

Cornerstone

Transformational Scholarship at Azusa Pacific University

Office of Research and Grants | Summer 2019



Faculty Spotlight

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**AZUSA PACIFIC
UNIVERSITY**

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Your APU Grants Hub



ScholarFest 2020

Celebrating Research, Scholarship, and Creative Achievement

“They always say time changes things, but you actually have to change them yourself.” (*The Philosophy of Andy Warhol* by Andy Warhol)

ScholarFest 2020 calls into remembrance Andy Warhol’s words. Things at APU have certainly changed over the last three decades. ScholarFest 2020 will not, however, take place because time changes things. Instead, a decision was made by APU academic leaders to see positive change come about, thus the Office of Research and Grants was asked to work with academic programs and make ScholarFest 2020 happen.

So, what is ScholarFest 2020, and when is it? ScholarFest 2020 is a reconception of APU’s Common Day of Learning (CDL) to a month-long celebration of faculty and student research, scholarship, and creative achievement in all academic disciplines at APU. It is scheduled for March 30 – April 24, 2020.

An advisory team with representation from across campus has worked hard in recent months on plans for ScholarFest 2020. The idea is to have four weeks in spring 2020 focused on celebrating academic successes at APU in all disciplines and across undergraduate, graduate, and professional platforms. This contrasts with the previous CDL model running for 27 years which was one concentrated day of academic discussions with an undergraduate focus.

Some programs already have vibrant celebrations of research and academic accomplishments each spring, and they will be encouraged to continue with their traditions. ScholarFest 2020 will promote a sense of connectedness among these ongoing celebrations while encouraging others to join. These department events will be kicked off in the first week with a chapel address by our president, Dr. Paul Ferguson. Special presentations by exceptional APU scholars, lively research poster sessions, and stimulating symposia will be included, as will novel competitions and an Honoring Excellence Special Awards Event with APU provost, Dr. Mark Stanton. Scholarfest 2020 should be a rewarding and memorable event that belongs on everyone’s ‘cannot-miss’ list! With schedule details still being worked on, objectives, guidelines, and...

**Submit
ScholarFest 2020
Events or Ideas**

(Article continued on Page 4)



Student Spotlight

Oganes Katchikian

College of Liberal Arts and Sciences
Department of Mathematics, Physics, and Statistics



2018-19 ORG SNAPSHOT

External Awards

\$8.40 Million

24 Awards

Proposals

Submitted

\$18.8 Million

53 Applications

External Grant

Revenues Received

\$7.07 Million

IRB Reviews

163 Applications

Graduate Publication

Reviews

207 Thesis and

Dissertations

More office highlights and details on grant activity (including complete list of awards and grant submissions) for Fiscal Year 2018-19 are offered in the published

ORG Annual Report

... the Lord Jesus Christ as my savior and walking in his path is my lifelong goal. My academic journey has been difficult. However, one certain thing is that the Lord put me on this path for a reason. Being accepted to APU as a physics major was an indication that Christ has bigger plans for me.

APU has great professors that teach in the Department of Mathematics, Physics, and Statistics. In 2018, I had the opportunity to meet my current mentor, Dr. Sandor Volkan-Kacso, APU physics professor and research scientist at California Institute of Technology, Pasadena.

My first course with Dr. Volkan-Kacso was PHYC 370: Waves and Optics. He introduced himself, shared with us his current research, and mentioned he was looking for undergrads to help him further his research. After the first class, I eagerly ran to his office and asked how I could be of service to further his research and was introduced to new and exciting ventures. In fall 2018, I began helping Prof. Volkan-Kacso with his research on the mechanism of ATP synthase, a biological “nanomachine” that essentially powers the energy cycle in all living cells. In Spring 2019, we were making great progress, and I had the grit and enthusiasm to continue this endeavor during the summer. With the Lord’s grace, I applied for and was offered a Summer Undergraduate Research Fellowships



(SURF) program at Caltech where I ended up working with Nobel Laureate (Chemistry 1992) Rudolph Marcus’s group. Our goal was to extract the hydrolysis and synthesis rate constant as a function of rotor angle from the single molecule binding and release data. Our method was to use the fluorescence data from the in vitro F1-ATPase controlled rotation experiment and apply theory, computation, and data analytics to extract the rate constants for the ATP hydrolysis reaction that are relevant to biological systems. Working with the Marcus group at Caltech has been a wonderful opportunity and enormous blessing. I am so very thankful for those who helped with the funding (APU and CalTech) and for Dr. Volkan-Kacso’s support and mentoring.

“Oganes has a prodigious enthusiasm for science in general and physics in particular. It translates into a strong resilience in the face of uncertainties that come along with research. Over the summer as a research fellow at Caltech, he engaged in an ambitious task to analyze complicated single-molecule experimental data on the forced rotation and advance imaging of the rotary motor enzyme F1-ATPase. His interaction with graduate students and a Nobel winning professor was exemplary. His hard work helped him successfully extract key statistical distributions of single ATP molecules binding and releasing. He is now developing a theory to treat these distributions. During our collaboration, Oganes’ joyful spirit has been a source of wonderful inspiration for me, and working with him is always a refreshing experience.”

