Plenary 2 – Finding Catalysts for Community Transformation

9:30-11:00am

**Dr. Jamie Bracey**, Professor, Temple University College of Engineering, Founder of the Center for Inclusive Competitiveness
How Inclusive Competitiveness May Save American Democracy, Thwart the Hunger Games and Produce our own Wakanda

Jamie M. Bracey, PhD
May 23, 2018
Is Hegemony the only Catalyst for American *EXCEPTIONALISM*?

Marginalized rural and urban “minority” communities are viewed in terms of economic burden and scarcity

Demographic shifts and the success of 19th century Prussian education [class sorting] is an existential threat to American democracy

Tribalism masquerading as “cultural liberation from political correctness” reflects devolving civility
AMERICA’S NEED FOR MORE ENTREPRENEURS & HIGH GROWTH ENTERPRISES AMONG P.O.C.

In a 2016 hearing, the US Senate Committee on Small Business and Entrepreneurship was informed of

SIX DISTURBING TRENDS:

The rate at which the U.S. economy generates new firms is in longterm decline;

New business formation suffered an unprecedented collapse following the Great Recession of 2009 – particularly within disconnected metro neighborhoods and communities;

The geography of tech startup activity has become highly concentrated and exclusionary;

The economy is increasingly dominated by older incumbent firms;

Rates of entrepreneurship are declining with each generation; and

Highpotential startups are less likely than ever to succeed
WHISPERS & GAFFS

US K-12 Schools now Majority Latino & African American and underprepared

US Higher Ed experiencing declining international enrollment – China is #1 draw for high performing STEM students from Africa

Investment in Women of Color Tech Start Ups is Ridiculously low

Black women received less than 2% in VC funds in 2016, but own 61% of businesses in the black community; Asian female owned businesses outpace all others for job creation but often hire from within; Latina businesses beginning to see explosive growth but no $
America’s Crisis in Entrepreneurship & Talent Development

In Pennsylvania, we must prepare, train and equip a tech-based workforce to compete in a tech-driven global Innovation Economy. We must also increase the numbers of successful scalable enterprises that can produce new jobs for a qualified workforce.
Nearly 80% of the Philadelphia metro's businesses are white-owned despite making up just one-third of the city's population.

The recently released *State of the City report* from Pew Charitable Trusts shows that only 2.4% of region's businesses are white-owned, while just 2.4 percent of businesses are black-owned, according to *PhillyMag.com*.

Additionally, businesses owned by blacks and Asians represented about 2 percent of payroll, and publicly held companies, which made up less than 8 percent of businesses included in the count, accounted for two-thirds of total payroll. White-owned businesses accounted for the remainder.

The findings reflect an economic imbalance already well-known in Philadelphia and beyond, and one city leaders have tried to address over the years.

**POPULATION: 1.56M**
- Black: 44%
- White: 35%
- HISPANIC: 14%
- Asian: 7%

**2.4%** Black-owned businesses

**Black + Asian = 2%** of payroll
URBAN SUSTAINABILITY OFFERS TREMENDOUS OPPORTUNITIES
Wherefore Art Thou Wakanda?

Technologically Advanced
Culturally Anchored
Interconnected Eco-System
Assets are Globally Valued

Rural America?
Urban America?
Neither? Both!
Spring 2018: Temple University has launched the nation’s first **Center for Inclusive Competitiveness** to advance community engaged research, K-12 education, and economic development to improve the performance of under-represented Americans in the global Innovation Economy.

**Who we are:**

Temple’s College of Engineering, Katz School of Medicine, College of Public Health, Fox School of Business, Temple Institute for Diversity, Equality, Advocacy and Leadership (IDEAL) Scale Up Partners, Inc. Forward Cities, Inc.

**Working Group Members:**

Clark Atlanta University
Imani Energy, Inc.
Jackson State University
KAD ICT Hub, Nigeria
Michigan State University
North Carolina A&T University
Penn State Extension TLC
Pennsylvania Department of Agriculture
Philadelphia Energy Authority
Uplift Solutions, Inc. (Brown’s Shop Rite)
Urban Creators Farm Collective, Inc.
School District of Philadelphia CTE Division
Tioga Hope Garden
CAN AMERICA WIN ITS ECONOMIC FUTURE?

"YES!" says the leadership of Temple University. Johnathan K. Hollfield, J.D., Temple’s Vice President for University Relations, is a leading advocate for social and economic development. His vision is for a future where the United States can compete globally. Hollfield believes that America’s future lies in its ability to create jobs and opportunities for all Americans to succeed.

In his new book, "The Future Economy and Inclusive Competitiveness," Hollfield explores the challenges and opportunities facing America today. He argues that we must focus on education, innovation, and entrepreneurship to create a more competitive future. Hollfield’s message is clear: we must invest in our people, our communities, and our economy if we want to succeed.

Published by: Temple University

PIPELINE OF PRODUCTIVITY

WORKFORCE

- White Collar
- Blue Collar

ENTREPRENEURSHIP

- Business Ownership
- Job Creation
- Wealth-building

STEAM EDUCATION

- Science, Technology, Engineering, Arts, and Math
How Do You Operationalize This Thing?

