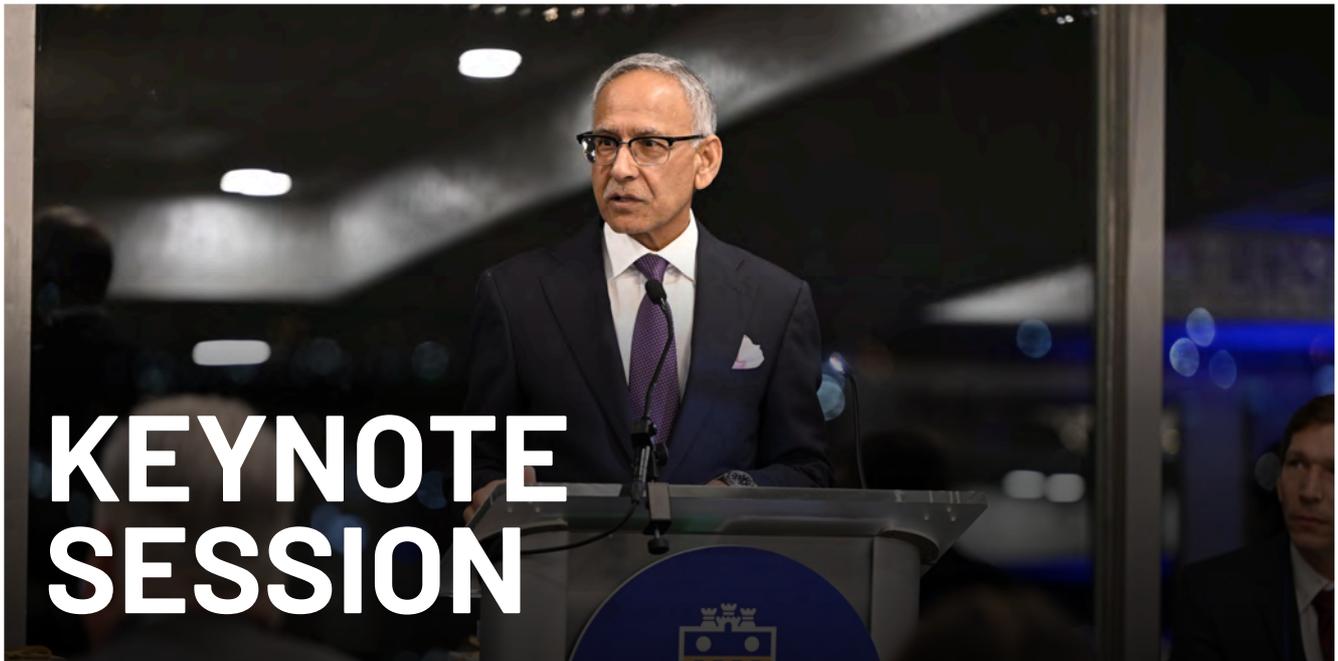
previous prosperity came at tremendous cost to the environment and excluded too many residents, creating a "toxic legacy" and leaving communities behind when industries collapsed. This remains a crucial lesson from the region's past.

Birmingham has one of Europe's youngest populations comprised of 187 nationalities, creating a vibrant innovation ecosystem. Aston University, aiming to break down barriers between the university and community, made a strategic decision to move its headquarters into the city center—creating an accessible "front door" with alumni clubs, enterprise hubs, and executive offices. This youthful diversity is driving Birmingham's emergence as the UK's second-largest life sciences center outside the traditional Oxford-Cambridge corridor, with genomics research leveraging the city's diverse population for clinical trials and personalized medicine development.

Leaders from all three cities identified critical success factors that extend beyond the traditional university missions of education and research. Collaboration is the "special sauce"—universities, government, business, philanthropy, and community working together with trusted relationships and mutual understanding.

Skills development emerged as perhaps the most urgent challenge, with universities creating flexible pathways through community college articulations, six-month reskilling programs, and support for students from low-income backgrounds who, when given additional support, actually outperform middle-class peers. Social inclusion cannot be an afterthought. Pittsburgh's Hazelwood neighborhood redevelopment ensures residents benefit from rising property values rather than face gentrification and displacement. Birmingham's integrated healthcare hub will serve children in the most deprived areas where "life expectancy is defined by postcode, not genomic code."

These three cities offer the elements of a blueprint for post-industrial transformation grounded in inclusive innovation and civic responsibility. Their experiences demonstrate: how universities can function as anchor institutions deeply integrated into their regions; collaboration across sectors and geographies creates competitive advantage; and, past mistakes—environmental degradation and social exclusion—must inform future development. As traditional research funding sources face threats and AI accelerates, regions need to leverage their asset base while ensuring prosperity reaches all residents. Pittsburgh, Birmingham, and Belfast prove industrial legacy cities, once written off, can lead the way toward a sustainable and equitable economic future.



MEHMOOD KHAN

CEO, Hevolution, Saudi Arabia; Former Executive Chairman, Life Biosciences, USA; Former Vice Chairman and Chief Scientific Officer of Global Research and Development, PepsiCo; and Executive Committee Member, Council on Competitiveness USA

Dr. Mehmood Khan, founding CEO of Hevolution Foundation, focused his remarks on healthy aging rather than longevity—keeping people functionally healthy longer, not just extending lifespan. As Dr. Khan explained, "Most people whom we have researched and interviewed actually do not want to live longer for the sake of living longer. They actually want to remain functionally healthy as long as possible."

Global demographics are shifting dramatically. Birth rates have plummeted worldwide, dropping from six or seven children per couple to two or three in countries like India, Pakistan, and the Middle East. By 2050-2060, about one-third of the world's population will be over 60. Despite aging-related diseases being the biggest healthcare cost, only around 5 percent of U.S. research funding goes to aging biology. Currently, no regulatory pathway exists to approve drugs specifically for preventing aging, which discourages industry investment.

The economic opportunity is substantial. Extending healthy life by just 12 months could add \$4 trillion to U.S. GDP through cost savings and increased productivity. The aging workforce is needed in the economy—this is not about old people blocking young people's jobs, but rather about maintaining a healthy, productive population as demographics shift.

Hevolution Foundation has become the world's second-largest funder of aging biology and neuroscience after the U.S. government, despite not existing five years ago. The foundation now funds 250 programs globally, with over 200 in the United States, and four funded companies are already in human trials.

Dr. Khan highlighted two breakthrough examples. The first involves a potential hepatitis B cure, where researchers targeted the aging process in liver cells through epigenomic editing. This approach helped mice, rabbits, and monkeys eliminate the virus, and it is now in human trials. The second example focuses on psoriasis treatment, developing targeted therapies by understanding accelerated aging in affected skin cells.

The vision for the future involves creating a global collaborative research network—a "Bell Labs of Aging"—where researchers worldwide work together on major problems without teaching or administrative burdens. Dr. Khan concluded with a powerful message: "Getting old is inevitable. Getting sick as you get old is not inevitable."

Panel 3:

AI Innovations Increasing the Health Span of Aging Populations



Left to right: University of Pittsburgh Professor of Anesthesiology and Perioperative Medicine, Biomedical Informatics, and Pharmacology **Aman Mahajan**; Center for Elders' Independence CEO **Maria Zamora**; Jewish Healthcare Foundation President and CEO **Karen Wolk Feinstein**.

Moderator:

Karen Wolk Feinstein

President and CEO, Jewish Healthcare Foundation, USA

Panelists:

- **Seigo Izumo**, Former Senior Vice President, Global Head of Regenerative Medicine Unit and Head of Scientific Affairs Japan, Takeda Pharmaceutical Company, Japan
- **Aman Mahajan**, Partner, Healthier Capital; and Professor of Anesthesiology and Perioperative Medicine, Biomedical Informatics, and Pharmacology, University of Pittsburgh, USA
- **John Eu-Li Wong**, Isabel Chan Professor in Medical Sciences and Executive Director, Centre for Population Health, National University of Singapore; and Senior Advisor, National University Health System, Singapore
- **Maria Zamora**, CEO, Center for Elders' Independence, USA

AI and digital technologies have the potential to extend healthy longevity and support aging populations, particularly when approached and applied through integrated, tech-supported, localized care models.

Nations are facing a "demographic cliff" as fertility rates drop and populations age. Successful countries should view seniors as opportunities rather than liabilities, focusing on extending health span, rather than lifespan. Longevity hubs, localized touchpoints, and integrated approaches combining healthcare, housing, social engagement, and technology are essential for thriving aging societies.

Singapore has a comprehensive approach to healthy aging. Explicit social compacts around education, employment, healthcare, housing, retirement, and care comprise a whole-of-society effort. Singapore has implemented national programs like "Healthier SG" and "Age Well SG" while testing innovations in the Queenstown Health District, a real-world laboratory serving 100,000 residents. This initiative embeds blended care teams in public housing, focuses on preventive health and metabolic control, creates community engagement hubs, and redesigns the built environment with features like covered walkways and community care apartments. Singapore deploys technology to help people stay independent, including smartphone-based blood pressure monitoring, portable

eye screening devices, fall detection systems, and ambient intelligence. Dr. Wong emphasizes that the country aims to create a "third demographic dividend" by enabling both robust younger and older generations to contribute to society.

Japan has an aging society, with nearly 30 percent of the population over 65 and the number of centenarians growing exponentially. Japan addresses caregiving challenges through extensive daycare service centers—as numerous as convenience stores—and comprehensive home care delivery systems that give elderly people options for where and how they receive care. Facing workforce shortages, Japan is pioneering robotic and AI solutions including humanoid caregiving robots, AI-powered pet companions for emotional support, and exoskeletons like Cyberdyne's HAL that assist both caregivers and people with disabilities. Other innovations include brain-computer interfaces that help stroke patients control robotic limbs, wearable bladder monitors that predict urination needs, and impact-absorbing flooring that reduces injury from falls. Japan is also advancing biotechnology solutions, including personalized stem cell therapies and vaccines targeting senescent cells. Dr. Seigo Izumo emphasized the importance of making these solutions scalable and affordable for Japan's 120 million people.

