# Fostering Youth Motivation, Achievement and Persistence in STEM: Findings from the ITEST Program

## Wednesday October 22nd, 2014

Hosted by:

STEM Learning & Research Center (STELAR)
Education Development Center, Inc.

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EdLab Group

# NSF's Innovative Technology Experiences for Students and Teachers (ITEST) Program

- To build understandings of best practices, factors, contexts and processes contributing to K-12 students' motivation and participation in STEM
- Helps students to be aware of STEM careers, and to pursue formal school-based and informal out-of-school educational experiences to prepare for such careers
- Includes **288** current and past projects across **44** states have served **247,700 students**, **9600 educators**, **3000 parents and caregivers**

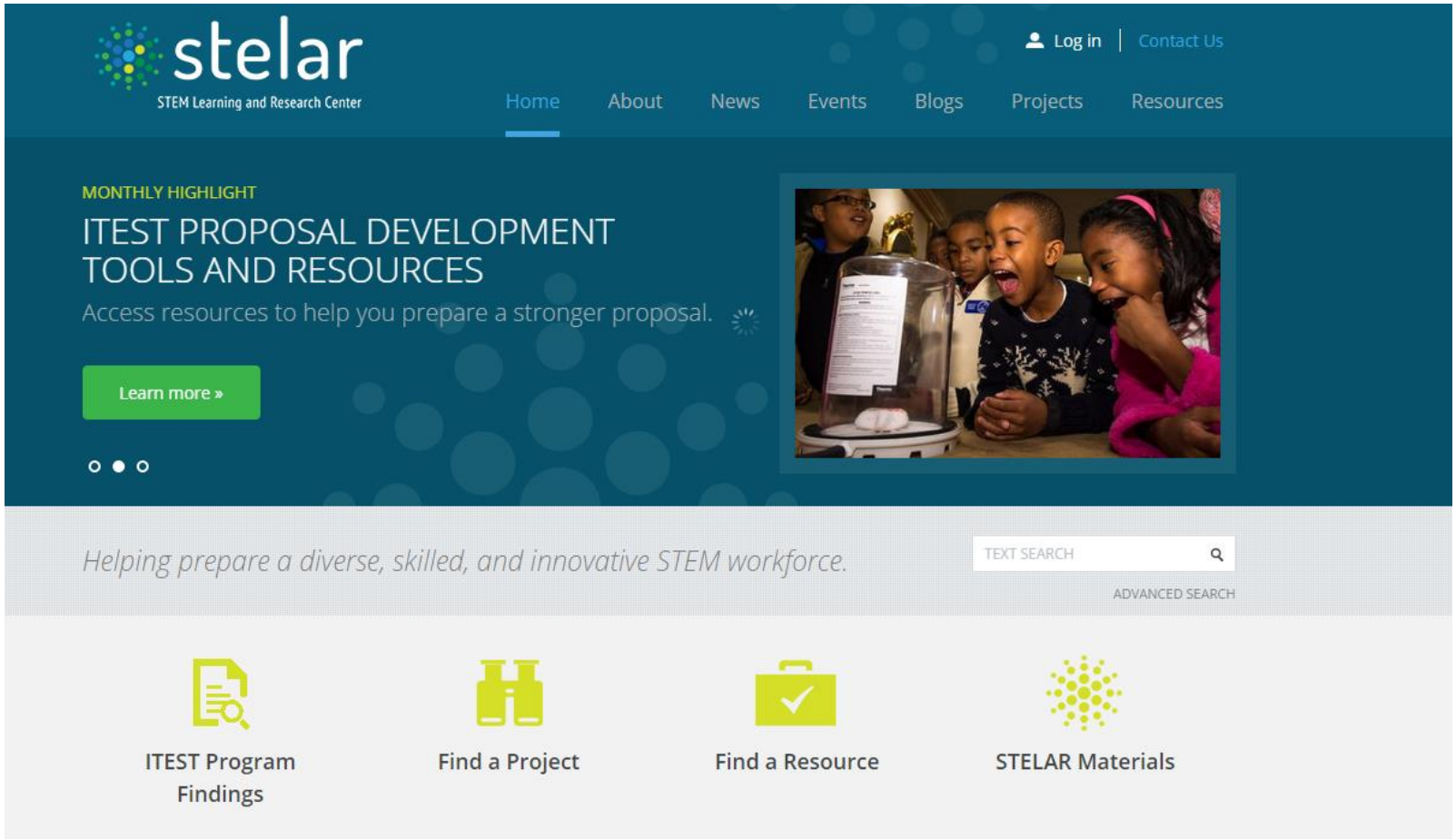
# ITEST Portfolio

- **Computer Science** gaming & simulations, general programming, web development, multimedia – audio, video and animation, computer hardware.
- **Bioscience** bioinformatics, biotechnology, DNA analysis/sequencing, neuroscience and biomedicine
- **Environmental Science** GIS/GPS, remote sensing technology, climate modeling, ecological research/analysis
- **Engineering** aerospace, astronomy, design, robotics and nanotechnology

