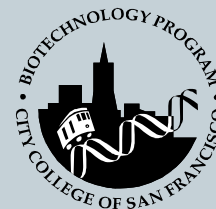


Bio-Link's B2B Learning Community



USING BRIDGE TO BIOTECH (B2B) MODEL
TO HELP INCREASE
DIVERSITY, RETENTION AND CONTINUATION
IN BIOTECH PROGRAMS



Moderators



John Carrese

**Bio-Link Synergy Project
Innovation Coach**

**Director of San Francisco Bay
Center of Excellence,
City College of San Francisco**

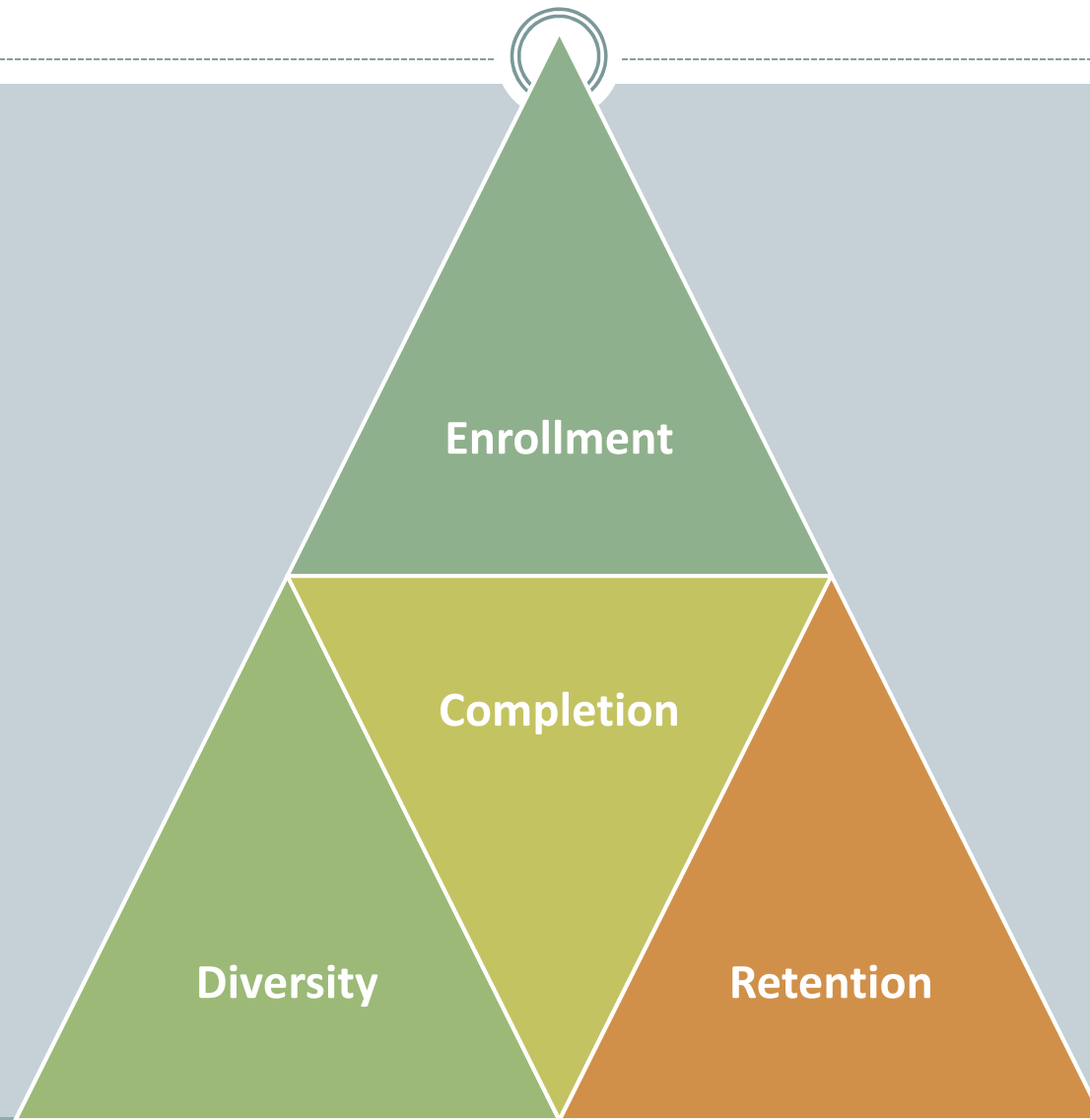


Laurence Clement

**Bio-Link Synergy Project
Manager**

**Faculty, Bridge to Biotech
Internship Program,
City College of San Francisco**

Goals of CCSF's B2B program





Dropped out of college in 1999

Back to college 10 years later but “felt discouraged because couldn't do fractions”

One year after completing the Bridge to Biotech Program, has successfully completed courses in: algebra, math for engineering, intro to chemistry and biology, honors English