Extending the healthy human lifespan by even a single year would drive significant productivity gains, as individuals remain active contributors to the economy for longer while reducing the systemic costs associated with age-related decline. Dr. Aman Mahajan highlighted AI-enabled platforms exist for nearly every major chronic condition affecting older adults, spanning prevention, risk modification, screening, diagnosis, therapy, and care navigation. The field is shifting toward earlier interventions, with new tools enabling self-administered digital and blood testing for Alzheimer's detection, retinal screening that can diagnose multiple organ diseases, and direct-to-consumer platforms providing rapid access to full-body MRI scans with over 500 potential diagnoses. AI models are becoming increasingly predictive, with some able to forecast which chronic conditions a person might develop 20 years in advance.

The PACE (Program of All-Inclusive Care for the Elderly) model, in the USA, serves individuals 55 and older who qualify for nursing home placement but prefer to remain in their communities. The model provides truly comprehensive care through a capitated payment structure, combining medical clinics, social centers, rehabilitation gyms, in-home services, and transportation under one integrated system. Each participant works with an interdisciplinary team of at least 11 professionals who develop personalized care plans based on individual goals. The heart of PACE is its community centers, which provide not just medical care but also social engagement, meals, exercise programs, and behavioral health services—addressing the isolation that affects many older adults. Maria Zamora

highlighted AI and data analytics will improve transportation reliability, streamline internal workflows, map participant journeys, and build a data foundation that will enable predictive, personalized care while maintaining privacy and fairness.

Throughout the panel, common themes emerged: the importance of viewing aging populations as assets rather than burdens; the necessity of integrated care that addresses medical, social, and environmental factors together; the value of keeping seniors in their communities rather than institutions; and the transformative potential of AI and technology when deployed thoughtfully at the local level. Extending health span requires not just technological innovation but also comprehensive policy frameworks, redesigned physical environments, and care models that treat older adults with dignity while supporting their independence and continued contribution to society.

Panel 4:

AI-Powered Education for the Next Generation of Innovators and Leaders



Left to right: University of Pittsburgh Vice Chancellor for Health Sciences Education **Paul M. Wallach**; Carnegie Mellon University Vice Provost for Teaching and Learning Innovation **Marsha Lovett**; Queen's University Belfast Senate Member **Eoin McMullan**; Los Alamos National Laboratory Associate Laboratory Director **Emerita Irene Qualters**; Vanderbilt University Chancellor's Executive Director for Science and Technology Strategy **Padma Raghavan**; Harper Adams University Vice-Chancellor and CEO **Ken Sloan**.

Moderator:

Paul M. Wallach

Vice Chancellor for Health Sciences Education and Executive Vice Dean for Academic Affairs, School of Medicine, University of Pittsburgh, USA

Panelists:

- **Marsha Lovett**, Vice Provost for Teaching and Learning Innovation, Carnegie Mellon University, USA
- **Eoin McMullan**, Senate Member, Queen's University Belfast, Northern Ireland
- **Irene Qualters**, Associate Laboratory Director Emerita, Los Alamos National Laboratory, USA
- **Padma Raghavan**, Chancellor's Executive Director for Science and Technology Strategy and Distinguished Professor of Computer Science, Vanderbilt University, USA
- **Ken Sloan**, Vice-Chancellor and CEO, Harper Adams University, U.K.

Artificial intelligence is transforming higher education, but not in the way many might expect. As AI assumes a larger role in campus operations and academic content, panelists emphasized the "human side" of education—collaboration, critical thinking, and empathy—ought to expand simultaneously. The central message: while AI offers powerful tools for personalization and efficiency, universities should focus on developing students' capacity to work alongside AI rather than becoming dependent on it.

A fundamental shift is underway in classroom dynamics. Students may increasingly bring specialized knowledge and expertise, particularly in rapidly evolving technological fields, requiring academic environments that welcome this exchange. There is an urgent need to break down traditional disciplinary barriers through what Irene Qualters called a "cross-disciplinary on steroids" approach. Training technologists without grounding in social sciences, ethics, or regulatory considerations leaves them less equipped for success. Conversely, humanities students need to understand the mechanics of the technology they will inevitably use. This integration demands a match between AI's growing presence on campus with deeper human engagement—more meaningful interactions between faculty and students both inside and outside the classroom.

When addressing workforce preparation, employers consistently value adaptability and resilience over narrow technical precision. The reality is stark: by the time students graduate, their field may have already evolved, making flexibility more valuable than any specific skill set.

Universities need to collaborate closely with industry to understand evolving graduate needs and ensure relevant curricula. The consensus is clear: all disciplines and degree programs will embed AI, not treating it as a specialized module for computer science students alone.

Marsha Lovett's insight was critical: AI will be a "coworker" or "thought partner", rather than a replacement for human intellect. Concrete examples have demonstrated this principle in action: one institution has studied students using AI for writing feedback and, in doing so, found when students remain engaged in critical thinking, drafting, and revising, while receiving AI-generated feedback, they produced higher quality work. Another institution deployed chatbots that successfully resolved 98 percent of routine student queries, freeing staff to focus on complex pedagogical support and student well-being. However, challenges remain. In safety-critical fields like biomedical engineering, experienced designers should oversee AI-generated code, raising important questions about knowledge transfer when early-career professionals no longer get hands-on coding experience. These examples illustrate the delicate balance between leveraging AI's capabilities and ensuring students develop essential competencies.

Addressing concerns about AI providing quick answers at the expense of deeper learning, there needs to be a fundamental shift in assessment philosophy. Education should move from grading the precision of a final answer—which AI can easily provide—to evaluating the quality of the process and the questioning mindset used to arrive there. Students should explain how they reached answers, what tools they used, and why they made specific choices. This maintains what Ken Sloan called a "questioning mindset" rather than just an "answering mindset" and ensures students develop comfort with failure and iteration—essential skills for innovation. Students also need agency in using AI tools, which requires understanding what's "under the hood" to recognize both AI's strengths and their own irreplaceable contributions.

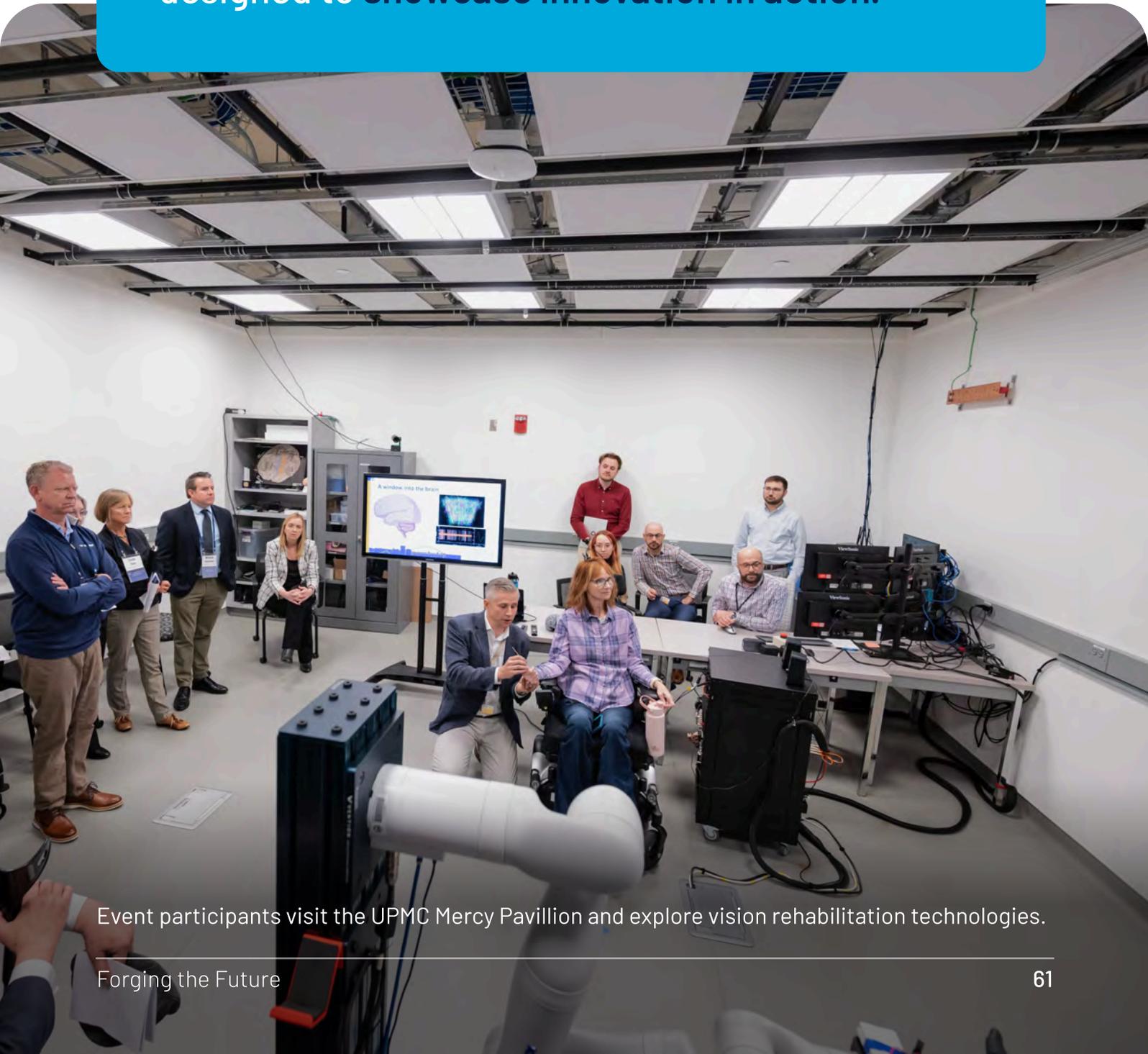
Universities face both tremendous opportunities and significant challenges in this moment. Success requires viewing AI integration as social change alongside technological change, developing infrastructure for continuous curriculum monitoring and lifelong learning, and conducting rigorous research to establish metrics for effectiveness. This uncharted territory requires extensive

experimentation, as effective AI use will differ dramatically across disciplines. The most critical insight: technology alone will not determine outcomes. Rather, shaping the future of education will rely on how thoughtfully institutions balance AI capabilities with human development, creativity, and connection. The imperative is clear—universities need to lean in and engage more deeply with students than ever before, ensuring, as machines become more capable, humans become more essential.