• Collaborative Partners (External and Institutional)
• Inclusive Economic Competitiveness Index
• Build on History of Success With STEM Education & Entrepreneurship
• Leverage Culturally Competent Patriotism
• Focus on Aligning with Growth Sectors while Respecting Traditional Strengths
Why start in Philadelphia, Pennsylvania?

<table>
<thead>
<tr>
<th>Race or ethnicity group</th>
<th>Unemployment rate</th>
<th>Employment-population ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>4.9%</td>
<td>59.7%</td>
</tr>
<tr>
<td>Black or African American</td>
<td>8.4%</td>
<td>56.4%</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>5.8%</td>
<td>62.0%</td>
</tr>
<tr>
<td>White</td>
<td>4.3%</td>
<td>60.2%</td>
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<tr>
<td>Asian</td>
<td>3.6%</td>
<td>60.9%</td>
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*Percentage of population that is employed

SEPTEMBER 2017 UNEMPLOYMENT RATE BY COUNTY

Philadelphia was named one of the world's top "Knowledge Capitals," according to a report from the Brookings Institution. The report listed greater Philadelphia as one of 10 mid-sized population centers in the U.S. and Europe that show a strong "economic output and innovative advances, that are also teeming with respected universities, talented graduates, venture capital and global patents."

"We wanted to look... at the economic factors that contribute to that city's competitiveness. That tells us something about their niche, their key role in the global economy and that reveals these groups, and Philly obviously is a knowledge capital," Joseph Fortilla, one of the study authors, told the Philadelphia Business Journal.
Investment Strategy in STE/A/M Education, Talent & Start Ups Most Likely to Increase Diversity’s Contribution to American Innovation Competitiveness

STE/A/M Education aligned with Sustainable Infrastructure (Food, Energy Water, Health)
Invention and Problem Solving Through Interactive Simulations (Play to Serious Gaming to Accelerated Cognition)
High Growth Enterprises aligned with $1T Annual Black Consumer Expenditures
Policy to Nurture and Protect Minority Business Growth
Cultural Assets that Can be Monetized to Benefit the Cultural Producers
<table>
<thead>
<tr>
<th>AFNR Career Pathways</th>
<th>Semi-Skilled (HS)</th>
<th>Entry level (CTE)</th>
<th>Mid Level (Assoc. Degree)</th>
<th>Professional level (B.S.)</th>
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<tbody>
<tr>
<td>Biotechnology</td>
<td>Laborer (biology, hospital, clinic)</td>
<td>Biological Tech</td>
<td>Biology researcher</td>
<td>Bioengineering Interdisciplinary Engr</td>
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<tr>
<td>Food Production &amp; Processing</td>
<td>Laborer (animal, crops, building)</td>
<td>Entry level tech support</td>
<td>Research tech</td>
<td>Interdisciplinary Engr Bioengineering</td>
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<td></td>
<td></td>
<td>(animal, plant, buildings)</td>
<td>Food Processor tech</td>
<td>Mechanical Engr</td>
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<td></td>
<td>GPS Tech</td>
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<tr>
<td>Environmental Sciences, Horticulture, Natural Resources</td>
<td>Laborer (farm, wildlife, greenhouse)</td>
<td>Horticulture tech</td>
<td>Engineering</td>
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<tr>
<td></td>
<td></td>
<td>Greenhouse tech</td>
<td>Technologists, Skilled Trades</td>
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<td></td>
<td></td>
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<td>(Hydraulics, Electricians, Plumbers,</td>
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<td></td>
<td></td>
<td></td>
<td>Welders), Process Control</td>
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<td></td>
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<td></td>
<td>Technicians, Computer Techs</td>
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<tr>
<td>Power, Structure &amp; Technology Systems</td>
<td>Machine operators, construction laborers, maintenance, retail sales, computer installation, networks</td>
<td>Precision tool techs, plumbing techs, welders, construction techs, computer support systems, mechatronics</td>
<td>Engineering Technologists, Skilled Trades (Hydraulics, Electricians, Plumbers, Welders), Process Control Technicians, Computer Techs</td>
<td>Mechanical Engr Civil Engr Electrical Engr Construction Mgt Tech Mechanical Engr Tech (manufacturing, energy, computers)</td>
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<tr>
<td>“Ag Mechanics”</td>
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<tr>
<td>“Ag Technology”</td>
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Economic Prosperity Opportunities

- Natural Gas LNGs (Ethylene)—Hair Fiber Manufacturing from China/Korean domination—$2B Black Women’s Beauty Industry
- Agriculture R&D – Genomic Research – Controlled Indoor Agriculture to Supplement Rural/Indigenous Farming with Specialty Crops
- Engineering Bio-digesters for Waste and Water Management
- Artificial Intelligence – Actuators – Manufacturing
- Biotechnologies to Advance Quality of Live
- Blockchain Technology to Provide UBIs
- Cyber Security SWOT Teams
Participation on National CIC Advisory Board
$300,000 for Engineering Urban Sustainability Career Pathway Strategic Planning
2 (Thirty) 30’ Shipping Containers for NPHL
$1.5M Investment in PA Urban STEM AgTech Applied Research via USDA, USAID or NIH