Institutional Change Via STEMJazz

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Associate Provost for STEM Initiatives
Brown University

MIT Forum for Equity
Equity in Engineering Education
February 24, 2021

Faculty Are Forever

Self-replication is the norm w/o action

Diversity *sans* cohesion $\rightarrow$ unstable

(isolation, disaffection, flight)

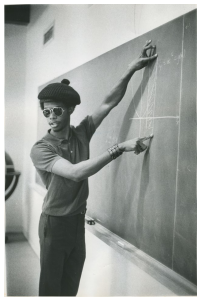
Diversity *sans* achievement $\rightarrow$ unstable

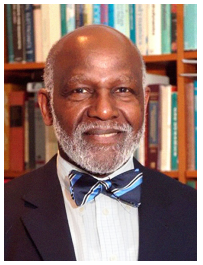
(isolation, disaffection, flight)

WHAT TO DO?

MODEL: A STEM Continuum (from Our MIT youth)

Instigator/Trailblazer





Undergrads **Grad/Postdocs** **Faculty**

The Dream

Critical Mass

+ Community

+ URM/HUG Creativity

=

Breakthroughs!

COMPETITIVE ADVANTAGE

Building The Dream@Brown

Diversity & Inclusion Action Plan

Administration provides resources

Departments provide plans

Administrative oversight and accountability

Administrative Will is ESSENTIAL

President
(Chris Paxson)

Provost
(Rick Locke)

Understanding Race in America is ESSENTIAL

CSREA Director
(Tricia Rose)

A HUG STEM Gadfly/Ombuds-Architect is ESSENTIAL

Associate Provost for STEM Initiatives
(Chris Rose)