Site Visits and Demonstrations

Monday, October 20 | Afternoon

In addition to plenary sessions, Forging the Future attendees participated in exclusive, hands-on site visits and demonstrations designed to showcase innovation in action.



Event participants visit the UPMC Mercy Pavillion and explore vision rehabilitation technologies.

Participants selected one of the following tracks:

Supporting Patient-Centered Vision Rehabilitation:

Participants explored advancements at the UPMC Mercy Pavillion to improve quality of life for individuals with neurological impairments.

Delivering Data-Informed Health and Social Care:

This interactive session at the University Club focused on the intersection of data analytics and social care delivery.

Championing Precision Medicine:

Participants attended a demonstration at the University Club highlighting developments in public health modeling and individual well-being.



Formal Dinner

📅 Monday, October 20 | Evening

2025 GFCC Global Competitiveness Awards: Recognizing Exemplary Leadership in Innovation and Global Competitiveness

On October 20, 2025, the Global Federation of Competitiveness Councils presented its prestigious Global Competitiveness Awards during the Forging the Future gala dinner, at the LeMont, overseeing the magnificent confluence of the Monongahela and Allegheny Rivers in Pittsburgh.





The GFCC annually recognizes leaders who fundamentally shape the competitiveness trajectories of their regions and nations through visionary leadership, coalition-building, and unwavering commitment to advancing science, innovation, and education.

The GFCC's Chair Chad O. Holliday Jr., Founder and President Deborah Wince-Smith, and Vice Chair Charles Kiefel presented four awards honoring leaders for their transformational impact on higher education, health research, and the innovation economy.



Left to right: Australian Advisory Board on Competitiveness Chairman and Co-Founder and GFCC Vice-Chair **Charles Kiefel AM**; University of Pittsburgh Chancellor **Joan Gabel**; GFCC Founder & President and Council on Competitiveness President and CEO **Deborah L. Wince Smith**; GFCC Chairman and Council on Competitiveness Chair Emeritus **Charles "Chad" O. Holliday Jr.**

Chancellor Joan Gabel

University of Pittsburgh

The GFCC honored **Chancellor Joan Gabel** for

**Inspiring Leadership, Action
and Impact in Cultivating the
Talent, Technology and
Infrastructure Shaping the
Future Innovation Economy.**

As the first woman to serve as Chancellor in the University of Pittsburgh's history dating back to 1787, she has guided the institution through a bold, metrics-driven strategy that has propelled it into the top tier of global research universities. Under her leadership, Pitt has achieved record-breaking enrollment, graduation rates, research expenditures, and post-graduation placement success. Pitt's economic contribution to Pennsylvania now exceeds \$5 billion annually, cementing its role as a true anchor institution.

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Chancellor Gabel's previous transformative leadership at the University of Minnesota included completing a \$4 billion capital campaign ahead of schedule and forging groundbreaking partnerships with Mayo Clinic and Google. Nationally recognized as a "shining star" and elected to the American Academy of Arts and Sciences, she serves as Vice-Chair of the Council on Competitiveness and Co-Chair of the Council's National Commission on Innovation and Competitiveness Frontiers.

In her remarks, Chancellor Gabel emphasized the symbolic significance of Pittsburgh's three rivers joining together, representing how the community comes together to ensure prosperity and competitiveness through mutual support. She praised the collaborative spirit between institutions like Carnegie Mellon University, the University of Pittsburgh Medical Center, and the region's innovators and startups. She also credited Deborah Wince-Smith's leadership of the GFCC as **"the voice of competitiveness for our whole country and, in many ways, for the whole world."**



Left to right: Australian Advisory Board on Competitiveness Chairman and Co-Founder and GFCC Vice-Chair **Charles Kiefel AM**; GFCC Chairman and Council on Competitiveness Chair Emeritus **Charles “Chad” O. Holliday Jr.**; Hevolution CEO **Mehmood Khan**; GFCC Founder & President and Council on Competitiveness President and CEO **Deborah L. Wince Smith**.

Dr. Mehmood Khan
Hevolution Foundation

The GFCC honored **Dr. Mehmood Khan** for

Visionary Leadership in Advancing Global Health Research and Innovation.

Dr. Khan leads the world's largest philanthropic funder of healthspan science and research in his role as Chief Executive Officer of the Hevolution Foundation. His remarkable career began at the Mayo Clinic, where he established himself as a pioneering clinician and researcher in endocrinology, nutrition, and diabetes, before taking his expertise to the global stage as President of Global Research and Development at Takeda Pharmaceuticals and later as Vice Chairman and Chief Scientific Officer at PepsiCo. He first engaged with the Council on Competitiveness during his time at PepsiCo, serving in the group of chief technology officers before becoming Vice Chair and then Chair of the Council.

At Hevolution, which Dr. Khan has built from its inception to its current prominence in less than five years, he has created an unprecedented ecosystem combining grants, early-stage investments, and partnerships to advance research into healthy aging. His vision extends beyond simply increasing lifespan to focus on extending the years of healthy, active living enjoyed by people everywhere.

In his acceptance remarks, Dr. Khan emphasized the foundational role of universities and educators, noting "**we are, every one of us, leaders because we are the product of academic institutions.**" He shared a guiding principle from a commencement speech he once gave: "**I have never come up with a good idea in my entire career. However, I have been successful because I recognize the good ideas of others.**" Dr. Khan stressed that leadership is about the ability to listen, absorb, and recognize excellence in others, rather than being about individual creativity or intelligence.



Left to right: Australian Advisory Board on Competitiveness Chairman and Co-Founder and GFCC Vice-Chair **Charles Kiefel AM**; University of South Carolina President Emeritus **Harris Pastides**; GFCC Chairman and Council on Competitiveness Chair Emeritus **Charles "Chad" O. Holliday Jr.**

Dr. Harris Pastides
University of South Carolina

The GFCC honored **Dr. Harris Pastides**, President Emeritus of the University of South Carolina, for

Transformational Leadership in Higher Education, Research, and Innovation.

A first-generation American and son of Greek Cypriot immigrants, Dr. Pastides built a career grounded in excellence and service, earning his PhD in Epidemiology from Yale before joining the University of South Carolina, where he served as dean, as vice president for research and health sciences, as the university's 28th president, and, ultimately returning as interim president.

During his presidency, Dr. Pastides oversaw a system of eight institutions serving more than 50,000 students, presiding over record-setting enrollment, a billion-dollar capital campaign, and the awarding of more than 117,000 degrees. Under his leadership, the South Carolina Honors College became the number-one public honors college in the United States. His greatest legacy lies in championing access, affordability, and innovation through initiatives such as Palmetto College and the Gamecock Guarantee, which opened doors for students who otherwise might never have had the chance to pursue higher education. He strengthened international collaborations with universities in Cyprus, Greece, Oman, and Qatar, and he has served with distinction on the boards of the Fulbright Program, the American Medical Association, and the National Academies. He received the Ellis Island Medal of Honor for his lifelong commitment to opportunity, diversity, and service.

In his acceptance speech, Dr. Pastides reflected on why university presidents choose to work with the Council and GFCC: **"It is because of the impact that we are having."** He described the work as non-partisan, non-denominational, competitive but not adversarial—exactly what the world needs. Quoting an ancient Greek philosopher, he noted what ultimately matters in one's career is **"what your name conjures up in the hearts and minds of respected colleagues and friends."** He also highlighted his students as his greatest teachers, noting young people **"continue to be the most creative force on the planet."**



Left to right: Australian Advisory Board on Competitiveness Chairman and Co-Founder and GFCC Vice-Chair **Charles Kiefel AM**; University of South Carolina President Emeritus **Harris Pastides**; GFCC Chairman and Council on Competitiveness Chair Emeritus **Charles “Chad” O. Holliday Jr.**

President Farnam Jahanian
Carnegie Mellon University

The GFCC recognized President **Farnam Jahanian** of Carnegie Mellon University for

Transformational Leadership in Higher Education, Research and Innovation.

A computer scientist, entrepreneur, and former head of the National Science Foundation's Directorate for Computer and Information Science and Engineering, President Jahanian has led CMU into an era of distinction at the frontier of science and technology. Under his leadership, the university has achieved growth in research, attracting more than \$600 million annually, and has undertaken the most ambitious campus transformation in its history—a billion-dollar investment in facilities and research infrastructure.

President Jahanian has spearheaded the most successful fundraising campaign in CMU's history, raising more than \$2.5 billion. He has championed access and affordability through scholarships, fellowships, and programs that open doors for underrepresented students, ensuring that CMU's excellence benefits the widest possible spectrum of society. His national service includes testifying before Congress on artificial intelligence, cybersecurity, and advanced computing.

In his acceptance remarks, President Jahanian emphasized that Pittsburgh's renaissance over the past two decades has been powered by alignment between public and private sectors, academic institutions, and civic organizations. He noted **"education is a path to social mobility, and catalyzes economic prosperity for all."**



Partner Spotlight:

Accelerating Health Innovation Through Cloud Computing and Collaboration

A fireside conversation between University of Pittsburgh **Chancellor Joan Gabel** and **Dan Sheeran**, Vice President and General Manager for Amazon Web Services' Healthcare and Life Sciences Business Unit, illuminated how technology partnerships are reshaping medical research and therapeutic development. The discussion revealed both the immense potential of AI-enabled collaboration and the practical challenges that need to be overcome to realize healthcare innovation at scale.