Goal: AS in biotech, BS in Biochemistry and Medical School



**Gabriel Santamaria,
Bridge to Biotech Student,
Spring 2010**

http://www.youtube.com/watch?feature=player_embedded&v=HCT5MMttpXA

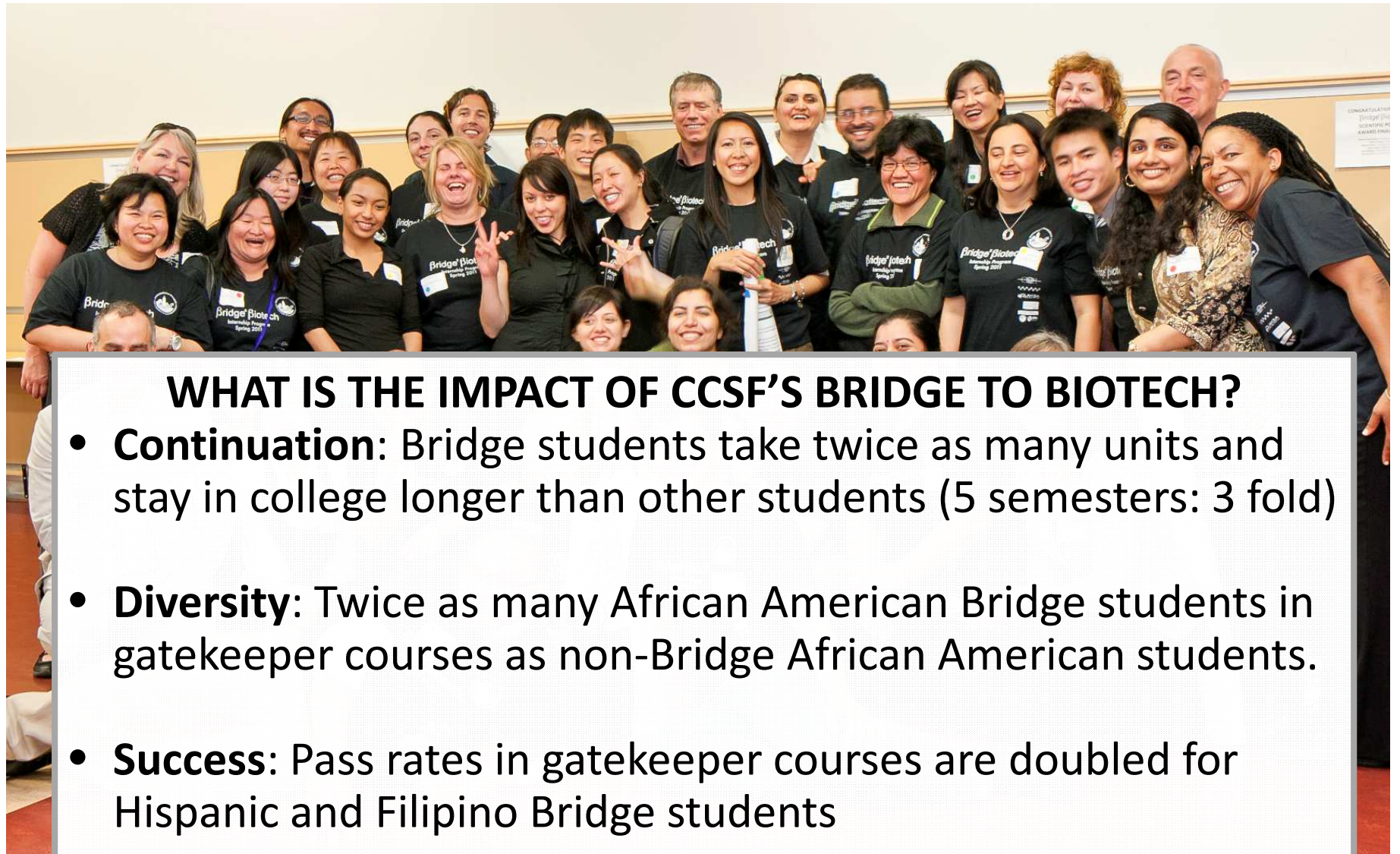


Bridge to Biotech Students at the student-organized Networking Event
May 2011



WHO ARE CCSF'S BRIDGE TO BIOTECH STUDENTS?

- Mostly **low income** adults
- Half the Bridge students have **no prior college education**
- **Low basic skills:** as low as 8th-9th grade math and English levels on T.A.B.E. test
- **Diverse** : 20% African American, 20% Asian, 20% Hispanic, 42% ESL students



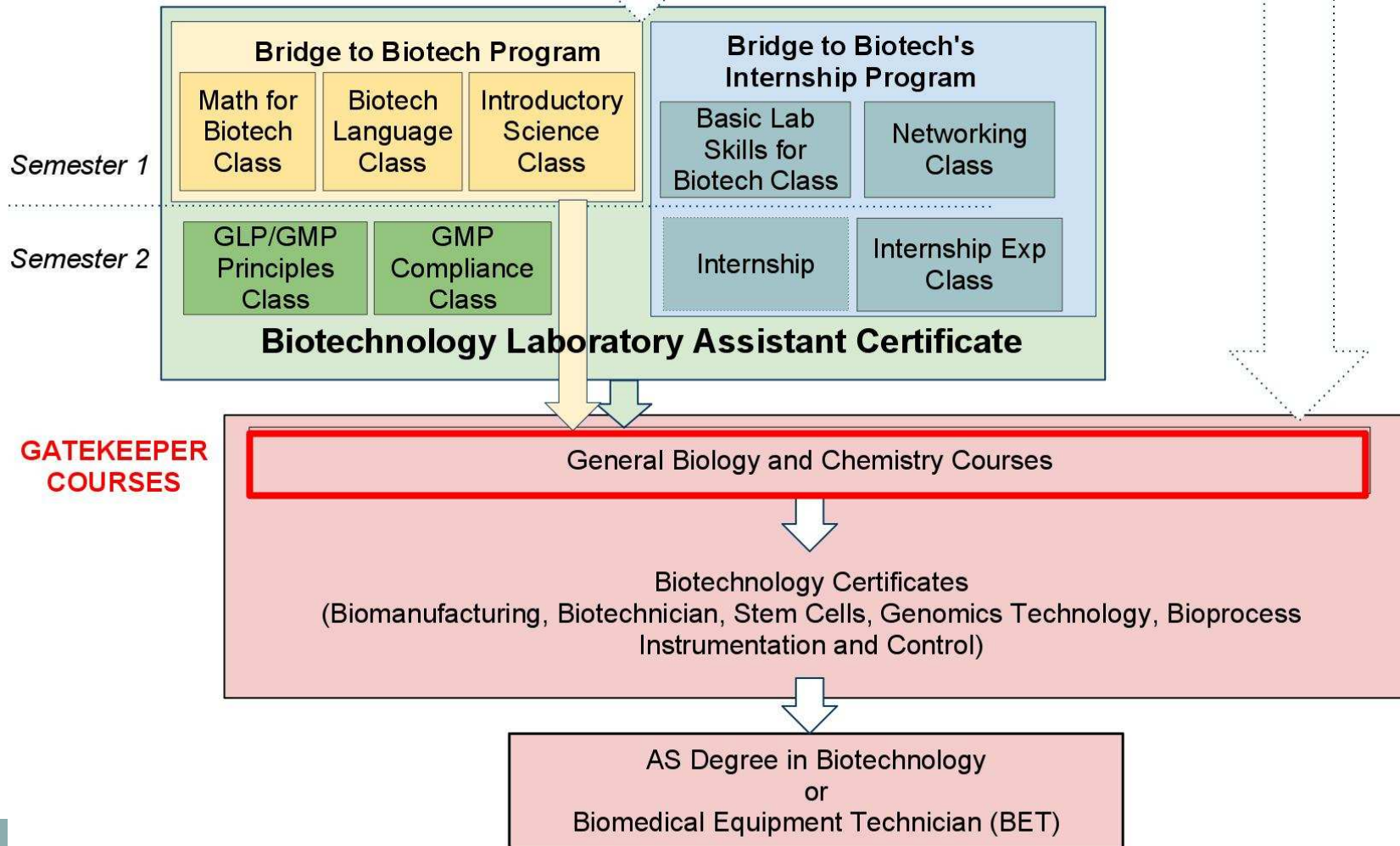
WHAT IS THE IMPACT OF CCSF'S BRIDGE TO BIOTECH?

