Setting Yourself up for Success!
Introduction

* PURE Math
  - Undergrad Mentoring + Research Prog
  - Pre-Research + Research; Ted Webby's Community
  - Native Hawaiians & Pacific Islanders
  - NSF MCTP
  - NSA Grant

Brian & I collaborated with folks from UH-Hilo. We came to share our experience to help you get started on building a program that makes a difference.

- Growing up
  - Undergrad (LMU = small liberal arts)
    + SMI @ Berkeley
    + Research Project w/ Herbert Medina
    + SACNAS + local presentations
  - Grad School (UCB + NMSU)
    + SIMU TA (x3)
  - The Professoriate (SHSU)
    + Undergrad research
    + Masters Project supervision
    + CURM
    + PURE Math

* What we want to do here today
  - Share what we did going from "0" to "PURE Math"
  - Encourage you to consider developing a program that makes a difference.
  - Give you an idea of how to get started.
1. Develop a Vision

* This took the longest
  - The high road: VISION \implies\ FUNDING
  - Don't take the low road: The converse of the high road.

* Your personal experience should be your muse
  - Those pivotal moments that
    - made you choose math
    - kept you in math as an undergrad
    - kept you from "walking away with a master's degree"
  - Can they become a pivotal moment for others? What are some ideas to make them so?

* Talking about / Sharing your experience and ideas for your program
  help to further the development of your vision/goal

* Let's take time to:
  - reflect on pivotal moments in your journey (3 min, ideally 6 months - 1 yr)
    * in your notepad, jot some of these down.
  - turn to a colleague seated near you to discuss them. (2 min each)
  - Can these experiences become a shared experience?
    For whom? How?

2. Get "qualified"

* In many ways, your experience makes you "feel" qualified, but it takes more to appear so.

* Some ideas:
  - Start a smaller version of your vision
    - eg. If your vision is "running an REU," then consider the smaller version like directing a group
  - Look for funding your smaller version internally.
  - Look for funding your smaller version externally, NREUP

* Given all that you have seen earlier from Dennis & Kimberly & Ulrica plus the vision
  you had jotted down, brainstorm ideas for getting "qualified" &
  prioritize them - 5 min
* Internally
  - Grants from your institution.
  - Talk to Chair/Dean:
    - What? (vision)
    - Who will this affect?
      + participants
      + faculty
      + admin
      + You!
    - What support you need
  - Grants office @ your institution
    - they may have ideas, $, etc...

* Externally
  - Concept Paper: You need to flesh out your ideas before you...
  - draft of proposal
  - Talk to Program officers or director

* Get an Advocate

* Build a Team!

* Carefully consider the types of essential personnel you'd need for the program.
  - faculty & #
  - grad students & #
  - past deco & #

* Even more carefully consider the actual people involved
  - PIs & co PIs
  - Shared Values
    - There's a difference between your Vision & Value
    - Openly discuss w/ potential collaborators your
      - desired outcomes
      - concerns
      - expectations
      - roles & individual contribution
  - Senior personnel

* Be reasonable, but have a core set of values that your team fully supports.
5 The Writing Process

* READ The Solicitation!
  - Take notes, especially on ideas & requirements that you didn't initially consider
  - Make an outline of what your proposal should contain
    - like a checklist to help you cover all your bases.
  - Become a giant reviewer!
    - This was once an awesome learning experience, but the process has changed over the years.
  - Ask for sample proposals from people you know well who do something along the lines of what you want to do.
  - Get a trusted mentor or colleague to look over your proposal.

6 Follow Through

* If your vision
  - makes "sense" - intellectual merit
  - is genuine
  - is well thought-out
  - it will most likely get funded if it also helps
    - broaden participation in STEM
* Communicate & follow your timeline
* Everyone should contribute