

# AGRIP

(Advanced Global Research  
Internship Program)

## GATEWAY to IVY League Research Program

**AGRIP- Advanced Global Research Internship Program** provides a challenging journey from high school to college through an online research academy founded by Harvard, MIT and Stanford researchers dedicated to conduct research under the guidance of experts from top universities, including Harvard, MIT, Berkeley and others.

**Eligibility:** High School, College & Int'l Students (including F/B/J/E VISA).

**Sessions:** (Virtual On-line Courses)

**Enrollment Request:** [contact@agminstitute.org](mailto:contact@agminstitute.org)

**Contact:** (571) 765-7840 **Fax:** (571) 765-7845



 **AGM INSTITUTE**  
[www.agminstitute.org](http://www.agminstitute.org)

Copyright © AGM Institute LLC, All rights reserved

# AGM Institute Introduction



**“Success is acquired by eagerly engaging in endless challenges and not just by planning”**

**Richard Myung**  
Founder, Chairman & CEO

Richard E. Myung, chairman and CEO, AGM Institute LLC, with other previous institutions became foundations of AGM Institute, LLC since 2004, he holds numerous proven remarkable achievement records by providing most effective solutions for the advanced college planning and need based college financial aid areas.

He believes that his endless on-going efforts with his every associated professional would result in each student’s customized academic career development and their future career paths.

His entrepreneurship comes from his endless passion of innovative ideas and from his corporate philosophy treating the importance of on-going R&D areas. He is a well-known columnist among the major newspapers published in US and his entire weekly articles of more than 1,200+ has been posted over 22 major cities nationwide.

He is actively working in corporate and individual College Financial Aid Planning areas over 18 states in US for the last 25 years.

# AGRIP Welcome Message



**“We are a community of researchers dedicated to empowering students to explore their academic passions, develop new skills, and reach their full intellectual potential”**

**Dr. George Philip (GP) LeBourdais**  
Stanford PhD/ US Fulbright Scholar

Dear AGM students and parents,

Welcome to Polygence! We are a community of researchers dedicated to empowering students to explore their academic passions, develop new skills, and reach their full intellectual potential.

Through our research mentorship program, you can connect with PhD-level experts in your fields of interest, from STEM subjects through the Humanities and Social Sciences, and create final products that you can showcase on college applications.

Learning how to perform research, however, has many other benefits. It teaches creative thinking, problem solving, time management, resilience, and the courage to take control of your academic and professional career. You will connect with inspiring mentors and fellow students during the process, becoming part of the growing Polygence alumni network that will serve you well no matter where you end up studying.

We are delighted to have you join us and can't wait to see the amazing things you create in your research!

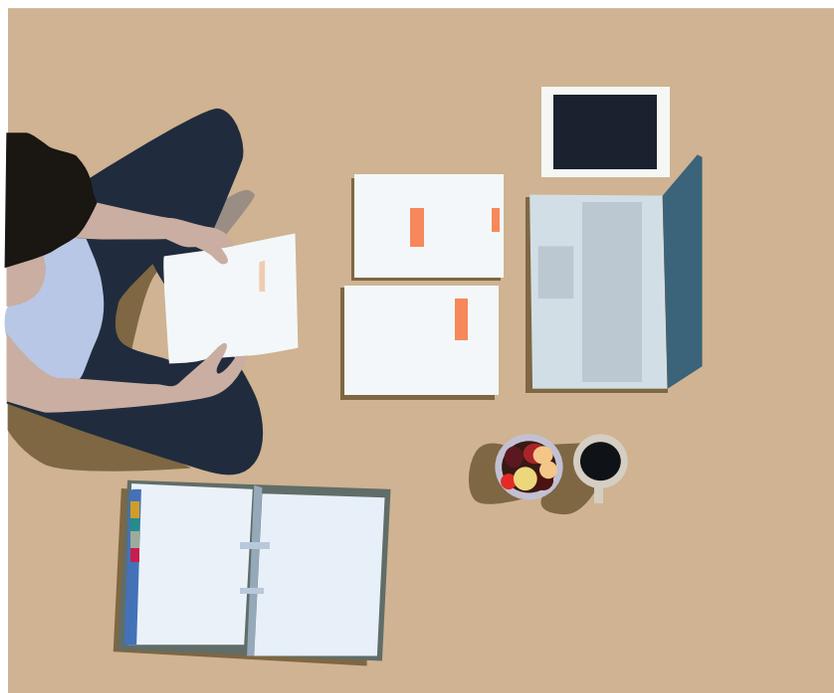
Sincerely,

**Dr. George Philip (GP) LeBourdais**  
Stanford PhD/ US Fulbright Scholar  
AGRIP at the AGM Institute Offered by Polygence



Students are given an opportunity to produce amazing research from published research papers to works of art that nourish their academic passions and stand out on college applications.