Addressing complex societal challenges, such as climate change and cancer, exceeds the capacity of any single organization, necessitating strategic partnerships between technology providers, universities, and health systems. To be effective, these collaborations should move beyond aspirational goals to focus on specific, measurable outcomes where the collective impact outweighs individual efforts. This principle is particularly evident in the use of cloud infrastructure to aggregate de-identified data for rare diseases, allowing global institutions to create research cohorts that would be impossible to form in isolation.

However, leveraging this data for broader applications, such as accelerating clinical trials, requires overcoming significant privacy and speed barriers. While pharmaceutical companies seek to utilize health system data to improve protocol design, complex access policies have historically slowed progress. The emerging solution lies in "clean room technology," which brings research queries to the data's location rather than moving the data itself. This approach addresses sovereignty and privacy concerns while bypassing the logistical frustrations that have previously hindered the utility of biobanks and genomic research.

Universities play a crucial role in this ecosystem by bridging the gap between theoretical research and clinical application. Beyond hosting researchers, academic institutions with integrated health systems provide the ideal environment to test ideas, while also serving as venues for philanthropic investment that creates hybrid innovation models capable of reducing the costs of personalized therapies.

Looking ahead, the ultimate measure of success for these partnerships will be a shift from efficiency to efficacy. While current AI implementation primarily drives cost reduction through faster processing, the future goal is to enable "better medicine"—identifying diagnoses and cures that would otherwise remain undiscovered.

Panel 5:

Forging the Future: Local and Regional Alliances to Build and Advance Health Innovation Hubs



Left to right: Summa Development President and CEO and University of Pittsburgh Board of Trustees Chairperson **John J. Verbanac**; Allegheny Conference on Community Development CEO **Stefani Pashman**; University of Pittsburgh Medical Center President and CEO **Leslie C. Davis**; GFCC Founder & President and Council on Competitiveness President and CEO **Deborah L. Wince-Smith**

Moderator:

Deborah L. Wince-Smith

Founder & President, GFCC, USA, and President and CEO, Council on Competitiveness USA

Panelists:

- **Leslie C. Davis**, President and CEO, University of Pittsburgh Medical Center (UPMC), USA
- **Stefani Pashman**, CEO, Allegheny Conference on Community Development, USA
- **John J. Verbanac**, President and CEO, Summa Development, and Chairperson, Board of Trustees, University of Pittsburgh, USA

Pittsburgh's transformation did not emerge from a vacuum. The region's industrial prowess during the steel era created an extraordinary philanthropic ecosystem, a robust financial sector, and anchor institutions that would prove critical to future success. When the steel industry collapsed in the early 1980s, these assets remained—universities, hospitals, corporate headquarters, and foundations with deep pockets and deeper commitments to the city. This period fostered a sophisticated financial sector populated by experts who knew how to structure complex deals, raise capital, and strategically deploy it. This professional infrastructure ensured that the wealth generated by the "shoulders of giants" was not just preserved but actively reinvested into the city's next chapter.

A powerful culture of pragmatic partnership, where leaders across political and sectoral divides put aside self-interest to focus on the common good of the region, fueled the transition from "steel to meds and eds". This ethos allowed disparate groups to coalesce around a shared civic purpose, proving that culture is just as important as physical assets in driving economic transformation. As Stefani Pashman explained, "People who you would not put in a room, who have very different perspectives, who come from different places...find a way to come together around the commonality of this place and to make it better."



People who you would not put in a room, who have very different perspectives, who come from different places...find a way to come together around the commonality of this place and to make it better.

-Stefani Pashman CEO, Allegheny Conference on Community Development, USA



If collaboration defines Pittsburgh's process, building defines its action. The region maintains a manufacturing identity while evolving what manufacturing means. Today's Pittsburgh sits at the nexus of innovation, advanced manufacturing, and energy—combining its heritage of making things with cutting-edge technology development and substantial energy resources. John Verbanac emphasized the ability to "build" in the modern era relies on this confluence: the legacy of capital markets expertise combined with a new vision for technology. The region excels at constructing vision, ideas, and plans that align diverse stakeholders toward common direction.

This collaborative framework underpins the region's most significant achievement: the tight integration between academic research and clinical application. By coupling a major university with a massive healthcare system, the region created a governance model that attracts world-class scientists while generating invaluable clinical data from millions of patients. When combined with local expertise in artificial intelligence and robotics, this ecosystem allows for rapid experimentation and the development of personalized therapies. The region has effectively evolved its identity as a "builder" from physical manufacturing to constructing complex innovation ecosystems, supported by flexible funding from large foundations that encourage risk-taking.

Despite its economic transformation, Pittsburgh faces a stark challenge: population decline. The region lost 250,000-300,000 people during the steel industry's collapse and has not recovered those numbers. Pittsburgh's county

ranks as the second-oldest in the country, and GDP growth has lagged behind national averages. While the economy has stabilized, it has not yet generated the robust job growth needed to reverse outward migration, a challenge compounded by the uncertainty of how AI will impact future employment levels.

However, the region's energy abundance is a critical competitive advantage to counter these trends. As the computational demands of AI soar, the area's natural resources and resurgence in nuclear technology—particularly micro-reactors—position it as a prime location for power-hungry tech development, turning a legacy industry into a future asset.

Throughout the discussion, a central theme emerged: healthcare represents both Pittsburgh's greatest strength and its most important mission. With 22 percent of U.S. GDP devoted to healthcare—a level universally acknowledged as unsustainable—the nation faces a systemic crisis. The aspiration is bold: to develop and export to the world diagnostic capabilities that are "faster and cheaper than ever before," along with treatment protocols that provide better care. Success would mean Pittsburgh establishing the template for sustainable, high-quality, technology-enabled healthcare—addressing not just regional needs but a national and global challenge.

Pittsburgh's experience offers lessons for regions seeking to build innovation ecosystems. Collaboration that transcends politics and sectors proves essential, requiring both institutional mechanisms that convene diverse stakeholders and cultural expectations that leaders will participate. Assets matter, but culture determines whether communities leverage them—many regions possess universities, hospitals, and foundations, but what distinguishes Pittsburgh is the intentional, collaborative effort to re-deploy these assets toward new purposes. Building requires patience and persistence spanning decades, not years. Integration creates competitive advantage, as the tight coupling among clinical operations, research capabilities, and technological expertise creates something competitors struggle to replicate. Finally, demographic and economic headwinds are real—even successful transformation does not automatically reverse population decline or overcome macro trends. But regions can build vibrant innovation ecosystems while pursuing the opportunities within reach.

Sessions

📅 Tuesday, October 21 | Morning and Afternoon

Panel 6:

At the Leading Edge of Health, AI, and Technology

Left to right: Pittsburgh Business Times Market President and Publisher **Evan Rosenberg**; UPMC Enterprises Executive Vice President **Brent Burns**; Highmark Health Chief Medical & Clinical Transformation Officer **Tony Farah**; University of Pittsburgh Walter E. Dandy Professor and Chairman of the Department of Neurological Surgery **Robert M. Friedlander**; Carnegie Mellon University Herbert A. Simon Professor of Computer Science **Carl Kingsford**; University of Pittsburgh Associate Dean of AI in Medicine **Hooman Rashidi**; Carnegie Mellon University Professor of Machine Learning **Pradeep Ravikumar**; University of Pittsburgh Distinguished Professor of Neurobiology **Andrew B. Schwartz**.



Moderator:

Evan Rosenberg

Market President and Publisher, Pittsburgh Business Times, USA

Panelists:

- **Brent Burns**, Executive Vice President, UPMC Enterprises, USA
- **Tony Farah**, Chief Medical & Clinical Transformation Officer, Highmark Health, USA
- **Robert M. Friedlander**, Walter E. Dandy Professor and Chairman of the Department of Neurological Surgery, University of Pittsburgh; Co-Director, UPMC Neurological Institute, USA
- **Carl Kingsford**, Herbert A. Simon Professor of Computer Science and Co-Director of the Joint Carnegie Mellon University-University of Pittsburgh Ph.D. Program in Computational Biology, Carnegie Mellon University, USA
- **Hooman Rashidi**, Associate Dean of AI in Medicine, University of Pittsburgh, USA
- **Pradeep Ravikumar**, Professor of Machine Learning, Carnegie Mellon University, USA
- **Andrew B. Schwartz**, Distinguished Professor of Neurobiology and Endowed Chair in Systems Neuroscience, University of Pittsburgh, USA

AI is making measurable impact in healthcare today. But many advances still lie ahead, and Pittsburgh sits in the intersection of world-class medicine and computing innovation.

“AI in healthcare is not entirely new,” affirms Dr. Rashidi. Practitioners have deployed for decades predictive analytics tools for diagnostics, identifying conditions like tuberculosis and prostate cancer. What is transformative now is generative AI and multi-agent frameworks that automate routine tasks. However, successful deployment requires widespread education—not just for computer scientists, but for all healthcare workers. For example, while tumor boards include pathologists, radiologists, oncologists, and other specialists, they typically lack AI-educated clinical champions who can critically evaluate AI predictions rather than accepting them at face value, creating potential patient safety issues.

“AI in healthcare is not entirely new,” affirms Dr. Rashidi. Practitioners have deployed for decades predictive analytics tools for diagnostics, identifying conditions like tuberculosis and prostate cancer. What is transformative now is generative AI and multi-agent frameworks that automate routine tasks. However, successful deployment requires widespread education—not just for computer scientists, but for all healthcare workers. For example, while tumor boards include pathologists, radiologists, oncologists, and other specialists, they typically lack AI-educated clinical champions who can critically evaluate AI predictions rather than accepting them at face value, creating potential patient safety issues.