*Sandor Volkan-Kacso, PhD
Associate Professor
CLAS Mathematics, Physics, Statistics*

Jr. Faculty Mentoring Program

2020-2021 Cohort

Call for Applications

Important Dates

- August 30, 2019: Application Available
- October 4, 2019: Program Q&A Session
- October 15, 2019: Intent to Apply Due Date
- October 28, 2019: Application Deadline

Research and Grants



Calendar & Events

Events/Workshops

Upcoming Sabbatical Talks

12:00 noon-1:00 p.m. | LAPC
September 17, 2019: Daniel Park
October 2, 2019: Sam Girguis
October 15, 2019: Joseph Bentz
November 5, 2019 – Terry Dobson
November 20, 2019 – Michael Dean Clark

Fulbright Talk

12:00 noon-1:00 p.m. | LAPC
September 5, 2019: Michael Truong

Skill Development

November 1, 2019: Finding Funding: PIVOT Advanced Search

ScholarFest 2020

March 30-April 24, 2020

Program

Dates/Deadlines

Jr. Faculty Mentoring Program

August 30, 2019:
Application Available
October 4, 2019:
Mentoring Program Q&A Session
October 10, 2019:
Intent to Apply Due Date
October 28, 2019:
Application Deadline
January 2020: New cohort to start

Research Ethics

Deadlines

IRB (human subjects research)

September 4, 2019: Full Board Review Application deadline for September meeting
October 2, 2019: Full Board Review Application deadline for October meeting
November 6, 2019: Full Board Review Application deadline for November meeting
November 27, 2019: Full Board Review Application deadline for December meeting
IACUC (animal research)
September 11, 2019: Protocol or amendment deadline for September meeting
October 9, 2019: Full Board Review Application deadline for October meeting
November 6, 2019: Full Board Review Application deadline for November meeting

Faculty Spotlight



Associate Professor, Chair of the Master of Science in Nursing Advanced Practice and Co-Chair of the Masters Studies Council, Dr. Lynda Reed has been essential in moving forward the agenda for excellence in APU nurse practitioner (NP) programs across campuses while working with community partners to develop unique training opportunities for our students.

An APU School of Nursing (SON) DNP and MSN-Family Nurse Practitioner alumna, Dr. Reed started as full-time faculty at APU in 2012. Her focus at that time was primarily chronic disease management from a nursing perspective, integrating the biomedical and biopsychosocial models into a comprehensive and longitudinal plan of care. As NP program director, she instituted clinical simulations and designed the adult-gerontology curriculum. In her 14 years as a NP, she dedicated significant efforts to assist uninsured persons with chronic illnesses.

In addition to her faculty and administrative roles at APU, Dr. Lynda Reed serves as a community member on a hospital and community health center board and its committees. In her personal statement, Dr. Reed writes, “I have worked with our graduates and colleagues to increase our preceptor pool by 20%, which includes specialty sites for the sick child, fragile elder, internal medicine, and psychiatric patient populations.” Her care and interest in providing support for at risk populations are evident. Most recently, she has worked with the Center for Integrated Family and Health Services, Baldwin Park Medical Center, and APU’s Neighborhood Wellness Center to co-locate and create a model clinic that provides mental health, physical health, substance misuse treatment, and wellness programs to patients in a family-centered environment. Financial sustainability and resource requirements will be studied for two years to determine the feasibility of this model for other non-federally qualified community health clinics that serve low-income communities. RN and NP students work side-by-side in this clinic and are enriched by the intra-professional collaboration.

In 2017, Dr. Reed received the Advanced Nursing Education Workforce (ANEW) 2-year federal grant funded by the Health Resources and Services Administration (HRSA) under the U.S. Department of Health and Human Services. With an initial award of \$1,399,189, this grant allowed the placement of 32 students into a longitudinal, immersive clinical experience in low-income clinics. We recently received news of additional 4-years federal funding being awarded to APU under Dr. Reed’s leadership. This recent competitive continuation award amounts to \$2,737,103, and it will focus on expanding the ANEW traineeship support. Residency placements for Advanced Practice Registered Nurse (APRN) students will increase to 20 full-time applicants annually, for a total of 80 students who will graduate prepared to make an immediate difference serving the disadvantaged in our communities.

On a personal note, Lynda is a native of Los Angeles county and very much enjoys watching Dodger baseball. She attends the United Methodist Church of the Good Shepherd in Arcadia. She is very proud of her three grown children, an almost PhD psychologist, a cancer biologist, and the senior director of operations for Saatva Mattress. She loves APU because of the opportunities for professional growth given to her by her dean, Dr. Aja Lesh, and the friendships she has made with students and faculty.

Congratulations Dr. Lynda Reed (SON) for outstanding work and recent grant funding success!



“The universe is intelligible... beauty and wonder are not imaginary constructs” (John Polkinghorne)

“Our curiosity through research and learning can lead us to real constructs that deepen our sense of beauty and wonder, which in turn, help us better understand God’s world.”

Louise Ko Huang, Ph.D.