Intellectually curious students with expert mentors are paired to pursue personalized research projects. Under the guidance of their mentors, students engage in academic fields across the STEM, the social sciences, and the humanities to produce showcaseable final projects.

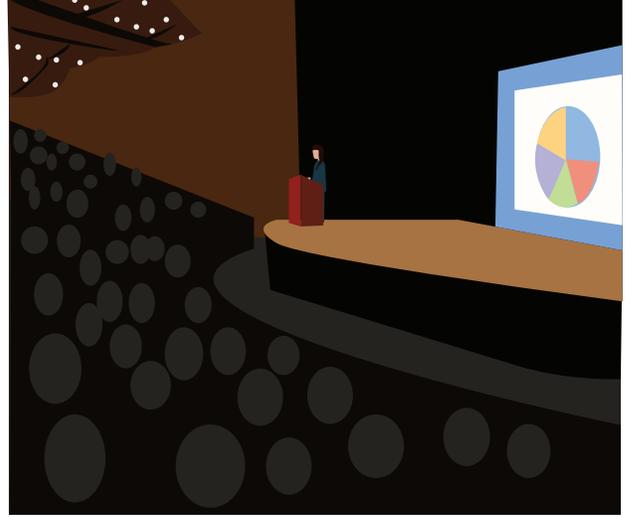


## PARTICIPANTS WILL BE ABLE TO:

- Publish a paper.



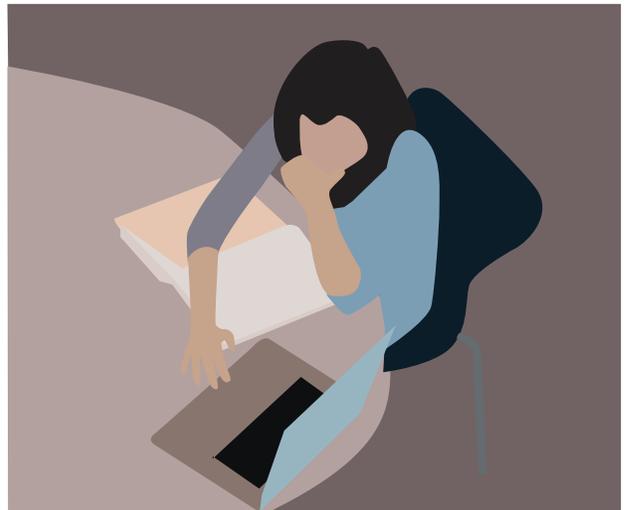
- Present at conferences.



- Produce a podcast.



- Demonstrate academic interest.



- Insider tips on research.



- Receive personal feedback and advice from top academics.



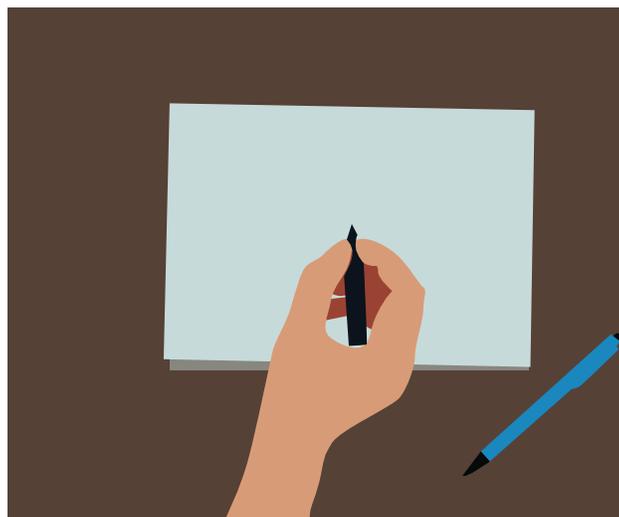
- Flexible personalized online scheduling from anywhere.



- Stand out from the crowd and distinguish yourself.



- Get a head-start in academic writing and applying the scientific method-College Readiness.



## A SIMPLE PROCESS:



1. Complete online application.



2. After application review, student will be contacted to schedule an interview with program coordinators to evaluate your background, learn about you and match you with a mentor.