- **Continuation:** Bridge students take twice as many units and stay in college longer than other students (5 semesters: 3 fold)
- **Diversity:** Twice as many African American Bridge students in gatekeeper courses as non-Bridge African American students.
- **Success:** Pass rates in gatekeeper courses are doubled for Hispanic and Filipino Bridge students
- **Completion:** Double the completion rates of other Biotech students for Biotech certificates.

The CCSF Biotech Program

Entryway for students without any scientific background

General entryway to the Biotechnology Degree courses for students with some scientific background



Any Questions?



Spreading the B2B Model to other colleges



Before Bio-Link

- Before 2010, several efforts to spread the B2B model to other colleges.
- Language, Math and Science Readers were provided to new colleges.
- CCSF B2B Faculty was the point of contact.



Bio-Link's "Synergy" project

- Community of practice where all adopters discuss challenges and share successful practices.
- CCSF provides a toolkit, a list of essential elements of the B2B, in addition to the curriculum, lesson plans, syllabi, and course outlines.
- Toolkit and materials will be supplemented with adopters' best practices.

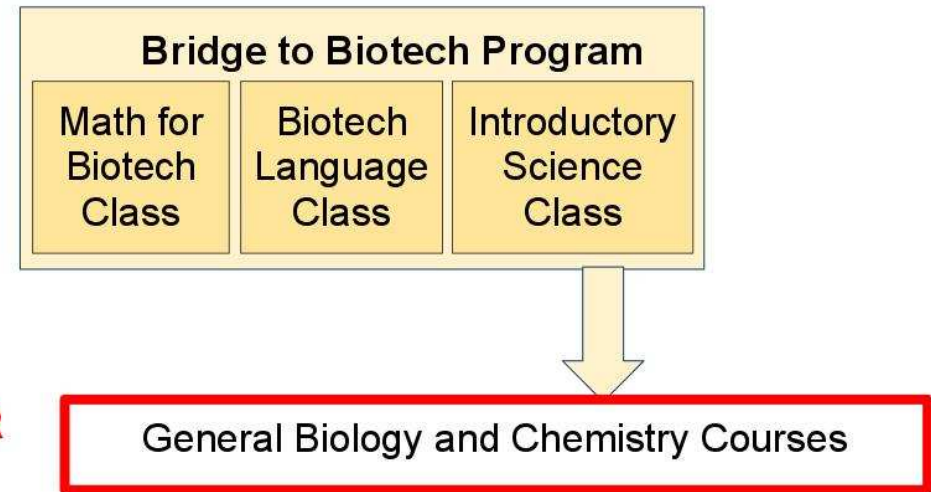


B2B TOOLKIT

1. Interdisciplinary curriculum that uses contextualization and linked courses (Math, Language, Science)

2. Use of “Learning Communities” as a support system for students

3. Link basic skills courses to gatekeeper classes



Goal: Academic preparation by building basic skills for science courses (example: lab notebooks in Language, solution concentrations in Math).