CLAS Assistant Dean, Director of the Center for Research in Science

(ScholarFest 2020 article, continued)

... parameters of ScholarFest 2020 were summarized by Dr. Denise Edward-Neff and other members of the advisory team.

By celebrating research, scholarship, and creative achievements among APU faculty and students, the goals are to:

- Nurture a culture of scholarly accomplishment.
- Provide enhanced opportunities for all academic units to showcase their scholarly successes.
- Stimulate the APU community to future scholarly excellence.
- Recognize individuals who have exhibited scholarly excellence in recent years.
- Assist in providing clarity and impetus for the role of scholarly activity in APU's strategic plan.
- Inspire prospective students with opportunities they might reach out to, thus serving as an attraction and distinction for recruiting.

Submit
ScholarFest 2020
Events or Ideas

Guidelines and parameters for ScholarFest 2020 include:

- Ownership: Emphasize academic unit ownership. Inasmuch as possible, promote what departments/schools/colleges are already doing or want to do, rather than be another activity for academic units to take on.
- Inclusivity: Involve all of APU, including regional campuses.
- Administrative Support: Emphasize the need for upper administration to be supportive and seen to be supportive of ScholarFest events.
- Connectedness: Strive to create a sense of continuity throughout ScholarFest month, rather than it being viewed as a series of unconnected events.
- Timing: Aim for UG events early in the month and graduate events later in month.
- Motivation: Identify ways to motivate attendance, including the use of continuing education credits (CEC) for faculty and prize drawings for students.
- Budget: Promote maximum impact within the small available budget.

ScholarFest 2020 embraces a broad definition of scholarship based on the model introduced by prominent educator Ernest Boyer, friend to APU and for whom CDL was originally named. According to Boyer, traditional research, or the scholarship of discovery, had been the center of academic life and crucial to an institution's advancement, but it needed to be broadened and made more flexible to include the new social and environmental challenges beyond the campus and other realities of contemporary life. His vision was to reshape the research mission of universities by introducing the idea that scholarship needed to be redefined.

Boyer proposed that scholarship include these four categories:

- The scholarship of discovery that includes original research that advances knowledge (i.e., [basic research](#));
- The scholarship of integration that involves synthesis of information across disciplines, across topics within a discipline, or across time (i.e., [interprofessional education](#), or [science communication](#));
- The scholarship of application (also later called the [scholarship of engagement](#)) that goes beyond the service duties of a faculty member to those within or outside the University and involves the rigor and application of disciplinary expertise with results that can be shared with and/or evaluated by peers (i.e., [Cooperative State Research, Education, and Extension Service](#), or [science diplomacy](#)); and
- The [scholarship of teaching and learning](#) that involves the systematic study of teaching and learning processes. It differs from scholarly teaching in that it requires a format that will allow public sharing and the opportunity for application and evaluation by others.

It is within this tradition of thinking deeply about the value of serious scholarship at Azusa Pacific University that we anticipate the launch of ScholarFest 2020, March 30-April 24, 2020. Your ideas for ScholarFest 2020 are welcome via the [ScholarFest 2020 Event/Idea Form](#).

Grants Academy In Review



An exciting and unique opportunity to learn grant development, grant writing and other aspects of the grant seeking process, the Grants Academy took place in May – June 2019.

- ✓ 3 days, 12 hours of training
- ✓ 50 faculty and staff attending different academy sessions
- ✓ 23 faculty and staff completed entire training and would qualify for incentives pending a grant application during 2019-20 academic year

Incentives details are listed [here](#).

Mark Your Calendar!

September 28, 2019



— SAVE THE DATE —
2019 STEM
Research Symposium

Saturday, September 28, 2019

9:00AM - 3:30PM

Segerstrom Science Center
701 E Foothill Blvd, Azusa, CA

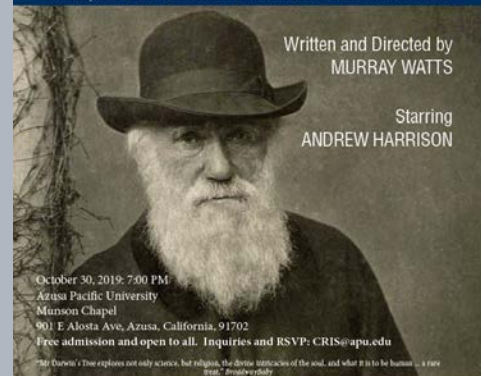
Registration: CRIS@apu.edu | 626.815.6000 ext. 6480



October 30, 2019

Mr. Darwin's Tree

The Acclaimed British One-Man Play
Produced by SCHOLARSHIP & CHRISTIANITY IN OXFORD in Association with WAYFARER PRODUCTIONS



Written and Directed by
MURRAY WATTS

Starring
ANDREW HARRISON

October 30, 2019: 7:00 PM
Azusa Pacific University
Manson Chapel
901 E Alosta Ave, Azusa, California, 91702
Free admission and open to all. Inquiries and RSVP: CRIS@apu.edu

"Mr. Darwin's Tree explores not only science, but religion, the divine spark of the soul, and what it is to be human – a rare feat." BroadwayBaby



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