## StARS: Strategic Alliance Rutgers Stuart

RLA Fellow: Ioannis (Yannis) P. Androulakis

Mentor: Lily Young, RU-NB Provost

ApproaCh science with a purpose

ADdress personnel and organizational diversity around a common goal

EMpower young women to lead future technology innovation

Eliminate K-12/Higher education barriers

In line with RU's strategic plan aiming at "Educating involved citizens and effective leaders for a dynamic world [...] enhancing our [Rutgers] public prominence"

The Institute for Women's Leadership

The Rutgers Institute for Translational Medicine and Science



The Collaborative for Technology
Entrepreneurship and Commercialization

STRONG ANAGEMENT

#### After many iterations ...

Spring semester junior year: "Doing Science"

<u>Theoretical perspectives</u>: needs and concepts; research ideas; testable hypotheses; teams and communication; ethics; scientific leadership

The scientific method: research design; understanding literature; qualitative and quantitative data; scientific writing and presentation

<u>Designing a project</u>: preparation; literature review; research planning; e-mentoring; e-shadowing;

Summer research immersion

Research experience at RWJMS Institute for Translational Medicine & Science

Fall semester evaluation, assessment and feedback

# Doing Science: The Process of Scientific Inquiry

under a contract from the National Institutes of Health

National Institute of General Medical Sciences









R. Panettieri, MD

RU Vice-Chancellor for Transl Med Sci



### Why is this program different?

Focuses on young women (all girl school) and their involvement in the scientific process with emphasis on broader health issues

Integrated, longer term, activity

Formalizes the research component and prepares students for specific tasks

Students are paired with researchers to develop, execute and evaluate a research plan

Establishes a formal collaborative program enabling the integration of university-level activities into a HS curriculum

Active integration with numerous educational activities at Stuart for assessment, evaluation and continuity

#### **Development Phases**

Phase 0: Agreement (time 0: Jan 2017)



Phase 1: Initiate discussions on development, deployment and assessment: course work, research experience, quantifiable assessment metrics (months 0-6) on going

Phase 2: Draft white paper outlining the components and initiate fund raising for components that will eventually need funding (months 6-8) – Initial contacts: *JnJ, BMS, Sanofi* 

Phase 3: Pilot implementation, 3-5 students (scheduled for Spring '18 – Summer '18) to assess the student selection process; course preparation; laboratory experience and provide overall feedback

#### What did I learn as an RLA fellow?

Identify broader goals that will benefit the organization and not aim <u>only</u> at personal gains

My project changed completely from what was originally proposed after a couple of RLA sessions

You can only engage people by presenting them with a mutually beneficial vision

My initial attempts to engage my colleagues failed miserably However, the failure made me identify better opportunities

Identify stakeholder gaps and needs early on and do not assume that they will do that for you ©

My initial plan had significant overlap with existing Stuart activities A lot of (hard) work on my part should have focused elsewhere

RU has leadership issues that need significant improvement Serious disconnect between leadership attributes as described during our meetings and the reality we often encounter at RU