3. 10 one-to-one sessions with your mentor over a period of 2-6 months:

- Discuss project learning goals and creative end product Foundations.
- Explore problem and innovative solutions.
- Implement cutting-edge research methods.
- Complete independent work and creative product Presentation.
- Present results, lessons learned.
- Letter of Recommendation may be awarded to students exhibiting outstanding performance throughout the mentorship process.
- Students with long extended projects may request extend program with additional sessions.

## MENTOR PROFILES:

# Math

**Mentor:** PhD Candidate, Economics, University of Virginia.

**Experience:** TA, Economics Department, Columbia University; Grader, Financial Econometrics, UCLA.

**Project Idea:** Macroeconomics Analysis (with Math).

In this project, you will learn the theoretical basis of macro models across several aspects of the real world such as long term economic growth for a country, personal income and consumption decision, interaction between firms and workers, and the setup of a bank. Corresponding math will be taught like calculus and constrained optimization. A research paper and some problem sets are expected.



University of Virginia

# Engineering

**Mentor:** PhD Candidate, Computer Science, Stanford University.

**Experience:** Security Engineer, Facebook; Experiment Team, CERN.

**Project Idea:** Learning the best data augmentations.

Data augmentation in machine learning is currently a bag of tricks. Very little work exists regarding what is the "best" form of data augmentation; most people try everything and keep what sticks. To see if you'd be a good fit for this project, you should test your understanding of the Auto Augment paper. Experience with Bayesian Optimization or reinforcement learning is a plus.

**Prerequisites:**

Deep learning, machine learning.



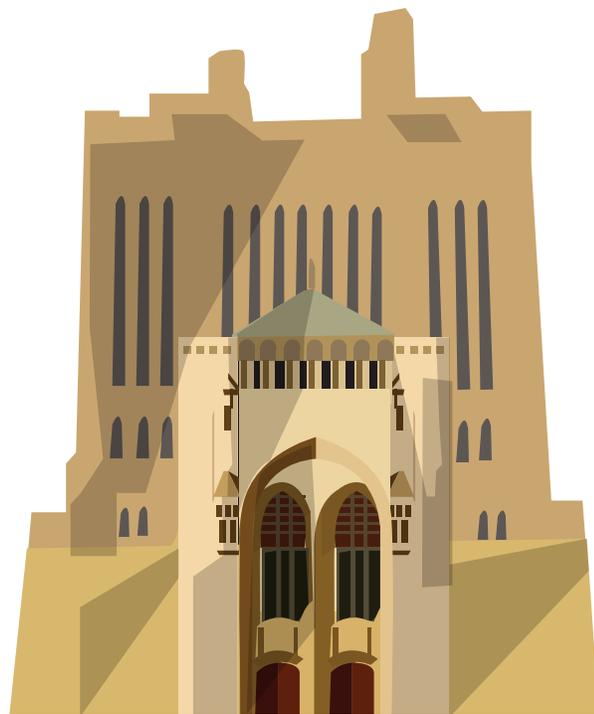
Stanford University

# Biology

**Mentor:** PhD Candidate, Organic Chemistry, Yale University

**Experience:** 3 years, General chemistry TA, Chemistry Teaching Assistant Award; 2 years, Organic Chemistry Lab Manager; T.F. Cooke Teaching Award for teaching Organic Chemistry; Mentor, Women In Science At Yale (WISAY) mentorship program.

**Project Idea:** Designing and completing a research project. Have you ever wanted to be a real-life scientist, but you don't have your very own lab? In this project, you will design a research project that can be completed at home, gather data, and present that data as either a scientific poster or talk. You will learn about the scientific process, how to construct appropriate figures for your data, and how to communicate your results in a formal presentation.



Yale University

# Literature

**Mentor:** PhD Candidate, English, Princeton University

**Experience:** Taught 10+ classes in U.S. universities on topics like genocide, protest, African-American literature, world literature, American cinema, graphics novels, and fanfiction; Coached high schoolers through the college application process and into Ivy League institutions and top public universities.

**Project Idea:** Decolonizing X

The term decolonization has recently become part of the mainstream vocabulary of activism, resistance, and social justice. Increasingly we hear calls for decolonizing the mind, the classroom, libraries, museums, humanitarianism, environmentalism, etc. Students will analyze an object, space, or idea of their choice from the standpoint of decolonization. Following careful research into the chosen topic as well as into the history and politics of decolonization, the project might culminate in a scholarly article, a curatorial statement, a series of op-eds, and so on.