# STEM Learning and Research Center (STELAR) Goals

- Facilitate projects' success through **technical support** with a focus on synthesis of findings
- Inform and influence the field of STEM stakeholders by **disseminating** project findings nationally
- Deepen the impact and reach of the ITEST program by **broadening participation** in the ITEST portfolio

# STELAR Website – http://stelar.edc.org



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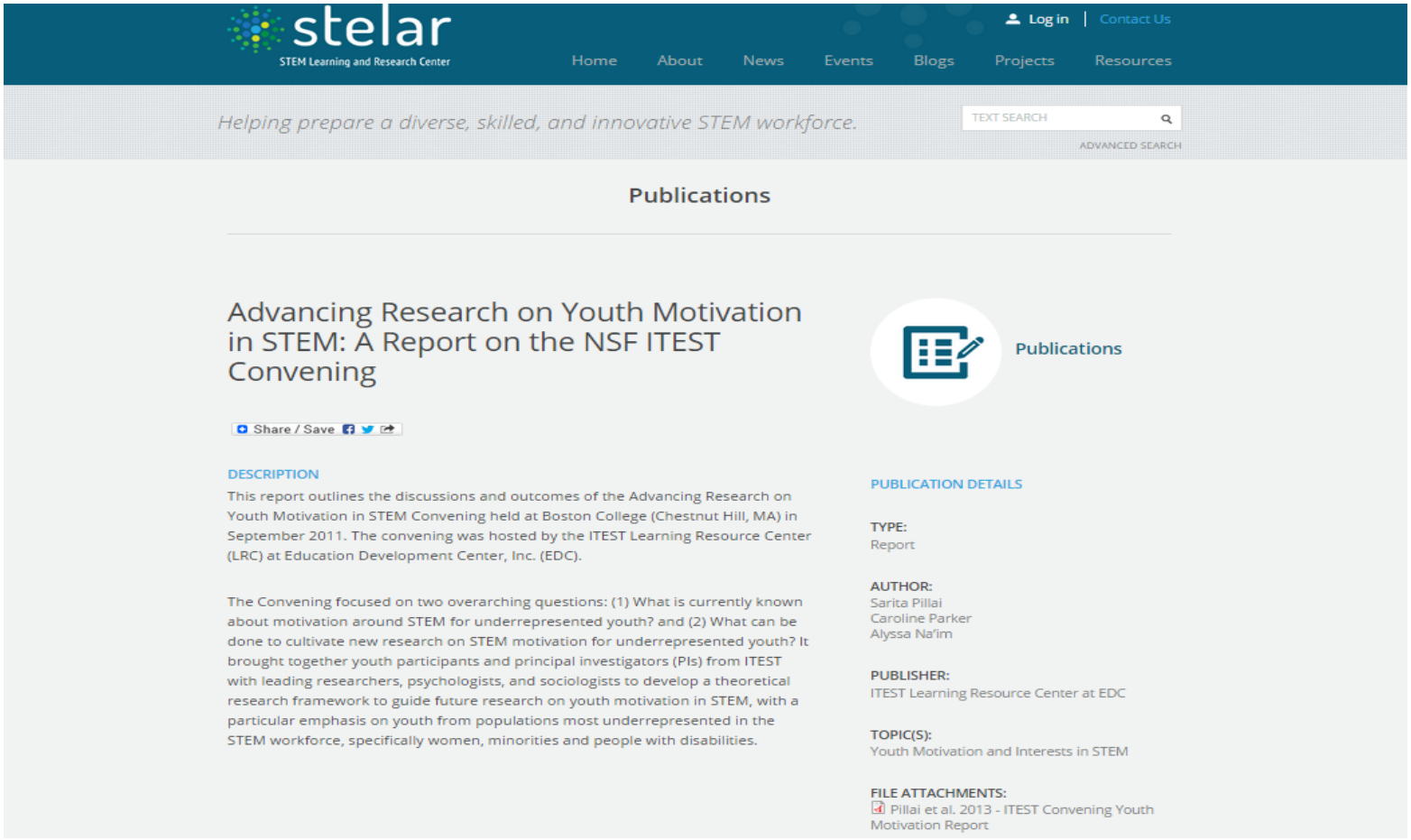

# Today's Panel

- What specific **programmatic aspects** have the greatest impact on **youth motivation, achievement and persistence in STEM** beyond ITEST?
- What do these STEM learning experiences teach young people about **STEM educational/career paths**?
- What are the **systemic barriers** that impeded student persistence in STEM education and career pathways and how can they be addressed? What are the **drivers of change** and the policy implications?

# Panel Members

- *Moderator:* **Sarita Pillai**, Education Development Center, Inc.
- **Carolyn Staudt**, Concord Consortium
- **David Reider**, Education Design
- **Jamie Larsen**, TERC Inc.
- **Mike Barnett**, Boston College
- **Andy Trossello**, Waltham High School
- **Russ Anderson,** Worcester Technical High School
- **Tim Gay**, Boston Latin Academy

# Thanks and Q&A

**Materials from our session today including presentations and links to reports will be available from our website:**

**http://stelar.edc.org**

**Or send us an email at:**

**stelar@edc.org**