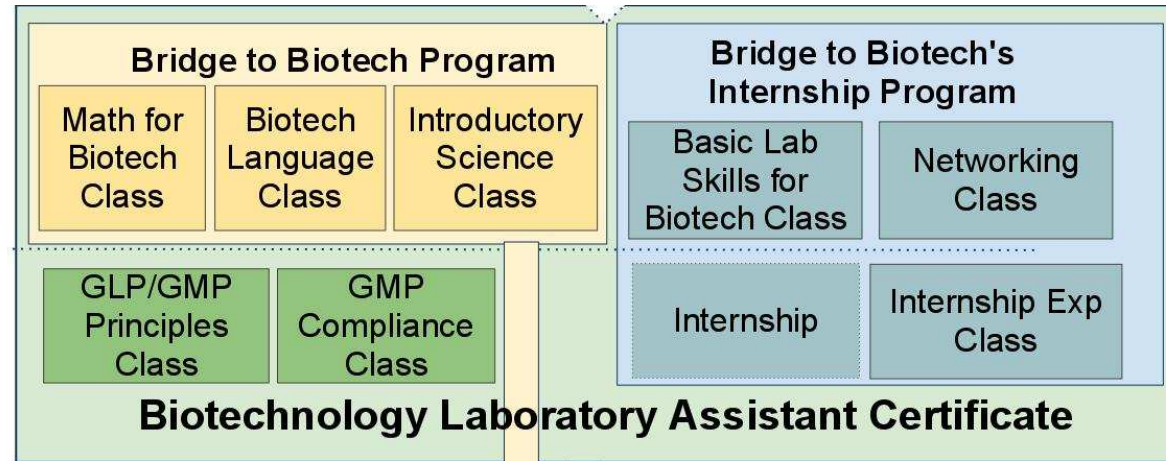


B2B TOOLKIT

4. Facilitate access for working and unemployed adults

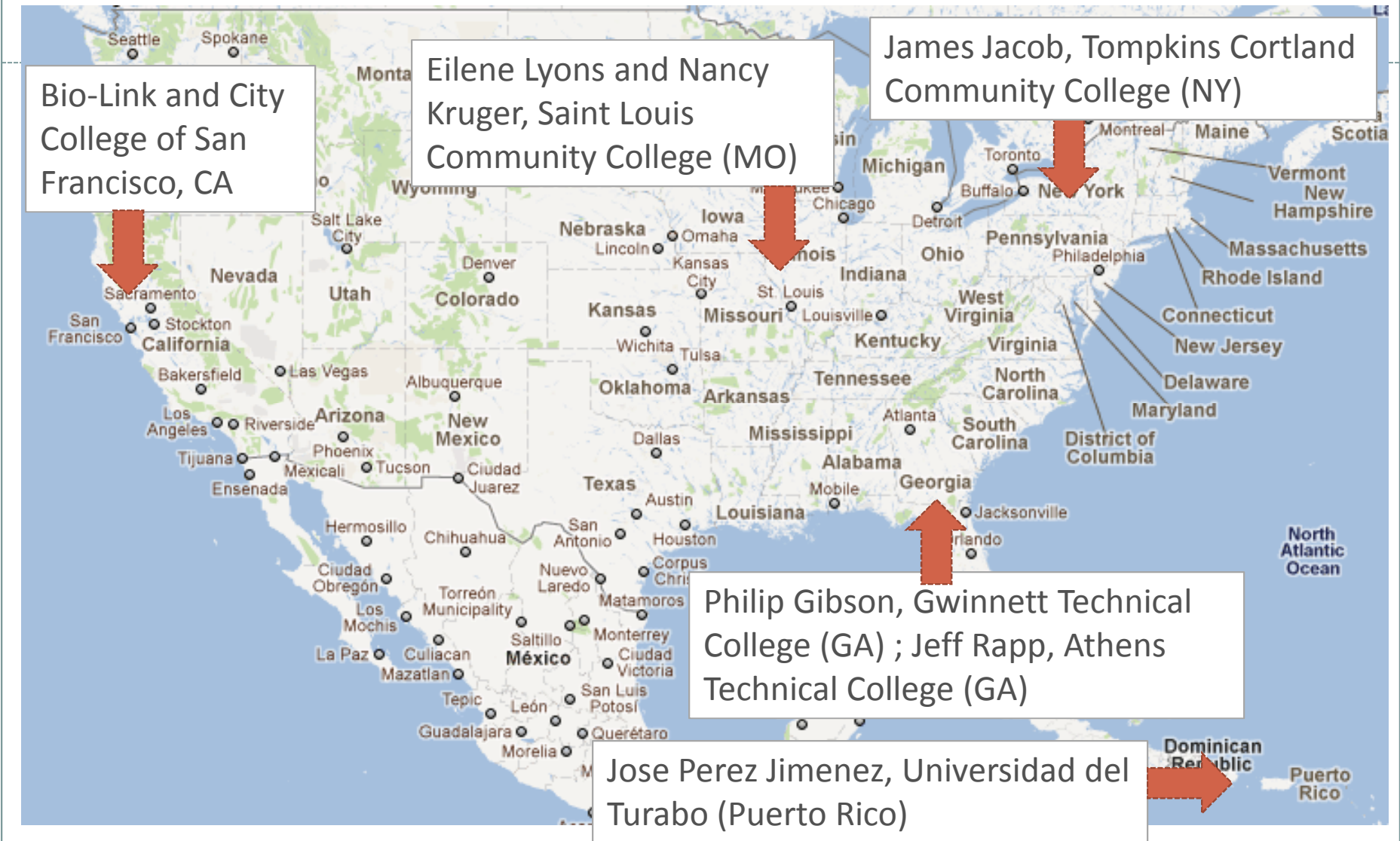
5. Credit courses count toward entry-level Biotech Certificate

6. Internship Option with Professional Development and Networking component



Goal: Retraining of low-income adults