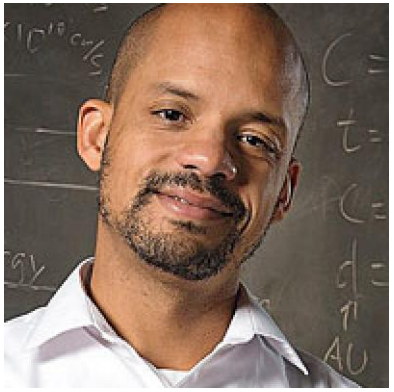
Diversity and Inclusion Action Plan

Program Palette Sampler

Provost's Visiting Professor Program

Jim Gates

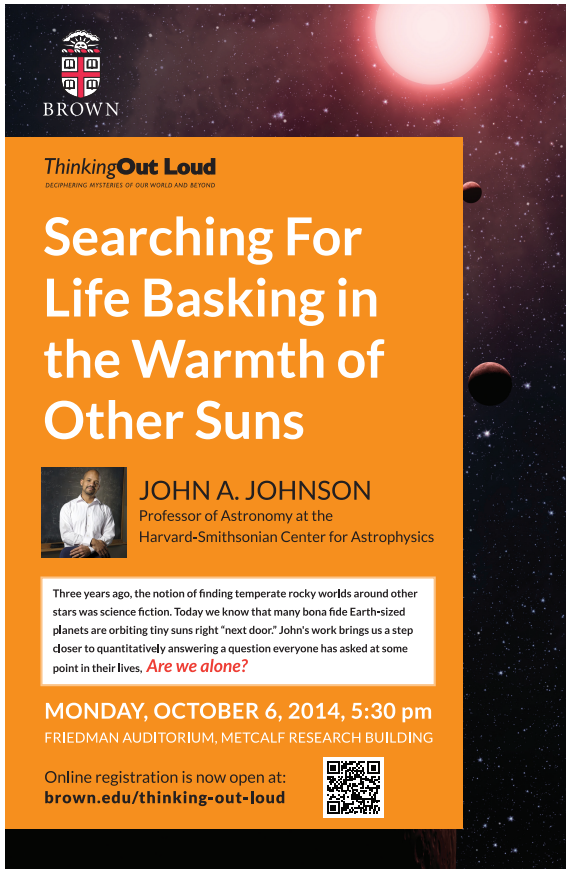
Ron Aubert

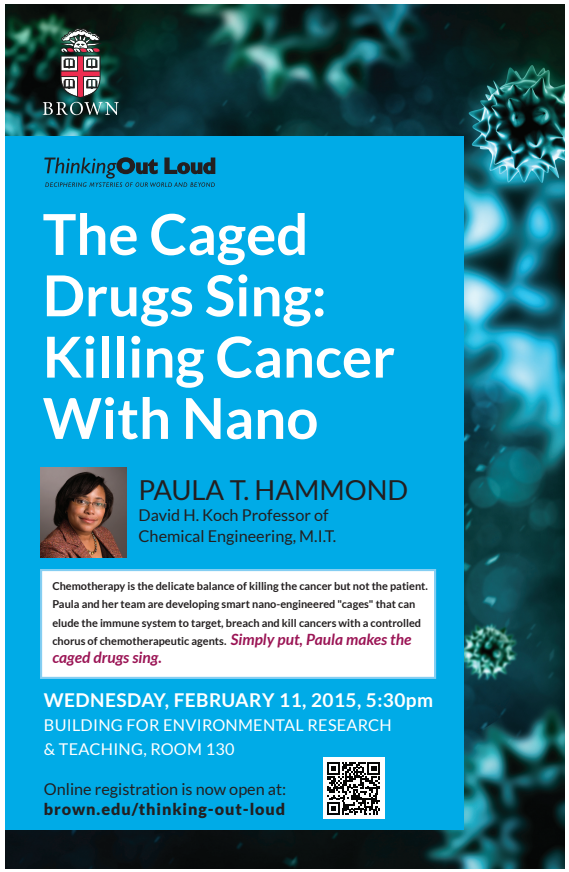


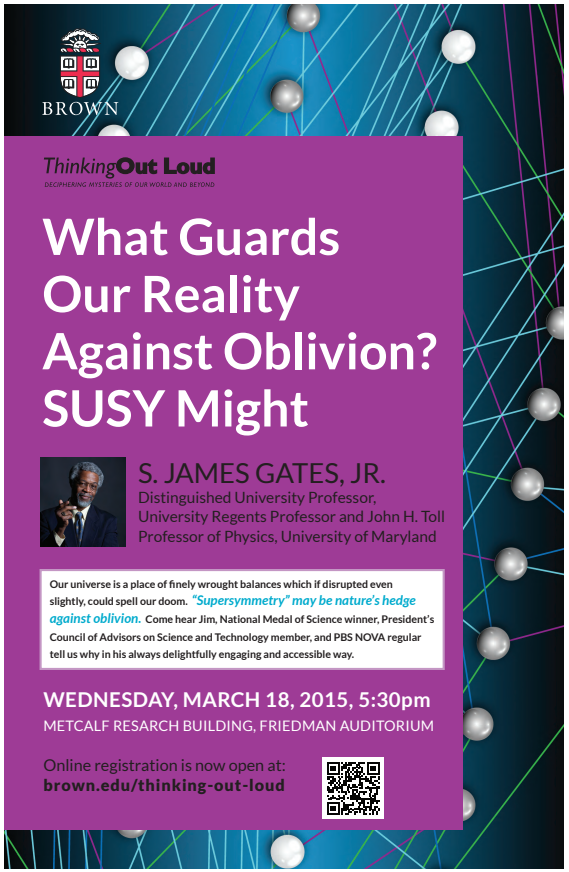
John Johnson

Carlos Castillo-Chavez

Presidential Colloquium Series







High Impact ENSEMBLE Brilliance



STEMJazz



Target of Opportunity Program

Aegis: All STEM at Brown

Resources: $N > 5$ ToO Lines/Year

Target Identification: Department/APSI

Target Evaluation: Careful Archival Vetting

Dream Progress: Critical Mass + Community

Black/LatinX/Native STEM Faculty

2014	2021		
Wayne (Full+)	Wayne (Full+)	Gabrielle (Asst)	Chris (Full)
Andrew (Assoc)	Andrew (Full)	Emilia (Assoc)	Stephon (Full)
Jason (Assoc)	Dan (Asst)	Greg (Assoc)	Jim (Full+)
Chad (Assoc)	Phyllis (Full+)	Lorin (Asst)	Theo (Asst)
Johnny (Assoc)	Johnny (Full)	Teddy (Asst)	Seny (Assoc)
Akilah (Asst)	Akilah (Assoc)	Sheldon (Asst)	Michelle (Asst)
Chanelle (Asst)	Chanelle (Assoc)	Bena (Asst)	Alex (Asst)
	Kimani (Full)	Tayla (Asst)	Diana (Assoc)
	Charles (Lecturer)	Jeff (Research)	Anarina (Research)
	Ron Aubert (Practice)		

Dream Progress: Creativity

STEMJazz researchers play their distinct disciplinary instruments in ensemble to weave startlingly new intellectual fabric across seemingly unrelated areas

Current riffs include:

SuperSymmetry and Evolutionary Biology

Genotype, Phenotype and Information Theory

Illuminating Women's Hidden Contribution to Historical Theoretical Population Genetics

Press Coverage:

(Wired 1/29/2019)

Molecular Informatics
(News from Brown 1/22/18)

Dream Progress: Breakthroughs

The Dream Reprise

Critical Mass + Community + URM/HUG Creativity

$$\Downarrow$$

Breakthroughs!

STEMJazz $\Rightarrow$ Selective Advantage $\Rightarrow$ Institutional Change