Healthcare has vital inefficiency problems: approximately 30 percent of healthcare spending represents waste, Dr. Farrah argues. The solution lies in deep integration between payers and providers, combining claims data with clinical information to create scalable programs that reach patients beyond clinic visits. For example, Highmark has implemented ambient listening technology, allowing physicians to focus on patients rather than keyboards, significantly reducing what Dr. Tony Farah calls “pajama time”—the hours doctors spend on administrative work after hours. The system also enables real-time prior authorization approvals using AI, eliminating a major frustration for both patients and providers. These innovations demonstrate how AI can help physicians spend more time being physicians and less time being administrators.

From the innovation side, scaling healthcare AI requires solving real problems with demonstrable return on investment while integrating seamlessly into existing workflows. The challenge is not just developing outstanding predictive tools—it is answering “so what?” and ensuring clinicians can act on predictions. To that end, Dr. Kingsford stresses the importance of “natural language interfaces that enable clinician-scientists to perform deep data analysis without becoming programmers.” While AI’s potential in drug development and biomarker discovery is expanding, its true scale will depend on these kinds of accessible tools.

AI has immense potential in neurosurgery, which can be exemplified by applications ranging from Gamma Knife radiation planning, to spinal cord stimulation that helps paraplegics walk. However, this power comes with significant blind spots. Dr. Schwartz noted we still lack a fundamental understanding of how these networks function, quipping, “How did the large language model cross the street? We don't know, but it sure does it well.”

Friedlander added AI remains “brute force computation” rather than true intelligence. Given these limitations, the consensus was clear: AI must serve to augment, not replace, expert clinical decision-making.

There are still multiple obstacles to broader AI adoption: technology limitations, costs, and cultural resistance. Dr. Farah emphasized addressing the physician shortage—projected to reach 86,000 by 2034—requires AI systems that make everyone "work at the top of their license." For example, in the radiology field, AI triages images by urgency, ensuring critical cases receive immediate attention. Furthermore, deployment strategies should vary by institution: what works at major academic medical centers like UPMC will not translate to smaller private practice systems, which need different vendor partnerships and realistic cost assessments for long-term fiscal health.

Healthcare AI is still in an "embryonic stage," but the path forward is becoming clear. Moving beyond general optimism to successful deployment requires bridging the gap between AI researchers and practitioners and ensuring education extends to the entire healthcare workforce. The goal ought to be augmentation—using AI to solve urgent problems like physician shortages—rather than replacement. As Dr. Friedlander predicted, "AI will not replace doctors; doctors who use AI will replace doctors who do not use AI."



AI will not replace doctors; doctors who use AI will replace doctors who do not use AI.

-Dr. Friedlander

Walter E. Dandy Professor and Chairman of the Department of Neurological Surgery, University of Pittsburgh; Co-Director, UPMC Neurological Institute, USA



Panel 7:

From Diagnostics to Treatments: Leveraging Tech Opportunities to Advance Health Care



Left to right: University of Pittsburgh Senior Vice Chancellor for Research **Rob A. Rutenbar**; University of Pittsburgh Professor of Psychology **Peter J. Gianaros**; Carnegie Mellon University Professor of Biomedical Engineering **Jana Kainerstorfer**; Carnegie Mellon University Frank A. and Helen E. Rish Assistant Professor of Operations Research **Andrew Li**; Director, UPMC Enterprises Executive Vice President **David Okonkwo**; University of Pittsburgh Chair of the Department of Pathology, and Maud L. Menten Professor of Pathology **Liron Pantanowitz**.

Moderator:

Rob A. Rutenbar

Senior Vice Chancellor for Research, University of Pittsburgh, USA

Panelists:

- **Peter J. Gianaros**, Professor of Psychology, University of Pittsburgh, USA
- **Jana Kainerstorfer**, Professor of Biomedical Engineering, Carnegie Mellon University, USA
- **Andrew Li**, Frank A. and Helen E. Rish Assistant Professor of Operations Research, Carnegie Mellon University, USA
- **David Okonkwo**, Director, Neurotrauma Clinical Trials Center, and Executive Vice President, UPMC Enterprises, USA
- **Liron Pantanowitz**, Chair, Department of Pathology, and Maud L. Menten Professor of Pathology, University of Pittsburgh, USA

While technology and AI are advancing healthcare from diagnostics through treatment, the true challenge lies in translating research innovations into clinical practice. Bridging this gap is essential to realizing AI's transformative potential in routine patient care.

According to Dr. Okonkwo, two concepts best frame AI's potential: "medical super intelligence" for complex diagnoses and "accelerated discovery" for developing new treatments. According to a recent New England Journal of Medicine study, AI platforms now outperform medical experts in diagnosing difficult cases because they can analyze tens of thousands of protein biomarkers simultaneously. These systems are capable of catching abnormalities that humans might miss. Additionally, AI offers a massive efficiency boost. AI can complete in mere minutes diagnoses that might take humans hours to finalize. These tools can also maintain patient privacy by running locally on hospital servers without needing internet connectivity.

Despite these capabilities, Dr. Okonkwo delivered a crucial reality check. When asked how AI influences his daily practice as a neurosurgeon, his answer was blunt: "It does not." Current AI lacks the years of accumulated experience and pattern recognition that allow physicians to catch subtle details—what Okonkwo

called "the art of medicine." He emphasized that one look at a patient remains "worth a thousand iterative LLMs" because AI can only work with the data researchers and programmers have provided. AI cannot venture into the unexplored diagnostic territory or exercise the judgment that human expertise provides.

This disconnect between AI's potential and its current utility stems from multiple systemic barriers. Scaling AI faces enormous hurdles, starting with the need for complete digitization, which requires overcoming cultural resistance to going paperless. Furthermore, regulatory frameworks have not caught up with AI capabilities, and there are currently no billing codes for AI-enhanced diagnostics—meaning hospitals must invest in the technology without any path to reimbursement. Technical consistency is also an issue, as ensuring algorithms work equally well in rural settings as they do in urban ones remains difficult. Finally, research imaging capabilities far exceed what is available clinically; standard hospital MRIs use outdated technology compared to research tools, yet translational pathways face bureaucratic hurdles that make moving these innovations from the lab to the clinic extremely difficult.

Dr. Li identified the "home run" opportunity for AI: the creation of a centralized, clean dataset of all health records, which he estimated would be worth over a trillion dollars. Such a dataset would enable the building of a true "Doctor GPT." However, health data is currently fragmented across siloed systems, often not digitized, and sometimes still handwritten. While AI fields like natural language processing succeeded by training on "all quality English on the internet," medicine lacks this foundational resource. Li noted that "Analytical AI"—using machine learning for predictions based on structured data—was essentially solved a decade ago, making it low-hanging fruit if we can simply connect existing methods to clinical problems. Yet, even this requires significantly better data infrastructure.

AI is extremely versatile, and there are numerous applications to medicine. But this versatility can also face a translation challenge. Dr. Gianaros exemplified this with his research, which uses machine learning combined with brain imaging to predict cardiovascular risk from stress patterns. While these findings could influence public health policy, the challenge lies in scaling the methodology from a research cohort of hundreds to a population of thousands.

Progress requires transformation on multiple fronts. First, education needs to evolve; integrating AI into medical school curricula is already changing how students view fields like pathology, which is now being seen as a discipline of cutting-edge digital prediction rather than just autopsies. Second, we need

technical safeguards, such as "AI monitoring AI," to catch algorithm drift over time, rather than relying solely on human oversight. Finally, a voluntary crowdsourcing of medical data, in which many people would willingly contribute their health information to build humanity-benefitting tools, would incredibly help advance AI's learning process in medicine (similar to the creation of the Oxford English Dictionary through public crowdsourcing in the 1800s).

AI in healthcare also exists in two parallel tracks that have not fully converged. Research demonstrates remarkable capabilities for pattern recognition, prediction, and discovery acceleration. But clinical practice still relies fundamentally on human expertise, judgment, and the "art of medicine" that no algorithm can replicate. Success lies not in replacing physicians but in removing administrative burdens, speeding up routine tasks, and freeing clinicians to focus intellectual capital on patients rather than processes. The barriers are less about technology than about infrastructure, data access, regulatory frameworks, reimbursement models, and cultural adoption.

Panel 8:

Health, AI, and Tech: Investing in a Future

Left to right: University of Pittsburgh Vice Chancellor for Innovation and Entrepreneurship and Associate Dean for Commercial Translation of the School of Medicine **Evan Facher**; Carnegie Mellon University Assistant Dean of Entrepreneurship Initiatives of the School of Computer Science and Associate Professor of Entrepreneurship of the Tepper School of Business **Meredith Meyer Grelli**; Proteus Founder **Lizzie Hudson**; AngelList Former CEO **Kevin Laws**; Stalwart Ventures Managing Partner **Jeff Martin**; Stack AV CEO and University of Pittsburgh Trustee **Bryan S. Salesky**; U.S. Navy Former Lieutenant Commander and Senior Regional Flight Surgeon **Michael Wolf**.



Moderator:

Evan Facher

Vice Chancellor for Innovation and Entrepreneurship and Associate Dean for Commercial Translation, School of Medicine, University of Pittsburgh, USA

Panelists:

- **Lizzie Hudson**, Founder, Proteus, USA
- **Kevin Laws**, Former CEO, AngelList, USA
- **Jeff Martin**, Managing Partner, Stalwart Ventures, USA
- **Meredith Meyer Grelli**, Managing Director & Interim Exec Director, Swartz Center for Entrepreneurship; Assistant Dean of Entrepreneurship Initiatives, School of Computer Science; Director, Project Olympus; Associate Professor of Entrepreneurship, Tepper School of Business, Carnegie Mellon University, USA
- **Bryan S. Salesky**, CEO, Stack AV, and Trustee, University of Pittsburgh, USA
- **Michael Wolf**, Former Lieutenant Commander, Senior Regional Flight Surgeon, U.S. Navy, USA

While investment capital is surging into the health and AI sectors, the true challenge lies in directing these resources toward the unglamorous but critical foundation of data infrastructure rather than just hype-driven applications. Laws noted that while health tech investment has grown approximately 20% in 2025, with two-thirds of new capital flowing into AI, a fundamental "data wall" remains. Unlike consumer AI, which leveraged billions of existing web pages, healthcare AI lacks foundational data infrastructure, explained Ms. Hudson.