Princeton University

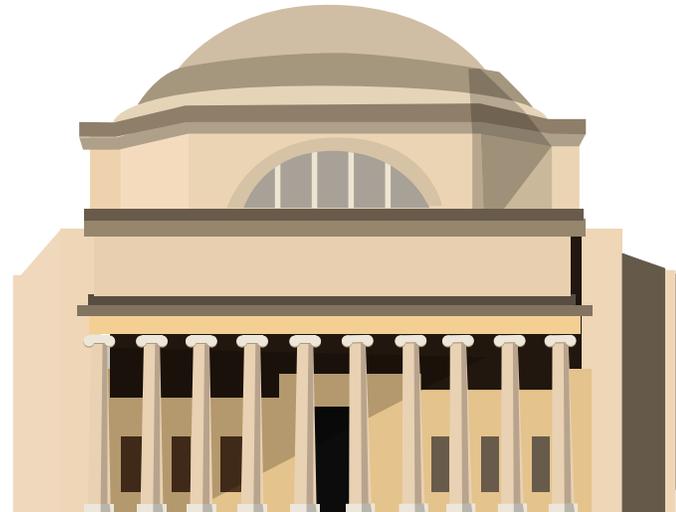
# Psychology

**Mentor:** PhD Candidate, Psychology, Columbia University

**Experience:** Psychology Counseling and Externships at Brooklyn VA, NY State Transgender Identity Program; Stigma, Identity, and Intersectionality Lab Research Fellow; TA for college courses in Psychopathology, Multicultural Counseling, Career Counseling, Foundations of Counseling, Substance Abuse, and Micro & Macro Aggressions in Institutional Climates.

**Project Idea:** Race-Related Stress & Racial Trauma

In this project, we will discuss what racial trauma is and the mental health consequences of racism. We will create a photo series with people's narratives on these topics. We will work together to create questions and interview people of color on how they manage the current climate, coping mechanisms that are useful/not useful, and how they find strength during this time. If you identify as a White person and want to explore what "Whiteness" is, I encourage you to interview White people in your life and ask them how they practice anti-racism in their lives. I encourage the student to act as an "investigative journalist" in this research project as we try to understand how we can support the people of color in our lives. Importantly, we will aim to understand how we emphasize resiliency and strength in communities of color when talking about racism.



Columbia University

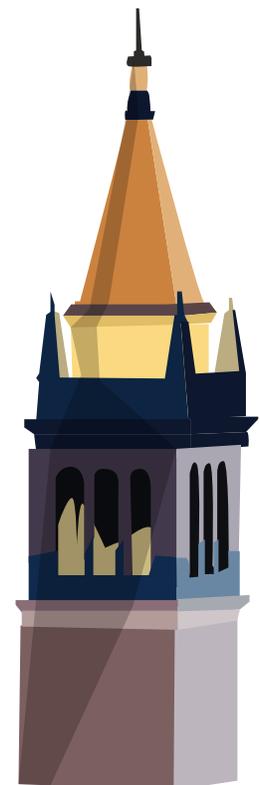
# History

**Mentor:** PhD Candidate, Chinese History, UC Berkeley

**Experience:** JD, Yale University; MA in Sinology, University of London; 15 years, Martial Arts instructor.

**Project Idea:** How I Learned to Stop Worrying and Love the Op-Ed

What does it mean to have an opinion worthy of an audience? We will learn how to critique, evaluate, and produce original and hard-hitting opinion pieces designed for publication in different media outlets. By reading across different genres of opinion pieces, you will learn to appreciate the nuance of communicating complex data and information in concise yet refined prose. Then, by practicing the art of writing about scientific policy, foreign military intervention, or the need to shore up public education, you will be better equipped to produce an original op-ed tailored for a targeted media outlet of your choosing. In this way, you too can shape public opinion.



UC Berkeley

**Eligibility: High School, College and Int'l Students (including F/B/J/E VISA).**

**Sessions: (Virtual Online Interactive Courses)**

**Enrollment Request: [contact@agminstitute.org](mailto:contact@agminstitute.org)**

**Contact: (571) 765-7840 Fax: (571) 765-7845**

**[www.agminstitute.org](http://www.agminstitute.org)**



**AGM INSTITUTE**

**3251 Old Lee Highway, Suite 514**

**Fairfax, VA 22030**

**(Main) 571-765-7840**

**(Fax) 571-765-7845**

L.A. Office: 3580 Wilshire Blvd., #900-1, Los Angeles, CA 90010

O.C. Office: 6281 Beach Blvd., Suite 212, Buena Park, CA 90621

GA Office: 3525 Mall Blvd. NW, Suite 5AA-2, Duluth, GA 30096

\* AGRIP modules offered through instructors of Polygence and other benefits offered through AGRIP Program at AGM Institute.