Building Bio-Link's B2B Community of Practice





Bio-Link's Synergy Process

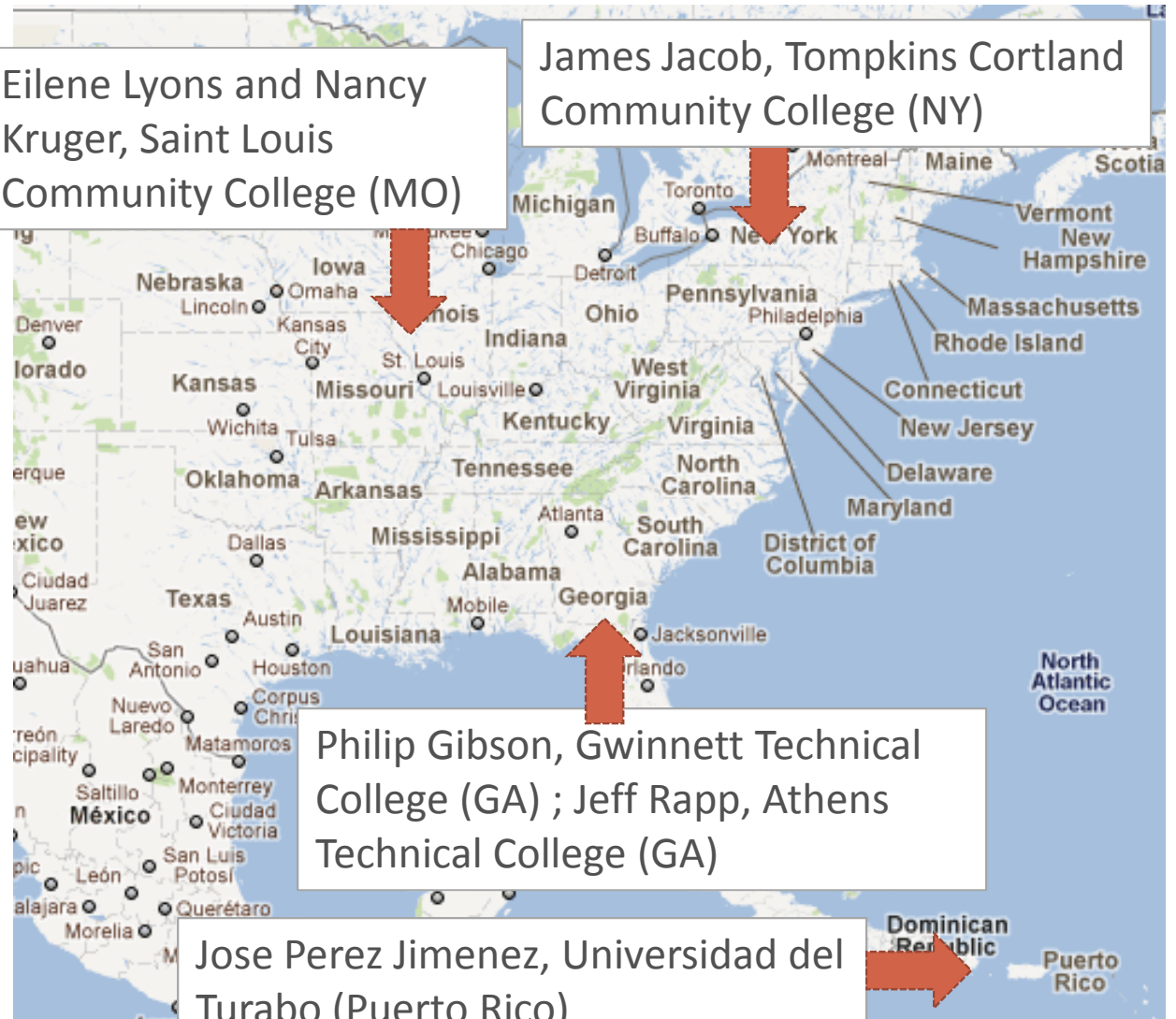
1. Meet at Bio-Link's Summer Fellows Forum in June
2. Connect through monthly webinars
3. Develop a process for working as a Learning Community
4. Share tools, discuss definitions of success, institutional challenges, outreach strategies and funding opportunities