Consequently, the greatest investment opportunities lie not in building applications on top of large language models, but in creating the underlying data architecture itself defended Mr. Martin, specifically for areas like protein mapping and proteomics to accelerate drug discovery. Bridging the gap between raw algorithmic potential and usable biological datasets is essential to transitioning from theoretical models to tangible future healthcare economies.

This creates both challenge and opportunity for companies and institutions alike. Ms. Hudson suggested that companies that successfully generate, organize, and provide access to clean healthcare datasets will establish positions that become very difficult for competitors to overcome. However, this requires unprecedented collaboration among private companies, academic institutions, and healthcare systems. Dr. Wolf emphasized that there is huge opportunity in data architecture from an institutional level, noting that healthcare must learn from other regulated sectors like finance and energy. He observed that while healthcare likes to think of itself as unique, "we're special, but we're not that special," and should draw on talent and architectures from other industries to solve these problems.

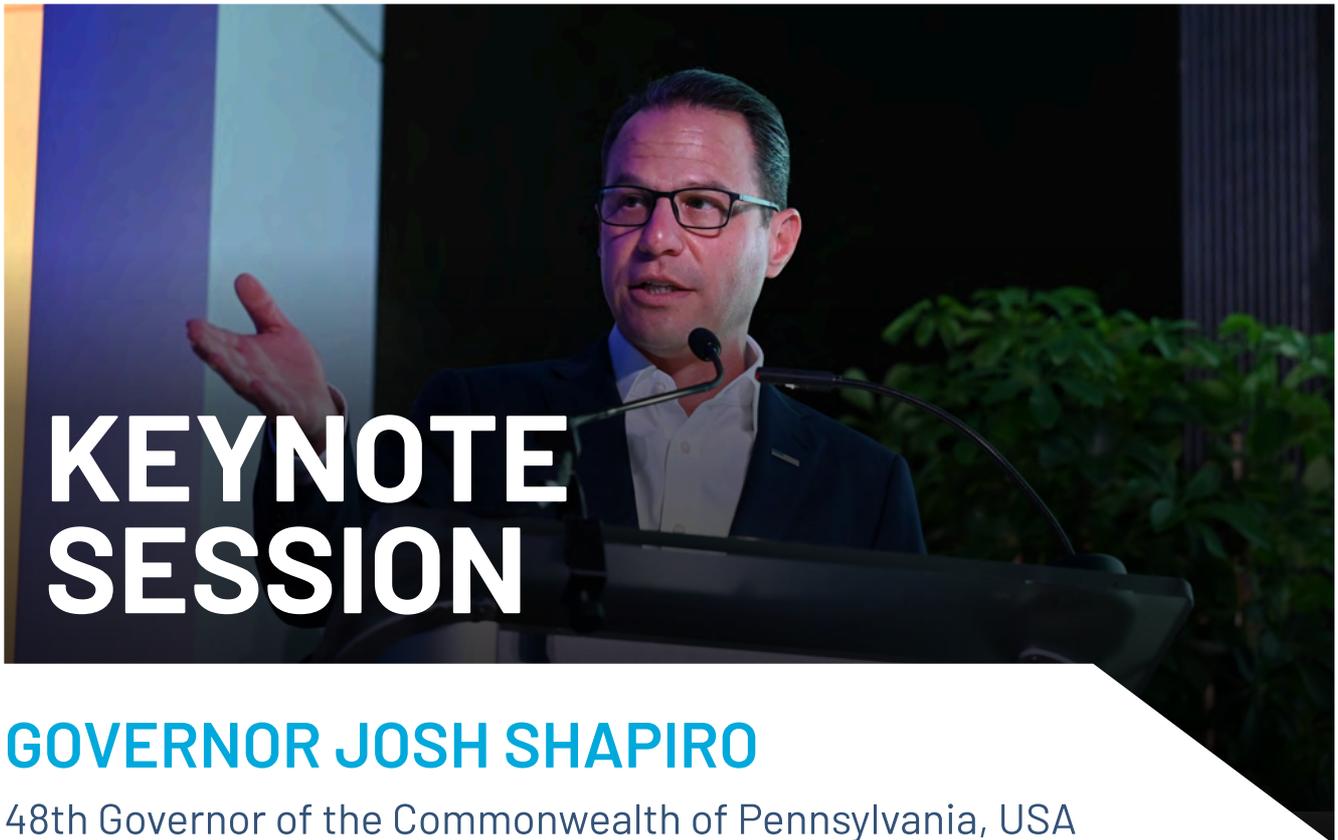
Trust networks and university technology licensing remain critical friction points slowing commercialization. As Mr. Laws pointed out, while regulatory reforms have made capital raising easier, the practical challenge of connecting innovations to funding sources remains significant, particularly outside traditional hubs. He advocated for standardized licensing agreements to dramatically accelerate startup formation, noting that most universities still negotiate custom terms that hinder speed to market. Dr. Grelli added that evolving university culture is necessary to make the jump to entrepreneurship as frictionless as possible for researchers.

As a non-coastal region that wants to compete for capital and talent, Pittsburgh's stakeholder community ought to decide whether it wants to be the region that builds the future economy and communicate that vision with single-minded focus.

Successful companies do not only originate in Silicon Valley or Boston; industries naturally migrate to where talent, infrastructure, and conviction converge. The semiconductor industry's move from California to Taiwan and the shift of aerospace to Texas demonstrate that no innovation cluster is permanently tied to one location. Dr. Wolf also highlighted the importance of focusing on how innovation advances a local community's specific needs and end strategy, rather than just individual institutional goals.

Investors' contribution should extend beyond funding to include network access, talent connections, and guidance on challenges founders don't yet know they face. Mr. Martin emphasized that the best investor relationships involve continuous dialogue and empathy for the inevitable "near-death" experiences that nearly every successful company navigates. Former founders often make the most effective investors because they can provide direct experience on scaling and business fundamentals. For founders, success requires openness to feedback; Dr. Wolf stressed that coachability and the ability to seek another view are vital for a startup's success.

The current moment offers extraordinary opportunity in health AI, but only for those who act decisively. AI has dramatically lowered barriers to entry, enabling founders to build viable products with minimal initial capital. Success will come to regions and individuals who build foundational infrastructure while others focus on applications, who foster genuine cross-sector collaboration, and who maintain conviction that breakthrough innovation can happen anywhere determined people decide to make it happen. The future economy is being built today through the companies and ecosystems established in this moment.



KEYNOTE SESSION

GOVERNOR JOSH SHAPIRO

48th Governor of the Commonwealth of Pennsylvania, USA

In this address at the University of Pittsburgh, Pennsylvania Governor Josh Shapiro emphasized how the commonwealth is distinctively positioned to lead the nation's AI revolution, particularly in healthcare innovation.

Pennsylvania possesses strengths that position it for AI leadership.

- As the second-largest energy exporter in the country, the state can power energy-intensive data centers and supercomputers while still providing reliable, affordable energy to homes and businesses.
- Investment in vocational education and apprenticeships has increased by more than 50 percent, adding nearly \$65 million and training over 35,000 Pennsylvanians in critical fields like welding and electrical engineering.
- The state's permitting system has transformed from one of the worst in the country to a national model, now moving at the speed of business.

The economic impact has been substantial. AWS announced an initial \$20 billion investment to build data centers in Pennsylvania—the largest private sector investment in the state's history. The state's life sciences industry, already a \$50 billion sector employing over 100,000 people, is positioned for explosive growth. Pennsylvania ranks fourth nationally in life sciences research and development spending, and half of all vaccines produced in the United States are manufactured in the commonwealth.

Researchers at the University of Pittsburgh and Carnegie Mellon University are already leveraging AI to combat antimicrobial resistance and advance personalized medicine. The approach treats AI as "a job enhancer, not a job replacer," with Pennsylvania becoming the first state to put AI tools in the hands of its 80,000-person workforce through executive order.

The stakes extend beyond economics to national security: "There are only two options out there for China to build out the infrastructure and surpass us, or for America to build out the infrastructure and lead. I am not going to take a backseat to China." Pennsylvania's legacy of medical breakthroughs, from Jonas Salk's polio vaccine to pioneering brain-computer interfaces, now connects with the promise of AI-driven healthcare innovation: "This is such an exciting time for our commonwealth, for Pittsburgh, and for this entire region."

Panel 9:

Unlocking the Promises of Health Technologies for Economic Growth



Left to right: University of Pittsburgh Dean and Professor of the School of Public Health **Maureen Lichtveld**; National Competitiveness Office of Oman Director, **Fahad R S Al Jahwari**; AI Strike Team Executive Director **Joanna Doven**; Tsukuba Global Innovation Promotion Agency Executive Director, **Takashi Inutsuka**; Pittsburgh Technology Council President and CEO **Audrey Russo**; National Academies of Sciences, Engineering, and Medicine Executive Director **Vaughan Turekian**.

Moderator:

Maureen Lichtveld

Dean and Professor, School of Public Health, University of Pittsburgh, USA

Panelists:

- **Fahad R S Al Jahwari**, Director, National Competitiveness Office, Oman
- **Joanna Doven**, Executive Director, AI Strike Team, USA
- **Takashi Inutsuka**, Specially Appointed Professor, Headquarters for International Industry-University Collaboration, University of Tsukuba & Executive Director, Tsukuba Global Innovation Promotion Agency (TGI), Japan
- **Audrey Russo**, President and CEO, Pittsburgh Technology Council, USA
- **Vaughan Turekian**, Executive Director, Office of International Networks, Collaboration, and Security; National Academies of Sciences, Engineering, and Medicine, USA

AI and health technologies can drive economic growth while addressing critical societal needs. The successful integration of AI in healthcare requires breaking down silos, fostering unprecedented collaboration, and thinking boldly about infrastructure and data access. As Dr. Turekian notes, the convergence of AI, data, and health represents the most intimate way AI will interact with people, as it directly affects healthcare delivery. However, humanity doubles the data it creates every six months. This exponential growth presents challenges for economic development, particularly as global policy frameworks become increasingly fragmented.

Oman's Vision 2040 positions healthcare as a central economic driver. Dr. Al-Jahwari explained that Oman established a Fourth Industrial Revolution Center with the World Economic Forum to deploy AI across sectors. This is intended to reduce public healthcare costs, a significant portion of the country's GDP. Following supply chain lessons from COVID-19, Oman is also establishing local pharmaceutical manufacturing to lead the region.

Pittsburgh's ecosystem faces bottlenecks in data and compute resources. Ms. Doven noted that while the region possesses "liquid gold"—one of the world's

largest pathology datasets—researchers face a "compute cliff" . Her proposed solution involves connecting data center developers with innovators; securing just one percent of a new data center's gigawatt capacity could scale innovation for five years . Furthermore, Ms. Russo highlighted that Pittsburgh's aging population represents a \$2.7 trillion longevity market . This "living lab" creates jobs in communal care and robotics that require human connection, offering expertise that Pittsburgh can export globally .

Japan's University of Tsukuba demonstrates how to bridge science and the economy. Mr. Inutsuka explained that bridges must be designed from the start, with experts in regulation and manufacturing working alongside scientists . This "living bridge" uses entities like UBA Spark and the Tsukuba Global Innovation Promotion Agency to align innovation with international standards and macro-level policies .

Transforming health innovation into growth requires unprecedented entrepreneurial thinking. Ms. Doven noted that success demands being "as social as possible" to bridge technology, government, and community needs, such as linking startups with trade unions for infrastructure access. Ms. Russo observed that because political cycles are only three to five years, leaders must accelerate the most pragmatic solutions—like optimizing workflows and insurance processes—to show value while supporting long-term research.

The panel's consensus centered on four imperatives for action: collaboration, investment, decisiveness, and bold thinking . Mr. Inutsuka emphasized that multi-sector collaboration is the primary key to building a "living bridge" between science and the real world. Dr. Al-Jahwari stressed that the number one action is investing in R&D and prioritizing education to build future capacity. Dr. Turekian urged the group to move forward despite an uncertain global policy landscape, while Ms. Doven called for bold movement to overcome infrastructure barriers. Ultimately, success requires balancing innovation with responsibility—addressing privacy and ethics to ensure that new technologies are both technically excellent and globally trusted.

Panel 10:

Advanced Manufacturing in a Dynamic Economy

Left to right: GFCC Executive Director **Roberto Alvarez**; Manufacturing Futures Institute Faculty Director and Carnegie Mellon University Hamerschlag University Professor of the Department of Electrical and Computer Engineering **Gary Fedder**; nVoq Inc. President and COO and University of Pittsburgh Trustee, **Debbi Gillotti**; Centre for Competitiveness Director **Paul Madden**; Glavbolgarstroy Holding Head of International Affairs and Strategic Development **Kalin Marinov**; University of Pittsburgh Associate Vice Chancellor for Research for STEM-Health Sciences Collaborations and Human Engineering Research Laboratories Founding Director and VA Senior Research Career Scientist **Rory Cooper**.



Moderator:

Roberto Alvarez

Executive Director, GFCC, USA

Panelists:

- **Rory Cooper**, Associate Vice Chancellor for Research for STEM-Health Sciences Collaborations, University of Pittsburgh, and Founding Director and VA Senior Research Career Scientist, Human Engineering Research Laboratories, USA
- **Gary Fedder**, Faculty Director, Manufacturing Futures Institute (MFI); Hamerschlag University Professor, Department of Electrical and Computer Engineering, Carnegie Mellon University, USA
- **Debbi Gillotti**, President and COO, nVoq Inc., and Trustee, University of Pittsburgh, USA
- **Paul Madden**, Director, Centre for Competitiveness, Northern Ireland
- **Kalin Marinov**, Head of International Affairs and Strategic Development, Glavbolgarstroy Holding, Bulgaria

Emerging technologies—particularly AI, robotics, and advanced materials—are reshaping business environments across the globe, affecting all industry verticals and not manufacturing alone. While these innovations offer significant opportunities for sectors like manufacturing and construction, they also present challenges, specifically regarding how to make deployment accessible to small and medium enterprises (SMEs).

Dr. Fedder frames this transformation as "the digitalization of manufacturing." Key drivers like digital twin technology and augmented reality offer pathways to increased efficiency and profit. However, from a business perspective, the goal is not just profit generation but also cost reduction and value creation. For smaller manufacturers lacking the resources of large corporations, democratizing access to these tools is paramount. This is where universities play a central role; through public-private partnerships, they create "try before you buy" environments. These hubs allow SMEs to de-risk innovation and experiment with Industry 4.0 solutions without prohibitive upfront costs.

To be effective, one must apply these technologies to solve distinct, sector-specific problems. In construction, Mr. Marinov explains that AI and robotics are not taking jobs but are filling critical labor gaps and advancing environmental sustainability, such as managing construction waste and improving energy efficiency. In healthcare, Dr. Cooper describes how the convergence of AI and 3D printing enables point-of-care manufacturing. This allows for the production of customized prosthetics and assistive devices tailored to the individual, solving the problem of "orphan products" that are too niche for mass production but essential for patient care.

However, adoption requires a pragmatic approach in all industry verticals to avoid the trap of "automating inefficiency." In the in-home health sector, where margins are tight, Ms. Gillotti warns against implementing "shiny toys," without deeply understanding business processes and models. Instead, successful AI deployment requires demonstrating clear return on investment through improved care and workflow efficiency. She notes that specialized language models supported by deep subject matter expertise consistently outperform generic AI wrappers because developers designed them around the customer experience, rather than raw technological capability.

Without this grounding in operational reality, technology becomes a "hammer" searching for a "nail," leading to wasted capital and organizational friction. As Paul Madden suggests, companies should adopt lean manufacturing principles before deploying any digital technology.

To support this broader innovation ecosystem—the interconnected network of universities, government funders, and private firms—formal translation mechanisms are required. Paul Madden points to Northern Ireland's AI Collaboration Center, which matches companies with specific pain points to technological solutions through "transformer" programs that offer free consulting to develop proofs of concept. Dr. Fedder reinforces this, stating that universities acts as feeders that de-risk technologies for the private sector.

In summary, three principles define successful deployment. First, as Dr. Fedder notes, technology itself is never the solution; it must solve a specific pain point. Second, organizations must achieve operational efficiency before investing in advanced technologies to avoid automating existing flaws. Third, and most importantly, Dr. Alvarez concludes that success depends on people: listening to customers, understanding end-user needs, and unlocking human potential by building talent at scale.



Innovation Spotlight:

Pittsburgh Partnerships Driving Global Innovation – Vizzhy Inc./GAINMED

Left to right: University of Pittsburgh Senior Vice Chancellor for the Health Sciences and John and Gertrude Petersen Dean of the School of Medicine **Anantha Shekhar**; University of Pittsburgh Professor of Surgery and Computational and Systems Biology **Afshin Beheshti**; Otsuka Pharmaceutical Co. Ltd. Advanced Research Institute for Core Science, Nutraceuticals Business Director **Yasutaka Ikeda**; Vizzhy Inc. Founder and CEO **Vishnu P. Srinivasulu**.



Moderator:

Anantha Shekhar

Senior Vice Chancellor for the Health Sciences and John and Gertrude Petersen
Dean of the School of Medicine, University of Pittsburgh, USA

Panelists:

- **Afshin Beheshti**, Professor of Surgery and Computational and Systems Biology; and Director, Center for Space Biomedicine, McGowan Institute for Regenerative Medicine, University of Pittsburgh
- **Yasutaka Ikeda**, Director, Advanced Research Institute for Core Science, Nutraceuticals Business, Otsuka Pharmaceutical Co. Ltd., Japan
- **Vishnuvardhan (Vishnu) P. Srinivasulu**, Founder and CEO, Vizzhy Inc., USA

GAINMED (Generative AI Navigated Medicine), a collaborative initiative between the University of Pittsburgh and Vizzhy Inc., is on a mission to transform healthcare by shifting the focus from disease management, to disease reversal and prevention. The initiative aims to return control of biology to the patient by using artificial intelligence to interpret complex biological data.

Traditional healthcare overlooks the vast majority of human biological data, relying on a few hundred biomarkers rather than the billions of data points available. To address this, Vizzhy has built a specialized multi-omics lab in Pittsburgh to sequence and map entire biological pathways. By employing generative AI, the platform translates this massive, complex dataset into actionable insights for patients and clinicians. Vizzhy founder Dr. Vishnu Srinivasulu shared a personal anecdote about his mother reversing her diabetes, illustrating the potential to cure chronic conditions rather than medicating them indefinitely—a shift that could significantly lower global healthcare costs.

A key component of the partnership involves Otsuka Pharmaceutical and the study of aging and longevity. Dr. Beheshti, formerly of NASA, explained spaceflight serves as an accelerated model for aging. His research revealed mitochondrial dysfunction is a central issue in both scenarios: the rapid changes caused by spaceflight (due to microgravity and radiation) and the process of natural aging.

Leveraging this insight, the partners are launching clinical trials at the University of Pittsburgh to test a mitochondrial supplement developed by Otsuka. The goal is to restore mitochondrial function to improve longevity and potentially treat conditions like Long COVID.