Eilene Lyons and Nancy Kruger, Saint Louis Community College (MO)

James Jacob, Tompkins Cortland Community College (NY)

Philip Gibson, Gwinnett Technical College (GA) ; Jeff Rapp, Athens Technical College (GA)

Jose Perez Jimenez, Universidad del Turabo (Puerto Rico)





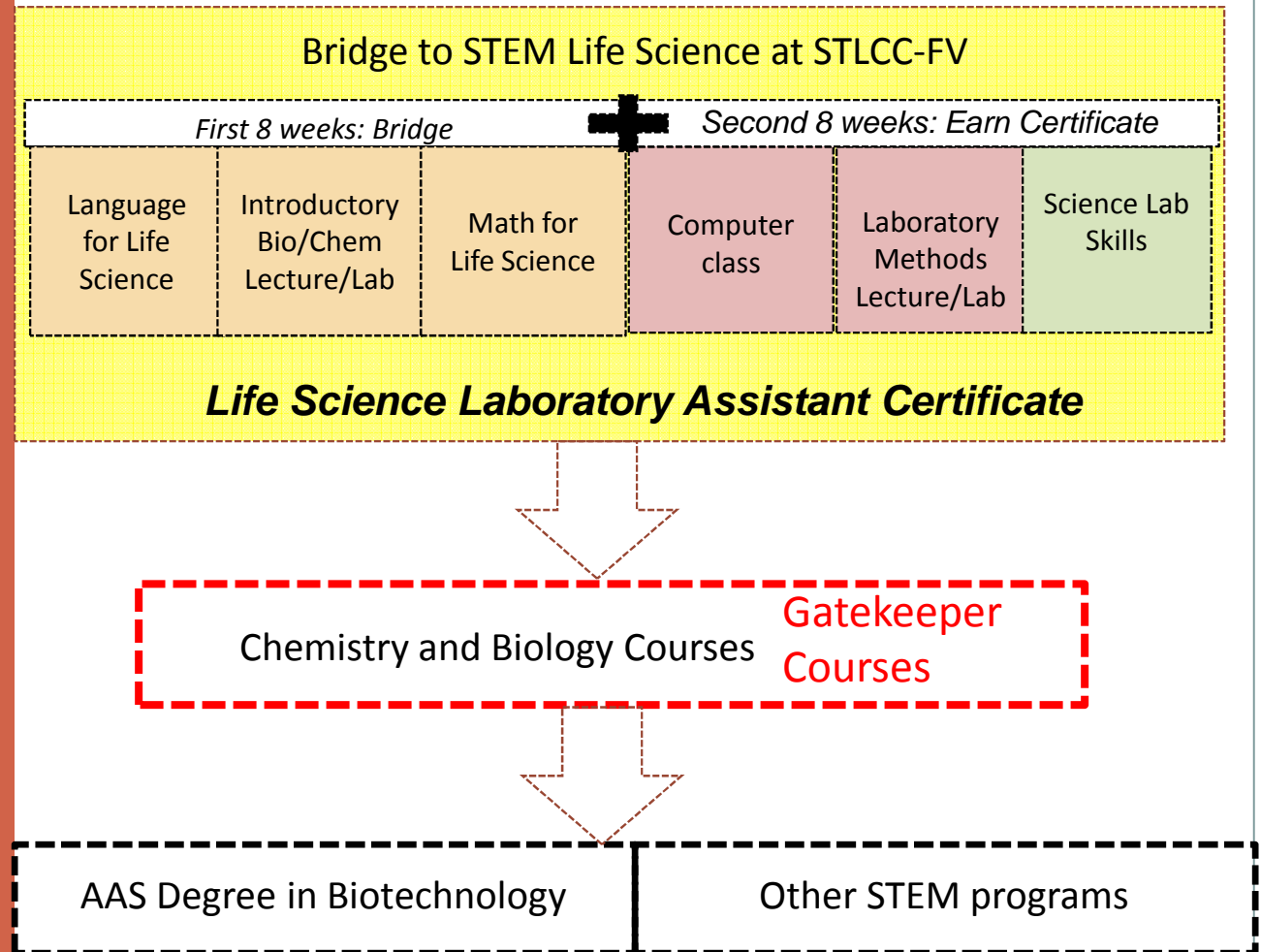
Saint Louis Community College, MO

Using existing
computer and
laboratory methods
courses

Developed new
classes and
contextualized
Language and Math

Built new certificate

**Expected Launch:
Spring 2012**





Athens Technical College, GA

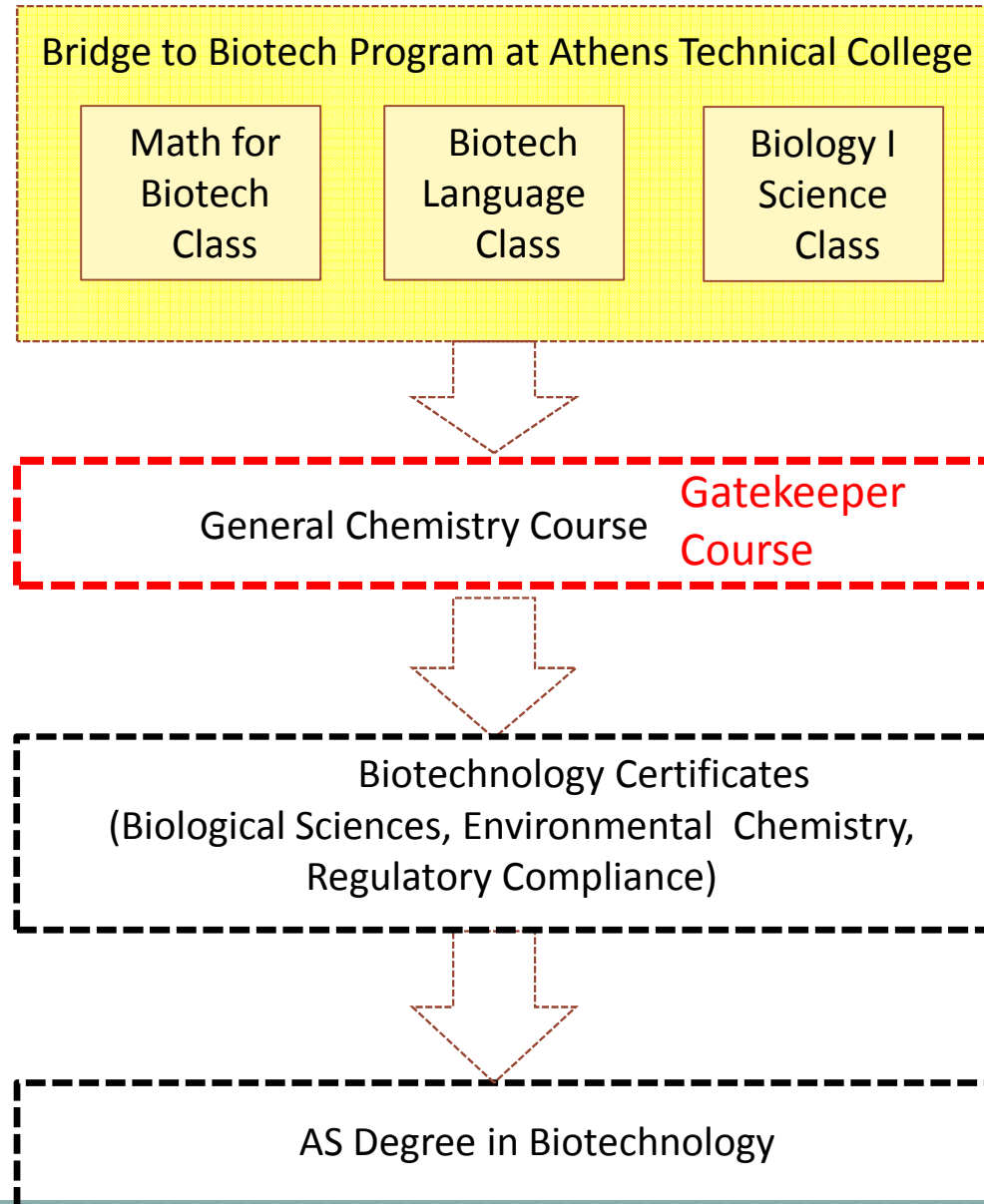
Existing Math class contextualized to Biotech

Existing Biology I Science Class

Gatekeeper course is General Chemistry

Expected Launch:

Fall 2012





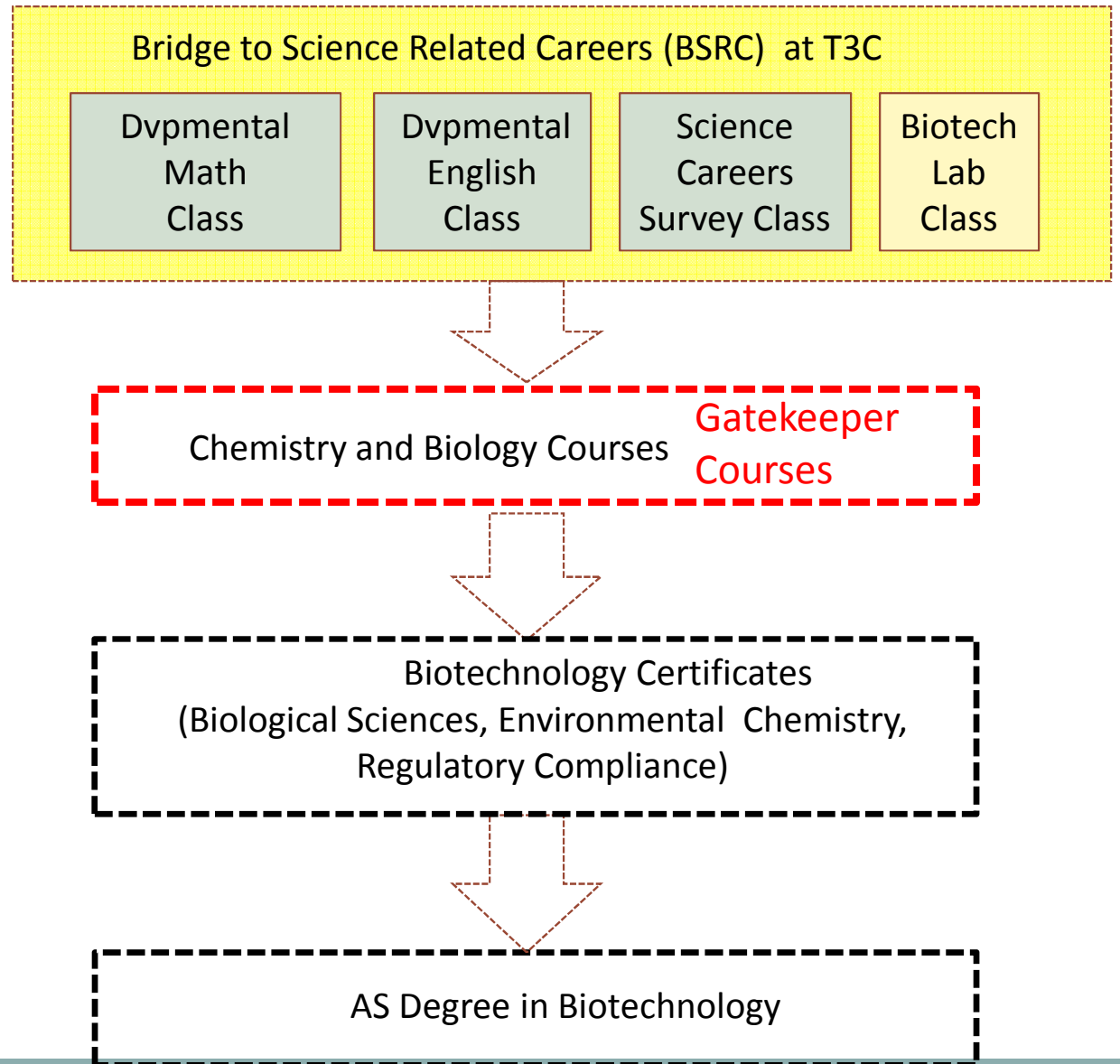
Tompkins Cortland Community College, NY

Building Bridge
around existing
developmental Math
and English classes

Existing Science
Careers Survey class
offered to
developmental
students

Adding on one
Biotech Lab Class

**Expected Launch:
Fall 2012**



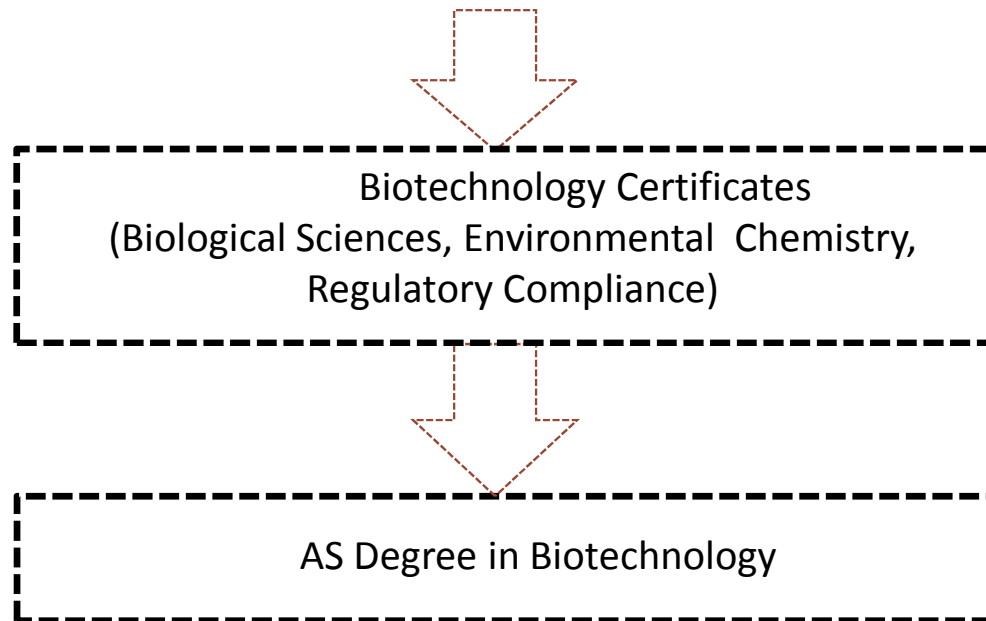
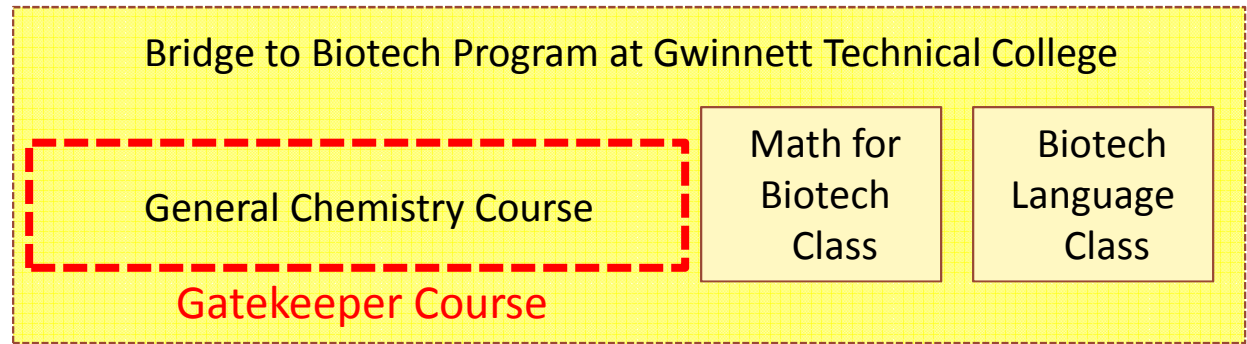


Gwinnett Technical College, GA

Gatekeeper course is
General Chemistry

Would offer Math
and Language class
simultaneously and
contextualized to
gatekeeper course