Realizing this vision requires robust technological infrastructure. And looking toward 2026, the team aims to set a world record by analyzing Whole Genome Sequencing data and releasing a report in just four hours. Dr. Ikeda highlights that Otsuka Pharmaceutical chose Pittsburgh as the hub for this transformation due to its world-class research infrastructure and a collaborative ecosystem willing to pursue "moonshot" healthcare goals.



Innovation Spotlight:

Aging, Longevity and Vitality Reimagined



Left to right: University of Pittsburgh Director of the Aging Institute **Toren Finkel**; University of Pittsburgh Director of Healthy Home Laboratory **Pamela Toto**.

Toren Finkel

Director, Aging Institute, University of Pittsburgh, USA

In conversation with:

Pamela Toto, Director

Healthy Home Laboratory, University of Pittsburgh, USA

Biological research and practical technology are converging to support the aging population. While one approach focuses on the molecular mechanisms of aging, the other centers on "aging in place"—a concept Dr. Toto designed, to use technology to help older adults remain independent and safe in their own homes.

The Healthy Home Laboratory, a physical 107-year-old home in Pittsburgh, serves as an interdisciplinary testing ground for innovative solutions. Dr. Toto noted that tensions often arise between an older adult's desire for independence and their family's desire for safety. Intrusive monitoring devices are frequently rejected if they do not align with the user's motivations and dignity, underscoring the need for consumer-driven design.

In contrast, the Aging Institute, under Dr. Finkel's leadership, focuses on a basic science approach. His lab investigates the molecular drivers of aging to identify targets for pharmaceutical intervention. The goal is not merely to extend life, but to improve "health span"—the period of life spent in good health.

Currently, the Institute is conducting a clinical trial targeting inflammation in adults over 70 using an antibody against Interleukin-6 (IL-6). IL-6 is a protein that acts as a signal for the immune system. While it is vital for fighting immediate infections, elevated levels over time cause chronic inflammation (often called "inflammaging"). This chronic state can damage tissues and accelerate age-related decline. By using antibodies to lower IL-6 levels, this study aims to determine if reducing this inflammation can restore cognitive and physical function in older adults.

AI will play a pivotal role in the future of longevity. It will be essential to manage the heterogeneity of the aging population, allowing for personalized solutions. It will

also be crucial in distinguishing between "chronological age" and "biological age" (cellular health), as different organs within the same individual can age at different rates.

Ultimately, the shared goal is to ensure a longer life is also a life lived well.

Panel 11:

From Ideas to Impact: Innovation Ecosystems Driving Transformative Place-Making

Left to right: Council on Competitiveness Executive Vice President and COO, and Secretary and Treasurer to the Board **Chad Evans**; Batelle Senior Vice President for Strategic Partnerships **Steven Ashby**; Morgan State University Vice President for Research and Economic Development **Willie E. May**; Ancora CEO **Josh Parker**; Catholic University of Portugal Vice-Rector and Professor of Business **Miguel Athayde Marques**; University of Illinois Chicago Distinguished Professor of Ophthalmology and Visual Sciences **Mark I. Rosenblatt**; Auckland University of Technology Vice-Chancellor **Damon Salesa**.



Moderator:

Chad Evans

Executive Vice President and COO, and Secretary and Treasurer to the Board, Council on Competitiveness USA

Panelists:

- **Steven Ashby**, Senior Vice President for Strategic Partnerships, Battelle, USA
- **Miguel Athayde Marques**, Vice-Rector and Professor of Business, Catholic University of Portugal, Portugal
- **Willie E. May**, Vice President for Research and Economic Development, Morgan State University, USA
- **Josh Parker**, CEO, Ancora, USA
- **Mark I. Rosenblatt**, G. Stephen Irwin Executive Dean, College of Medicine; **Chief Executive Officer**, University of Illinois Hospital & Clinics; Distinguished Professor of Ophthalmology and Visual Sciences, University of Illinois Chicago, USA
- **Damon Salesa**, Vice-Chancellor, Auckland University of Technology, New Zealand

Pittsburgh's evolution from a steel-based economy to a leader in healthcare, robotics, and AI serves as a primary case study for an innovation ecosystem rooted in "place-making." In looking at Pittsburgh, as well as to other communities in which they have had experience, the panelists attributed Pittsburgh's success to two critical factors: intentionality and alignment.

As Dr. Ashby noted, Pittsburgh did not "meander" toward its current status; it deliberately designed a path forward, aligning government, academic, and industrial players behind a shared vision rather than stumbling into success by chance. Mr. Parker added the region's remarkable "energy" fueled the transformation—both as a net energy exporter and through the human commitment driving these initiatives.

While impressive, Pittsburgh's current collaboration is often viewed as a "collaboration of necessity," born from past economic crises. In order to accelerate Pittsburgh's growth and success, it should evolve into a model of

"radical collaboration"—an ambitious, aggressive pursuit of transformative opportunities rather than mere survival.

Parallels can be drawn between Pittsburgh and Baltimore, noted Dr. May, both waterfront cities with federal tech hub designations and major research universities positioned for similar transformations. On a global scale, Lisbon, Portugal, illustrates how "place-making" can overcome geographic limitations. Dr. Marques noted that the Catholic University of Portugal's business school boasts a student body that is 75 percent international, proving that a clear strategy can drive wealth by attracting global talent to a small nation.

A sustainable ecosystem need to also address the social implications of growth. Dr. Salesa cautioned residents can "share a place but not share space," occupying the same geography while having vastly different access to opportunities. To achieve true competitiveness, equity must be a "design feature" of innovation, not an afterthought.

Dr. Rosenblatt illustrated this challenge vividly with data from Chicago, revealing a 30-year life expectancy gap between the affluent neighborhood of Streeterville (90 years) and the South Side (60 years), located just ten miles away. Since factors outside the hospital—such as food access, education, and exposure to violence—determine 80 percent of health outcomes, he challenged the ecosystem to innovate for populations that lack basic connectivity and resources.

To sustain its momentum, Pittsburgh faces a distinct challenge: panelists argued it should shed its "Midwest humility." The unanimous advice is that local leadership should "bottle" their unique formula—a combination of philanthropy, world-class universities, and government support—and aggressively broadcast this narrative to the world.

Looking ahead, Pittsburgh's universities ought to seize the narrative regarding higher education's role in anchoring innovation ecosystems and preparing students for an AI-augmented workforce. Stakeholder engagement need to remain persistent across different institutional cultures. And regions pursuing technological transformation must ensure inclusive growth is a fundamental design principle, serving all residents.

From Pittsburgh to Sofia: Launch of the 2026 Global Innovation Summit



As "Forging the Future" concluded in Pittsburgh, the Council on Competitiveness and the GFCC celebrated a successful convergence of global and regional innovation ecosystems. Closing the event, Council Chair Emeritus and GFCC Chair Chad Holliday reminded participants that "a small group of thoughtful, committed citizens can change the world," setting the stage for the community's next chapter. He then invited Kalin Marinov, Head of International Affairs and Strategic Development at GBS (Glavbolgarstroy Holding) to announce **Sofia, Bulgaria, will host the 2026 Global Innovation Summit.**



Glavbolgarstroy Holding Head of International Affairs and Strategic Development Kalin Marinov.

Nestled at the strategic crossroads of Europe and Asia, Bulgaria is a dynamic EU and NATO member rapidly transforming into a high-tech industrial powerhouse. From the historic charm of Sofia to the booming manufacturing clusters of Plovdiv, the country seamlessly blends a rich cultural heritage and stunning four-season landscapes with cutting-edge innovation, featuring one of Europe's few Petascale supercomputers and a world-class ICT sector. As a critical energy and transport hub, Bulgaria is currently spearheading massive infrastructure projects—including the visionary Vertical Gas Corridor and advanced nuclear expansions—that are reshaping the continent's connectivity.

The 2026 host organization, Glavbolgarstroy (GBS), a GFCC corporate member, is a leader in construction and engineering. Their commitment extends beyond infrastructure to the well-being of the broader region, evidenced by their recent initiative to establish the Bulgarian Advisory Council on Competitiveness.

As the event adjourned with a final "Hail to Pitt," the global competitiveness community turned its eyes toward Southeastern Europe for 2026.

About the GFCC

The Global Federation of Competitiveness Councils (GFCC) is a network of leaders and organizations committed to enhancing sustainable growth through competitiveness strategies, amplifying and accelerating their evolution and best practices worldwide. The GFCC has pioneered the development of global competitiveness principles and members continue to co-create cross-border thinking and action on the field.

The GFCC is a global organization founded in 2010. Our network spans more than 30 countries across every continent and is composed of two key groups: members who secure their place through yearly dues, and distinguished experts who are invited to join as fellows.

By connecting businesses, civil society organizations, universities and government agencies, the GFCC enables shared learning and access to world-class expertise for transformation. With a hands-on approach and focus on collaboration, the GFCC helps its members build and deploy strategies.

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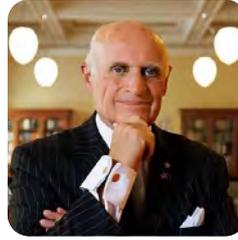
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About the Council On Competitiveness

For nearly four decades, the Council on Competitiveness (Council) has championed a competitiveness agenda for the United States to attract investment and talent, and spur the commercialization of new ideas.

While the players may have changed since its founding in 1986, the mission remains as vital as ever—to enhance U.S. productivity and raise the standard of living for all Americans.

The members of the Council—CEOs, university presidents, labor leaders and national laboratory directors—represent a powerful, nonpartisan voice that sets aside politics and seeks results. By providing real-world perspective to Washington policymakers, the Council’s private sector network makes an impact on decision-making across a broad spectrum of issues—from the cutting-edge of science and technology, to the democratization of innovation, to the shift from energy weakness to strength that supports the growing renaissance in U.S. manufacturing.

The Council’s leadership group firmly believes that with the right policies, the strengths and potential of the U.S. economy far outweigh the current challenges the nation faces on the path to higher growth and greater opportunity for all Americans.

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