**Expected launch:
Fall 2012**



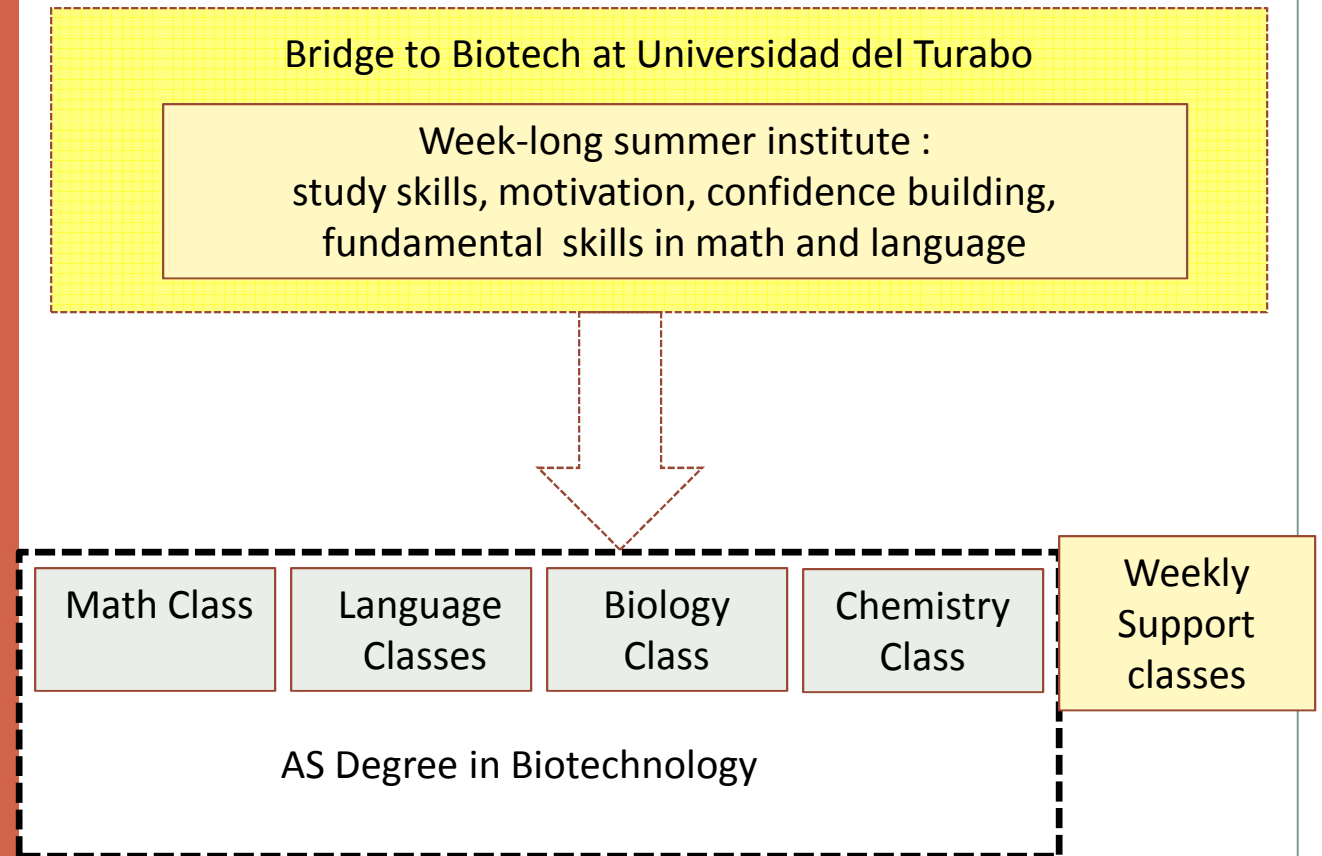


Universidad del Turabo, PR

Building Bridge around existing required courses for Biotech AS Degree

Adding on a week-long summer institute and weekly support courses

**Expected Launch:
Fall 2012**



Any questions?



Expanding Bio-Link's B2B Community of Practice

January-March 2012
Identify cohort 2 colleges

- Needs Assessment Survey on the Bio-Link website
- Schedule a phone call
- Follow-up questionnaire in January

April-May 2012
Prepare for Summer Fellows Forum

- Collect data on gatekeeper courses
- Develop and present program goals
- Participate in joint webinar with other adopters

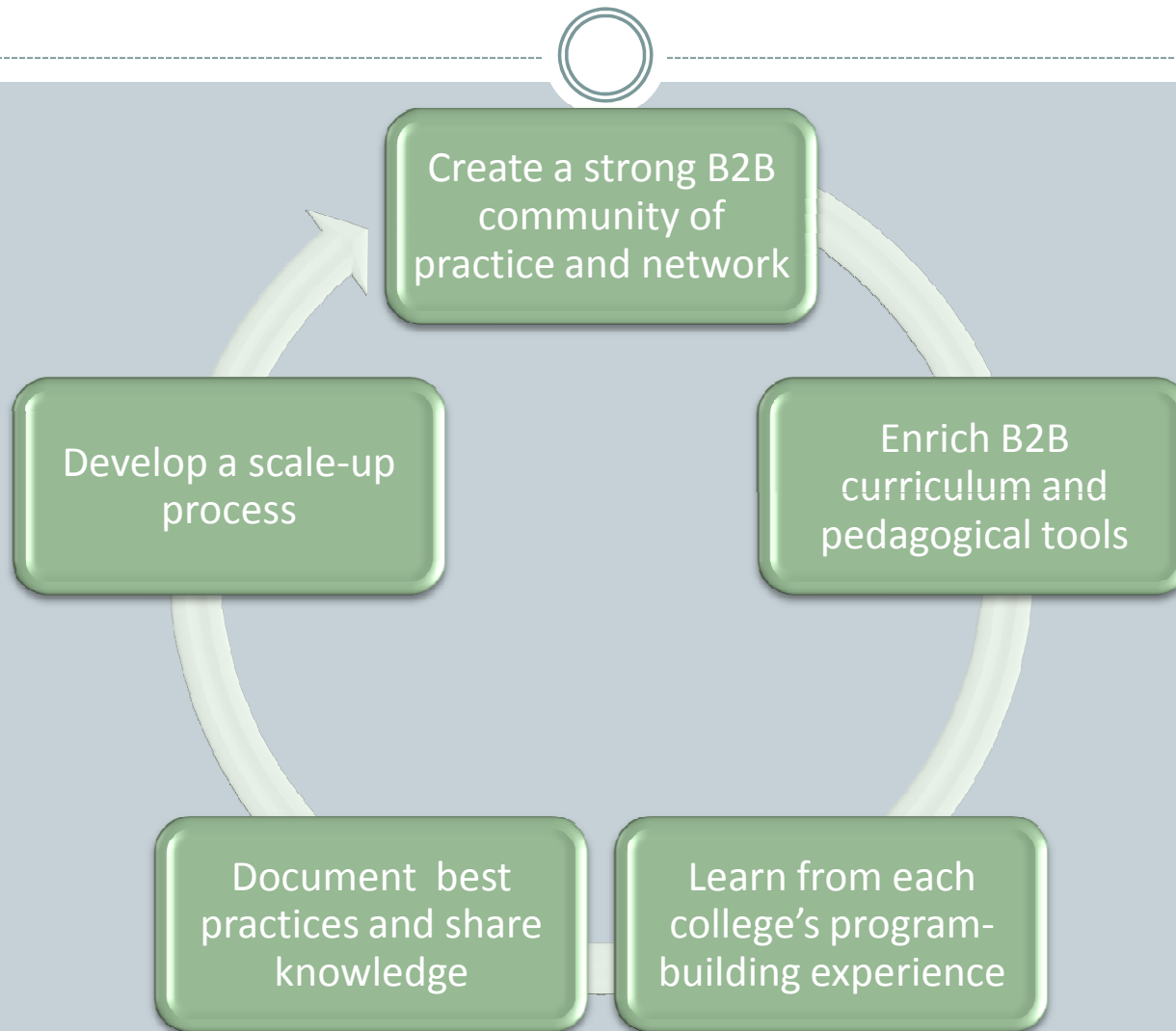
June 4th to 8th, 2012
Meet at Bio-Link's Annual SFF in Berkeley

- B2B track at Bio-Link's Summer Fellows Forum
- Networking and community-building
- Sharing experience with B2B tools

Fall 2012 -Spring 2013
Joint Webinars Cohort 1 & 2

- Webinars are used as a forum for discussions between members of the community of practice
- Share challenges and successful practices
- Support during the program development phase

Throughout the process, we hope to:



Any questions?



Thank You!
**Please contact us for more
information**



LAURENCE CLEMENT
LCLEMENT@CCSF.EDU

BIO-LINK B2B PAGES:
[HTTP://WWW.BIO-LINK.ORG/HOME/BRIDGE-TO-BIOTECH](http://www.bio-link.org/home/bridge-to-biotech)

NEEDS ASSESSMENT SURVEY
[HTTP://WWW.BIO-LINK.ORG/HOME/CONTENT/NEEDS-ASSESSMENT-SURVEY](http://www.bio-link.org/home/content/needs-assessment-survey)